Supreme Court Case No. S273160

### IN THE SUPREME COURT OF THE STATE OF CALIFORNIA

SAVE BERKELEY'S NEIGHBORHOODS Respondent and Cross-Appellant

v.

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, et al., Appellants and Cross-Respondents

AMERICAN CAMPUS COMMUNITIES; COLLEGIATE HOUSING FOUNDATION, ET AL., *Real Parties in Interest* 

After Order by the Court of Appeal First Appellate District, Division One (Case No. A163810) On Appeal from the Superior Court for the State of California, County of Alameda, Case No. RG19022887 (Related Case Nos. RG18902751, RG19023058), Hon. Brad Seligman, Dept. 23, Telephone (510) 267-6939

### DECLARATION OF DAVID SHIVER IN SUPPORT OF ANSWER TO PETITION FOR REVIEW

THOMAS N. LIPPE (Bar No.104640) LAW OFFICES OF THOMAS N. LIPPE, APC 201 Mission Street, 12th Floor San Francisco, California 94105 Telephone: (415) 777-5604 Email: Lippelaw@sonic.net Counsel for *Save Berkeley's Neighborhoods*  I, David Shiver, declare:

1. I am a Co-convener of the Southside Neighborhood Consortium ("SNC"), which is a group of neighborhood organizations, including Respondent and Cross-Appellant Save Berkeley's Neighborhoods ("SBN"), that represent Berkeley residents concerned about UC Berkeley's growth, including the expansion of student enrollment. As such, I have conducted extensive research into enrollment at UC Berkeley and how it would likely have impacts on homelessness, displacement, and housing construction.

2. The facts set forth herein are true of my own knowledge, except as to those matters alleged on information and belief, and as to those matters, I am informed and believe them to be true.

3. UC Berkeley has documented the impacts of its enrollment growth on homelessness and housing affordability through its Urban Displacement Project ("UDP"). The UDP is a research initiative that, according to the UDP's website, conducts research "...to understand and describe the nature of gentrification, displacement, and exclusion, and also to generate knowledge on how policy interventions and investment can support more equitable development."

4. The UDP publishes Displacement Typology Maps, including one for the San Francisco Bay Area, that depict the degree of vulnerability at a census tract level to gentrification and displacement of low-income households. During the 2005 to 2018 period of campus enrollment growth, significant gentrification has occurred in census tracts in Berkeley and Oakland and many census tracks in these cities continue to be shown by by UDP as at risk for gentrification, displacement, and exclusion.

5. Attached hereto as Exhibit 1A is a true and correct copy of a map that I downloaded from the UDP web site on February 16, 2022 showing

Bay Area census tracts and the level of risk of gentrification and displacement in each census tract as most recently updated by UDP.

6. Attached hereto as Exhibit 1B is a true and correct copy of a map that I downloaded from the UDP web site on February 16, 2022 showing Bay Area census tracts and the level of risk of gentrification and displacement in each census tract as of December 25, 2015.

7. Attached hereto as Exhibit 1C is a true and correct copy of a map that I downloaded from the U.S. Bureau of the Census web site on February 16, 2022 showing identifying numbers for Bay Area census tracts. This permits identification by number of the census tracks shown in the Displacement Topography Maps and the tables in the exhibits that I prepared for this declaration.

8. Attached hereto as Exhibit 1D is a true and correct copy of a map that I downloaded from the UDP website on February 16, 2022 showing Bay Area census tracts and the level of housing precarity risk as last updated by UPD.

9. The Exhibit 1A Displacement Typology Map shows eleven census tracts in Berkeley that are rated by the UDP as "Low-Income/Susceptible to Displacement," "Early/Ongoing Gentrification," or "Advanced Gentrification." These census tracts are all within two miles of the UC Berkeley campus core (aka Campus Park).

10. The Exhibit 1B Displacement Typology Map shows sixteen census tracts in Berkeley that are rated by the UDP as "At risk of gentrification or displacement," "Undergoing displacement," or "Advanced gentrification." These census tracts are all within two miles of the UC Berkeley campus core.

11. Attached hereto as Exhibit 2 is a table that I prepared from data

obtained on February 16, 2022 from the interactive map contained in Exhibit 1a showing the impact of displacement on low-income households in parts of Berkeley. There are six census tracts that contain a total population of 18,984 per UDP data that are designated as undergoing "Advanced Gentrification."

12. The UDP data in Exhibit 2 show a loss of low-income households (defined as households with a median income of 80 percent of the Area Median Household Income as defined by the U.S. Department of Housing and Urban Development) for each census tract. The weighted average loss of low-income households is 11.8 percent. Since many student households qualify as low-income per the UDP, these data may understate the loss of non-student low-income households.

13. The UDP data also show that census tracts in Berkeley have transitioned from being mostly non-students to high concentrations of students. Attached hereto as Exhibit 3 is a table that I prepared from data obtained on February 16, 2022 from the maps contained in Exhibits 1A and 1B. These maps show that census tract 4237 in the Elmwood District to the immediate south of the campus core was designated as "Undergoing Displacement" in 2015 and designated as "High Student Population" in 2018. Exhibit 3 also shows that Census tract 4224, which is located approximately four blocks from the northwest corner of the UC Berkeley campus core, was designated as "At Risk of Gentrification or Displacement" in 2015 and in 2018 was designated "High Student Population."

14. There are other indicators of how UC Berkeley's enrollment growth and displacement of Berkeley residents have contributed to gentrification and displacement, requiring the construction of housing elsewhere.

Regularly conducted counts of the homeless population in Berkeley and Oakland indicate that during the period of UC Berkeley's recent enrollment growth from 2015 to 2019, the incidence of homelessness increased. Attached hereto as Exhibit 4 is a table that I prepared from data obtained from reports issued by the City of Berkeley and City of Oakland. Exhibit 4 presents data from three surveys conducted separately by the City of Berkeley and City of Oakland. Between 2015 and 2019 (the last available survey), the number of homeless in Berkeley rose from 834 to 1,108, representing a 33 percent increase. In the City of Oakland during the same period the number of homeless increased from 2,191 to 4,071, or an 86 percent increase.

15. The UDP data also show that during the period of the expansion of campus enrollment from 2010 to 2020, the number and percentage of residents reporting their race as Black or African-American has fallen in Berkeley and Oakland. Attached hereto as Exhibit 5 is a table that I prepared from data obtained from the U.S. Bureau of the Census on February 16, 2022 presenting 2010 and 2020 decennial census data. The data indicate that the number of Black or African-American residents in Berkeley fell by 1,429 persons between 2010 and 2020, or a 12.7 percent decline. In Oakland the population of Black or African-American residents fell by 15,651, a decline of 14.3 percent.

16. The UDP also has prepared a Housing Precarity Risk Model using data as recent as 2020 that it describes on its website as showing: "...which communities are at risk of post-pandemic eviction, displacement, and long-term poverty." The model calculates a Housing Precarity Risk on a census tract level which the UDP describes as "a composite score of eviction risk, displacement vulnerability, and pandemic unemployment."

The UDP indicates that "[t]hese maps are a conservative estimate meaning eviction and displacement may actually be higher in some areas depending on local and federal resources, recovery efforts, policies (or lack thereof), and market dynamics." UDP's Housing Precarity Risk Model shows eight census tracts in Berkeley that have been rated by UDP as "Higher Precarity" with a composite score between 3 and 5 points out of a range of 0 to 9. These census tracts (4232, 4233, 4234, 4235, 4240.02, 4240.01, 4239.01, and 4217) are located in south and west Berkeley. Census tracts with a high percentage of student residents (over 30 of total tract population per UDP) are excluded. Of these eight census tracts, five are also designated as "Advanced Gentrification" by UDP in its Displacement Typology Map provided in Exhibit 1A. Together, both the Displacement Typology Maps and Housing Precarity Risk Model indicate that many areas of Berkeley have been, or are undergoing, or will likely undergo gentrification and displacement with UC Berkeley's recent and projected employment and enrollment growth contributing to these trends.

17. Attached hereto as Exhibit 6 is a true and correct copy of the SNC's comment letter dated September 25, 2021, that I submitted to the Regents regarding the Final Environmental Impact Report issued by UC Berkeley in 2021 for its Long Range Development Plan and Housing Projects #1 and #2. Exhibit 6 attaches) numerous studies that show how UC Berkeley could study the impacts of its enrollment growth on the population if it chose to do so. These studies provide methodologies and best practices for measuring, among other things, the impact on total housing construction and affordable housing requirements generated by the University's increase in employment, housing projects, and student enrollment.

I declare under penalty of perjury under the laws of the State of

California, that the foregoing is true and correct of my personal knowledge.

Executed on February 17, 2022, in Berkeley, California. David Shiver

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### Exhibit 1A

### UC Berkeley Urban Displacement Project Map with Displacement Typologies

Note: Arrow and text box added by Declarant.

Source:

https://www.urbandisplacement.org/maps/sf-bay-area-gentrification-and-displacement/



### Exhibit 1B

# UC Berkeley Urban Displacement Project Map with Displacement Typologies 2015 Map

Note: Arrow and text box added by Declarant

Source:

https://web.archive.org/web/20151225184821/http://www.urbandisplacement.org/





### Exhibit 1C

### **Census Tract Numbers and Map**

### **U.S. Census Bureau**

Note: Arrow and text box added by Declarant.

#### Source:

https://data.census.gov/cedsci/map?q=census%20track%20map&g=1400000US06001400100,06001400 200,06001400300,06001400400,06001400500,06001400600,06001400700,06001400800,06001420301,060 06001404200,06001404300,06001404400,06001404502,06001420100,06001420200,06001420301,060 01420302,06001420401,06001420402,06001420500,06001420600,06001421100,06001421200,060014 21300,06001421400,06001421500,06001421600,06001421700,06001421800,06001421900,060014220 00,06001422100,06001422200,06001422300,06001422400,06001422500,06001422700,06001422800,0 6001422901,06001422902,06001423000,06001423100,06001423200,06001423300,06001423400,0600 1423500,06001423601,06001423602,06001423700,06001423800,06001423901,06001423902,0600142 4001,06001424002,06001425101,06001425102,06001425103,06001982100,06013353001,0601335400 1,06013354002,06013356002,06013380001,06013382000,06013383000,06013389100,06013389200,06 013390200,06013391000\_1600000US0606000&vintage=2020&layer=VT\_2020\_140\_00\_PY\_D1&mode= selection



### Exhibit 1D

### Housing Precarity Risk Model Map

### UC Berkeley Urban Displacement Project

Note: Arrow and text box added by Declarant,

Source:

https://www.urbandisplacement.org/maps/housing-precarity-risk-model/



### Exhibit 2 Loss of Low-income Households

### Berkeley

Census Tracts Designated	Change in	
		Low-
"Advanced Gentrification" (c)(d)	Population (a)	income (b)
4239.01	1,954	-13.7%
4239.02	1,539	-15.9%
4240.01	4,151	-17.2%
4240.02	2,507	-2.9%
4233	3,764	-5.6%
4234	5,069	-14.3%
Sum/Weighted Average	18,984	-11.8%

Notes:

(a) Census tract population as of date per UDP.

(b) Time period per UDP.

(c) Definition of "Advanced Gentrification" per UDP.

(d) All census tracts located within two miles of Campus Core.

Source: UC Berkeley Urban Displacement Project website:

https://www.urbandisplacement.org/maps/sf-bay-area-gentrification-and-displacement/ Accessed February 16, 2022.

Berkeley		UDP Displacement Typology Map Designations (b)			
Census Tracts (c)	Population (a)	2015	2018		
		"Undergoing	"High Student		
4237	4,399	displacement"	Population"		
4224	4,386	"At Risk of	"High Student		
		Gentrification or	Population"		
		Displacement"			

### Exhibit 3 Student Displacement of Long-term Residents

Notes:

(a) As of date per UDP.

(b) "Undergoing Displacement," "At Risk of Gentrification or Displacement," and "High Student Population" per UDP.

(c) Located within half mile of Campus Core.

Sources: UC Berkeley Urban Displacement Project website:

https://www.urbandisplacement.org/maps/sf-bay-area-gentrification-and-

displacement/

Internet Archive captured webpage:

https://web.archive.org/web/20151225184821/http://www.urbandisplacem ent.org/

Accessed February 16, 2022.

## Exhibit 4 Change in Incidence of Homelessness

				2015-2019 C	hange
Homelessness					Percen
Population	2015	2017	2019	Number	t
Berkeley	834	972	1,108	274	33%
Oakland	2,191	2,761	4,071	1,880	86%
Sources:	City of Berkeley H 2019, page 12.	Iomeless County	and Survey, Co	omprehensive F	Report
	City of Oakland H 2019, page 12.	omeless Count a	nd Survey, Cor	mprehensive Re	port

### Exhibit 5 Change in African American Population in Berkeley and Oakland

	2010		2020		2010-2020 Change	
	Number	Percent	Number	Percent	Number	Percent
Total Population - Berkeley	112,590	100.0%	124,321	100.0%	11,731	NA
<b>Race</b> Black or African American alone	11,241	10.0%	9,812	7.9%	(1,429)	-12.7%
Total Population - Oakland	390,724	100.0%	440,646	100.0%	49,922	NA
<b>Race</b> Black or African American alone	109,471	28.0%	93,820	21.3%	(15,651)	-14.3%

Source: U.S. Census Bureau; 2010 Census; 2020 Census.

### Exhibit 6

### SNC September 21, 2021 Comment Letter

(See following pages)



September 25, 2021

Via Electronic Mail Only

University of California Board of Regents Office of the Secretary and Chief of Staff to the Regents 1111 Franklin St., 12<sup>th</sup> Floor Oakland, CA 94607

regentsoffice@ucop.edu

LRDP Project Manager UC Berkeley, Physical and Environmental Planning 300 A&E Building Berkeley, CA 94720 planning@berkeley.edu

- Re: (1) September 29, 2021, Finance and Capital Strategies Committee meeting, Agenda Item F3 (Budget, Scope, and External Financing, Student Housing and Open Space Components; and Design, All Components, Following Action Pursuant to the California Environmental Quality Act, Housing Project #2, Berkeley Campus)
  - (2) September 30, 2021, Board of Regents of the University of California meeting, Agenda Item B5, entitled "Committee Reports Including Approvals of Recommendations from Committees: ... Finance and Capital Strategies Committee."

Dear Members of the Board of Regents of the University of California,

The undersigned members of the Southside Neighborhood Consortium ("SNC") are submitting comments on the proposed CEQA Findings and Statement of Overriding Considerations for Housing Project #2 ("Findings").

We note that these SNC comments are submitted on behalf of each of the individuals and organizations listed as signatories on page 8 of this letter and each individual and organization objects to the approval of Housing Project 2 and the Findings.

### I. The Population and Housing Findings are legally inadequate under CEQA

In the Findings, UC determined that the Population and Housing impacts (POP-1, POP-2 and POP-3) would have no impact or less than significant impacts on the environment.<sup>1</sup> However, UC failed to follow CEQA Guideline 15126(e) which provides:

<u>Growth-Inducing Impact of the Proposed Project</u>. Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment....Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

Numerous commenters provided substantial evidence of all of the ways that the Project was growth inducing, but the Findings either ignore or improperly dismiss the evidence submitted. Consequently, the determination is legally inadequate, and the Regents approval of the Findings would be a prejudicial abuse of discretion. Each of the POP impacts is significant, as we set forth below.

# A. POP-1---The Project will induce substantial unplanned growth, both directly and indirectly

It is very clear from the evidence submitted in the comments that Project will induce substantial unplanned growth. While there are reasonable and widely used methodologies to estimate the housing impact of increases in students and employees, including the need for additional housing, including affordable housing, UC failed to utilize such methodologies to analyze the potential environmental impacts of its growth.

Many California cities and counties prepare housing nexus and linkage studies that estimate the impact on the local housing market of new commercial and residential construction within their jurisdictions. These studies are used to set housing impact fees that are collected by the agencies and expended to support the construction of affordable housing. These studies typically estimate the total new demand for housing construction generated by population and employment growth. After preparing an estimate of total housing impact, these studies then prepare economic models that can make estimates of the need for affordable housing. Affordable housing impacts are expressed for various income levels (moderate income, low-income, very low-income, and extremely low income which are defined as a percent of the area medium household income pursuant to U.S. Department of Housing and Urban Development standards).

Examples of housing nexus or linkage fee studies in the Bay Area include the City and County of San Francisco, City of Oakland, City of Berkeley, City of San Jose, City of Mountain View, City of Walnut

<sup>&</sup>lt;sup>1</sup> "POP-1 The proposed project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); POP-2 The proposed project would not displace substantial numbers of existing people or housing and would not necessitate the construction of replacement housing elsewhere; POP-3 The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in less-than-significant cumulative impacts with respect to population and housing." Findings at page 8.

Creek, City of Palo Alto, City of Menlo Park, City of Sunnyvale, City of Santa Clara, City of San Mateo, City of San Bruno, City of Redwood City, City of Cupertino, and County of Santa Clara, among others.

At least three of these studies specifically prepare estimates of impacts generated by changes in student population and employment at academic institutions. A 2015 study prepared by BAE Urban Economics, Inc. for the City of Berkeley ("Berkeley 2015 Study")<sup>2</sup> found that a 100-unit apartment building, through the spending of its residents, generates the demand for 59.9 units of housing, including 25.5 units of affordable housing for low, very-low, and extremely low-income households. This study also noted that student spending is higher than non-student spending, consequently the impact on demand for affordable housing may be understated since many new apartment buildings are occupied by student households<sup>3</sup>. Examples of student spending include purchases of goods and services such as Uber/Lyft transportation, prepared meals delivery, fast and quick service food, cafes, bars, personal services, and entertainment. These types of expenditures are in retail and service sectors that typically pay low wages which in turn generate demand for affordable housing as demonstrated in this and other studies.

Applying these housing impact factors from the Berkeley 2015 Study to Housing Project 2, for example, this project would generate demand for approximately 222 new total housing units  $(1,113 \text{ beds} \div 3)$  (average beds per unit<sup>4</sup>) = 371 apartment units. 371 units  $\div 100 = 3.71$ .  $3.71 \times 59.9 = 222$  units of housing impact). and 95 affordable housing units  $(3.71 \times 25.5 = 95)$  units of affordable housing impact).

Applying these factors to the cumulate impact of proposed Housing Project #1 (772 beds) and proposed GSPP/Upper Hearst housing (225 beds), along with the 776 beds at Blackwell Hall, would, for example, generate demand for approximately 354 units of total housing, assuming an average of three beds per equivalent apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment units. 591 units  $\div$  100 =5.91. 5.91 x 59.9 = 354 units of total housing impact). Applying this factor to the cumulate impact of proposed Housing Project #1 (772 beds) and proposed GSPP/Upper Hearst housing (225 beds), along with the 776 beds at Blackwell Hall, would, for example, generate demand for approximately 151 units of affordable housing, assuming an average of three beds per apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment (1,773 beds  $\div$  3 (beds per unit) = 591 apartment units. 591 units  $\div$  100 =5.91.

The City and County of San Francisco commissioned a study prepared by Keyser Marston and Associates, Inc. ("CCSF 2019 Study")<sup>5</sup> that documented the impact of institutional uses (including education) on demand for affordable housing. This study found that for every 1,000 gross square feet of new institutional development, .575 of total housing demand is generated, including 0.33176 units of affordable housing units. Applying this factor to the cumulative impact of 3.19 million square feet of Academic Life and Campus Life construction proposed by UC under its LRDP 2021, UC would generate a

<sup>&</sup>lt;sup>2</sup> See *City of Berkeley Affordable Housing Nexus Study*, Draft, March 25, 2015 included in Item 9- Attachment 2 Planning Commission meeting September 2, 2015.

<sup>&</sup>lt;sup>3</sup> Ibid, Appendix C. Note that this finding was based, in part, upon data supplied by UC Berkeley.

<sup>&</sup>lt;sup>4</sup> Housing Project #2 is planned to have 148 units with primarily four-bedroom units with two beds per bedroom. This is not a typical floor plan when compared to new housing units which are primarily one- or two-bedroom units according to data provided in Table 2 of the Berkeley 2015 Study, page 4. The estimate of housing impact in this comment assumes three beds per unit reflecting an average mix of one- and two-bedroom units that would provide up to two beds in a one-bedroom unit and up to four beds in a two-bedroom unit.

<sup>&</sup>lt;sup>5</sup> See City and County of San Francisco, *Jobs Housing Nexus Analysis, San Francisco, California*, prepared by Keyser Marston and Associates, Inc., May 2019.

need to fund or construct approximately 1,834 total housing units of which 1,075 units would need to be affordable housing units<sup>6</sup>.

The County of Santa Clara prepared a study of the housing impacts arising from a proposal by Stanford University to expand its campus in that county<sup>7</sup>. That study found that Stanford's development program of 2.27 million square feet would generate demand for approximately 2,172 total housing units, of which 602 units would need to be constructed affordable rental rates. The study also utilized a methodology to estimate the demand for new housing stimulated by Stanford's expansion of faculty and student housing.

	Berkeley 2015		
Housing Impact	Study	CCSF 2019 Study	SCC 2018 Study
Total Housing Construction	59.9 units per 100-unit	.57 unit for every 1,000 gross	.51560 for every 1,000 gross
Demand	apartment complex	square feet	square feet (a)
Affordable Housing Construction Demand	25.5 units per 100-unit apartment complex	.33176 unit for every 1,000 gross square feet	.42359 for every 1,000 gross square feet (b)
	Application of study	generation factors to l	JC Berkeley LRDP
UC Berkeley LRDP and Housing Projects #1 and #2	576-unit total construction need for non- student housing generated by demand from new 4,996 UC- provided student beds	1,834-unit total housing construction need generated by 3.19 million sq. ft. of new academic and campus life facilities	1,645-unit total housing construction need generated by 3.19 million sq. ft. of new academic and campus life facilities

These studies are be summarized in the following table:

(a) Calculated by dividing 1,174 new Above Moderate employees as reported in Table II-7B on page 14 by 2,275,000 gross square feet, unadjusted, and multiplying by 1,000.

(b) Calculated by SNC by multiplying the factor taken from Table II-9 on page 16 and multiplying by 1,000.

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<sup>&</sup>lt;sup>6</sup> The generation factor for total housing demand is taken from Table III-5 of the CCSF 2019 Study (and divided by SNC by 100) and the generation factor for affordable housing is taken from Table III-6.

<sup>&</sup>lt;sup>7</sup> See Santa Clara County, *Affordable Housing Nexus Analysis Addendum*, prepared by Keyser Marston and Associates, Inc. April 2018.

What these studies demonstrate is that there are widely recognized methodologies for determining:

- The impact on total housing construction requirements generated by the University's own increase in employment.
- The impact on affordable housing construction requirements generated by the University's own increase in employment.
- The impact on total and affordable housing of new student housing that arising from economic activity stimulated by student spending

# B. The proposed Project will exacerbate UC's continued displacement of Berkeley residents, increasing homelessness and requiring the construction of housing elsewhere.

Given the large increase in both employees (3,190) and student population (14,750) <sup>8</sup>over the baseline set forth in the 2005 LRDP EIR, UC has a potentially large physical impact on housing through the need to replace housing for residents displaced by UC staff and students. However, these impacts are unknown because UC has failed to study them in the Draft EIR and FEIR.

The analysis focuses solely on the physical displacement that would occur if UCB acquired additional properties ('direct displacement') and does not even discuss the impacts of enrollment growth on displacement that occurs in the housing market in the City of Berkeley. The comments are replete with comments about displacement of long-time tenants by students all over the city, and the responses ignore the data from UC's own Urban Displacement Project which has published studies of displacement for Alameda County as well as near the MacArthur BART Station in Oakland<sup>9</sup>. By not housing its students and staff UC's growth triggers the need for the construction of replacement housing. CEQA Guidelines require analysis of population growth if the growth will result in environmental impacts from the need to build additional housing for displaced persons.

The inadequate displacement analysis, which is almost exactly the same as the discussion in the GSPP FSEIR<sup>10</sup>, was found to be legally inadequate<sup>11</sup>. In an order granting petitions for writs of mandate seeking to vacate the Regents' approval of the GSPP FSEIR, Judge Seligman found that "Increases in campus population foreseeably lead to direct and indirect impacts on housing, population, and displacement, and the failure to consider those impacts constitutes a prejudicial abuse of discretion."<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> FEIR at p. 5-42

<sup>&</sup>lt;sup>9</sup> See University of California, Berkeley, URBANDISPLACEMENT.ORG, *Rising Housing Costs and Re-Segregation in Alameda County,* undated, and *MacArthur Accessibility and Investment in North Oakland*, June 2015.

<sup>&</sup>lt;sup>10</sup> https://capitalstrategies.berkeley.edu/sites/default/files/upper\_hearst\_final\_seir\_may\_2\_2019.pdf

<sup>&</sup>lt;sup>11</sup> See Order Granting Petitions for Writ of Mandate, Save Berkeley's Neighborhoods v. Regents, July 9,2021,

Alameda Superior Court

<sup>&</sup>lt;sup>12</sup> Order at p. 16

# C. The proposed project, in combination with past, present, and reasonably foreseeable projects, would result in significant cumulative impacts with respect to population and housing

As noted in Section I.A. above, the Findings ignore the significant increase in demand for housing that would be generated by the Project. The findings also ignore the significant cumulative impact of housing projects. Past projects, noted in the FEIR, such as Martinez Commons and Blackwell Hall added 1180 beds,<sup>13</sup> the proposed Upper Hearst project would add 225 beds and Housing Project #1 would add 772 beds, and the FEIR proposes several thousand additional beds.

We note that the increase in beds from all of these projects (10,188)<sup>14</sup> amounts to more than 8% of Berkeley's current population (124,321).<sup>15</sup> Yet nowhere in the SEIR, FEIR or the Findings is there an analysis of these huge cumulative impacts.

Finally, there is no consideration of the cumulative impact of the allocation of 8,934 housing units to the City of Berkeley as part of the Association of Bay Area Government's Regional Housing Needs Allocation, a draft of which was released in December 2020<sup>16</sup>. UC's growth is not taking place in a vacuum, and the RHNA allocation is a reasonably foreseeable project that will affect the housing market in Berkeley. This RHNA allocation together with the aforementioned UC cumulative housing impacts could result in significant housing impacts and cumulative impacts are unstudied by the FEIR.

UC's proposed mitigation of submitting reports of its growth to ABAG does not reduce the significant impact of its growth. According to the California Department of Housing and Community Development's Housing Element Site Inventory Guidebook Government Code Section 65583.2<sup>17</sup>:

Student/University Housing: Please be aware, college and university student housing may be considered noninstitutional group quarters and not a housing unit for purposes of meeting the RHNA (emphasis added). According to the census, college/university student housing includes residence halls and other buildings, including apartment-style student housing, designed primarily to house college and university students in group living arrangements either on or off campus. These facilities are owned, leased, or managed by a college, university, or seminary or can be owned, leased, or managed by a private company or agency. Residents typically enter into "by the bed" leases (i.e., single-liability leases). Another distinguishing factor is that the unit is not available for rent to non-students.

<sup>&</sup>lt;sup>13</sup> FEIR at p. 5-42

<sup>&</sup>lt;sup>14</sup> FEIR at p. 5-42

<sup>&</sup>lt;sup>15</sup> https://www.census.gov/quickfacts/berkeleycitycalifornia

<sup>&</sup>lt;sup>16</sup> See Association of Bay Area Governments, Press Release, *Release of Regional Housing Needs Allocation Methodology*, dated December 18, 2020 and *Draft Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031*, May 2021.

<sup>&</sup>lt;sup>17</sup> See California Department of Housing and Community Development's Housing Element Site Inventory Guidebook Government Code Section 65583.2 Memorandum, June 10 2020, page 6.

The FEIR takes the position that annual reporting of growth to ABAG is a sufficient mitigation, somehow turning UC's growth into 'planned' growth, However, as noted above ABAG, by law, can't account for university housing in its planning.

Finally, having purportedly implemented a mitigation measure, the FEIR then refuses to address challenges to the mitigation as inadequate.

For example, UC responds to the SNC comment B4-53<sup>18</sup> with the claim that it's only 'unplanned' growth that matters, and that by providing their growth information to ABAG, they satisfy their obligations to mitigate the impact. Since RHNA doesn't include beds owned, built, or managed by UC (see above), simply reporting growth numbers to ABAG would not reduce any impacts to less than significant. The FEIR once again avoids studying the impacts of population growth on housing,

In another example of this attempted sleight of hand, the response to former Berkeley Mayor Shirley Dean's comment C-105-219 about not having student beds and demand included in RHNA, the FEIR claimed that her comments did not raise specific concerns or questions regarding the sufficiency of analysis or mitigation measures, directly contradicting the claim that providing data to ABAG is sufficient mitigation made in the response to Comment B4-53 cited above.

# II. Action Item F3 significantly misstates the number of undergraduates living in Berkeley

Action Item F3 relies on a materially inaccurate estimate of the additional number of students who live in Berkeley. In the DEIR and FEIR, UC estimated that 71% of students lived in Berkeley<sup>20</sup>, but Action Item F3 states that only 60% of undergraduates live in Berkeley<sup>21</sup>. The difference is more than 3000 students, and the impacts from those additional students are material.

# III. The Findings rely on materially significant population increases that weren't analyzed in the FEIR

The Findings rely on materially significant increases in population and housing demand estimates that were changed between the DEIR and the FEIR. These increases were not studied in the FEIR. In the DEIR, UC used a 2018-2019 baseline for population and housing, and estimated the growth in students between 2018-19 to 2036-37 as 8,492 and a decrease in unaccommodated students of 2,581.<sup>22</sup> However the FEIR shifted the baseline to the 2005 LRDP EIR, and estimated the growth in students from 2005 to 2036-37 to be 14,700 and an increase in unaccommodated students of 2,497.<sup>23</sup> This is a change in unaccommodated students of over 5,000, yet the FEIR and the Findings say nothing about the environmental effects of this large change in population.

<sup>&</sup>lt;sup>18</sup> FEIR at p. 5-400

<sup>&</sup>lt;sup>19</sup> FEIR at p. 5-1045

<sup>&</sup>lt;sup>20</sup> See Table 5.12.3 DEIR at page 5.12-10 and FEIR at page 5-44

<sup>&</sup>lt;sup>21</sup> See Action Item F3 at p. 3.

<sup>&</sup>lt;sup>22</sup> DEIR Table 5.12-9 at p. 5.12.-19

<sup>&</sup>lt;sup>23</sup> FEIR Table 5.7 at p. 5-42

Thank you for your consideration of these comments.

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### ATTACHMENTS

1. Berkeley 2015 Study

- 2. CCSF 2019 Study
- 3. SCC 2018 Study

5. ABAG December 18, 2020 Press Release: Release of Draft Regional Housing Needs Allocation Methology

4. ABAG, DRAFT REGIONAL HOUSING NEEDS ALLOCATION (RHNA) PLAN: San Francisco Bay Area, 2023-2031

5. California Department of Housing and Community Development, Housing Element Site Inventory Guidebook Government Code Section 65583.2

6. UC Berkeley, UrbanDisplacementproject.org, Rising Housing Costs and Re-Segregation in Alameda County

7. UC Berkeley, UrbanDisplacementproject.org, MacArthur: Accessibility and Investment in North Oakland

Item 9 – Attachment 2 Planning Commission September 2, 2015

bae urban economics

City of Berkeley Affordable Housing Nexus Study \*\*DRAFT\*\* March 25, 2015

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## **INTRODUCTION**

## **Purpose of Report**

The City of Berkeley's Inclusionary Housing Ordinance has been an important tool in creating affordable housing in the City since its adoption in 1986. Generally speaking, the City's Inclusionary Housing Ordinance (Chapter 23C.12 of the Municipal Code) requires that at least 20 percent of the total number of units in rental and ownership projects with five or more units be affordable to low-income households earning up to 80 percent of the Area Median Income (AMI).<sup>1</sup>

The 2009 California Appellate Court ruling in *Palmer/Sixth Street Properties LP v. City of Los Angeles* (*"Palmer"*) overturned previous understandings about the validity and analytic underpinning of inclusionary housing ordinances as applied to market rate <u>rental</u> housing projects. The *Palmer* case found that inclusionary housing requirements on rental developments violate the Costa-Hawkins Rental Act of 1995 and effectively outlawed these programs for new rental properties, compelling jurisdictions throughout California to reconsider their inclusionary ordinances. As an alternative, jurisdictions may assess an affordable housing impact fee on new rental developments, based on the affordable housing need generated by the new units. This relationship between new residential development, the need for affordable units, and the associated impact fee must be established through a "nexus study." California case law and the Mitigation Fee Act require California jurisdictions to show through a nexus study that (1) the proposed development is in fact creating an impact and (2) the fee is proportional to the impact.<sup>2</sup> The nexus study effectively establishes the *maximum* fee amount that a jurisdiction may legally assess.

In response to the *Palmer* case, the City of Berkeley retained BAE Urban Economics (BAE) in 2010 to prepare a nexus study that provides the City with a legally defensible affordable housing fee for new rental housing. The 2010 nexus study found that the maximum per unit fee was \$34,000 for rental developments. However, the study recommended that the City establish the fee at \$19,310 per unit to address concerns related to the financial feasibility of new projects. The City's current (2014) fee rate is \$28,000 per unit.

In 2014, the City of Berkeley retained BAE to update the previous nexus study to determine the current maximum fee for rental units. In addition, the City requested an analysis of a) the nexus and maximum fees applicable to new market-rate for-sale projects, and b) for new market rate units that are built to replace older less expensive units that have been demolished or destroyed.

This report is the update to the 2010 nexus study, and also includes these new additional items.

<sup>&</sup>lt;sup>1</sup> AMI is established annually for each county in California by the State Department of Housing and Community Development (HCD).

 $<sup>^{\</sup>rm 2}$  San Remo Hotel vs. City and County of San Francisco (1991) is the relevant case law.

## Organization of Report

After this introduction, this report contains the following sections:

- Affordable Housing Needs Assessment. This section provides an overview of Berkeley's residential market and analyzes the affordability of market rate housing in the City.
- Affordable Housing Nexus Analysis for New Housing. This section outlines the nexus study methodology and findings related to new rental and for-sale residential development.
- Affordable Housing Nexus Analysis for Replacement Housing. This section outlines the nexus study methodology and findings related to new housing units that are constructed to replace units that were destroyed or demolished.
- **Financial Feasibility Analysis.** This section provides a pro forma analysis to assess the effects of additional fees on development feasibility.
- **Recommendations.** This section offers general recommendations to the City as it considers an affordable housing impact fee based on best practices in the affordable and inclusionary housing field.

## AFFORDABLE HOUSING NEEDS ASSESSMENT

This chapter summarizes the current residential market in Berkeley in light of major market shifts in recent years. It is important to note that Berkeley's rental housing market is affected by many factors, including both high demand by all segments of the housing market, as well as the City's Rent Stabilization program, which limits rent increases for existing tenants in units that meet legal requirements for registration.

## **Rental Market Overview**

### Rental Units Subject to Rent Stabilization

In June 1980, Berkeley residents approved the Rent Stabilization and Eviction for Good Cause Ordinance (Berkeley Municipal Code Chapter 13.76). In general, the Ordinance limits annual rent increases for units built before June 30, 1980. However, landlords are allowed to charge market rate rents when a unit is vacated and leased to a new tenant.<sup>3</sup> Thus, the Berkeley rental housing market, within which approximately 69 percent of all rental units are subject to stabilization, is directly influenced overall by these limits on rent increases for existing tenants.<sup>4</sup> In housing markets elsewhere in the Bay Area without these requirements for rent stabilization, overall housing needs swing more dramatically, as existing tenants can be charged large rent increases each year in line with housing booms.

The Berkeley Rent Stabilization Board, which implements the rent stabilization law, collects and reports data on rental rates for units subject to rent stabilization on a quarterly basis. A summary of recent rent-stabilized market data is shown below. The Rent Stabilization Board data tracks rents for both "all units" subject to rent stabilization, as well as those in the subset representing "new tenancies" after a unit is vacant and leased again. As shown, the average rent for all units ranged from \$1,000 per month for studios to \$2,382 for three-bedroom units. Not surprisingly, the rents for new tenancies were higher, as landlords establish new market rate rents when units are vacated and leased to a new tenant. Median rents for new tenancies ranged from \$1,092 for studios to \$2,910 for three-bedroom units. As shown, there were 5,034 new tenancies in 2013, indicating that approximately 26 percent of rent-stabilized units were re-tenanted in 2013 with new market-rate rents.

 <sup>&</sup>lt;sup>3</sup> Vacancy decontrol was mandated after the State legislature passed the Costa-Hawkins Rental Act in 1995, which allows rent to increase to market rates when a qualifying vacancy occurs and reinstates rent control for a new tenant.
 <sup>4</sup> Data is reported for units subject to the City's Rent Stabilization Ordinance. As of May 15, 2014, 19,118 units were registered with the Rent Stabilization Board. The American Community Survey estimates that there are approximately 27,500 renter households in the City.

# Table 1: Average Rent for Units Subject to RentStabilization, Berkeley, 1<sup>st</sup> Quarter 2014

	New Tenancies in 2013 (a)		All Units, 2014 (b)	
Unit Type	Average Rent	Units	Average Rent	Units
Studio	\$1,092	1,158	\$1,000	3,668
1-Bedroom	\$1,469	1,931	\$1,242	7,893
2-Bedroom	\$2,086	1,547	\$1,705	5,975
3-Bedroom	\$2,910	289	\$2,382	1,026
All Units	\$1,715	5,034	\$1,442	19,118

Notes:

(a) Data on new tenancies reflect all new tenancies that started in 2013,

the most recent year-long period for which data are available.

(b) Data on all units are shown as of 5/15/2014.

Sources: Berkeley Rent Stabilization Board, 2014; BAE, 2014.

#### New Market Rate Rental Units Not Subject to Rent Stabilization

At the other end of the market's spectrum, Berkeley has experienced a rise in new multifamily rental developments in recent years. Monthly rents at new developments are substantially higher than citywide rents for the older units built before 1980 that are subject to rent stabilization. Table 2 summarizes current market data for five multifamily developments in Berkeley that were constructed between 2007 and 2012 (see Appendix A for additional detail). As shown, average rents in 2014 ranged from \$2,239 for studios to \$4,200 for three-bedroom units.

# Table 2: Average Rents for New MultifamilyDevelopments, 2014

Unit Type	Weighted Average Rents (a)	Units
Studio	\$2,239	23
1-Bedroom	\$2,537	403
2-Bedroom	\$3,434	303
3-Bedroom	\$4,200	3
Vacancy Rate (b)	3.1%	1,054

(a) Rents reported for five new rental developments: Berkeley Central, Fourth & U, New Californian, Hillside Village, and Library Gardens. These five developments were constructed between 2007 and 2012.

(b) Vacancy rate shown is for all properties in Berkeley that are included in the realAnswers inventory, which consists of 1,054 units in 9 properties. All properties in Berkeley in the realAnswers inventory consist of 50 units or more and were constructed between 2001 and 2012.

Sources: realAnswers, 2014; BAE, 2014.

Rental properties in Berkeley generally have low vacancy rates. Among properties surveyed by realAnswers, a private data vendor which surveys projects with 50 units or more, the vacancy rate was 3.1 percent during the first two quarters of 2014. While this sample only represents a portion of the rental stock in Berkeley, it offers a general benchmark for vacancy rates in the City. Housing economists generally consider a rental vacancy of five percent as sufficient to provide adequate choice and mobility for residents and sufficient income for landlords. Higher rates result in a

depressed rental market, while vacancy rates below five percent tend to restrict resident mobility and indicate an extremely tight housing market.

## **Rental Housing Affordability**

This section discusses the affordability of housing in Berkeley, relative to federal and State-defined household income limits. The U.S. Department of Housing and Urban Development (HUD) and the California Department of Housing and Community Development (HCD) characterize households as "extremely low-income," "very low-income," "low-income," "moderate-income," or "above-moderate income" based on percentages of the Area Median Income (AMI). The income categories are defined below:

- Extremely Low-Income: Up to 30 percent of AMI
- Very Low- Income: 31 percent to 50 percent of AMI
- Low-Income: 51 percent to 80 percent of AMI
- Moderate-Income: 81 percent to 120 percent of AMI
- Above-Moderate Income: More than 120 percent of AMI

In accordance with guidelines established by HUD, housing is considered "affordable" if it costs no more than 30 percent of the household's gross income, including utilities.

Table 3 compares the maximum affordable monthly rent for households of various sizes with the average market rate rents in Berkeley. The average rent shown in the table is a weighted average of rental rates for several recently-constructed large projects in Berkeley, along with the rental rates reported by the Berkeley Rent Stabilization Board.<sup>5</sup> These two data sources are combined and averaged, in order to reflect overall market rate rents in the pre- and post-1980 housing inventory. Maximum affordable monthly rent assumes that households pay 30 percent of gross household income on rent and utilities. As a conservative measure to avoid overstating the affordability of rental housing, this analysis uses household incomes at the mid-point of each income range when calculating affordable rents.<sup>6</sup> Utility costs are based on utility allowances published by the Berkeley Housing Authority.

The data suggest that some moderate-income households can afford market rents in Berkeley, particularly households that can be accommodated in smaller units. The maximum affordable rent for moderate-income households exceeds average market rents for one- and two-person

<sup>&</sup>lt;sup>5</sup> Data on newer properties are provided by realAnswers, which surveys rental properties with 50 units or more. The realAnswers inventory includes a total of nine properties in Berkeley, all built between 2001 and 2012, with a total of 1,054 units. The Rent Board provides data on the 19,118 units in Berkeley that were covered by the rent stabilization ordinance as of the first quarter of 2014, all of which were built in 1980 or earlier. Rents for new tenancies were used to compute the weighted average among rent-stabilized properties to reflect the average cost of an apartment for a household beginning a tenancy in Berkeley in 2014. Together, the units surveyed by realAnswers and the Rent Board comprise 73 percent of all rental units in Berkeley.

<sup>&</sup>lt;sup>6</sup> For example, for the 50%-80% of AMI range, 65% of AMI is used to calculate affordable rents.

households. However, market rents exceed affordable rents for three- or four-person households with moderate incomes.

The analysis also finds that market rents exceed the maximum affordable rent for households with incomes that are below the moderate-income level. Market-rate rents are higher than the maximum affordable rent for low-income households across all household sizes, and are significantly higher than the maximum affordable rent for extremely low- and very low-income households.

	Household (Unit) Size			
	1 Person	2 Person	3 Person	4 Person
	(Studio)	(1 Bedroom)	(2 Bearooms)	(3 Bearooms)
Average Market-Rate Rent (a)	\$1,105	\$1,529	\$2,171	\$2,914
Utility Costs (b)	\$34	\$48	\$62	\$75
Maximum Affordable Monthly Rent				
Extremely Low Income (up to 30% AMI)				
Household Income at Midpoint of Income Range (c)	\$9,825	\$11,225	\$12,625	\$14,025
Max. Affordable Monthly Rent (d)	\$212	\$233	\$254	\$276
Amount Above (Below) Market Rate Rent	(\$893)	(\$1,297)	(\$1,917)	(\$2,638)
Very Low Income (31-50% AMI)				
Household Income at Midpoint of Income Range (c)	\$26,200	\$29,925	\$33,675	\$37,400
Max. Affordable Monthly Rent (d)	\$621	\$700	\$780	\$860
Amount Above (Below) Market Rate Rent	(\$484)	(\$829)	(\$1,391)	(\$2,054)
Low Income (51-80% AMI)				
Household Income at Midpoint of Income Range (c)	\$40,050	\$45,750	\$51,475	\$57,175
Max. Affordable Monthly Rent (d)	\$967	\$1,096	\$1,225	\$1,354
Amount Above (Below) Market Rate Rent	(\$138)	(\$434)	(\$946)	(\$1,560)
Moderate Income (81-120% AMI)				
Household Income at Midpoint of Income Range (c)	\$62,950	\$71,925	\$80,925	\$89,900
Max. Affordable Monthly Rent (d)	\$1,540	\$1,750	\$1,961	\$2,173
Amount Above (Below) Market Rate Rent	\$435	\$221	(\$210)	(\$741)

#### Table 3: Affordability of Market Rate Rental Housing in Berkeley, 2014

Notes:

(a) Based on a weighted average of rents among rent-controlled properties and among newer properties. Average rents for rent-controlled properties are based on rents for new tenancies in the first quarter of 2014, as reported by the Rent Stabilization Board. Average rents for newer properties are based on information reported by realAnswers, which collects data on properties with 50 units or more, including 9 properties with a total of 1,054 units in Berkeley, all of which were built in 2001 or later.

(b) Utility costs based on utility allowance for multifamily dwellings established by the Berkeley Housing Authority in 2014. Utility cost estimates assume that water, sewer, and trash collection costs are included in monthly rental amount.
 (c) Household income limits published by the California Department of Housing and Community Development for Alameda County, 2014. Shows mid-point of income range.

(d) Assumes 30 percent of income spent on rent and utilities.

Sources: California Department of Housing and Community Development, 2014; Berkeley Housing Authority, 2014; BAE, 2014.

Table 4 shows the income required to afford the average rent for a market-rate unit in Berkeley, based on assumptions related to household and unit sizes, using the average market-rate rents shown in Table 3. As shown, the income required as an estimated percent of AMI increases as household sizes increase, from 76 percent of AMI for a one-person household to 128 percent for a four-person household. Overall, Table 4 suggests that households earning 100 percent of AMI or less are typically unable to afford the average market-rate unit in Berkeley.

#### Table 4: Income Required to Afford Market-Rate Rents in Berkeley, 2014

	Household (Unit) Size				
	1 Person	2 Person	3 Person	4 Person	
	(Studio)	(1 Bedroom)	(2 Bedrooms)	(3 Bedrooms)	
Average Monthly Rent (a)	\$1,105	\$1,529	\$2,171	\$2,914	
Plus Utilities (b)	<u>\$34</u>	<u>\$48</u>	<u>\$62</u>	<u>\$75</u>	
Total Monthly Housing Costs	\$1,139	\$1,577	\$2,233	\$2,989	
Annual Housing Costs	\$13,669	\$18,929	\$26,794	\$35,868	
Household Income Required (c)	\$45,564	\$63,097	\$89,314	\$119,558	
Income Required as a % of AMI (d)	76%	89%	106%	128%	

Notes:

(a) Based on a weighted average of rents among rent-controlled properties and among newer properties. Average rents for rent-controlled properties are based on rents for new tenancies in the first quarter of 2014, as reported by the Rent Stabilization Board. Average rents for newer properties are based on information reported by realAnswers, which collects data on properties with 50 units or more, including 9 properties with a total of 1,054 units in Berkeley, all of which were built in 2001 or later.

(b) Utility costs based on utility allowance for multifamily dwellings established by the Berkeley Housing Authority in 2014. Utility cost estimates assume that water, sewer, and trash collection costs are included in monthly rental amount.

(c) 30 percent of gross income spent on housing costs.

(d) Income required as a percent of AMI is estimated based on HCD income limits for households of each size and income level.

Sources: realAnswers, 2014; Berkeley Rent Stabilization Board, 2014; California HCD Income Limits, 2014; Berkeley Housing Authority Utility Allowance, 2014; BAE, 2014.

The data presented above indicate that market-rate rental units are generally not affordable to households earning the median income for Alameda County. For many households that earn less than the median income, market-rate rents are substantially higher than the affordable rental amount. The previous (2010) Nexus Study for the Berkeley's Housing Impact Fee found that households earning more than 65 percent of AMI were generally able to afford market-rate rental units, indicating that market-rate units were substantially more affordable at the time when the 2010 Nexus Study was conducted.

### For-Sale Market Overview

Berkeley has experienced significant home price increases in recent years, indicating that the Berkeley housing market has largely recovered from the economic recession. Like many Bay Area communities, Berkeley home prices experienced dramatic appreciation between 2000 and 2007 before declining as a result of the economic recession. Following the decreases that occurred during the recession, Berkeley housing prices increased again in 2012 and 2013 and have continued to rise during 2014. For example, as of July 2014, the median home sale price in Berkeley was \$785,000, an increase of 21 percent over the July 2013 median. Figure 1 shows median home sale price trends for Berkeley and Alameda County between 2005 and 2014.

Berkeley home sale prices are consistently higher than home sale prices in Alameda County overall, also shown in Figure 1. While Berkeley and Alameda County both experienced decreases in sale
prices beginning in 2008 followed by increases beginning in 2012, the median home sale price in Berkeley remained 18 to 68 percent higher than the Alameda County median in each year between 2005 and 2013. Moreover, Berkeley experienced more a moderate decrease in the median home sale price between 2007 and 2011 (20 percent) than Alameda County overall (43 percent). These data indicate that Berkeley has a strong for-sale housing market, with significant demand as expressed by rapidly rising home prices. It is important to note that the most recent data point, July 2014, shows a median house price surpassing the previous peak in 2008 before the recession.



#### Figure 1: Median Home Sale Prices, Berkeley and Alameda County, 2005-2014

Note:

(a) The July 2014 median sale price is for a single month only and is therefore not directly comparable to the annual medians shown above.

Sources: DataQuick, 2014; BAE, 2014.

### For-Sale Housing Affordability

For this study, the affordability of the for-sale marketplace in Berkeley is limited to just multifamily for-sale units, due to the approach used by the City's inclusionary program, which only charges projects with five or more units; this generally results in inclusionary requirements that are not relevant for a new single family home or duplex. Due to the high housing and land costs in Berkeley, and the built-out nature of the community, new for-sale housing projects with five units or more in them tend to be either townhouses or stacked-flat multifamily buildings.

Table 5 presents affordability scenarios for three-person households at various income levels and compares the maximum affordable sale price for each of these households to the sales prices for condominiums sold in Berkeley between July 1, 2013 and July 31, 2014. The maximum affordable sales price was calculated using household income limits published by HCD, the average July 2014 interest rate for 30-year fixed mortgages, and assuming that households provide a 20 percent downpayment and spend 30 percent of gross income on mortgage payments, taxes, and insurance.

The detailed calculations used to derive the maximum affordable sales price for single-family homes and condominiums are presented in Appendix A.

Condominium sale prices in Berkeley are largely unaffordable for households with low or moderate incomes. As shown in Table 5, a moderate-income household earning 120 percent of AMI can afford a condominium sale price up to \$400,235. Among recent condominium sales in Berkeley, only 27 percent were under this price point. Only 12 percent of condominiums recently sold in Berkeley were affordable to households earning 100 percent of AMI, and only five percent were affordable to households earning 80 percent of AMI.

Income Level	Income Limit (a)	Max. Affordable Sale Price (b)	Percent of Condos on Market Within Price Range (d)
Extremely Low-Income (Up to 30% AMI)	\$25,250	\$50,145	0.0%
Very Low-Income (Up to 50% AMI)	\$42,100	\$128,020	1.0%
Low-Income (Up to 80% AMI)	\$60,850	\$214,675	5.2%
Median-Income (Up to 100% AMI)	\$84,150	\$322,360	12.4%
Moderate-Income (Up to 120% AMI)	\$101,000	\$400,235	26.8%
Median Sale Price Number of Units Sold			\$507,000 97

#### Table 5: Affordability of Condominiums in Berkeley, 2013-2014

Notes:

(a) Income limits published by California Department of Housing and Community Development for a three-person household in Alameda County, 2014.

(b) Mortgage terms:

Annual Interest Rate (fixed)	4.13%
Term of mortgage (years)	30
Percent of sale price as down payment	20%
Initial property tax (annual)	1.27%
Mortgage Insurance as percent of loan amount	N/A
Annual homeowner's insurance rate as percent of sale price	0.57%
Homeowners Association Fee (monthly, condominiums only)	\$360
Percent of household income available for housing costs	30%
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(c) Consists of all full and verified sales of single-family residences in the 95035 between 1/1/2013 and 8/15/2013

(d) Consists of all full and verified sales of condominiums in Berkeley between 7/1/2013 and 7/31/2014.

Sources: DataQuick, 2014; Freddie Mac, 2014; California Department of Insurance, 2014; Alameda County Auditor-Controller, 2014; Condos.com, 2014; Zillow.com, 2014; BAE, 2014.

### AFFORDABLE HOUSING NEXUS ANALYSIS FOR NEW HOUSING

This chapter quantifies the link between new residential rental and for-sale development and the demand for additional affordable housing. The demand for affordable housing units is then translated into an impact fee for new residential units.

### Methodology

It is important to note that the methodology required to identify the maximum mitigation fee is subject to the California Mitigation Fee Act, which requires that such fees are related only to the increment of new development being added, and cannot mitigate market deficiencies caused by the existing marketplace. In other words, a mitigation fee cannot charge new developments for all affordable housing needs, only the affordable housing needs to be generated by the new project. This leads to a commonly-accepted methodology which estimates the household spending of just the new market-rate unit occupants (in terms of households), and the resulting portion of new workers arising from this new spending that in turn, would need affordable housing.

A brief overview of the nexus analysis methodology follows below. Subsequent sections will discuss each step in greater detail.

# Step 1: Determine number of lower-income households generated by residents in new multifamily rental units or condominiums in Berkeley

- Step 1A: Estimate household incomes of residents in new Berkeley units
- Step 1B: Determine the number of workers by industry generated by new resident spending
- Step 1C: Determine the number of lower-income households among these workers

### Step 2: Calculate cost to house lower-income households

- Step 2A: Determine the permanent loan amount developers can secure to build an affordable unit
- Step 2B: Calculate the financing gap per affordable unit
- **Step 2C:** Apply the per unit financing gap to the number of lower-income households generated by new resident spending

# Step 1: Determine number of lower-income households generated by residents in new multifamily rental units or condominiums in Berkeley

The first step in this analysis is to determine the affordable housing need generated by new rental and condominium developments. In order to do this, BAE estimated the household incomes of residents in new Berkeley apartments and condominiums, determined the number of workers that would be induced by the new household spending, and estimated the number of lower-income households that be formed and comprised of these new workers.

For the purposes of this analysis, BAE assessed the impact of a new market-rate 100-unit apartment complex and a new market rate 100-unit condominium development. Although many residential projects in Berkeley are smaller than the hypothetical 100 units, the analysis uses a hypothetical 100-unit development to simplify the calculation of per unit impacts and fees.

#### Step 1A: Estimate household incomes of residents in new Berkeley rental units and condominiums

**Multifamily Rental Units:** Table 6 presents the annual household income required to rent new apartments in Berkeley. The analysis is based on the average rent across a sample of new apartment complexes in Berkeley, and assuming households spend 30 percent of gross income on rent and utilities. New rental housing was defined as apartment complexes built between 2007 and 2012. Complexes were selected for geographic diversity, as well as variation between developers in an effort to capture a range of product types and target markets. Appendix A presents rent characteristics at the five new developments sampled for this analysis. Based on the weighted average monthly rent of \$2,906 across studios, one-bedrooms, two-bedrooms, and three-bedrooms, the annual household income required to afford these market rents is \$118,400.<sup>7</sup>

Table 6 also presents the aggregate income for all households in the hypothetical new rental development. As shown, the aggregate income is calculated by simply multiplying the household income by 100 units. This results in an aggregate income in the development of \$11.8 million.

# Table 6: Household Income Required toRent New Housing in Berkeley, 2014

Average Monthly Rent (a)	\$2,906
Plus Utilities (b)	<u>\$53</u>
Total Monthly Housing Costs	\$2,959
Annual Housing Costs	\$35,510
Household Income Required (c)	<b>\$118,400</b>
Number of Households in Development	100
Aggregate Income in Development	<b>\$11,840,000</b>

Notes:

(a) Based on rents at new apartment complexes, as shown in Appendix A.

(b) Utility costs based on utility allowance for multifamily dwellings established by the Berkeley Housing Authority in 2014. Utility cost estimates assume that water, sewer, and trash collection costs are included in monthly rental amount.
(c) 30 percent of gross income spent on housing costs. Sources: realAnswers, 2014; Berkeley Housing Authority, 2014; BAE, 2014.

<sup>&</sup>lt;sup>7</sup> See Appendix C for a detailed discussion of student tenants in new apartment complexes, and the effect of student spending on affordable housing need.

**Condominiums:** Table 7 shows the annual household income required to afford a new condominium in Berkeley. Due to the lack of recent condominium development in Berkeley, data on sales of newly-constructed condominiums were not available. To estimate the expected sale price of new condominiums in Berkeley, the analysis uses data on recent resales of existing condominiums and estimates that the sale price for new condominiums would be ten percent higher than the resale price of existing condominiums. Using this methodology, the estimated sale price of a new condominium is \$557,700. An annual household income of at least \$135,100 is required to afford this sale price.

### Table 7: Household Income Required to Purchase aNew Condominium in Berkeley, 2014

Median Condominium Sale Price, Resales (a)	\$507,000
Estimated Sale Price for New Condominiums (b)	\$557,700
Monthly Housing Costs for a New Condominium (c)	\$3,377
Annual Housing Costs	\$40,521.39
Household Income Required (d)	<b>\$135,100</b>
Number of Households in Development	100
Aggregate Income in Development	<b>\$13,510,000</b>

#### Notes:

(a) Median sale price among all full and verified sales of condominiums in the City of Berkeley between July 1, 2013 and July 31, 2014. Data for resales are used because no data on recent purchases of new condominiums in Berkeley are available.

(b) The sale price for a new condominiums in Berkeley is estimated to be ten percent higher than the median condominium resale price.

(c) Monthly homeownership costs are based on the following assumptio	ons:
Annual Interest Rate	4.13%
Term of Mortgage (years)	30
Percent of sales price as down payment	20%
Initial property tax (annual)	1.27%
Mortgage Insurance as a percent of sale price	N/A
Annual homeowner's insurance rate as a percent of sale price	0.57%
Homeowners Association Fee (monthly)	\$360
(d) Percent of household income available for housing costs:	30%

Sources: DataQuick, 2014; Freddie Mac, 2014; California Department of Insurance, 2014; Alameda County Auditor-Controller, 2014; Condos.com, 2014; Zillow.com, 2014; BAE, 2014.

#### Step 1B: Determine number of workers by industry generated by new resident spending

New household spending within an economy supports jobs. As households spend money on retail goods, food, and health, personal, professional, and educational services, they support job growth in these and other sectors.

To estimate the effect of new household spending on employment generation, this nexus study uses IMPLAN ("Impact analysis for Planning"), a widely-accepted and utilized software model. At the heart of the model is an input-output dollar flow table. For a specified region, the input-output table accounts for all dollar flows between different sectors of the economy. Using this information, IMPLAN models the way income injected into one sector is spent and re-spent in other sectors of the

economy, generating waves of economic activity, or so-called "economic multiplier" effects. Appendix B contains a more detailed overview of IMPLAN.

The IMPLAN model is also able to estimate the number of *direct*, *indirect*, and *induced* jobs generated by a given economic "event." For the purpose of this analysis, the economic "event" is the household spending by occupants of new residential units in Berkeley. *Direct* jobs refer to jobs created as an immediate result of new household spending. For example, households spend money at grocery stores, creating direct jobs in the form of cashiers and baggers. *Indirect* and *induced* job generation refers to the process whereby money spent by a household continues to circulate through an economy in subsequent transactions, supporting employment at places other than the initial point of sale. In the case of the grocery store example, *indirect* jobs would include people who work for the store's suppliers or truck drivers who deliver goods to the store. *Induced* jobs would be employment generated when the grocery store employees, store suppliers, and truck drivers spend money in the economy. This analysis includes direct, indirect, and induced jobs in the employment generated with new household spending.

The IMPLAN model is customized to reflect the economic characteristics of the specified region – in this case the nine-County Bay Area. The nexus analysis considers regional employment generation, rather than jobs generated in Berkeley exclusively, because household spending in Berkeley creates jobs throughout the Bay Area. Many of these workers cannot afford to live in Berkeley precisely because of the City's high rents. If the analysis solely considered workers living in Berkeley, it would in effect discount the needs of households who currently cannot afford to live in Berkeley, and propagate the need for affordable housing in the City. In essence, this analysis considers employment effects beyond the City's borders in order to address the City's "fair share" of regional housing need.

**Multifamily Rental Units:** Table 8 presents an estimate of new jobs by industry resulting from household spending associated with new multifamily rental development. As shown, a 100-unit apartment complex generates approximately 93 jobs across various industries.

**Condominiums:** Table 8 also presents an estimate of new jobs by industry resulting from household spending associated with new condominium development. As shown, a 100-unit condominium complex generates approximately 106 jobs across various industries.

		Number of	f Jobs (a)
		New Rental	New Condo
NAICS Code	Industry	HHs	Owner HH
11, 21	Natural Resources	0.48	0.54
23	Construction	0.67	0.76
31-33	Manufacturing	1.82	2.08
42	Wholesale Trade	3.16	3.60
44-45	Retail Trade	17.55	20.02
48-49, 22	Transportation, Warehousing, and Utilities	2.90	3.31
51	Information	1.82	2.07
52	Finance & Insurance	10.21	11.65
53	Real Estate & Rental & Leasing	4.42	5.05
54-55	Professional & Technical Services;	4.81	5.49
	Management of Companies & Enterprises		
56	Administrative & Waste Services	4.28	4.88
61	Educational Services	4.00	4.57
62	Health Care & Social Assistance	13.83	15.78
71-72	Arts, Entertainment & Recreation;	13.79	15.74
	Accommodation & Food Services		
81	Other Services, except Public Administration	8.68	9.91
	Government	0.85	0.97
	Total Jobs	93.27	106.43

# Table 8: Direct, Indirect, and Induced Employment Generation fromNew Rental and Condominium Households

Notes:

(a) Job generation is output of the IMPLAN model, and shows direct, indirect, and induced employment generated by household spending.

Sources: IMPLAN; BAE, 2014.

#### Step 1C: Determine number of lower-income households generated by new resident spending

Most worker households<sup>8</sup> in the Bay Area have more than one resident and many have more than one employed person. In some instances, economists estimate household income for workers by simply multiplying worker earnings by industry by the average number of workers per worker household. This methodology relies on the unsatisfactory assumption that on average workers make the same amount of money as other workers in their household. Given the diversity of household composition, this assumption is not appropriate. For example, a household may have a teacher and a doctor, with significantly different individual earnings.

To address this issue, this analysis makes use of a detailed and rich data set published by the U.S. Census known as the Public Use Microdata Sample (PUMS). Derived from a five percent sample of all households per the American Community Survey, and available for defined areas of 100,000 or more population, this data allows one to cross tabulate variables such as industry of employment and household income. The PUMS data set was queried to identify the number of households by income category by industry (controlling for household size) to construct a household income distribution by industry. The distribution was constructed based on the income categories defined by the California Department of Housing and Community Development (HCD). These HCD income

<sup>&</sup>lt;sup>8</sup> A worker household is defined as a household with one or more employed persons. They may be wage and salary workers, or self-employed/sole proprietors.

categories are defined as a percentage of the Area Median Income (AMI), adjusted for household size.

As a conservative measure, the income distribution was adjusted to account for the fact that households earning up to 100 percent of AMI require rental housing assistance in Berkeley. This assumption stems from the analysis presented in Table 4, which found that households earning 100 percent of AMI or less generally cannot afford the market rents in the City. The household income distribution by industry is shown in Appendix A.<sup>9</sup>

Housing need is based on the number of households rather than the number of jobs. As such, jobs are translated into households by dividing the number of jobs by the average number of workers per worker household in Alameda County.<sup>10</sup>

**Multifamily Rental Housing:** Table 9 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in new rental units. As shown, a 100-unit apartment complex generates a total of 53 households across the various income groups and 26 households earning up to 100 percent of AMI.

**Condominiums:** Table 10 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in condominiums. As shown, a 100-unit condominium development generates a total of 60 households across the various income groups and 29 households earning up to 100 percent of AMI.

<sup>&</sup>lt;sup>9</sup> At the time of this analysis, the most recent PUMS data was from the 2012 American Community Survey. BAE used the 5year (2008-2012) sample to provide the highest possible level of statistical reliability. These incomes were compared to household income limits published by the California Department of Housing and Community Development, to determine the percentage of households falling into each income category. The analysis controlled for household size, to address the varying HCD income limits for each household size.

<sup>&</sup>lt;sup>10</sup> Average workers per worker household from American Community Survey, 2008-2012.

#### Table 9: Employment and Household Generation from a New 100-Unit Multifamily Rental Development by Income Level

			Estimated Jobs by Percent of AMI (b)					
		Total	Up to 30%	30% to	50% to	80% to	100% to	Above
NAICS Code	Industry	Jobs (a)	AMI	50% AMI	80% AMI	100% AMI	120% AMI	120% AMI
Private Sector								
11, 21	Agriculture and Natural Resources	0.48	0.09	0.08	0.08	0.08	0.04	0.11
23	Construction	0.67	0.09	0.09	0.09	0.12	0.06	0.21
31-33	Manufacturing	1.82	0.10	0.13	0.15	0.24	0.16	1.03
42	Wholesale Trade	3.16	0.24	0.30	0.36	0.50	0.28	1.48
44-45	Retail Trade	17.55	2.32	2.14	2.14	3.10	1.59	6.27
48-49, 22	Transportation, Warehousing, and Utilities	2.90	0.28	0.31	0.36	0.54	0.28	1.12
51	Information	1.82	0.10	0.10	0.11	0.22	0.16	1.14
52-53	Finance, Insurance, and Real Estate	14.63	0.89	0.96	1.27	1.92	1.32	8.26
	Professional, Scientific, & Technical Services, & Mgmt of	4.81	0.22	0.19	0.25	0.48	0.35	3.33
54-55	Companies							
56	Administrative and Support and Waste Management Services	4.28	0.73	0.68	0.61	0.77	0.35	1.13
61	Educational Services	4.00	0.37	0.31	0.38	0.60	0.38	1.96
62	Health Care and Social Assistance	13.83	1.23	1.22	1.37	2.05	1.27	6.69
71-72	Leisure and Hospitality	13.79	2.21	2.24	2.03	2.32	1.15	3.85
81	Other Services Except Public Administration	8.68	1.40	1.22	1.17	1.46	0.82	2.62
All Government	Employment	0.85	0.06	0.06	0.07	0.13	0.09	0.44
	Total Jobs	93.27	10.34	10.03	10.44	14.52	8.31	39.64
	Number of Households (a)	52.57	5.83	5.65	5.88	8.18	4.68	22.34

Notes:

(a) Total Jobs is output of IMPLAN model, and shows direct, indirect, and induced employment generated by household spending. Columns to right

may not sum to Total Jobs due to independent rounding.

(b) Based on 2012 HCD Income Limits.

(c) Average number of workers per worker household calculated for Alameda County based on American Community

Community Survey data, 2008-2012.

Total Workers	725,920
Total Households with Workers	409,157
Avg. Workers per Household	1.8
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Sources: American Community Survey, 2008-2012, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2012; BAE, 2014.

#### Table 10: Employment and Household Generation from a 100-Unit Condominium Development by Income Level

			Estimated Jobs by Percent of AMI (b)					
		Total	Up to 30%	30% to	50% to	80% to	100% to	Above
NAICS Code	Industry	Jobs (a)	AMI	50% AMI	80% AMI	100% AMI	120% AMI	120% AMI
Private Sector								
11, 21	Agriculture and Natural Resources	0.54	0.10	0.09	0.09	0.09	0.05	0.13
23	Construction	0.76	0.11	0.10	0.10	0.14	0.07	0.24
31-33	Manufacturing	2.08	0.12	0.15	0.17	0.27	0.19	1.18
42	Wholesale Trade	3.60	0.27	0.34	0.41	0.57	0.32	1.69
44-45	Retail Trade	20.02	2.64	2.44	2.44	3.53	1.82	7.15
48-49, 22	Transportation, Warehousing, and Utilities	3.31	0.32	0.35	0.41	0.62	0.32	1.28
51	Information	2.07	0.11	0.11	0.13	0.25	0.18	1.30
52-53	Finance, Insurance, and Real Estate	16.70	1.02	1.09	1.45	2.19	1.51	9.43
	Professional, Scientific, & Technical Services, & Mgmt of	5.49	0.25	0.22	0.28	0.54	0.40	3.79
54-55	Companies							
56	Administrative and Support and Waste Management Services	4.88	0.84	0.78	0.70	0.88	0.39	1.29
61	Educational Services	4.57	0.42	0.35	0.44	0.68	0.43	2.24
62	Health Care and Social Assistance	15.78	1.40	1.39	1.56	2.34	1.45	7.63
71-72	Leisure and Hospitality	15.74	2.52	2.56	2.31	2.65	1.31	4.39
81	Other Services Except Public Administration	9.91	1.60	1.40	1.33	1.67	0.93	2.98
All Government	Employment	0.97	0.07	0.06	0.08	0.14	0.10	0.51
	Total Jobs	106.43	11.80	11.44	11.91	16.57	9.48	45.23
	Number of Households (a)	59.99	6.65	6.45	6.71	9.34	5.34	25.49

Notes:

(a) Total Jobs is output of IMPLAN model, and shows direct, indirect, and induced employment generated by household spending. Columns to right

may not sum to Total Jobs due to independent rounding.

(b) Based on 2012 HCD Income Limits.

(c) Average number of workers per worker household calculated for Alameda County based on American Community

Community Survey data, 2008-2012.

Total Workers	725,920
Total Households with Workers	409,157
Avg. Workers per Household	1.8

Sources: American Community Survey, 2008-2012, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2012; BAE, 2014.

### Step 2: Calculate Cost to House Lower-Income Households

The next step in the nexus analysis is to calculate the cost to house the lower-income households calculated in Step 1. This is done by determining the per unit "financing gap" that affordable housing developers (e.g., non-profit developers) encounter when securing a permanent loan for their projects. In other words, the cost to house a low-income household is the difference between the cost to develop an affordable unit and the amount the developer can borrow to build the unit.

### Step 2A: Determine the permanent loan developers can secure to build an affordable unit

Affordable housing developers are able to secure a permanent loan based on their net operating income (NOI) per unit. NOI is equal to rental income less operating expenses and vacancy. As shown in Table 11, households can afford monthly rents ranging from \$569 for extremely low-income households to \$2,042 for households at 100 percent of AMI. These rents are based on household income limits for three-person households and assuming households spend 30 percent of their income on rent and utilities.<sup>11</sup> Standard deductions are taken for operating expenses and vacancies to determine NOI.

BAE used conventional financing assumptions to determine the supportable loan amount per unit for each income level. As shown in Table 11, the loan amount ranges from approximately \$5,200 per unit for extremely low-income units to \$184,700 for units serving households at 100 percent of AMI.

### Step 2B: Calculate the financing gap per affordable unit

The financing gap per affordable unit is equal to the total development cost less the supportable loan amount per unit. According to cost data provided on applications for 2014 low-income housing tax credits, the average development cost for affordable housing in Berkeley and the surrounding area is approximately \$429,400 per unit.<sup>12</sup> Based on the supportable loan amount calculated in Step 2A, the financing gap per affordable unit ranges from \$424,200 for extremely low-income units to \$244,700 for units serving households at 100 percent of AMI.

# Step 2C: Apply the per unit financing gap to the number of lower-income households generated by new tenant spending

The final step in calculating the impact fee is to apply the financing gap per unit to the number of units demanded at each income level (from Step 1C).

**Multifamily Rental Units:** As shown in Table 11, the cost to address the affordable housing need generated by new multifamily rental development is \$8.44 million for a 100-unit apartment complex. This cost can be translated into a per unit fee simply by dividing by 100, resulting in a per unit fee of \$84,400.

<sup>&</sup>lt;sup>11</sup> The analysis assumes a three-person household for consistency with the 2014 Alameda County average household size of 2.78 persons per household, per California Department of Finance estimates.

<sup>&</sup>lt;sup>12</sup> This weighted average cost is based on data from 7 developments with a total of 392 units in Berkeley and neighboring cities.

**Condominiums:** As shown in Table 11, the cost to address the affordable housing need generated by new condominium development is \$9.63 million for a 100-unit condominium development, or \$96,300 per unit.

#### Table 11: Affordable Housing Impact Fee Calculation for New Rental and Condominium Units

Financing Gap Analysis					
					Source
Total Affordable Unit Development Costs	\$429,400				Interviews with affordable housing developers & data from funding applications for recent projects
Financing Terms					
Debt Coverage Ratio	1.30				
Interest Rate	6.00%				Data from funding applications for recent projects
Term of Loan (months)	30				
	Inco	me Level as a	a Percent of A	AMI	
	Up to 30%	31%-50%	51%-80%	80%-100%	
Household Income Limit	\$25,250	\$42,100	\$60,850	\$84,150	Based on a 3-person HH, CA Dept. of Housing & Comm. Dev.
Affordable Monthly Rent per Unit	\$569	\$991	\$1,459	\$2,042	30% of income to rent and utilities
Monthly Operating Expenses	\$500	\$500	\$500	\$500	Data from funding applications for recent projects
Vacancy	5%	5%	5%	5%	Interviews with affordable housing developers
Net Operating Income per Unit	\$41	\$441	\$886	\$1,440	Affordable Monthly Rent less Operating Expenses & Vacancy
Monthly Supportable Debt Service per Unit	\$31	\$339	\$682	\$1,107	Previous row divided by Debt Coverage Ratio
Loan Amount	\$5,233	\$56,578	\$113,712	\$184,710	Based on financing terms above
Financing Gap per Affordable Unit	\$424,167	\$372,822	\$315,688	\$244,690	Total Development Costs less Loan Amount
Fee Calculation for New Rental Units					
Units Demanded	5.83	5.65	5.88	8.18	See Table 9
Total Financing Gap	\$2,472,119	\$2,107,056	\$1,857,621	\$2,002,332	Product of prior row and Financing Gap per Affordable Unit
Max. Impact Fee per 100-Unit Development	\$8,439,129				Sum of columns in previous row
Max. Impact Fee per Unit	\$84,391				Prior row divided by 100
Fee Calculation for New Condominiums					
Units Demanded	6.65	6.45	6.71	9.34	See Table 10
Total Financing Gap	\$2,820,800	\$2,404,246	\$2,119,630	\$2,284,753	Product of prior row and Financing Gap per Affordable Unit
Max. Impact Fee per 100-Unit Development Max. Impact Fee per Unit	\$9,629,429 <b>\$96,294</b>				Sum of columns in previous row Prior row divided by 100

Sources: Interview with affordable housing developers, 2014; California HCD, 2014; http://www.treasurer.ca.gov/ctcac/2014/application.asp, 2014; City of Berkeley, 2014; BAE, 2014.

### Findings

This study presents the maximum legally justifiable affordable housing fee that could be charged on new multifamily rental housing based on the identified need for new affordable housing. As noted above, the maximum per unit fee supported by this nexus study is \$84,400 for multifamily rental developments and \$96,300 for new condominium developments (see Table 11). In other words, the City could charge developers of new multifamily developments up to \$84,400 per market rate rental unit to be developed and charge developers of new condominium developments up to \$96,300 per unit, based on the nexus between new market rate development and the need created by that development to house low income households induced by the new market rate unit's household spending.

The City may also choose to assess the impact fee on a per square foot basis rather than a per unit basis, thereby allowing fees to scale up or down to correspond to unit size. Assuming an average unit size of 752 square feet (see Appendix A) for new apartment units in Berkeley, a \$84,400 fee for rental units would translate into \$112.24 per square foot. Among recent condominium sales in Berkeley, unit sizes averaged 983 square feet, which results in a fee totaling \$97.98 per square foot for condominiums.

The fee rates presented in this chapter are the maximum fee rates that the City of Berkeley may legally assess on new residential development. However, the City is not required to assess fees at the maximum rate allowed by law. Many jurisdictions assess fees at rates that are lower than the maximum legal fee rate in order to improve the financial feasibility of new development. For example, the fee that the City of Berkeley adopted following the City's previous (2010) Affordable Housing Nexus Study was lower than the maximum legal fee presented in the study. A subsequent chapter of this report will evaluate the financial feasibility of market-rate residential development in Berkeley to estimate feasible fee rates that will not impinge on housing production in the City.

### AFFORDABLE HOUSING NEXUS ANALYSIS FOR REPLACEMENT UNITS

This chapter quantifies the link between units that are built to replace previously rent-stabilized units that have been demolished or destroyed and the demand for additional affordable housing. The demand for affordable housing units is then translated into an impact fee for new residential units. The fee analyzed in this section is meant to address the impacts of the loss of rent-stabilized units or other older, less expensive units, that become uninhabitable and the subsequent replacement of these units by new units that are either not subject to rent stabilization due to their new date of construction, or otherwise would likely be more expensive to support the costs of new construction.

### Methodology

A brief overview of the nexus analysis methodology for replacement units follows below. Subsequent sections will discuss each step in greater detail.

**Step 1:** Determine the <u>net increase</u> in lower-income households generated by tenants in new replacement units

- Step 1A: Estimate household incomes of residents in rent-stabilized units in Berkeley
- Step 1B: Determine the number of workers by industry generated by resident spending by households in rent-stabilized units
- Step 1C: Determine the number of lower-income households among these workers
- Step 1D: Determine the difference between the number of lower-income workers generated by spending from households in rent-stabilized units and the number of lower-income workers generated by spending from households in replacement units.

#### Step 2: Calculate cost to house lower-income households

- Step 2A: Determine the permanent loan amount developers can secure to build an affordable unit
- Step 2B: Calculate the financing gap per affordable unit
- **Step 2C:** Apply the per unit financing gap to the net increase in lower-income households generated by spending by tenants in new replacement units

# Step 1: Determine <u>net increase</u> in lower-income households generated by tenants in new replacement units

The first step in this analysis is to determine the net increase in affordable housing need generated when new units are built to replace units that are demolished or destroyed. In order to do this, BAE estimated the household incomes of residents in rent-stabilized units in Berkeley as a proxy for the likely former occupants of the units being replaced. Next, BAE determined the number of workers that would be supported by household spending by these new market rate households, and

estimated the number of lower-income households that would be formed and comprised of these workers. These figures were then compared to the number of lower-income households induced by new rental developments to determine the net increase in lower-income households associated with replacing rent-controlled units with new rental units. Thus, this methodology, while similar to the approach utilized in the prior chapter for new development that did not previously exist, varies by estimating just the increase in household spending by the higher income new occupants (paying new construction market rate rents), versus the former occupants assumed to be not as affluent, and paying rent that approximates rent stabilized rates. This is a net increase approach, based on different incomes of households in the former building and the new replacement building.

For the purposes of this analysis, BAE assessed the impact of replacing a 100-unit rent-stabilized rental complex with a new 100-unit market-rate rental complex. Although replacement units would likely consist of a smaller number of units in most cases, a hypothetical 100-unit development is used to simplify the calculation of per unit impacts and fees.

#### Step 1A: Estimate household incomes of residents in rent-stabilized units in Berkeley

Table 12 presents the annual household income required to afford the average rent for a rentstabilized unit in Berkeley. The analysis is based on the average rent for all 19,118 units subject to rent stabilization in Berkeley (as shown in Table 1) according to data from the Rent Stabilization Board, and assuming households spend 30 percent of gross income on rent and utilities. Based on the average monthly rent of \$1,442 for rent-stabilized units, the annual household income required to afford these market rents is \$59,800. The aggregate income in the 100-unit hypothetical development totals \$6.0 million.

# Table 12: Household Income Required to Rentan Average Rent-Stabilized Unit in Berkeley,2014

Average Monthly Rent for Rent-Controlled Units (a)	\$1,442
Plus Utilities (b)	<u>\$53</u>
Total Monthly Housing Costs	\$1,495
Annual Housing Costs	\$17,945
Household Income Required (c)	<b>\$59,800</b>
Number of Households in Development	100
Aggregate Income in Development	<b>\$5,980,000</b>

Notes:

(a) Based on the average rent among all units in Berkeley subject the Rent Stabilization Ordinance as of May 2014.
(b) Utility costs based on utility allowance for multifamily dwellings established by the Berkeley Housing Authority in 2014. Utility cost estimates assume that water, sewer, and trash collection costs are included in monthly rental amount.
(c) 30 percent of gross income spent on housing costs. Sources: Berkeley Rent Stabilization Board, 2014; Berkeley Housing Authority, 2014; BAE, 2014.

### Step 1B: Determine number of workers by industry generated by households in rent-stabilized units

The number of workers supported by spending by households in rent-stabilized units was estimated based on household expenditures by households living in rent-stabilized units. Similar to the analysis of workers generated by expenditures from households living in new units, the analysis of workers supported by expenditures from households living in rent-stabilized units is based on outputs provided by IMPLAN.<sup>13</sup>

Table 13 presents an estimate of jobs by industry resulting from household spending by tenants in rent-stabilized units. As shown, a 100-unit rent-stabilized apartment complex supports approximately 47 jobs across various industries.

		Number of Jobs, Average Rent
NAICS Code	Industry	Controlled HH (a)
11, 21	Natural Resources	0.24
23	Construction	0.34
31-33	Manufacturing	0.92
42	Wholesale Trade	1.59
44-45	Retail Trade	8.86
48-49, 22	Transportation, Warehousing, and Utilities	1.47
51	Information	0.92
52	Finance & Insurance	5.16
53	Real Estate & Rental & Leasing	2.23
54-55	Professional & Technical Services;	2.43
	Management of Companies & Enterprises	
56	Administrative & Waste Services	2.16
61	Educational Services	2.02
62	Health Care & Social Assistance	6.99
71-72	Arts, Entertainment & Recreation;	6.97
	Accommodation & Food Services	
81	Other Services, except Public Administration	4.39
	Government	0.43
	Total Jobs	47.11

# Table 13: Direct, Indirect, and Induced Employment Supported by Households in Rent-Stabilized Units

Notes:

(a) Job generation is output of the IMPLAN model, and shows direct, indirect, and induced employment generated by household spending.

Sources: IMPLAN; BAE, 2014.

# Step 1C: Determine the number of lower-income households supported by spending by households in rent-stabilized units

The analysis estimates the income distribution for workers and households supported by tenants in rent-stabilized units based on the number of jobs by industry shown in Table 13. The methodology used to apply the income distribution to workers and households relies on PUMS data, using the same methodology detailed in the previous chapter in Step 1C to estimate the income of workers and households that would be induced by new units.

<sup>&</sup>lt;sup>13</sup> Further information about the IMPLAN model is provided in the previous chapter and in Appendix B.

Table 14 applies the income distribution by industry to the number of jobs supported in each industry as a result of spending by households in rent-stabilized units. As shown, a 100-unit rent-stabilized apartment complex supports a total of 27 households across the various income groups and 13 households earning up to 100 percent of AMI.

#### Table 14: Employment and Households Supported by a 100-Unit Rent-Stabilized Development by Income Level

			Estimated Jobs by Percent of AMI (b)					
		Total	Up to 30%	30% to	50% to	80% to	100% to	Above
NAICS Code	Industry	Jobs (a)	AMI	50% AMI	80% AMI	100% AMI	120% AMI	120% AMI
Private Sector								
11, 21	Agriculture and Natural Resources	0.24	0.04	0.04	0.04	0.04	0.02	0.06
23	Construction	0.34	0.05	0.04	0.05	0.06	0.03	0.11
31-33	Manufacturing	0.92	0.05	0.07	0.08	0.12	0.08	0.52
42	Wholesale Trade	1.59	0.12	0.15	0.18	0.25	0.14	0.75
44-45	Retail Trade	8.86	1.17	1.08	1.08	1.56	0.80	3.16
48-49, 22	Transportation, Warehousing, and Utilities	1.47	0.14	0.15	0.18	0.27	0.14	0.57
51	Information	0.92	0.05	0.05	0.06	0.11	0.08	0.58
52-53	Finance, Insurance, and Real Estate	7.39	0.45	0.48	0.64	0.97	0.67	4.17
	Professional, Scientific, & Technical Services, & Mgmt of	2.43	0.11	0.10	0.12	0.24	0.18	1.68
54-55	Companies							
56	Administrative and Support and Waste Management Services	2.16	0.37	0.35	0.31	0.39	0.17	0.57
61	Educational Services	2.02	0.19	0.16	0.19	0.30	0.19	0.99
62	Health Care and Social Assistance	6.99	0.62	0.62	0.69	1.03	0.64	3.38
71-72	Leisure and Hospitality	6.97	1.11	1.13	1.02	1.17	0.58	1.94
81	Other Services Except Public Administration	4.39	0.71	0.62	0.59	0.74	0.41	1.32
All Government	Employment	0.43	0.03	0.03	0.04	0.06	0.05	0.22
	Total Jobs	47.11	5.22	5.06	5.27	7.33	4.19	20.02
	Number of Households (a)	26.55	2.94	2.85	2.97	4.13	2.36	11.28

Notes:

(a) Total Jobs is output of IMPLAN model, and shows direct, indirect, and induced employment generated by household spending. Columns to right

may not sum to Total Jobs due to independent rounding.

(b) Based on 2012 HCD Income Limits.

(c) Average number of workers per worker household calculated for Alameda County based on American Community

Community Survey data, 2008-2012.

725,92
409,15
1.0

Sources: American Community Survey, 2008-2012, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2012; BAE, 2014

# Step 1D: Determine the net increase in the number of lower-income workers generated by spending from households in replacement units

In order to determine the impact of spending by households in new replacement units, the nexus analysis compares the number of lower-income households supported by expenditures from households in rent-controlled units to the number of lower-income households induced by expenditures from households in replacement units. Because replacement units would be new, the employment induced by replacement units can be assumed to be equivalent to the employment induced by other new multifamily rental units in Berkeley.

The net increase in lower-income households induced by spending from tenants in new replacement units is shown in Table 15, based on the number of households induced by a new rental project (as shown Table 9) and the number of households supported by a rent-stabilized project (as shown in Table 14).

# Table 15: Net Increase in Households by Income Level Generated by Spending fromTenants in 100 Replacement Units

		Estimated Households by Percent of AMI (b)						
	Total	Up to 30%	30% to	50% to	80% to	100% to	Above	
	Households	AMI	50% AMI	80% AMI	100% AMI	120% AMI	120% AMI	
New Households from Employment Generated by New Rental Project (a)	52.57	5.83	5.65	5.88	8.18	4.68	22.34	
Households Supported by Average Rent-Stabilized Project (b)	26.55	2.94	2.85	2.97	4.13	2.36	11.28	
Net Number of Households	26.02	2.88	2.80	2.91	4.05	2.32	11.06	

Notes:

(a) From Table 9.

(b) From Table 14.

Sources: American Community Survey, 2008-2012, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2012; BAE, 2014.

### Step 2: Calculate Cost to House Lower-Income Households

The next step in the nexus analysis is to calculate the cost to house the net increase in lower-income households calculated in Step 1. The methodology used to calculate the cost to house the net increase in lower-income households induced by replacement units is the same as the methodology used to calculate the cost to house the total number of lower-income households induced by new units, and is outlined below. As detailed in the previous chapter, this is done by determining the per unit "financing gap" between the cost to develop an affordable unit and the amount the developer can borrow to build the unit.

#### Step 2A: Determine the permanent loan developers can secure to build an affordable unit

Affordable housing developers are able to secure a permanent loan based on their net operating income (NOI) per unit. NOI is equal to rental income less operating expenses and vacancy. As shown in Table 11 and Table 16, households can afford monthly rents ranging from \$569 for

extremely low-income households to \$2,042 for households at 100 percent of AMI. These rents are based on household income limits for three-person households and assuming households spend 30 percent of their income on rent and utilities. As shown in Table 16, the loan amount ranges from approximately \$5,200 per unit for extremely low-income units to \$184,700 for units serving households at 100 percent of AMI.

#### Step 2B: Calculate the financing gap per affordable unit

The financing gap per affordable unit is equal to the total development cost less the supportable loan amount per unit. According to cost data provided on applications for 2014 low-income housing tax credits, the average development cost for affordable housing in Berkeley and the surrounding area is approximately \$429,400 per unit.<sup>14</sup> Based on the supportable loan amount calculated in Step 2A, the financing gap per affordable unit ranges from \$424,200 for extremely low-income units to \$244,700 for units serving households at 100 percent of AMI.

# Step 2C: Apply the per unit financing gap to the net increase in lower-income households generated by spending by tenants in new replacement units

The final step in calculating the impact fee is to apply the financing gap per unit to the net increase in the number of units demanded at each income level (from Step 1D). As shown in Table 16, the cost to address the net increase in affordable housing need generated by a replacement rental development is \$4.18 million for a 100-unit apartment complex, resulting in a per unit fee of \$41,800.

<sup>&</sup>lt;sup>14</sup> This weighted average cost is based on data from 7 developments with a total of 392 units in Berkeley and neighboring cities.

#### Table 16: Affordable Housing Impact Fee Calculation for Replacement Rental Units

Financing Gap Analysis					
					Source
Total Affordable Unit Development Costs	\$429,400				Interviews with affordable housing developers & data from
					funding applications for recent projects
Financing Terms					
Debt Coverage Ratio	1.30				
Interest Rate	6.0%				Data from funding applications for recent projects
Term of Loan (months)	30				
	Inco	me Level as a	a Percent of	AMI	
	Up to 30%	31%-50%	51%-80%	80%-100%	
Household Income Limit	\$25,250	\$42,100	\$60,850	\$84,150	Based on a 3-person HH, CA Dept. of Housing & Comm. Dev.
Affordable Monthly Rent per Unit	\$569	\$991	\$1,459	\$2,042	30% of income to rent and utilities
Monthly Operating Expenses	\$500	\$500	\$500	\$500	Data from funding applications for recent projects
Vacancy	5%	5%	5%	5%	Interviews with affordable housing developers
Net Operating Income per Unit	\$41	\$441	\$886.29	\$1,440	Affordable Monthly Rent less Operating Expenses & Vacancy
Monthly Supportable Debt Service per Unit	\$31	\$339	\$682	\$1,107	Previous row divided by Debt Coverage Ratio
Loan Amount	\$5,233	\$56,578	\$113,712	\$184,710	Based on financing terms above
Financing Gap per Affordable Unit	\$424,167	\$372,822	\$315,688	\$244,690	Total Development Costs less Loan Amount
Fee Calculation					
Net New Units Demanded	2.88	2.80	2.91	4.05	See Table 15
Total Financing Gap	\$1,223,534	\$1,042,852	\$919,399	\$991,021	Product of prior row and Financing Gap per Affordable Unit
Max. Impact Fee per 100-Unit Development Max. Impact Fee per Unit	\$4,176,806 <b>\$41,768</b>				Sum of columns in previous row Prior row divided by 100

Sources: Interview with affordable housing developers, 2014; California HCD, 2014; http://www.treasurer.ca.gov/ctcac/2014/application.asp, 2014; City of Berkeley, 2014; BAE, 2014.

### Findings

This study presents the maximum legally justifiable affordable housing fee that could be charged on rental units that are built to replace rental units that are demolished or destroyed, based on the identified net increase in the need for new affordable housing. As noted above, the maximum per unit fee supported by this nexus study is \$41,800 for replacement multifamily rental developments (see Table 16). In other words, the City could charge developers of new replacement units up to \$41,800 per market-rate unit to be developed to replace units that demolished or destroyed. Assuming an average unit size of 752 square feet (see Appendix A) for new apartment units in Berkeley, a \$41,800 fee for rental units would translate into \$55.55 per square foot.

As discussed in the previous chapter, the fee rates presented in this chapter are the maximum fee rates that the City of Berkeley may legally charge, and the City may adopt a fee that is lower than the maximum legal amount in order to account for financial feasibility concerns. The following chapter of this report will evaluate the financial feasibility of market-rate residential development in Berkeley to estimate feasible fee rates that will not impinge on housing production in the City.

In addition to the increased demand for lower-income households calculated by the preceding methodology, there is another impact on the supply of affordable units. The demolition of an older unit, and its subsequent replacement with a higher rent new unit, removes a more affordable unit from the market, even if it preserves the same number of units in the market. The exact magnitude of this loss is situation specific. As such, it does not lend itself to the easy calculation of a single fee applicable to all replacement units. In order to properly quantify the proportional impact from a specific demolition proposal a formula would have to be developed that would at a minimum take into account the rental history of the units demolished, the assumed average rent of the replacement units and the proposed size of the replacement units. Devising such a formula was beyond the scope of this nexus study update. The maximum supportable impact fee calculated with the study methodology already exceeds the feasible impact fee so further quantifying the impacts as discussed above would only continue to increase the maximum supportable fee above the feasible fee at this time. If the Council wished to pursue this calculation a further investigation would be need to define a formula capable of determining on a situation specific basis the impact of unit demolitions.

### FINANCIAL FEASIBILITY ANALYSIS

This chapter considers refining the maximum fee amounts identified in the previous chapters by analyzing the maximum amount of fee that can be paid by a market rate project, and still create financially feasible market returns necessary to produce new market rate housing in Berkeley.

### Methodology and Analysis

The financial feasibility testing relies on a static pro forma analysis of typical development projects, including all requisite inclusionary units, parking, impact fees, and other costs. The measure of return, which allows for analysis without considering specific combinations of debt and equity (e.g. leverage), is a simple measure of overall profit compared to total cost. This measure of return is called Return on Cost (ROC); developers typically seek at least a 10 to 12 percent ROC to consider a project feasible.

The pro forma analysis shows the ROC generated by four prototype projects in Berkeley, all of which consist of three stories of multifamily rental units above ground-floor retail space and podium parking. All residential units in the prototype projects are two-bedroom units measuring 900 square feet on average. This average unit size is based on the average size among new two-bedroom units in Berkeley, as shown in Appendix A, rounded to the nearest 100 square feet. The development program includes 6,000 square feet of retail space and 93 parking spaces.

Development standards such as floor area ratio (FAR), parking requirements, and open space requirements are based on zoning provisions in the West Berkeley Commercial (C-W) zoning district, which is an area in which there has been recent development interest and activity and which currently has some potential development sites. The maximum FAR in the C-W zoning district is 3.0, with a 50-foot height limit for mixed-use projects. Parking requirements in the C-W zoning district call for one parking space per residential unit and one space per 500 square feet of commercial floor area for most commercial uses. The C-W zoning district calls for 40 square feet of open space per residential unit. These development standards are similar to development standards in many of the other zoning districts in Berkeley that allow for multifamily residential development.

The four projects that are analyzed include two rental projects and two condominium projects. Alternative A1 shows the ROC for a rental project based on the current Housing Impact Fee, while Alternative A2 shows the ROC for a rental project using a higher fee rate. Alternative B1 shows the ROC for a condominium project that provides inclusionary units per the City's inclusionary ordinance and Alternative B2 shows the ROC for a condominium project that provides a Housing Impact Fee in lieu of providing the inclusionary units. Sensitivity testing was conducted on Alternatives A2 and B2 to determine the maximum Housing Impact Fee rates that can be assessed while ensuring a reasonable rate of return to the developer. The pro forma analysis was conducted on a conservative basis, using estimates for land costs, construction costs, and other expenses that are at the high end of the likely range and rental rates and sale prices that reflect the current average. Developer returns for individual projects may vary from the returns shown in the pro forma analysis based on factors specific to each project, and would likely be slightly higher than what is shown, but could also be lower if interest rates increased substantially or due to shifts in other factors analyzed.

As mentioned above, the minimum profit for a feasible project, measured by ROC, is typically between 10 and 12 percent. However, to account for zones with lower height limits or allowable FAR, more open space requirements, or other provisions that may reduce overall return, as well as to provide policy adaptability if economic conditions change (e.g., higher interest rates or variations in costs), the fee rates tested in the pro forma analysis allow for feasible projects with profit margins that exceed this threshold.

**Multifamily Rental Development:** Alternative A1 shows the ROC for a rental project on which the Housing Impact Fee is assessed at the current fee rate (\$28,000 per market rate unit). Monthly rental rates are based on the average rent for new two-bedroom units in Berkeley, as shown in Appendix A. The ROC in Alternative A1 is 15.5 percent, indicating a profit to the developer that exceeds the amount needed to make a project feasible.

Sensitivity testing was conducted in Alternative A2 to determine the maximum Housing Impact Fee that can be charged to developers of new multifamily rental projects while maintaining development feasibility. As shown, a Housing Impact Fee can be assessed at a rate of \$34,000 per unit while providing 13.9 percent ROC to the developer, indicating that the Housing Impact Fee for market rate rental units can be increased to \$34,000 per unit while continuing to allow for a reasonable return.

**Condominium Development:** Alternative B1 shows the ROC for a condominium project that provides 20 percent of units to be sold at affordable sale prices in accordance with the City's Inclusionary Housing Ordinance. The sale price for inclusionary units (\$198,700) is based on the City's 2014 allowable sale price for affordable inclusionary units measuring 850 to 999 square feet. The average market rate sale price used in the analysis is based on the average sale price among all two-bedroom condominiums sold in Berkeley between July 2013 and July 2014 (approximately \$567,000). However, because most, if not all, sales of recent condominiums in Berkeley consist of resales of existing units, the analysis uses an estimated sale price for new condominiums that is ten percent higher than the average among recent sales.<sup>15</sup> As shown, the ROC in Alternative A1 is 16.4 percent, indicating a profit to the developer that exceeds the amount needed to make a project feasible.

Alternative B2 shows the ROC for a condominium project that provides a Housing Impact Fee rather than the inclusionary units. Sensitivity testing was conducted to determine the maximum Housing

<sup>&</sup>lt;sup>15</sup> Data for resales are used because no data on recent sales of new condominiums in Berkeley are available.

Impact Fee rate that can be charged to developers of new condominium projects while maintaining development feasibility. As shown, a Housing Impact Fee can be assessed at a rate of \$75,000 per unit while providing 14.0 percent ROC to the developer, indicating that the Housing Impact Fee can be assessed at a rate of \$75,000 per market rate condominium unit while continuing to allow for a reasonable return.

#### **Table 17: Berkeley Mitigation Fee Feasibility Analysis**

		Re	ntal	Co	ndo		Re	enta	al		Co	ndc	
		Alt A1	Alt A2	Alt B1	Alt B2		Alt A1		Alt A2		Alt B1		Alt B2
				Current									
			Maximu	(with						•	Current (with		
		Current	m New	inclusion	Maximum		Current With	Ma	aximum New		inclusionary	Ma	aximum New
Development Assuptions		With Fee	Fee	ary units)	New Fee	Pro Forma Analysis	Fee		Fee		units)		Fee
Site Size (acres) (a)		1.00	1.00	1.00	1.00	Land Cost	\$ 4,791,600	\$	4,791,600	\$	4,791,600	\$	4,791,600
Land Cost and Prep/sq.ft.		\$ 110	\$ 110	\$ 110	\$ 110								
FAR		3.0	3.0	3.0	3.0	Residential							
Total Buildable Square Feet per	FAR	130,680	130,680	130,680	130,680	Hard Costs for Units	\$ 19,668,200	\$	19,668,200	\$	22,870,000	\$	22,870,000
Number of Floors		4	4	4	4	Soft Costs	\$ 3,933,640	\$	3,933,640	\$	4,574,000	\$	4,574,000
Developable Footprint/1st Floor (	b)	39,200	39,200	39,200	39,200	Current Fees (exc. Affordable)	\$ 286,416	\$	286,416	\$	286,416	\$	286,416
Gross Sq. Ft. Residential (c)		91,480	91,480	91,480	91,480	Affordable In-Lieu	\$ 2,268,000	\$	2,754,000	\$	-	\$	6,075,000
Desident's Librits						Parking for Units	\$ 1,620,000	\$	1,620,000.00	\$	1,620,000.00	\$1	,620,000.00
Residential Units	200/	(40.000)	(40.000)	(40.000)	(40.000)	Subtotal	\$ 27,776,256	Þ	28,262,256	Þ	29,350,416	Þ	35,425,416
Less: Common Area Residential	20%	(18,296)	(18,296)	(18,296)	(18,296)	Detail							
Sq, Feet for Residential Units		73,184	73,184	73,184	73,184	Retall	¢ 000.000	¢	000 000	¢	000 000	¢	000 000
Size per Offic (all 2-bedrooff) (d)		900	900	900	900	Soft Costs	\$ 900,000	ф Ф	180,000	ф С	180,000	ф Ф	180,000
Number of Market Pate Units		01	01	65	01	Current Ecos	\$ 100,000 ¢	φ ¢	180,000	φ ¢	180,000	φ ¢	180,000
Number of Affordable Units	20%	01	01	16	01	Current Fees	φ ¢ - 240.000	ф Ф	240.000	ф С	-	ф Ф	240.000
Vacancy Rate (for rental)	20 /0	5.0%	- 5.0%	10	-	Subtotal	\$ 1320,000	¢ ¢	1 320 000	¢ ¢	1 320 000	¢	1 320 000
vacancy reate (for fental)		5.070	5.070			Subtotal	φ 1,520,000	Ψ	1,520,000	Ψ	1,520,000	Ψ	1,520,000
Pricing						Total Costs Before Financing	\$ 33 887 856	\$	34 373 856	\$	35 462 016	\$	41 537 016
Market Rate Rent/Momth (e)		\$ 3400	\$ 3400			Total Coold Before I manoing	\$ 00,001,000	Ŷ	04,010,000	۴	00,402,010	۴	41,007,010
Market Rate Condo Sale Price (f)		φ 0,100	φ 0,100	\$620,000	\$620,000	Financing Costs							
Affordable Condo Sale Price (g)				\$198,700	\$198,700	Interest	\$ 1.387.708	\$	1.407.609	\$	1.452.170	\$	1.700.941
(3)				•••••	<b></b>	Fees/Points	\$ 474.430	\$	481,234	\$	496,468	\$	581.518
Parking For Residential Units						Subtotal	\$ 1,862,138	\$	1,888,843	\$	1,948,638	\$	2,282,459
Parking Ratio (per unit)		1.00	1.00	1.00	1.00		. ,,		, ,				, . ,
Number of Spaces - Res		81	81	81	81	Total Project Costs	\$ 35,749,994	\$	36,262,699	\$	37,410,654	\$	43,819,475
Sq. Ft. Per Space		350	350	350	350	VALUE ANALYSIS							
Total For Res Parking		28,350	28,350	28,350	28,350	Rental Residential							
		- ,	- ,	- ,		Gross Rental Revenue	\$ 3.304.800	\$	3.304.800	\$	-	\$	-
Retail Space						Less: Vacancy	\$ (165,240)	\$	(165,240)	\$	-	\$	-
Sq. Ft.		6,000	6,000	6,000	6,000	Less: Operating Costs	\$ (991,440)	\$	(991,440)	\$	-	\$	-
Rent/sg ft /month (NNN)		\$ 2.25	\$ 2.25	\$ 2.25	\$ 2.25	NOL	\$ 2,148,120	\$	2,148,120	\$	-	\$	-
Vacancy Rate		10.0%	10.0%	10.0%	10.0%		\$ 2,1.10,120	*	_,,	*		*	
						Retail							
Parking for Retail Space						Gross Rental Revenue	\$ 162.000	\$	162.000	\$	162.000	\$	162.000
Parking Ratio (per 1,000 sq. ft.)		2.0	2.0	2.0	2.0	Less: Vacancy	\$ (16,200)	\$	(16,200)	\$	(16,200)	\$	(16,200)
Number of Spaces - Retail		12	12	12	12	NOL	\$ 145,800	\$	145,800	\$	145,800	\$	145,800
Sq. Ft. Per Space		350	350	350	350		\$ 1.0,000	*	,	*	1 10,000	*	,
Total for Retail Parking		4.200	4.200	4.200	4.200	Caplitalized Value of Income							
		1,200	1,200	1,200	1,200	Rental Units	\$ 39.056.727	\$	39.056.727	\$	-	\$	-
Construction Costs						Retail	\$ 2,243,077	\$	2,243,077	\$	2,243,077	\$	2,243,077
Hard Costs / So Et Residential		\$ 215	\$ 215	\$ 250	\$ 250	Total Capitalized Value	\$ 41 299 804	ŝ	41 299 804	ŝ	2 243 077	ŝ	2 243 077
Hart Costs /Sg. Ft. Retail		\$ 150	\$ 150	\$ 150	\$ 150	. otal ouplialized value	+ +1,200,004	Ψ	1,200,004	Ψ	<u>_,_</u> _0,011	Ψ	2,2-3,017
Parking Costs /Space		\$20,000	\$20,000	\$ 20,000	\$ 20,000	Condominiums							
Soft Costs (as % of hard)		20.0%	20.0%	20.0%	20.0%	Gross Sales Revenue	<b>\$</b> -	\$	-	\$	43,479,200	\$	50.220.000
Impact Fees/Res Unit		\$ 3,536	\$ 3,536	\$ 3,536	\$ 3,536	Less: Marketing Costs (5%)	\$-	\$	-	\$	(2,173,960)	\$	(2,511,000)
Impact Fees/Retail Sg. Et. (b)		\$ 5.75	\$ 5.75	\$ 5.75	\$ 5.75	Net Sales Revenue		-	-	\$	41 305 240	\$	47 709 000
impact rees/retail 6q. r t. (ii)		ψ 0.15	ψ 5.75	ψ 0.75	ψ 5.75	Net Gales Revenue				Ψ	41,303,240	Ψ	47,703,000
Financing Costs						Total Project Value	41.299.804		41.299.804		43.548.317		49.952.077
Loan-to-Cost Ratio		70.0%	70.0%	70.0%	70.0%	Less: Developmet Costs	\$ (35,749,994)	\$	(36,262,699)	\$	(37,410,654)	\$	(43.819.475)
Interest Rate		6.5%	6.5%	6.5%	6 5%	Profit	\$ 5.549.811	\$	5.037 105	\$	6.137 663	\$	6.132 602
Fees/Points/Loan Costs		2 00/	2 00/	2 00/	2 00/		φ 0,0 <del>4</del> 0,011	Ψ	5,057,105	Ψ	5,157,005	Ψ	3,132,002
Loan Period (months)		2.070	2.0%	2.070	2.070	Profit as % Return on Cost	15 5%		13 9%		16 4%		14 0%
Avg Outstanding Balance		60.0%	60.0%	60.0%	60.0%		13.376		10.0 /0		10.470		17.070
		30.070	30.070	30.070	30.070								
Operating Costs for Rental (% of	Rev)	30%	30%										
Cap Rate - Rental Residential	. /	5.5%	5.5%										
Affordable Housing Impact Fee		\$28,000	\$34,000	\$-	\$ 75,000								
Cap Rate - Retail		6.5%	6.5%	6.5%	6.5%								

Notes:

(a) Analysis is based on a one-acre site with at 150-foot street frontage and 290.4-foot lot depth.

(b) Calculated as though the parcel abuts a residential district and therefore requires a rear yard setback equal to 10% of the lot depth, which reduces the size of the one-acre lot by 4,360 square feet to allow for the rear setback. The developable footprint is equal to the size of the first floor of the project, which will consist of parking and retail space.

(c) Calculated by subtracting the ground floor from the total buildable square feet per the FAR, resulting in three 30,493-square foot stories of residential units above the ground floor parking and retail space. This results in 8,707 square feet of open space at the second-floor level (39,200 square feet at the ground floor less 30,493 square feet on floors 2 through 4), providing 107 square feet of open space per unit. The C-W zoning district and many other zoning districts in Berkeley that allow for multifamily housing require 40 square feet of open space per unit. (d) Based on the average size of a new two-bedroom unit in Berkeley, as shown in Appendix A, rounded to the nearest 100 square feet. This assumes that new condominiums will be typically be the same size as new rental units in Berkeley.

(e) Based on the average rental rate for new 2-bedroom units in Berkeley, as shown in Appendix A, rounded to the nearest \$100.

(f) Based on the average sale price among all full and verified sales of two-bedroom condominiums in Berkeley between July 1, 2013 and July 31, 2014. Data for resales are used because no data on recent purchases of new condominiums in Berkeley are available. The sale price for new condominiums is estimated to be ten percent higher than the median resale price. Figure differs from figure shown in Table 7 because the feasibility analysis considers two-bedroom units only rather than all units recently sold.

(g) Per City of Berkeley Inclusionary Housing Program requirements. Sale amount could potentially be increased if adjusted to new mortgage assumptions and AMI levels.

(h) Childcare and affordable housing fees are assessed on retail space measuring 7,500 square feet of more.



### Findings

Based on the above financial feasibility tests, the maximum fee identified by the nexus analysis per market rate unit is higher than today's market conditions would allow in terms of financial feasibility for a project. Thus, in order to continue stimulating market rate housing production in Berkeley, for both rental and ownership units, the nexus-derived fee amount could be reduced to the levels shown.

# Table 18: Fee Maximums Compared to Financially FeasibleFee Amounts

	Per Market Rate Rental Unit	Per Market Rate For-Sale Unit
Maximum per Nexus Analysis	\$84,391	\$96,294
Maximum per Pro Forma Analysis	\$34,000	\$75,000

Source: BAE, 2014.

### RECOMMENDATIONS

The financial feasibility of new residential development is an important consideration in setting the affordable housing impact fee rates. This nexus study determines the maximum impact fee the City of Berkeley may charge; the City may choose to set its fee at levels lower than the maximum fee supported by this analysis. Jurisdictions generally strive for a balance between extremely high fees that can depress housing production, and extremely low fees that do not allow the City to collect enough funds to address affordable housing need. This balance is particularly important because generation of affordable housing fees depends on new market-rate residential development in Berkeley.

To account for financial feasibility considerations, this study suggests that the City should set fee rates based on the rates found to be feasible in the previous chapter. This suggests that the fee for new market-rate rental units should total \$34,000 per unit and the fee for new condominium units should total \$75,000 per unit. Because the financial feasibility of building replacement units is the same as the financial feasibility of building new units, the recommended fee rate for replacement rental units is the same as the recommended fee rate for new rental units, or \$34,000 per unit.

### **APPENDIX A: NEXUS STUDY DETAILED TABLES**

### Table A.1: New Multifamily Rental Projects in Berkeley, April 2010

		Size	Renta	l Rate	
Property	Unit Type	(sq. ft.)	Low	High	Unit Mix
Berkeley Central	Studio	474	\$2,400	\$2,600	8
2055 Center St	1-Bedroom	793	\$2,800	\$3,250	99
Built in 2012; 143 units	2-Bedroom, 1 Bath	826	\$3,700	\$3,900	6
143 Units	2-Bedroom, 1 Bath	955	\$3,900	\$4,200	6
	2-Bedroom, 2 Bath	1,160	\$5,800	\$6,300	10
	2-Bedroom, 2 Bath	1,598	\$5,900	\$6,250	5
	2-Bedroom, 2.5 Bath	1,256	\$5,900	\$6,250	3
	2-Bedroom, 2.5 Bath	1,706	\$6,300	\$6,300	3
	2-Bedroom, 2.5 Bath	1,713	\$6,300	\$6,300	3
	Weighted Average			\$3,591	
Fourth & U	1-Bedroom	632	\$2.000	\$2.400	30
2020 4th St	1-Bedroom	720	\$2.276	\$2.306	26
Built in 2010: 171 units	1-Bedroom	738	\$2.769	\$2.800	35
<b>,</b>	1-Bedroom	747	\$2.699	\$2.800	20
	2-Bedroom, 2 Bath	953	\$3,100	\$3,100	32
	2-Bedroom, 2 Bath	956	\$1,806	\$1,806	3
	2-Bedroom, 2 Bath	1,078	\$2,900	\$3,200	15
	2-Bedroom, 2 Bath	1,106	\$3,190	\$3,190	8
	2-Bedroom, 2 Bath	1,307	\$2,869	\$2,879	2
	Weighted Average			\$2,688	
New Californian Apartments	1-Bedroom	620	\$2,400	\$2.400	92
1888 Berkeley Way	2-Bedroom, 1 Bath	850	\$3,400	\$3,400	30
Built in 2010: 148 units	2-Bedroom, 2 Bath	950	\$3.300	\$3.300	26
,	Weighted Average		+-,	\$2,761	
Hillside Village	Studio	406	\$2,100	\$2,100	15
1797 Shattuck Avenue	1-Bedroom	442	\$2,400	\$2,400	11
Built in 2008; 94 units	2-Bedroom, 1 Bath	592	\$2,800	\$2,800	15
	2-Bedroom, 1.5 Bath	720	\$2,900	\$2,900	10
	2-Bedroom, 2 Bath	687	\$3,000	\$3,000	40
	3-Bedroom, 2 Bath	1,100	\$4,200	\$4,200	3
	Weighted Average			\$2,782	
Library Gardens	1-Bedroom	594	\$1,895	\$2,500	45
2020 Kittredge Street	1-Bedroom	614	\$1,895	\$2,500	45
Built in 2007; 176 units	2-Bedroom, 1 Bath	717	\$2,850	\$3,800	45
	2-Bedroom, 1 Bath	797	\$2,850	\$3,800	41
	Weighted Average			\$2,748	
Weighted Averages	Studio	430	\$2,239		23
- <b>-</b>	1-Bedroom	678	\$2,537		403
	2-Bedroom	871	\$3,434		303
	3-Bedroom	1,100	\$4,200		3
	Overall Weighted Average	752	\$2,906		-
	- •				

Sources: RealFacts, 2014; BAE, 2014.

NAICS		Estimated Household Income as a Percent of AMI (a)										
Code	Industry	Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 100% AMI 10	0% to 120% AMI	Above 120% AMI	Total				
Private Se	ctor											
11, 21	Agriculture & Natural Resources	18.4%	17.3%	16.5%	16.1%	8.6%	23.0%	100.0%				
23	Construction	13.9%	13.2%	13.5%	18.2%	9.4%	31.8%	100.0%				
31-33	Manufacturing	5.6%	7.1%	8.3%	13.2%	9.0%	56.7%	100.0%				
42	Wholesale Trade	7.6%	9.5%	11.3%	15.7%	9.0%	46.9%	100.0%				
44-45	Retail Trade	13.2%	12.2%	12.2%	17.7%	9.1%	35.7%	100.0%				
48-49, 22	Transportation, Warehousing, & Utilities	9.8%	10.5%	12.5%	18.8%	9.7%	38.7%	100.0%				
51	Information	5.3%	5.4%	6.1%	11.9%	8.6%	62.7%	100.0%				
52-53	Finance, Insurance, & Real Estate	6.1%	6.5%	8.7%	13.1%	9.0%	56.5%	100.0%				
54-55	Professional, Scientific, & Technical	4.6%	4.0%	5.1%	9.9%	7.3%	69.1%	100.0%				
	Services, & Mgmt of Companies											
56	Admin, Support, & Waste Mgmt Srvcs	17.1%	16.0%	14.4%	18.1%	8.1%	26.4%	100.0%				
61	Educational Services	9.2%	7.7%	9.6%	15.0%	9.4%	49.0%	100.0%				
62	Health Care & Social Assistance	8.9%	8.8%	9.9%	14.8%	9.2%	48.4%	100.0%				
71-72	Leisure & Hospitality	16.0%	16.3%	14.7%	16.8%	8.3%	27.9%	100.0%				
81	Other Services Except Public Admin	16.1%	14.1%	13.4%	16.8%	9.4%	30.1%	100.0%				
All Govern	iment Employment	7.4%	6.5%	8.6%	14.7%	10.5%	52.3%	100.0%				

#### Table A.2: Income Level by Industry, Persons by 2012 Income Limits

#### Notes:

(a) Based on a cross tabulation of Public Use Microdata Samples (PUMS) from the 2008-2012 American Community Survey. These incomes were compared to household income limits published by the California Department of Housing and Community Development, to determine the percentage of households falling into each income category. The analysis controlled for household size, to address the varying HCD income limits for each household size.

Sources: Census, Public-Use Microdata Sample (PUMS), 2000; CA Dept. of Housing and Community Development, 2009; BAE, 2010.

#### Table A.3: Calculation of Maximum Affordable Sales Price for Condominiums, Berkeley, 2014

	Household Income (a)	Sale Price	Down Payment (b)	Total Mortgage (b)	Monthly Payment	Monthly Property Tax (c)	Mortgage Insurance (d)	Homeowner's Insurance (e)	Homeowner's Association Fee (f)	Total Monthly PITI (g)
Extremely Low Income (30% AMI) 3 Person HH	\$25,250	\$50,145	\$10,029	\$40,116	\$194.54	\$53.07	\$0.00	\$23.64	\$360	\$631.25
Very Low Income (50% AMI) 3 Person HH	\$42,100	\$128,020	\$25,604	\$102,416	\$496.65	\$135.49	\$0.00	\$60.36	\$360	\$1,052.50
Low Income (80% AMI) 3 Person HH	\$60,850	\$214,675	\$42,935	\$171,740	\$832.84	\$227.20	\$0.00	\$101.21	\$360	\$1,521.25
Median Income (100% AMI) 3 Person HH	\$84,150	\$322,360	\$64,472	\$257,888	\$1,250.60	\$341.16	\$0.00	\$151.98	\$360	\$2,103.75
Moderate (120% AMI) 3 Person HH	\$101,000	\$400,235	\$80,047	\$320,188	\$1,552.72	\$423.58	\$0.00	\$188.70	\$360	\$2,525.00

Notes:

(a) Income limits published by U.S. Dept. of Housing and Urban Development for a four-person household in Santa Clara County, 2010. (b) Mortgage terms:

Annual Interest Rate (fixed)	4.13%	July 2014 Freddie Mac average fixed interest rate
Term of mortgage (years)	30	
Percent of sale price as down payment	20%	
(c) Initial property tax (annual)	1.27%	Alameda County Auditor-Controller
(d) Mortgage Insurance as percent of loan amount	0.00%	Only included if down payment is less than 20%.
(e) Annual homeowner's insurance rate as percent of sale price	0.57%	CA Dept. of Insurance website, based on average of all quotes, assuming \$100,000 of
		coverage.
(f) Homeowners Association Fee (monthly)	\$360	Average taken from survey of currently selling condos.
(g) PITI = Principal, Interest, Taxes, and Insurance		
Percent of household income available for PITI	30%	
Sources: California Department of Housing and Community Development, 2014;	Freddie Mac, 2	014; Alameda County Auditor-Controller, 2014; CA Dept. of Insurance, 2014; Condos.com

2014; Zillow.com, 2014; BAE, 2014.

### **APPENDIX B: OVERVIEW OF IMPLAN**

This appendix provides additional clarification of the workings of the IMPLAN input-output model. It provides a step-by-step account of how IMPLAN estimates economic impacts using new residential development as an illustrative example. Definitions of key *italicized* terms are provided in footnotes for the benefit of the reader. This section begins with an overview of the data that IMPLAN uses internally, and moves forward through the process of how the model estimates the impacts of the construction phase of the proposed casino.

### What is IMPLAN?

As stated in the main body of the text, IMPLAN is an input-output model that estimates the total economic implications of new economic activity within a specified geography. The model uses national industry data and county-level economic data to generate a series of multipliers, which in turn estimate the total economic implications of economic activity.

At the heart of the model is a national input-output dollar flow table called the Social Accounting Matrix (SAM). Unlike other static input-output models, which just measure the purchasing relationships between industry and household sectors, SAM also measures the economic relationships between government, industry, and household sectors, allowing IMPLAN to model transfer payments such as unemployment insurance. Thus, for the specified region, the input-output table accounts for all the dollar flows between the different sectors within the economy.

*National Industry Data*. The model uses national production functions for 440 sectors to determine how an industry spends its operating receipts to produce its commodities. The model also uses a national matrix to determine the *byproducts*<sup>16</sup> that each industry generates. To analyze the impacts of household spending, the model treats households as an "industry" to determining their expenditure patterns. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts for our example.

*County-Level Economic Data*. In order to estimate the county-level impacts, IMPLAN combines national industry production functions with county-level economic data. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each of the industries in a given county. It also collects data on average prices for all of the goods sold in the local economy. In the case of our example, IMPLAN uses an average of all the economic data across the nine Bay Area counties to estimate the impacts to the region.<sup>17</sup> IMPLAN gathers data on the types and amount of output that each industry generates within the region. In addition, the IMPLAN model uses county-level data on the prices of goods and household expenditures to

<sup>&</sup>lt;sup>16</sup> The byproducts refer to any secondary commodities that the industry creates.

<sup>&</sup>lt;sup>17</sup> The Bay Area is defined as Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma counties.

determine the consumption functions of regional households and local government, taking into account the availability of each commodity within the specified geography.

*Multipliers*. IMPLAN combines this data to generate a series of SAM-type multipliers for the local economy. The multiplier measures the amount of total economic activity that results from an industry (or household) spending an additional dollar in the local economy. Based on these multipliers, IMPLAN generates a series of tables to show the economic event's *direct, indirect,* and *induced* impacts to gross receipts, or output, within each of the model's 440 sectors. These outputs are described below:

 Direct Impacts. Direct impacts refer to the dollar value of economic activity available to circulate through the economy. In the case of new residential development, the direct impacts are equal to the new households' discretionary spending. The direct impacts do not include household savings and payments to federal, state, and local taxes, as these payments do not circulate through the economy.

It should be noted that impacts from retail expenditures differ significantly between the total economic value of retail and the amount available to circulate through the local economy. The nature of retail expenditures accounts for this difference. The model assumes that only the retail markup impacts the local economy, particularly for industries heavily populated with national firms such as gas stations and grocery stores. Since local stores buy goods from wholesalers and manufacturers outside of the area, and corporate profits also leave the local economy, only the retail markup will be available for distribution within the local economy. To the extent that retailers' headquarters are located within the county or region, the model allocates their portions of the impacts to the local economy.

- Indirect Impacts. The indirect impacts refer to the "inter-industry impacts of the input-output analysis."<sup>18</sup> In the new housing example, indirect impacts results from spending by the local and regional companies that the new households buy goods and services from. Retail establishments, restaurants, personal service providers, and other firms use the payments they receive from new households to buy equipment and supplies, rent space, pay their employees, etc. These expenditures have an impact on the economy.
- Induced Impacts. The induced impacts refer to the impacts of household spending by the employees generated by the direct and indirect impacts. In other words, induced impacts result from the household spending of employees of business establishments that the new households patronize (direct) and their suppliers (indirect). The model accounts for local commute patterns in the geography. For example, if 20 percent of construction workers who work in the region live outside of the region, the model will allocate 80 percent of labor's disposable income into the model to generate induced impacts. The model excludes payments to federal and state taxes and savings based on the geography's average local tax

<sup>&</sup>lt;sup>18</sup> IMPLAN Pro User's Guide, 2000.

and savings rates. Thus, only the disposable incomes from local workers are included in the model.

### Specifying the "Event" and Running the Model

Once the model is built for the specified geographies, it is time to specify the "event" that the model will analyze and run the model.

**Specifying the "Event."** The "event" refers to the total economic value of industry output that we are interested in analyzing. In the case of the ongoing economic impacts of a new residential development, the "event" would be the total household incomes of the households that buy or rent the homes.

*Running the Model.* Once the event is specified, IMPLAN runs the event through the model to generate the results. IMPLAN applies the local data on average output per worker and compensation per worker to determine the direct impacts. It then applies the value of the event to the national production functions and runs a number of iterations of this value through the production functions for the local economy to determine the indirect and induced impacts. During each iteration, the model removes expenditures to government, savings, and for goods bought outside of the local economy so that the results only include those dollars that impact the local economy.

### Summarizing the Impacts

Once the model is run, IMPLAN generates a series of output tables to show the direct, indirect, and induced impacts within each of the model's 440 sectors. IMPLAN generates these tables for three types of impacts: output, employment, and value added. The nexus study is concerned with the employment impacts.

- *Output* refers to the total economic value of the project in the local economy.
- *Employment* shows the number of employees needed to support the economic activity in the local economy. It should be noted that for annual impacts of ongoing operations, the employment figure shown represents the amount of employment needed to support that activity for a year. Furthermore, IMPLAN reports the number of jobs based on average output per employee for a given industry within the geography. This is not the same as the number of full-time positions.
- *Value Added* shows the total income that the event generates in the local economy. This income includes:

- Employee Compensation total payroll costs, including benefits<sup>19</sup>
- Proprietary Income payments received by self-employed individuals as income<sup>20</sup>
- o Other Property Type Income payments for rents, royalties, and dividends<sup>21</sup>
- Indirect Business Taxes excise taxes, property taxes, fees, and sales taxes paid by businesses. These taxes occur during the normal operation of businesses, but do not include taxes on profits or income.<sup>22</sup>

<sup>&</sup>lt;sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Ibid.
## **APPENDIX C: STUDENT SPENDING ESTIMATES**

The nexus model assumes that households earning \$118,400 occupy new apartments in Berkeley, based on the market rents in these units (see Table 6). This assumption drives the projected demand for affordable housing generated by new apartment development in Berkeley. However, many new apartment units in Berkeley are occupied by students. While most students have significantly lower household incomes than \$118,400, they can afford high rents through personal savings, familial assistance, financial aid, grants, and by putting more people in each unit. In fact, as discussed below, student spending actually generates a *greater* demand for affordable housing in the region, compared to a household earning \$118,400.

Between 2000 and 2014, UC Berkeley enrollment grew by over 15 percent from 31,267 to 36,204 students, according to University data. Students contribute to the local economy through their purchases and fees paid to the University, and thereby also contribute to the regional need for affordable housing.

Table C.1 shows student spending estimates based on survey data by the University of California, Berkeley. Adjusting student expenditures on rent and utilities to reflect rents at new apartment complexes in Berkeley (as shown in Appendix A.1), the average UC Berkeley student has expenditures on the order of \$49,800 a year. Therefore, conservatively assuming an average of two students per household, each student household in a new apartment complex spends approximately \$99,600 annually on student fees, goods, and services.

In comparison, the IMPLAN model run conducted for this study indicates that the households earning \$118,400 make only \$84,900 in direct expenditures in the region annually, i.e., less than the \$99,600 spent by student households. Therefore, by using household income (as opposed to student spending) as the basis for determining the affordable housing impact of new development, the nexus study is actually taking a more conservative approach to quantifying the impact of new residential development.

#### Table C.1: Expenditures by Students Occupying New Apartment Complexes

	Undergraduate (a)		Gradu	Graduate (a)		Average Student	Adjusted to
		Non-		Non-	Average	Adjusted for Full	Reflect Rents at New
	Resident	Resident	Resident	Resident	Student (b)	Calendar Year	Apt Complexes (e)
Rent/Utilities	\$7,112	\$7,112	\$11,946	\$11,946	\$8,481	\$11,308	\$16,491
Food	\$2,556	\$2,556	\$6,614	\$6,614	\$3,705	\$4,940	\$4,940
Personal	\$2,116	\$2,116	\$1,480	\$1,480	\$1,936	\$2,581	\$2,581
Transportation	\$724	\$724	\$3,002	\$3,002	\$1,369	\$1,826	\$1,826
Books	\$1,230	\$1,230	\$772	\$772	\$1,100	\$1,100	\$1,100
Health (c)	\$2,190	\$2,190	\$3,154	\$3,154	\$2,463	\$2,463	\$2,463
Student Fees (c)	<u>\$12,972</u>	\$35,850	<u>\$12,972</u>	\$28,074	\$20,421	\$20,421	<u>\$20,421</u>
Total	\$28,900	\$51,778	\$39,940	\$55,042	\$39,475	\$44,639	\$49,822
Percent of Student Body (d)	45.9%	25.8%	18.1%	10.2%	100.0%		

Notes:

(a) Spending patterns shown for nine-month academic year unless otherwise noted. Spending information provided by UC Berkeley Financial Aid and Scholarships Office for 2014-2015.

(b) Represents weighted average based on percent of student body.

(c) Student fees, books, and healthcare plan costs are not adjusted for full calendar year.

(d) Based on the following student body distribution from the Fall 2013 UC Berkeley Student Profile:

Undergraduates: 71.7%

Graduates:	28.3%
California residents:	64.0%

California residents:

(e) Assumes 2 students per unit. See Appendix B.1 for average rent at new complexes.

Sources: UC Berkeley Financial Aid and Scholarships Office, 2014; UC Berkeley Facts at a Glance, 2014; BAE, 2014.

Item 9 - Attachment 3 Planning Commission September 2, 2015

# AFFORDABLE HOUSING NEXUS STUDY



Eric Angstadt, Planning Director Carol Johnson, Land Use Planning Manager 0075<sup>(14, 2015)</sup>

## Introduction

- Background
- Study Overview
- Study Findings
- Nexus Model Methodology
- Fee Calculation Methodology
- Examples
- Questions for Council
- Next Steps

## Background

- Palmer vs. City of Los Angeles decision on inclusionary rental housing in 2009
- Affordable Housing Nexus Study in October 2010
- Affordable Housing Mitigation Fee Resolution in October 2012
- Updated Affordable Housing Nexus Study in March 2015
- CBIA vs. City of San Jose decision on inclusionary ownership housing in June 2015

# Study Overview

## Nexus model

- Supreme Court states that (1) gov't must demonstrate nexus between legitimate state interest and exaction imposed by City and (2) exaction must be "roughly proportional" to the impact the project is creating
- Model establishes the maximum fee that the City may legally charge

## Fee calculation

Scales back the maximum fee set by the nexus model to a lower level, accounting for financial feasibility concerns

## Study Findings

Average Market Rent (3 person/2 BR): \$2,171 (2014) vs. \$1,765 (2010)

Income Required to Afford Market Rent: 100% AMI (2014) vs. 65% (2010)

Households Requiring Rental Assistance (generated by a 100-unit project): 25.54 (2014) vs. 10 (2010)

## Nexus Model Methodology







Step 1: What are the incomes of households moving into new apartments?

- Based on rents of new apartments in Berkeley

Step 2: How much need for affordable housing is generated as new households spend money in the economy?

- Based on IMPLAN and Census data Step 3: How much does it cost to address the associated affordable housing need?

- Based on financing gap of subsidized housing developments

# Nexus Model Methodology

- Nexus model results in a maximum fee of \$84,400 per rental unit and \$96,300 per condo unit
- This nexus model methodology is the industry standard used by cities throughout California and other states
  - Model satisfies legal requirements on impact fees
- Similar study involving affordable housing fees on commercial development has been upheld by Ninth Circuit

# Fee Calculation Methodology

Many cities impose lower fees than permitted by their nexus studies to account for financial feasibility concerns.

Financial feasibility tests were conducted for four alternatives -

- A1 (rental with adopted fee of \$28,000) = 15.9% Return
- A2 (rental with test fee of \$34,000) = 13.9% Return
- B1 (condo with inclusionary requirement of 20%) = 16.4% Return
- B2 (condo with test fee of \$75,000) = 14.0% Return
- Study recommends feasible fee of \$34,000 for rental and \$75,000 for condo

# Fee Calculation Methodology

### ADDITIONAL HOUSEHOLDS NOT ABLE TO AFFORD MARKET RENTS GENERATED PER 100 UNIT MARKET RATE PROJECT



# Fee Calculation Methodology

DETERMINING PERCENTAGE OF AFFORDABLE UNITS EQUIVALENT TO THE FEE



## Fee Calculation – Current Examples

100 units

### 100 unit development

- 100 market rate units
- Fee Calculation:
   100 x \$20,000 = \$2M
- □ Fee due: \$2 million

## Fee Calculation – Current Examples



## 100 unit development

- 9 Very Low Income (VLI) units
- 91 Market Rate units

## Fee Calculation:

- 91 x \$20,000 = \$1.82M
- 10% of 91= 9.1 VLI units required to satisfy fee
- 9 of 9.1 VLI provided = 98.9% of requirement
- Remaining fee: 1.1% of \$1.82M
- □ Fee due: \$20,020

# Fee Calculation – Current Examples



## 100 unit development

- 5 VLI units
- 95 market rate units

## Fee Calculation:

- 95 x \$20,000 = \$1.9M
- 10% of 95 = 9.5 VLI required to satisfy fee
- 5 of 9.5 VLI provided = 53% of requirement
- Remaining fee: 47% of \$1.9M
- Fee due: \$893,000

# Fee Calculations with Density Bonus



Example #1:

- 5% VLI units for 20% bonus
- 120 Total Units (100 unit base)
  - 95 market rate units
  - 5 very low income units
  - 20 bonus market rate units
- Fee Calculation:
  - 115 x \$20,000 = \$2.3M
  - 10% of 115 = 11.5 VLI required to satisfy fee
  - 5 of 11.5 VLI = 43% of requirement
  - Remaining fee: 57% of \$2.3M

Fee due: \$1.3M

# Fee Calculations with Density Bonus



### Example #2:

11% VLI units for 35% bonus

- 135 Total Units (100 unit base)
  - 89 market rate units
  - 11 very low income units
  - 35 bonus units

## Fee Calculation:

- 124 x \$20,000 = \$2.5M
- 10% of 124 = 12.4 VLI required to satisfy fee
- 11 of 12.4 = 89%
- Remaining fee: 11% of \$2.5M
- □ Fee due: \$275,000

# **Questions for City Council**

## Should the current Affordable Housing Mitigation Fee (AHMF) be changed?

If so, what percentage of units are equivalent to the new fee?

What levels of affordability should be addressed?

## Next Steps

## Further analysis of the following policy questions -

- In light of the San Jose decision, should the City replace its Inclusionary Housing Ordinance with a mitigation fee for ownership housing?
- What options are feasible for capturing the impact of the loss of historically affordable units that have been replaced?

## Planning Commission on September 2, 2015

- Housing Advisory Commission on September 3, 2015
- City Council in Fall 2015







### **KEYSER MARSTON ASSOCIATES**

### JOBS HOUSING NEXUS ANALYSIS SAN FRANCISCO, CALIFORNIA

Prepared for City and County of San Francisco

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### I. EXECUTIVE SUMMARY

This Jobs Housing Nexus Analysis has been prepared for the City and County of San Francisco ("City") in support of the City's Jobs Housing Linkage Program ("JHLF Program") established in Section 413 of the San Francisco Planning Code. The JHLF Program establishes affordable housing fees applicable to non-residential development (the "Jobs Housing Linkage Fee" or "JHLF Fee"). The purpose of this report is to determine nexus support for fees under the JHLF Program consistent with the requirements of the Mitigation Fee Act (Government Code Section 66000 et. seq.). Findings represent the results of an impact analysis only and are <u>not</u> recommended requirements.

The nexus analysis establishes the relationships among construction of new non-residential buildings, added employment, and increased affordable housing demand. The analysis addresses construction of eight types of workplace buildings in San Francisco covering uses currently subject to the City's Jobs Housing Linkage Program plus medical and institutional uses which are included for consistency with the City's prior nexus study and to provide flexibility in adjusting program requirements in the future.

The eight building types addressed are:

- Office
- Research and Development (R&D)
- Retail
- Entertainment
- Hotel
- Production Distribution and Repair (PDR)
- Medical
- Institutional

The analysis establishes the additional demand for affordable units for each 1,000 square feet of net new non-residential gross floor area. This represents the maximum level of affordable unit demand to be mitigated by the City's JHLF Program consistent with the requirements of the Mitigation Fee Act, referred to for purposes of this Report as the "Affordable Unit Demand Factor." This Affordable Unit Demand Factor is a multiplier that the City can use in combination with current information regarding the subsidy required to produce affordable units to determine the maximum Jobs Housing Linkage Fee level consistent with the requirements of the Mitigation Fee Act.

### Analysis Methodology

The nexus analysis links new non-residential buildings with new workers; these workers demand additional housing, a portion of which needs to be affordable to the workers in lower income households. The analysis begins by assuming a 100,000 square foot building for each of the eight building types and then makes the following calculations:

- Number of employees is estimated based on average employment density data.
- New jobs are adjusted to new households, using San Francisco demographics on the number of workers per household. We know from the Census that many workers are members of households where more than one person is employed; we use factors derived from the Census to translate the number of workers into the number of households.
- Household incomes of workers by building type is estimated based on data specific to San Francisco's workforce derived from the United States Census American Community Survey (ACS) Public Use Microdata Sample for 2011 through 2016.
- The household income categories addressed in the analysis are Extremely Low Income, Very Low Income, Low Income and Moderate Income. The number of households within each income category generated by the new development is calculated by comparing data on household income to the income limits applicable to each income category. The number of households per 100,000 square feet of non-residential gross floor area (GFA) is then divided by 100 to arrive at coefficients of housing units needed for every 1,000 square feet of GFA, which are the Affordable Unit Demand Factor conclusions of the analysis.

The maximum Jobs Housing Linkage Fee per square foot of gross floor area (GFA) supported by this nexus analysis may be determined by multiplying each Affordable Unit Demand Factor by the required net subsidy to deliver each unit of affordable housing in San Francisco ("affordability gap") and then dividing by 1,000 square feet. Affordability gaps are published by the Mayor's Office of Housing and Community Development and updated regularly for purposes of San Francisco's affordable housing programs. Because affordability gaps for San Francisco are published regularly and vary over time with changes in development costs and median income levels, the final step in the fee calculation, multiplication by an affordability gap to determine mitigation cost, was not included in this report.

### Nexus Findings: Affordable Unit Demand Factors

Table I-1: Affordable Unit Demand Factors						
Number of Affordable Units Needed per 1,000 Square Feet of Gross Floor Area						
Office	0.80892					
R&D	0.44599					
Retail	1.02229					
Entertainment	0.34275					
Hotel	0.51642					
PDR	0.53153					
Medical	0.68647					
Institutional	0.33176					

The Affordable Unit Demand Factors for the eight building types are as follows:

These figures express the maximum number of affordable units per 1,000 square feet of gross floor area to be mitigated by JHLF Fees applicable to the eight building types. Affordable Unit Demand Factors by income category are provided in Table III-6 on page 14. They are <u>not</u> recommended levels for requirements; they represent only the maximums established by the impact analysis.

The results of the analysis are heavily driven by the density of employees within buildings in combination with the household incomes of workers. Retail has both high employment density and a high proportion of lower income workers. These factors combine to drive the greater Affordable Unit Demand Factor conclusions for retail.

Appendix C addresses the potential for overlap between affordable housing impacts documented in this Jobs Housing Nexus Analysis and the City's separate Residential Affordable Housing Nexus Analysis. The analysis demonstrates that adopted requirements are within the maximums supported by the nexus analyses even in the unlikely event significant overlap were to occur.

#### II. INTRODUCTION

The following report is a Jobs Housing Nexus Analysis, an analysis of the linkages between non-residential development and the need for additional affordable housing in San Francisco. This Jobs Housing Nexus Analysis has been prepared by Keyser Marston Associates, Inc. (KMA) in support of affordable housing fees under the City's Jobs Housing Linkage Program.

### Purpose and Use of This Study

The purpose of a Jobs-Housing Nexus Analysis is to document and quantify the impact of the development of new non-residential buildings and the employees that work in them, on the demand for affordable housing. This nexus study has been prepared for the limited purpose of determining nexus support for the San Francisco JHLF Program consistent with the requirements of Government Code Section 66000 (Mitigation Fee Act). The analysis establishes the basis for calculating Jobs Housing Linkage Fees that could be imposed on a non-residential development project in a manner consistent with the requirements of the Mitigation Fee Act, referred to for purposes of this Report as the "Affordable Unit Demand Factor." Because jobs in all buildings cover a range of compensation levels, there are housing needs at all affordability levels. This analysis quantifies the need for affordable housing created by eight categories of workplace buildings. The affordable housing need is then translated into Affordable Housing Demand Factors representing the number of affordable Unit Demand Factor is a multiplier that the City can use to quantify and impose JHLF Fees to address the additional demand for affordable housing units resulting from non-residential development.

This study updates a prior nexus study prepared by KMA in 1997. In the 21 years since the prior study was prepared, there have been changes in the business activity taking place in the City, in the occupation and compensation structure of the City's workforce and in the cost of delivering affordable units to workers who cannot afford housing at market rates, all of which make an update to the City's nexus study advisable at this time.

This analysis has not been prepared as a document to guide policy design in the broader context. We caution against the use of this study, or any impact study for that matter, for purposes beyond the intended use. All nexus studies are limited and imperfect but can be helpful for addressing narrow concerns. The findings presented in this report represent the results of an impact analysis only and <u>are not</u> policy recommendations for changes to the JHLF Program.

### San Francisco's Jobs Housing Linkage Program

San Francisco's affordable housing fee program applicable to non-residential development has been in place for over 30 years. The predecessor to the current JHLF Program, the Office Affordable Housing Production Program (OAHHP), was enacted in 1985. The OAHHP program linked development of office buildings to the demand for affordable housing, by requiring office developers to either build affordable housing or pay an in-lieu fee. The program has been expanded and amended several times and now covers the following building types:

- Office,
- Research and Development (R&D),
- Retail,
- Entertainment,
- Hotel,
- Integrated Production Distribution and Repair (PDR), and
- Small Enterprise Workspace<sup>1</sup>.

San Francisco's JHLF Program is established in Section 413 of the Planning Code. Fee requirements apply to projects adding more than 25,000 square feet of any combination of the above uses. Projects have the option to provide affordable units as an alternative to payment of fees or to comply through a combination of fee payment and provision of affordable units.

### Legal Context

San Francisco's JHLF Program is among the first jobs housing linkage programs adopted in the U.S. Since the program was adopted in the mid-1980s, there have been several court cases and California statutes that affect what local jurisdictions must demonstrate when imposing impact fees on development projects. The most important U.S. Supreme Court cases are Nollan v. California Coastal Commission and Dolan v. City of Tigard (Oregon). The rulings on these cases, and others, help clarify what governments must find in the way of the nature of the relationship between the problem to be mitigated and the action contributing to the problem. Here, the problem is the lack of affordable housing and the action contributing to the problem is building workspaces that mean more jobs and worker households needing more affordable housing.

Following the Nollan decision in 1987, the California legislature enacted AB 1600 which requires local agencies proposing an impact fee on a development project to identify the purpose of the fee, the use of the fee, and to determine that there is a reasonable relationship between the fee's use and the development project on which the fee is imposed. The local agency must also demonstrate that there is a reasonable relationship between the fee amount and the cost of

<sup>&</sup>lt;sup>1</sup> Defined in Planning Code Section 102 as a use comprised of discrete workspace units of limited size that are independently accessed from building common areas.

mitigating the problem that the fee addresses. Studies by local governments designed to fulfill the requirements of AB 1600 are often referred to as AB 1600 or "nexus" studies.

One court case that involved housing linkage fees was Commercial Builders of Northern California v. City of Sacramento decided in 1991. The commercial builders of Sacramento sued the City following the City's adoption of a housing linkage fee. Both the U.S. District Court and the Ninth Circuit Court of Appeals upheld the City of Sacramento and rejected the builders' petition. The U.S. Supreme Court denied a petition to hear the case, letting stand the lower court's opinion.

Since the Sacramento case in 1991, there have been several additional court rulings reaffirming and clarifying the ability of California cities to adopt impact fees. A notable case was the San Remo Hotel v. the City and County of San Francisco, which upheld the impact fee levied by the City and County on the conversion of residence hotels to tourist hotels and other uses. The court found that a suitable nexus, or deleterious impact, had been demonstrated. In 2009, in the Building Industry Association of Central California v. the City of Patterson, the Court invalidated the City's fee since the impact of the proposed project as related to the fee had not been demonstrated. A 2010 ruling upheld most of the impact fees levied by the City of Lemoore in Southern California. Of note relevant to housing impact fees was the judges' opinion that a "fee" may be "established for a broad class of projects by legislation of general applicability....the fact that specific construction plans are not in place does not render the fee unreasonable." In other words, cities do not have to identify specific affordable housing projects to be constructed at the time of adoption.

In summary, the case law at this time appears to be fully supportive of fees under the JHLF Program that have been in place in San Francisco since the 1980s and are the subject of this updated nexus analysis.

### Analysis Scope

This analysis examines eight types of workplace buildings encompassing uses subject to the City's JHLF Program. The Institutional and Medical categories are not generally subject to fees at this time but are included for consistency with the 1997 study and to provide flexibility in amending the program in the future.

- **Office** encompasses the full range of office users in San Francisco from high tech firms that have represented an increasing share of leasing activity in recent years to the financial and professional services sector and medical offices.
- Research and Development (R&D) encompasses the Laboratory and Life Science uses defined in Planning Code Section 102.
- Retail includes all types of retail, restaurants and personal services.
- Entertainment includes performance venues, movie theaters and other entertainment.

- Hotel covers the range from full service hotels to limited service accommodations.
- Production Distribution and Repair (PDR) is a use category defined in Planning Code Section 102 encompassing industrial, wholesale, auto repair and service, storage, delivery services, and a range of other uses of an industrial or semi-industrial character.
- **Medical** encompasses hospitals, outpatient and nursing care facilities. Medical office is not included as it is captured within the office category.
- **Institutional** uses encompass educational, cultural, religious and other institutional buildings except medical, which are captured as a separate category.

Small enterprise workspace is not addressed as a separate use category in the nexus analysis because these buildings are defined more by the size of businesses and interior configuration and may include one or more of the above uses.

The household income categories addressed in the analysis are:

- Extremely Low Income: households earning up to 30% of median income;
- Very Low Income: households earning over 30% up to 50% of median;
- Low Income: households earning over 50% up to 80% of median; and,
- Moderate Income: households earning over 80% up to 120% of median.

#### **Report Organization**

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

- Section I is the Executive Summary;
- Section II provides an introduction;
- Section III presents an analysis of the jobs and housing relationships associated with each workplace building type and concludes with the number of households at each income level associated with each building type;
- Section IV provides draft findings consistent with the requirements of the Mitigation Fee Act;
- Appendix A provides a discussion of various specific factors and assumptions in relation to the nexus concept;
- Appendix B contains support information regarding the industry categories identified as applicable to each building type; and

 Appendix C – provides an analysis to address the potential for overlap between jobs counted in this Jobs Housing Nexus Analysis and the separate Residential Affordable Housing Nexus Analysis prepared for the City in 2016.

#### **Data Sources and Qualifications**

The analyses in this report have been prepared using the best and most recent data available. Local and current data were used whenever possible. The American Community Survey of the U.S. Census is used extensively. Other sources and analyses used are noted in the text and footnotes. While we believe all sources utilized are sufficiently accurate for the purposes of the analyses, we cannot guarantee their accuracy. KMA assumes no liability for information from these or other sources.

#### III. JOBS HOUSING NEXUS ANALYSIS

This section presents a summary of the analysis linking the development of the eight types of workplace buildings to the estimated number of lower income housing units required in each of four income categories.

#### Analysis Approach and Framework

The analysis establishes the jobs housing nexus for individual land use categories, quantifying the connection between employment growth in San Francisco and affordable housing demand.

The analysis examines the employment associated with the development of workplace building prototypes. Then, through a series of steps, the number of employees is converted to households and housing units by income level. The findings are expressed in terms of numbers of households per 100,000 square feet, for ease of presentation. In the final step, we convert the numbers of households for an entire building to the number of households per 1,000 square feet of building area, which becomes the basis for the Affordable Unit Demand Factors that are the conclusions of the analysis.

#### **Household Income Limits**

The analysis estimates demand for affordable housing in four household income categories: Extremely Low, Very Low, Low and Moderate Income. The analysis uses income limits applicable to San Francisco's affordable housing programs published by the San Francisco Mayor's Office of Housing and Community Development (MOHCD) for 2018 as shown in Table III-1.

Table III-1: 2018 Income Limits for San Francisco										
			Household S	ize (Persons)						
	1	2	3	4	5	6 +				
Extr. Low (Under 30% AMI)	\$24,850	\$28,400	\$31,950	\$35,500	\$38,350	\$41,200				
Very Low (30%-50% AMI)	\$41,450	\$47,350	\$53,300	\$59,200	\$63,950	\$68,700				
Low (50%-80% AMI)	\$66,300	\$75,750	\$85,250	\$94,700	\$102,300	\$109,900				
Moderate (80%-120% AMI)	\$99,500	\$113,650	\$127,850	\$142,100	\$153,400	\$164,800				
Median (100% of Median)	\$82,900	\$94,700	\$106,550	\$118,400	\$127,850	\$137,350				
Source: San Francisco Mayor's Offic	e of Housing an	d Community De	evelopment.							

### **Analysis Steps**

Following is a description of the four major steps in the analysis.

### Step 1 – Estimate of Total New Employees

The first step identifies the total number of direct employees who will work in the building type being analyzed. Average employment density factors are used to make the calculation. Employment density estimates are drawn from a variety of sources including a separate KMA study on office employment density specific to San Francisco, estimates used in the San Francisco Planning Department's Land Use Allocation Model, Environmental Impact Reports, Institute of Transportation Engineers (ITE) and other sources. Estimates are tailored to the character of development and the types of tenancies expected in San Francisco.

- Office 238 square feet per employee based on a separate office employment density study completed by KMA in 2017. The estimate reflects the mix of tech, professional services, financial, and legal tenants in San Francisco.
- Research and Development 400 square feet per employee. The estimate reflects laboratory, life sciences and other research facilities and utilizes the Association of Bay Area Government's estimate of employment density from the ITE Trip Generation Manual, 5th Edition.
- Retail Estimated at 368 square feet per employee consistent with the San Francisco Planning Department's Land Use Allocation Model and other planning applications. Restaurant space typically has a higher employment density, while retail space ranges widely depending on the type of retail, with furniture stores, for example, representing the lower end. The density range within this category is wide, with some types of retail as much as five times as dense as other types.
- Entertainment Estimated at 900 square feet per employee. This category address lower employment density entertainment uses such as movie theaters and live performance venues. The estimate is based on ITE Trip Generation Manual, 7th Edition data applicable to movie theaters.
- Hotel 787 square feet per employee. The 787 square feet per employee average covers a range from higher service hotels, which are far more employment intensive, to minimal service extended stay hotels which have very low employment density. The employment density estimate is consistent with the San Francisco Planning Department's Land Use Allocation Model.
- Production Distribution and Repair (PDR) 597 square feet per employee. This category encompasses a wide range of industrial, storage and service uses. The employment density figure is specific to the PDR category and is based on the estimate used in the San Francisco Planning Department's Land Use Allocation Model.

- Medical 350 square feet per employee. This category reflects hospitals, outpatient and nursing care facilities. The employment density estimate comes from the City's land use allocation model. By way of comparison, the Environmental Impact Report (EIR) for the reconstruction of San Francisco General Hospital reflected a similar employment density while the EIR for the University of California San Francisco Medical Center in Mission Bay reflects a somewhat higher density of employment than estimated here.
- Institutional 1,000 square feet per employee. The institutional use category
  encompasses educational, cultural, religious and other institutional uses other than
  those of a medical nature which are represented in the separate medical category. The
  employment density estimate is based on data from the Institute of Transportation
  Engineers on employment densities for a range of institutional uses. Cultural facilities
  such as museums may be less dense than the average while schools may have a higher
  density of employment. The estimate is less than that used in the City's Land Use
  Allocation Model to capture lower density of employment uses included in this category.

KMA conducted the analysis on 100,000 square foot buildings. This facilitates the presentation of the nexus findings, as it allows jobs and housing units to be presented in whole numbers that can be more readily understood. At the conclusion of the analysis, the findings are converted to the number of units per 1,000 square feet so that the findings can be applied to buildings of any size. Table III-2 shows the employment estimate.

Floor Area (GFA)							
	Employment Density (SF/Employee)	Number of Employees per 100,000 sq.ft. of GFA					
Office	238	420					
R&D	400	250					
Retail	368	272					
Entertainment	900	111					
Hotel	787	127					
PDR	597	168					
Medical	350	286					
Institutional	1,000	100					

### Step 2 – Adjustment from Employees to Employee Households

This step (Table III-3) converts the number of employees to the number of employee households, recognizing that that there is, on average, more than one worker per household, and thus the number of housing units needed for new workers is less than the number of new workers. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons and students.

The number of workers per household in a given geographic area is a function of household size, labor force participation rate and employment availability, as well as other factors. According to the 2011-2015 ACS, the number of workers per worker household in San Francisco is 1.74, including full- and part-time workers. The total number of jobs created is divided by 1.74 to determine the number of new households. This is a conservative estimate because it excludes all non-worker households (such as students and the retired). If the average number of workers in all households was used, it would have produced a greater demand for housing units. Table III-3 presents the results of this calculation step.

Table III-3: Adjustment from Employees to Employee Households								
	Number of Workers per	Number of Worker						
	100,000 Sq.It. OI GFA	Households						
		(=no. workers / 1.74)						
Office	420	241.7						
R&D	250	143.8						
Retail	272	156.3						
Entertainment	111	63.9						
Hotel	127	73.1						
PDR	168	96.4						
Medical	286	164.3						
Institutional	100	57.5						

### Step 3 – Worker Household Incomes

Household incomes for workers are estimated using data from the U.S. Census American Community Survey (ACS) for 2011 to 2016. The ACS data is accessed in raw form through the Public Use Microdata Sample (PUMS) program. Data on household income from individual Census survey responses is summarized for each of the eight building types. Household income data is for San Francisco's workforce, including in-commuters. Workers were grouped by building type based on their industry category. A list of industries corresponding to each of the eight building types is included in Appendix Table B - 1. Incomes are adjusted for changes in the consumer price index (CPI) since the applicable survey year consistent with the approach used by the U.S. Department of Housing and Urban Development in establishing income limits. Each individual household's income is then compared to income limits for San Francisco to determine the applicable income category (Extremely Low, Very Low, Low and Moderate).

The percentage of individual survey respondents within each income category is summarized by building type as shown in Table III-4. As indicated, more than 65% of retail worker household and over 70% of hotel worker households are below the 120% of median income level. R&D space has lowest percentage of workers under 120% of median at approximately 31%.

Table III-4: Percentage of New Worker Households by Income Category									
	Office	R&D	Retail	Entertainment	Hotel	PDR	Medical	Institutional	
Extremely Low Very Low Income Low Income Moderate Income	3.0% 4.2% 10.0% 16.2%	3.5% 1.2% 6.4% 19.9%	10.9% 15.1% 20.1% 19.4%	8.1% 7.8% 16.2% 21.5%	6.7% 17.1% 24.5% 22.3%	7.4% 10.1% 18.4% 19.3%	3.1% 5.5% 13.6% 19.6%	7.4% 9.4% 18.6% 22.3%	
Subtotal 0-120% of median	33.5%	31.0%	65.4%	53.6%	70.7%	55.2%	41.8%	57.7%	
Above Moderate (over 120% of median)	66.5%	69.0%	34.6%	46.4%	29.3%	44.8%	58.2%	42.3%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	

Lower income households have been found to over-report income in self-reported Census surveys,<sup>2</sup> which may artificially reduce the share that qualify within the four income tiers. Therefore, use of self-reported household income derived from American Community Survey data likely provides a conservative estimate that understates affordable housing demand.

The distribution of household incomes from Table III-4 is applied to the number of households from Table III-3 to calculate the number of affordable units needed by income category per 100,000 square feet of building area summarized in table III-5.

Table III-5: New Worker Households by Income Level per 100,000 square feet									
	Office	R&D	Retail	Entertainment	Hotel	PDR	Medical	Institutional	
Extremely Low Very Low Income Low Income	7.3 10.3 24.3	5.1 1.7 9.2	17.0 23.6 31.3	5.2 5.0 10.4	4.9 12.5 17.9	7.1 9.8 17.7	5.1 9.0 22.3	4.3 5.4 10.7	
Subtotal 0%-120% of median	80.9	<b>44.6</b>	102.2	<b>34.3</b>	<b>51.6</b>	<b>53.2</b>	68.6	<b>33.2</b>	
Above Moderate (over 120% of median)	160.8	99.2	54.1	29.6	21.4	43.2	95.7	24.3	
Total	241.7	143.8	156.3	63.9	73.1	96.4	164.3	57.5	

<sup>2</sup>Murray-Close, Marta and Heggeness, Misty L. 2018. Manning up and womaning down: How husbands and wives report their earnings when she earns more. The paper examines bias in reporting of income in Census surveys as a reflection of gender and gender roles based on a comparison to administrative records. Self-reported income was found to exceed that indicated in administrative records for households in the bottom 50<sup>th</sup> percentile of income (Figure 1, pp 13) in three of the four categories addressed.

### Step 4 – Affordable Unit Demand Factors

Affordable unit demand factors representing the number of housing units per 1,000 square feet of building area are calculated by dividing the number of worker households within each income tier per 100,000 square feet of building area from step 3 by 100. The Affordable Unit Demand Factors for the eight building types are presented in Table III-6:

Table III-6: Affordable Unit Demand Factors         [Affordable Units Needed per 1,000 SF of GFA]									
	Per	Affordable U 1,000 Squa	nit Demand re Feet of C	I GFA	Total Affordable Unit Demand				
	Extremely	Very Low	Low	Moderate	Per 1,000 Square Feet of GFA				
Building Type	Low	Income	Income	Income	(0% to 120% AMI)				
Office	0.07312	0.10265	0.24268	0.39047	0.80892				
R&D	0.05100	0.01682	0.09175	0.28642	0.44599				
Retail	0.17037	0.23571	0.31348	0.30274	1.02229				
Entertainment	0.05176	0.04968	0.10373	0.13759	0.34275				
Hotel	0.04891	0.12531	0.17919	0.16302	0.51642				
PDR	0.07085	0.09757	0.17683	0.18628	0.53153				
Medical	0.05059	0.09047	0.22300	0.32240	0.68647				
Institutional	0.04255	0.05391	0.10722	0.12808	0.33176				

These figures express the maximum number of affordable units to be mitigated per 1,000 square feet of gross floor area for the eight building types. They are <u>not</u> recommended requirements; they represent only the maximums established by this analysis, below which JHLF Program requirements may be set.

The results of the analysis are heavily driven by the density of employees within buildings in combination with the occupational make-up of the workers. Retail has both high employment density and a high proportion of lower paying jobs. These factors combine to drive the greater Affordable Unit Demand Factor conclusions for retail.

This is the summary of the housing nexus analysis, or the linkage from buildings to employees to housing demand, by income level in relationship to non-residential building area.

#### Maximum Supported JHLF Program Fees

This report does not include a calculation of maximum supported fee level. Maximum supported fee levels per square foot of building area may be calculated by:

- 1) Multiplying affordable unit demand factors summarized in Table III-6 by an affordability gap representing the estimated average net cost to produce each unit of affordable housing; and
- 2) Dividing by 1,000 square feet of building area.
Affordability gaps are published by the Mayor's Office of Housing and Community Development and periodically updated as required under Planning Code Section 415.5. Affordability gaps are subject to change as a function of construction costs and other factors. The step of calculating maximum supported fee levels in dollar terms was not included in this report given there is a process in place to determine and regularly update the affordability gap.

Appendix C addresses the potential for overlap between affordable housing impacts documented in this Jobs Housing Nexus Analysis and the City's separate Residential Affordable Housing Nexus Analysis. The analysis demonstrates that adopted requirements are within the maximums supported by the nexus analyses even after consideration of potential overlap between the impacts addressed in the two studies.

## IV. MITIGATION FEE ACT FINDINGS

This section identifies the findings of the Nexus Analysis consistent with the requirements of the Mitigation Fee Act as set forth in Government Code § 66000 et seq:

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

The purpose of the fee under the JHLF Program is to fund construction of affordable housing units to address the affordable housing needs of new workers added by construction of non-residential buildings in San Francisco.

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

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

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

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

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

The analysis has demonstrated that there is a reasonable relationship between the development of non-residential workspace buildings in San Francisco and the need for additional affordable units. Development of new workspace buildings accommodates additional jobs in San Francisco. Eight different non-residential development types were analyzed (Office, R&D, Retail, Entertainment, Hotel, Production Distribution and Repair, Medical and Institutional). The number of jobs added in various types of new non-residential buildings is documented on page 10. Based on household income levels for the new workers in these new jobs, a significant share of the need is for housing affordable to Extremely Low, Very Low, Low and Moderate Income levels. The nexus

analysis concludes that for every 100,000 square feet of new office space, 80.9 incremental affordable units are needed. For R&D, 44.6 affordable units are needed per 100,000 square feet of space developed, 102.2 for Retail, 34.3 for Entertainment, 51.6 for Hotel, 53.2 for Production Distribution and Repair, 68.6 for Medical and 33.2 for Institutional.

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

There is a reasonable relationship between the amount of the fee and the cost of the needed affordable housing attributable to the new non-residential development. The nexus analysis has quantified the increased need for affordable units in relation to each type of new non-residential use being developed. The cost of providing each needed affordable unit is determined by the Mayor's Office of Housing and Community Development and regularly updated. Costs reflect the net subsidy required to produce the affordable units based on recent cost information for affordable housing units. Per unit costs are multiplied by the Affordable Housing Demand Factors established in this nexus study and divided by 1,000 square feet to determine maximum per square foot fees based on affordable housing need attributable to each type of development. JHLF Fees are charged per square foot of building area and updated annually. JHLF Fees for each building type are set at a level that does not exceed the per square foot cost of providing affordable housing attributable to each type of development.

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

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

## APPENDIX A: DISCUSSION OF VARIOUS FACTORS IN RELATION TO NEXUS CONCEPT

This appendix provides a discussion of various specific factors and assumptions in relation to the nexus concept.

# 1. Addressing the Housing Needs of a New Population vs. the Existing Population

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

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

Local analyses of housing conditions have found that new housing affordable to lower income households is not being added to the supply in sufficient quantity to meet the needs of new employee households. If this were not the case and significant numbers of affordable units were being added to the supply, or if residential units were experiencing significant long-term vacancy levels, particularly in affordable units, then the need for new units would be questionable.

# 2. No Excess Supply of Affordable Housing

An assumption of this nexus analysis is that there is no excess supply of affordable housing available to absorb or offset new demand; therefore, new affordable units are needed to mitigate the new affordable housing demand generated by new non-residential development. Based on a review of San Francisco's Housing Element as well as recent Census information, conditions are consistent with this underlying assumption.

San Francisco is often ranked as one of the most expensive housing markets in the country. San Francisco's 2014 Housing Element indicates average rents for a two-bedroom apartment are more than twice the level that is affordable to a Low Income household and nearly four times the level affordable to Very Low Income households. The least expensive of 15 San Francisco neighborhoods surveyed as part of the Housing Element still has market rent levels that are more than twice the amount a Very Low income household can afford and well above a level affordable to Low Income households. Rents have increased significantly since the 2014 survey, further exacerbating the disparity between market rents and the rent level affordable to Extremely Low, Very Low, and Low-Income households. Ownership housing is similarly out of reach for the majority of households in San Francisco. According to the Housing Element, the median priced home is affordable to only 16% of San Francisco households. Census data for San Francisco (from the 2011 to 2015 American Community Survey) shows that 40% of all households in the City are paying thirty percent or more of their income on housing.

## 3. Nexus Relationships Hold on Macro Scale

The nexus analysis relates square feet of new non-residential development to added jobs in San Francisco on an individual building basis. While the analysis is conducted at the level of the individual building, the underlying relationships hold on a larger City-wide scale. KMA reviewed published data on office employment in San Francisco over the past 27 years in relationship to the absorption of new office space. As summarized in the table below, office employment has grown in proportion to the new office space that has been constructed and absorbed in San Francisco. Relationships between building area absorbed and jobs added has been relatively consistent over time with a modest trend toward increasing density of employment. As shown in the table below, over the past 27 years in San Francisco, an average of one new office job was added for every 235 square feet of added office space.

Table A-1         Relationship Between Added Jobs and Added Square Feet of Office Space in San Francisco         Incremental Growth								
	1990	2017Q1	1990 - 2017					
Office Square Feet in San Francisco <sup>(1)</sup>	59,857,000	79,953,100	20,096,100					
Office Jobs in San Francisco	240,552	326,041	85,489					
Ratio: Added Jobs to Square Feet of Office Space	1 job per 249	1 job per 245	1 added job for every					
	square feet of	square feet of	235 square feet of					
	office space	office space	added office space					

(1) Occupied Gross Floor Area.

Source: Office Employment Density Estimate. Keyser Marston Associates, Inc.

The above table is extracted from an analysis included in the 2017 Office Employment Density Estimate for San Francisco prepared by Keyser Marston Associates, Inc. The employment data is derived from the Quarterly Census of Employment and Wages and the data on office space absorption is reported by the brokerage firm Colliers International.

## 4. Substitution Factor

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

## 5. Indirect Employment and Multiplier Effects

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

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

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

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

## 6. Economic Cycles

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

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

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

In contrast, during a vigorous economic boom period, conditions exist in which elevated impacts are experienced on a temporary basis. As an example, compression of employment densities can occur as firms add employees while making do with existing space. Compressed employment densities mean more jobs added for a given amount of building area. Boom periods also tend to go hand-in-hand with rising development costs and increasing home prices. These factors can bring market rate housing out of reach of a larger percentage of the workforce and increase the cost of delivering affordable units.

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

## 7. Governmental Offices

The analysis has been performed for uses currently subject or potentially subject to the fee in the future. Buildings constructed by the City, State, or Federal government are generally exempt. However, governmental agencies also lease space in buildings that are built by the private sector and subject to the fee. For purposes of the analysis, tenancies in new office buildings are assumed to be primarily private sector tenants. Governmental agencies are not assumed as part of the tenant mix due to the difficulty in estimating the share governmental tenants would represent within privately developed buildings. To test the impact of this assumption, a sensitivity was performed to identify how findings would differ if office space were to be occupied by governmental tenants. The results indicate that affordable housing demand associated with occupancy by a governmental tenant would be greater than for the representative mix of private tenant types reflected in the analysis. This demonstrates that the approach used in the analysis, which does not assume governmental tenants, is conservative

because findings regarding affordable housing needs would be higher if a share of governmental tenants were included.

Table A-2 Percent of New Worker Households by Income Category – Sensitivity with Governmental Tenants								
	Office Space Occupied by Private Tenant	Office Space Occupied by Governmental Tenants						
Extremely Low	3.0%	3.3%						
Very Low Income	4.2%	5.3%						
Low Income	10.0%	13.1%						
Moderate Income	16.2%	21.2%						
Total 0% to 120% of median	33.5%	42.9%						
Above Moderate (over 120% of median)	66.5%	57.1%						
Total	100%	100%						

## APPENDIX B: LIST OF INDUSTRY CATEGORIES BY BUILDING TYPE

The following table summarizes the industry categories selected as applicable to each building type. Household income data by industry for San Francisco's workforce was translated to building type using the identified categories.

#### Office

Includes manufacturing businesses anticipated to locate offices rather than production facilities in San Francisco.

Computer and peripheral equipment manufacturing Communications, and audio and video equipment manufacturing Electronic component and product manufacturing, n.e.c. Newspaper publishers Periodical, book, and directory publishers Software publishing Internet publishing and broadcasting and web search portals Wired telecommunications carriers Telecommunications, except wired telecommunications carriers Data processing, hosting, and related services Libraries and archives Other information services, except libraries and archives, and internet publishing and broadcasting and web search portal Banking and related activities Savings institutions, including credit unions Nondepository credit and related activities Securities, commodities, funds, trusts, and other financial investments Insurance carriers and related activities Real estate Commercial, industrial, and other intangible assets rental and leasing Legal services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Specialized design services Computer systems design and related services Management, scientific, and technical consulting services Advertising, public relations, and related services Other professional, scientific, and technical services Management of companies and enterprises **Employment services** Business support services Investigation and security services Services to buildings and dwellings (except cleaning during construction and immediately after construction) Offices of physicians Offices of dentists Offices of chiropractors Offices of optometrists Offices of other health practitioners Civic, social, advocacy organizations, and grantmaking and giving services Business, professional, political, and similar organizations

Production, Distribution and Repair (PDR) Animal food, grain and oilseed milling Sugar and confectionery products Fruit and vegetable preserving and specialty food manufacturing Dairy product manufacturing Animal slaughtering and processing Retail bakeries Bakeries and tortillerias, except retail bakeries Seafood and other miscellaneous foods. n.e.c. Not specified food industries Beverage manufacturing Tobacco manufacturing Fiber, yarn, and thread mills Fabric mills, except knitting mills Textile and fabric finishing and coating mills Carpet and rug mills Textile product mills, except carpets and rugs Knitting fabric mills, and apparel knitting mills Cut and sew apparel manufacturing Apparel accessories and other apparel manufacturing Footwear manufacturing Leather tanning and finishing, and other allied products manufacturing Pulp, paper, and paperboard mills Paperboard container manufacturing Miscellaneous paper and pulp products Printing and related support activities Petroleum refinina Miscellaneous petroleum and coal products Resin, synthetic rubber, and fibers and filaments manufacturing Agricultural chemical manufacturing Pharmaceutical and medicine manufacturing Paint, coating, and adhesive manufacturing Soap, cleaning compound, and cosmetics manufacturing Industrial and miscellaneous chemicals Plastics product manufacturing Tire manufacturing Rubber products, except tires, manufacturing Pottery, ceramics, and plumbing fixture manufacturing Clay building material and refractories manufacturing Glass and glass product manufacturing Cement, concrete, lime, and gypsum product manufacturing Miscellaneous nonmetallic mineral product manufacturing Iron and steel mills and steel product manufacturing Aluminum production and processing Nonferrous metal (except aluminum) production and processing Foundries Metal forgings and stampings Cutlerv and hand tool manufacturing Structural metals, and boiler, tank, and shipping container manufacturing Machine shops; turned product; screw, nut and bolt manufacturing Coating, engraving, heat treating and allied activities Ordnance Miscellaneous fabricated metal products manufacturing Not specified metal industries Agricultural implement manufacturing Construction, and mining and oil and gas field machinery manufacturing Commercial and service industry machinery manufacturing



Metalworking machinery manufacturing Engine, turbine, and power transmission equipment manufacturing Machinery manufacturing, n.e.c. or not specified Navigational, measuring, electromedical, and control instruments manufacturing Household appliance manufacturing Electric lighting and electrical equipment manufacturing, and other electrical component manufacturing, n.e.c. Motor vehicles and motor vehicle equipment manufacturing Aircraft and parts manufacturing Aerospace products and parts manufacturing Railroad rolling stock manufacturing Ship and boat building Other transportation equipment manufacturing Sawmills and wood preservation Veneer, plywood, and engineered wood products Prefabricated wood buildings and mobile homes Miscellaneous wood products Furniture and related product manufacturing Medical equipment and supplies manufacturing Sporting and athletic goods, and doll, toy and game manufacturing Miscellaneous manufacturing, n.e.c. Not specified manufacturing industries Motor vehicle and motor vehicle parts and supplies merchant wholesalers Furniture and home furnishing merchant wholesalers Lumber and other construction materials merchant wholesalers Professional and commercial equipment and supplies merchant wholesalers Metals and minerals (except petroleum) merchant wholesalers Household appliances and electrical and electronic goods merchant wholesalers Hardware, and plumbing and heating equipment, and supplies merchant wholesalers Machinery, equipment, and supplies merchant wholesalers Recyclable material merchant wholesalers Miscellaneous durable goods merchant wholesalers Paper and paper products merchant wholesalers Drugs, sundries, and chemical and allied products merchant wholesalers Apparel, piece goods, and notions merchant wholesalers Grocery and related product merchant wholesalers Farm product raw material merchant wholesalers Petroleum and petroleum products merchant wholesalers Alcoholic beverages merchant wholesalers Farm supplies merchant wholesalers Miscellaneous nondurable goods merchant wholesalers Wholesale electronic markets and agents and brokers Not specified wholesale trade Services incidental to transportation Warehousing and storage Automotive equipment rental and leasing Veterinary services Landscaping services Other administrative and other support services Waste management and remediation services Automotive repair and maintenance Car washes Electronic and precision equipment repair and maintenance Commercial and industrial machinery and equipment repair and maintenance Personal and household goods repair and maintenance

#### Research and Development (R&D)

Scientific research and development services

#### Retail

Automobile dealers Other motor vehicle dealers Automotive parts, accessories, and tire stores Furniture and home furnishings stores Household appliance stores Electronics stores Building material and supplies dealers Hardware stores Lawn and garden equipment and supplies stores Grocery stores Specialty food stores Beer, wine, and liquor stores Pharmacies and drug stores Health and personal care, except drug, stores Gasoline stations Clothing stores Shoe stores Jewelry, luggage, and leather goods stores Sporting goods, and hobby and toy stores Sewing, needlework, and piece goods stores Musical instrument and supplies stores Book stores and news dealers Department stores and discount stores Miscellaneous general merchandise stores Retail florists Office supplies and stationery stores Used merchandise stores Gift, novelty, and souvenir shops Miscellaneous retail stores Electronic shopping Electronic auctions Mail-order houses Vending machine operators Fuel dealers Other direct selling establishments Not specified retail trade Video tape and disk rental Other consumer goods rental Travel arrangements and reservation services Restaurants and other food services Drinking places, alcoholic beverages Barber shops Beauty salons Nail salons and other personal care services Drycleaning and laundry services Funeral homes, and cemeteries and crematories Other personal services

#### Entertainment

Motion pictures and video industries Performing arts, spectator sports, and related industries Bowling centers Other amusement, gambling, and recreation industries

#### Hotel

Traveler accommodation

#### Institutional

Elementary and secondary schools Colleges, universities, and professional schools, including junior colleges Business, technical, and trade schools and training Other schools and instruction, and educational support services Individual and family services Community food and housing, and emergency services Vocational rehabilitation services Child day care services Museums, art galleries, historical sites, and similar institutions Religious organizations

#### Medical

Outpatient care centers Other health care services Hospitals Nursing care facilities (skilled nursing facilities) Residential care facilities, except skilled nursing facilities APPENDIX C: NON-DUPLICATION BETWEEN FEES UNDER INCLUSIONARY AFFORDABLE HOUSING AND JOBS HOUSING LINKAGE PROGRAMS San Francisco has affordable housing fees for residential and non-residential development. Fees applicable to residential development (the "Inclusionary Housing Fee") are described in the Inclusionary Affordable Housing Program (Planning Code section 415 et seq.) and are supported by a separate nexus analysis prepared by KMA in 2016, the Residential Affordable Housing Nexus Analysis ("Residential Nexus"). Fees applicable to non-residential development (the "Jobs Housing Linkage Fee" or "JHLF Fee") are described in the Jobs Housing Linkage Program (Planning Code section 413 et seq.) and are supported by this nexus study ("Jobs Housing Nexus"). This Jobs Housing Nexus and the separate Residential Nexus both document the employment impacts of new development and the resulting need for affordable housing for those new workers. This appendix examines the potential for overlap between the two nexus fees.

# A. Overview of the Two Affordable Housing Nexus Studies and Potential for Overlap

To briefly summarize the Jobs Housing Nexus, the logic begins with jobs located in new workplace buildings including office buildings, retail spaces and hotels. The Jobs Housing Nexus then identifies the income of the new worker households and the number of housing units needed by housing affordability level. The analysis concludes with the number of affordable units needed per 1,000 square feet of non-residential building area to house the new workers.

In the Residential Nexus, the logic begins with the households purchasing or renting new market rate units. The purchasing power of those households generates new jobs in the local economy. The nexus analysis quantifies the jobs created by the spending of the new households and then identifies the compensation structure of the new jobs, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

The Jobs Housing Nexus and the Residential Nexus could overlap if both fees are assessed to address the affordable housing demands created by the same new employees. However, this is unlikely to occur because many of the affordable housing needs for workers counted in this Jobs Housing Nexus are not addressed in the Residential Nexus at all. Firms in office, R&D, and hotel buildings often serve a much broader, sometimes international, market and are generally not focused on providing services to local residents. These non-local serving jobs are not counted in the Residential Nexus.

Retail, which is more local-serving, is the building type that has the greatest potential for overlap between the jobs counted in the Residential Nexus and the Jobs Housing Nexus. However, because daytime and visitor populations contribute a significant portion of the retail demand in San Francisco, most retail is not entirely local serving. Theoretically, there is a set of conditions in which there is substantial overlap between the jobs counted for purposes of the Jobs Housing Nexus and the jobs counted for purposes of the Residential Nexus. For example, a small retail store or restaurant might be located on the ground floor of a new apartment building and entirely dependent upon customers from the apartments in the floors above. In this scenario, the commercial space on the ground floor would pay the Jobs Housing Linkage Fee and the apartments would pay the Inclusionary Housing Fee. In this special case, the two programs could mitigate the affordable housing demand created by the same set of workers. In this event, the combined fees for the two programs should not exceed 100% of the permissible amount pursuant to the Jobs Housing Nexus.

This theoretical example is unlikely to occur based on the following:

- (1) The Jobs Housing Linkage Fee has a 25,000-square foot threshold for its application. Most ground floor retail spaces included as part of new residential projects are likely to be smaller than this and therefore would be exempted from the JHLF Program. For pharmacies and grocery stores built as standalone projects or as a component of a mixed-use development with residential, the threshold for application of fees is even larger -- 50,000 square feet and 75,000 square feet respectively.
- (2) The overlap between the affordable housing demand mitigated by the two fee programs only occurs to the extent the new retail is being supported entirely by demand from residents in new residential units. In most cases, the larger retail spaces subject to the JHLF Program will be too large to be supported entirely by demand from new residential units. Instead it is more likely that the new retail will serve a broader customer base that also includes visitors, the workplace population and existing residents. As described in Section D below, demand for new retail could be supported by up to 94.9% of new residential customers without exceeding 100% of the permissible amount pursuant to the Jobs Housing Nexus.
- (3) The visitor population in San Francisco contributes significantly to retail demand. The San Francisco Travel Association reports visitors to San Francisco spent an estimated \$9 billion in 2016, a figure that includes retail as well as other types of visitor spending. Retail in Union Square, Fisherman's Wharf, and many other areas of the City are supported in part by visitor spending.
- (4) San Francisco's large workplace and student populations also contribute to retail demand. The Financial District and South of Market are the most obvious examples, but other neighborhoods also have significant daytime populations. For example, near major institutions like the University of California San Francisco and San Francisco State.
- (5) Future residential development in San Francisco will occur in infill locations and through redevelopment of previously built properties which, by virtue of being in San Francisco, will be in proximity to existing residential and businesses populations. Even when new retail is added as a component of a very large residential project or in a neighborhood

where much new residential development activity is occurring, new retail space is unlikely to be solely supported by the new residential.

Treasure Island and Hunters Point are special cases of major development projects that include retail that may be primarily supported by new residential. Each project adds thousands of new residential units and is relatively geographically isolated. The potential overlap was not analyzed in these projects, however, because both projects were implemented pursuant to a development agreement. Even so, local serving retail within these developments will still derive some customers from included employment uses, existing residents and visitors.

The analyses provided in Section B., C., and D. of this Appendix demonstrate that the combined mitigation requirements under the Inclusionary Affordable Housing and JHLF Programs would not exceed the maximums supported by the nexus even if significant overlap in the jobs counted in the Residential and Jobs Housing Nexus Analyses were to occur. As discussed, the potential for overlap exists mainly with retail jobs that serve residents of new housing in San Francisco; therefore, the overlap analysis is focused on the retail land use. The analysis expresses the requirements of the Inclusionary Affordable Housing and JHLF Programs in terms of the percentage of the affordable housing impacts documented in each nexus study that are being mitigated. The two mitigations are then evaluated in combination to demonstrate that requirements would not exceed the nexus maximums even if a significant degree of overlap were to occur.

# B. Share of Affordable Unit Need Mitigated by JHLF Program

As the first step to determine if there is substantial overlap between the Jobs Housing Linkage Fee and the Inclusionary Housing Fee, this analysis determines the share of affordable housing impacts that are mitigated by every 1,000 square feet of new retail development subject to the Jobs Housing Linkage Fee. First, it converts the per square foot fee for retail development to a fee per 1,000 sq. feet. This value is then compared to the average local subsidy per affordable unit based on MOHCD data. The average local subsidy per affordable unit reflects construction loan closings and cost certifications for nine affordable housing projects from 2015 to 2017 and represents the net local subsidy without inclusion of other State and Federal subsidy sources.

Based on San Francisco's JHLF Program fees for retail of \$25.15 per square foot and an average local subsidy per affordable unit of \$235,000, for every 1,000 square feet of retail GFA, San Francisco's retail fee is estimated to result in approximately 0.1070 additional affordable units. The supporting calculation is shown in Table C-1 below.

Tabl Reta	Table C-1: Affordable Unit Demand Mitigated by JHLF Program Retail Fee							
A.	JHLF Retail Fee Per Sq.Ft.	\$25.15	/ Sq.Ft. GFA					
В.	JHLF Retail Fee Per 1,000 Sq.Ft.	\$25,150	/ 1,000 Sq.Ft. GFA					
C.	Average Local Subsidy Per Unit (from MOHCD)	\$235,000	Per Unit					
D.	Affordable Unit Demand Mitigated by JHLF Retail Fees Per 1,000 Sq.Ft.	0.1070	= B. / C.					

Next, the analysis calculates the 1,000 sq. ft. retail fee as a percentage of the maximum supported Jobs Housing Nexus. Table C-2 below shows that the 0.1070 affordable units mitigated by the JHLF Retail Fee per 1,000 square feet is equivalent to approximately 10.5% of the total affordable unit demand of 1.0223 units per 1,000 square feet of new retail development. Thus, San Francisco's retail fee mitigates approximately 10.5% of the subsidy necessary to finance the demand for affordable units generated by new retail space.

Table C-2: Affordable Unit Demand As Percent of JHLF Nexus Maximum						
Α.	Affordable Unit Demand Mitigated by JHLF Retail Fees Per 1,000 Sq. Ft.	1.0223	Affordable Units per 1,000 Sq.Ft. of GFA			
В.	Jobs Housing Nexus Study: Maximum Supported Affordable Unit Requirement, per 1,000 Sq. Ft. Retail	0.1070	Affordable Units per 1,000 sq.ft. of GFA			
C.	Retail Fees per Affordable Unit as a Percent of Maximum JHLF Nexus	10.5%	= A. / B.			

## C. Residential Requirement as a Percent of Maximum Supported

Unlike the JHLF Fees, San Francisco's Inclusionary Affordable Housing Program is expressed as an affordable unit percentage per market rate units in the residential project. The maximum supported affordable unit requirement per market rate unit is 37.6% for ownership units and 31.8% for rental units. In other words, for every 100 market rate units, the maximum number of affordable units that could be supported by the nexus is 37.6 ownership or 31.8 for rental units. The Board of Supervisors adopted 33% and 30% requirements for ownership and rental, respectively. Table C-3 below compares the maximum supported affordable unit percentage to the adopted requirement.

Table C-3: Affordable Housing Fee as Percent ofMaximum Supported by Residential Nexus Analysis		
	Condominium	Apartment
A. Adopted Affordable Unit Percentage for Determining Affordable Housing Fees	33%	30%
B. Maximum Affordable Unit Percentage for Determining Affordable Housing Fee Supported by Nexus Analysis	37.6%	31.8%
Adopted Fee per Affordable Unit as Percent of Maximum Residential Nexus (A./B.)	87.8%	94.3%

Source: Keyser Marston Associates, Inc. 2016 Residential Affordable Housing Nexus Analysis.

Thus, San Francisco's Inclusionary Housing Fee is equal to 87.8% of the maximum supported by the Residential Nexus for Condominiums and 94.3% for Apartments.

Currently, the option of providing affordable units onsite represents a lower percentage of the maximum supported by the nexus than does the Affordable Housing Fee; however, this is anticipated to change over time due to scheduled increases in the onsite requirement.

### D. Combined Requirements Within Nexus Maximums Even if Significant Overlap Occurs

This analysis determines the level of permissible overlap between the Jobs Housing Linkage Nexus and the Residential Nexus discussed in Section A, or the extent to which a new retail establishment could rely solely upon retail demand from new residential customers in the same development. Because the JHLF retail fee is set at 10.5% of the maximum nexus amount, there is 89.5% of the demand for affordable units is unmet by the Jobs Housing Linkage Fee.

As described above, the Inclusionary Affordable Housing Program only mitigates affordable housing impacts of new retail to the extent it is supported by spending of residents in new residential units. Based on the fact that the Residential Nexus is set at a 94.3% of the Residential Nexus maximum, the analysis determines that up to 94.9% of demand for new retail space could be derived from new residential units without exceeding the maximums supported by the nexus analysis. Table C-4 shows the derivation of this 94.9% figure.

Tabl resid	Table C-4: Share of Demand for New Retail Derived from New Residential (vs. existing residents, businesses, workers and visitors) to Reach Nexus Maximum						
A.	Affordable housing impacts for retail workers unmitigated by JHLF Retail Fee.	89.5%	= balance after 10.5% mitigated by JHLF fee				
В.	Inclusionary Affordable Housing Program Fees as Percent of Residential Nexus Maximum	94.3%	Finding for apartment				
C.	Share of Demand for New Retail Derived from New Residential (vs. existing residents, businesses, workers and visitors) to Reach Nexus Maximum	94.9%	=A. / B.				

As described in Section A, virtually all new retail space built in San Francisco will derive a significant share of demand from existing residents, visitors, businesses and the workplace population. It is improbable any new retail building subject to the JHLF Program would derive more than 94.9% of its customer base from new residential units. However, to address improbable and unforeseen conditions, San Francisco Planning Code Section 406 explicitly provides for waiver or reduction of fees in the event of duplication or absence of a reasonable relationship. If fees under either program are increased, this analysis should be updated.

# Mayor's Office of Housing and Community Development

City and County of San Francisco



London N. Breed Mayor

> Kate Hartley Director

To:	The San Francisco Board of Supervisors
From:	The Mayor's Office of Housing and Community Development
	The San Francisco Planning Department
Date:	November 19, 2018
Re:	Inclusionary Fees Update, January 1, 2019

In August 2017, the Board passed Ordinance 158-17, modifying the City's inclusionary housing requirements. Those amendments, specifically those in Section 415.5(b)(2) of the Planning Code, directed the Controller, along with the Mayor's Office of Housing and Community Development (MOHCD) and the Inclusionary Housing Technical Advisory Committee (TAC), to develop a methodology for the calculation, indexing, and application of this fee:

No later than January 31, 2018, the Controller, with the support of consultants as necessary, and in consultation with the Inclusionary Housing Technical Advisory Committee (TAC) established in Planning Code Section 415.10, shall conduct a study to develop an appropriate methodology for calculating, indexing, and applying the appropriate amount of the Inclusionary Affordable Housing Fee.

In May 2018, as noted in Attachment 1, *Inclusionary Housing Fee Methodology*, the Controller's Office completed this effort and conveyed its recommendations to the Board of Supervisors. Its primary recommendations were to:

- 1. Calculate the fee based on MOHCD's funding gap, calculated from the actual documented costs of producing affordable housing over the three years prior to any annual update.
- 2. Index the fee on an annual basis by utilizing an annual, rolling update of its 3-year construction cost survey, in place of any pre-existing inflation indicator.
- 3. Apply the fee on a per-gross square foot (GSF) basis, to simplify administration, as well as to apply the fee more equitably for projects with varying unit sizes.

The Ordinance further directed MOHCD to implement the results of the Controller's recommendations, by updating the fee accordingly on an annual basis, and furthermore updating the methodology and technical report every three years:

For all housing developments, no later than January 1 of each year, MOHCD shall adjust the fee based on the cost of constructing affordable housing, including development and land acquisition costs.

The Department and MOHCD shall update the fee methodology and technical report every three years, with analysis from the Technical Advisory Committee, in order to ensure that the affordability gap remains current, consistent with the requirements set forth below in Section 415.5(b)(3) and Section 415.10.

This memorandum summarizes how MOHCD proposes to implement those recommendations.

# **Calculation of the Fee**

Calculating the fee according to the direction of the Board of Supervisors, and the recommendations of the Controller's Office and the TAC requires adhering to the following basic formula:

Actual Funding Gap			Percent				
per unit		In Liou Foo		Required		Fee required per	
Average Size of New Unit In	່ =	per GSF	Х	Under Planning	=	Gross Square Foot	
San Francisco				Code Section		of Development	
				415			

## Actual Funding Gap Per Unit

As noted in the Controller's memo, MOHCD previously determined that the actual documented cost of producing an affordable housing unit between January 2015 and December 2017 was, on average, \$235,000 per unit. MOHCD has updated their survey of costs to cover the most recent 3-year period for which data is available, which is the Third Quarter of 2015 through Third Quarter of 2018 (Q3 2015 – Q3 2018), and has determined that the current, actual documented costs of producing an affordable housing unit over that period is \$239,000 per unit.

## Average Size of New Unit In San Francisco

Also as noted in the Controller's memorandum, applying the fee on a per-gross square foot (GSF) basis requires dividing MOHCD's per-unit cost by an estimated average size of units in new projects to which the fee will be applied. To determine this, the Planning Department reviewed recently approved residential projects that have elected to pay the Affordable Housing Fee as their method of compliance with the Inclusionary program. For each project, the residential gross floor area was divided by the total project units to estimate the average gross square feet per unit. This method was deemed appropriate for this analysis because it captures the actual residential gross square feet of fee projects, as calculated in the same manner that will be used by Planning when assessing the fee for future projects.

Using this methodology, Planning reviewed 26 residential projects that were entitled between Q3 2015 and Q3 2018 that elected to pay the Affordable Housing Fee. Of these, seven were small projects below 25 units, seven were large rental projects, and 12 were large ownership projects. The average gross residential square feet per unit across all projects was 1,198 gross square feet. Note that this measurement includes all space in a building associated with residential uses, including amenity and lobby space, except for parking, so it is expected to be considerably larger than the net unit sizes that are frequently referred to in the development process.

## Affordable Housing Fee for 2019

This method yields an Affordable Housing Fee (or "in-lieu" fee) for the 2019 calendar year of:

\$239,000 (Actual Funding Gap) = 1,198 (Average residential GSF per unit)

**\$199.50** (In Lieu Fee per GSF)

When applied to a project, the Affordable Housing Fee would then be multiplied by the applicable inclusionary percentage in Section 415, based on whether the project is less than 25 units (20%); or for projects that are 25 units or greater, based on its tenure as a rental (30%) or ownership (33%) project.

For example, a large (25 or more units) condominium project with 100,000 residential gross square feet would pay an Affordable Housing Fee of \$6,583,500 (100,000 gsf x 33% x \$199.50).

## Sample Analysis of Fee Revenue

To evaluate the effect of this new fee on MOHCD revenue into the Affordable Housing Fund, as compared with the prior fee methodology in place before Proposition C, and as compared with a per unit fee, Planning finally applied the fee rate to a set of 45 projects entitled since 2014 (including the 26 from Q3 2015 to Q3 2018 that were used to determine the fee) for which data was available. These projects were used simply as test cases and this analysis is *not* a projection of fee revenue, and does not consider the particular requirements of any specific project.

This analysis found that overall, the new methodology described here would result in 27 percent higher fee payments than under the previous methodology (20% x unit type x per unit fee). The analysis also found that total fee payments would be roughly equal whether the MOHCD Actual Funding Gap were applied on a per unit or per square foot basis. The difference is that projects proposing units that are larger than the average unit size would pay more when the fee is applied per gross square foot, rather than on a per unit basis. This ensures that the fee paid is proportional to the actual project size, rather than rewarding projects with very large units with a relatively lower fee, as under the current method.

# Implementation and Indexing

## Implementation

The above fee will be included in the San Francisco Citywide Development Impact Fee Register that will be effective as of January 1, 2019. The Planning Code requires that the updated Fee Register be published 30 days in advance, or December 1, 2018.

As with all other impact fees, the amount of the Affordable Housing Fee will be assessed at the time of a project's entitlement, and due when the project's First Construction Document (generally, the first building permit for vertical construction) is issued. The fee amount for entitled projects will be updated annually on January 1 until the First Construction Document is issued.

## Indexing

As indicated in the Controller's memorandum, the fee will be updated annually by recalculating the Actual Funding Gap, and the average unit size of fee projects, using data from projects recorded in the most recent 3-year period. The updated fee amount will be effective on January 1 of the following year. MOHCD and Planning will include data available as of the end of the third quarter of each calendar year. For example, to set the 2020 fee, projects from Q3 2016 – Q3 2019 will be included in the analysis. This "rolling" look-back will allow for the fee to keep up with MOHCD's actual cost to subsidize new affordable housing and trends in unit sizes of entitled projects, but without resulting in sharp swings in the fee amount from year to year that could result from using data from only a single year or point in time. The fee methodology, manner of indexing, and inclusionary percentage rates would be subject to review by the Controller and Technical Advisory Committee every three years, as per Planning Code Section 415.10.

## FINAL MEMORANDUM

To:	Ken Rich and Theodore Conrad, City and County of San Francisco
From:	James Musbach, Michael Nimon, and Michelle Chung, EPS
Subject:	Jobs-Housing Linkage Fee Update Development Feasibility Assessment; EPS #191029
Date:	June 3, 2019

#### The Economics of Land Use



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This memorandum has been prepared by Economic & Planning Systems, Inc. (EPS) for the City and County of San Francisco (the City or Client) and documents development feasibility analysis and findings related to the economics of office development and its ability to support contemplated Jobs-Housing Linkage fee increases. The City is currently conducting a Nexus Analysis for the Jobs-Housing Linkage fee update designed to establish a maximum allowable fee that could be imposed on new development. As part of this effort, the City is interested in understanding development feasibility impacts of potential fee increases on new office development in the City's pipeline. The City is interested in maintaining the feasibility of new office development while also making sure that new development "pays its own way", i.e., contributes to the City's funding of affordable housing and other community benefits needed to respond to the growing employment base.

The analysis completed by EPS is based on six office development prototypes summarized in **Table 1**. These prototypes are reflective of high-level office development characteristics associated with projects in the City's development pipeline. This financial analysis is based on EPS's ongoing and previously completed work in San Francisco as well as technical input from City staff and Seifel Consulting, including development impact fee schedules and cost estimates, review of key assumptions, and definition of prototypes. It also incorporates stakeholder comments received during the presentation to the development community on April 29, 2019. Key findings are described below.

Prototype	1 Central SoMa - Large Cap (Large)	2 Central SoMa - Large Cap (Medium)	3 Central SoMa - Small Cap	4 Transit Center - Large Cap	5 Eastern Neighborhoods (EN) - Small Cap	6 Eastern Neighborhoods (EN) - Large Cap
Site Assumptions						
Neighborhood	Central SoMa	Central SoMa	Central SoMa	Transit Center	EN	EN
Lot Area (sq. ft.)	90,000	35,000	13,000	20,000	10,500	20,000
Floor Area Ratio (FAR)	9.7	7.7	4.8	19.4	5.6	6.3
Building Assumptions (1)						
Building Height	200	160	65	400	85	130
Total Gross Floor Area						
(w/o parking) (sq. ft.)	870,000	270,000	62,000	388,000	59,000	125,000
Office	800,000	245,000	49,900	372,000	49,900	110,000
PDR	45,000	17,500	6,500	0	0	10,000
Retail	14,000	4,500	3,600	13,000	8,100	2,000
Other	11,000	3,000	2,000	3,000	1,000	3,000
Efficiency Ratio	89%	89%	89%	89%	89%	89%
Total Net Floor Area						
(w/o parking) (sq. ft.)	774,300	240,300	55,180	345,320	52,510	111,250
Office	712,000	218,050	44,411	331,080	44,411	97,900
PDR	40,050	15,575	5,785	0	0	8,900
Retail	12,460	4,005	3,204	11,570	7,209	1,780
Other	N/A	N/A	N/A	N/A	N/A	N/A
Existing PDR	45,000	17,500	6,500	0	0	10,000
Parking Spaces	272	88	23	91	16	29

#### Table 1 Development Prototypes

(1) Estimated by the San Francisco Planning Department and Seifel Consulting.

Source: City of San Francisco; Seifel Consulting; Economic & Planning Systems

# Key Findings

Key findings are described below with the summary of results shown in **Tables 2** and **3**.

- 1. None of the tested office prototypes appears financially feasible based on current market conditions. The rapid growth in construction and land costs in recent years, fueled by a high level of development activity in the region, has resulted in costs often exceeding office development values, making new development infeasible. Additionally, City-imposed community benefits costs, such as CFD special taxes and Proposition C commercial rent taxes, also add to the overall cost burden. The pro forma analysis indicates that all six office development prototypes have a negative development return with costs exceeding revenues and developer returns falling below the feasibility threshold, as shown in Table 2.
- 2. Office development will become feasible for certain prototypes once the market normalizes with land values, construction costs, and building values becoming more aligned. EPS constructed this hypothetical scenario to test fee increases on development economics of projects that are feasible (the Pipeline Scenario). This scenario assumes 25 percent reductions to land value and construction cost, as well as a 13 percent increase in rents. These changes are intended to illustrate the potential economics of the office projects in the City's pipeline that may have locked in favorable deal terms or are opportunistically positioned to capitalize on potential market improvements. Feasibility of various office prototypes under the Pipeline Scenario is shown in Table 3.

3. Once market conditions improve sufficiently to support the feasibility of office development, the analysis suggests that some modest level of fee increase may be viable. With five of the six tested prototypes being feasible in the Pipeline Scenario, some are estimated to remain feasible with fee increases of up to \$10 per square foot. This increase equates to 35 percent over the existing Jobs-Housing Linkage fee level and is shown to be supported by Prototype 3 (with \$5 per square foot increases supported by Prototypes 3, 5, and 6). The extent of the supportable fee increase, if any, will vary by prototype, project-specific criteria, location within the City, and other factors. However, any more significant cost increase would further jeopardize development feasibility of new office development even after the improvement in the market conditions takes place.

#### Table 2 Summary of Feasibility Results – Baseline Scenario

Brototype	4	2	2	4	5	6
Flototype	Central SoMa - Large C Cap (Large)	Central SoMa - Large Cap (Medium)	Central SoMa - Small Cap	Transit Center - Large Cap	Eastern Neighborhoods (EN) - Small Cap	Eastern Neighborhoods (EN) - Large Cap
EXISTING COMMERCIAL LINKAGE FEE						
Profit	(\$255,769,651)	(\$37,664,709)	(\$6,542,480)	(\$68,005,374)	(\$5,282,456)	(\$11,510,688)
Return on Cost	-29.2%	-16.4%	-13.9%	-17.5%	-12.3%	-11.8%
	4.0%	4.8%	4.9%	4.7%	5.0%	5.0%
Commercial Linkage Fee as % of Total Cost Commercial Linkage Fee as % of Direct Cost	2.7% 5.9%	3.1%	3.2%	2.8%	3.8% 6.9%	3.3% 6.0%
INCREASED COMMERCIAL LINKAGE FEE	OPTIONS					
\$5 psf Increase (18% increase over the exis	ting fee)	(**** *** ***	(***********		(*** * * * * * * *	(* (* *** ***
Profit Return on Cost	(\$260,596,111)	(\$39,236,289)	(\$6,869,294)	(\$69,518,794)	(\$5,316,010)	(\$12,273,968)
Stabilized Yield	-29.0 %	-17.0%	- 14.5 %	-17.8%	-12.4 %	-12.5%
Commercial Linkage Eee as % of Total Cost	3.2%	3.8%	3.0%	3.2%	3.0%	4.0%
Commercial Linkage Fee as % of Direct Cost	7.2%	7.5%	7.2%	6.8%	7.0%	7.4%
		1.0%		0.070	1.070	
\$10 pst increase (35% increase over the exit	(\$264 596 111)	(\$40,461,289)	(\$7 118 794)	(\$71 378 794)	(\$5 565 510)	(\$12,823,968)
Return on Cost	-29.9%	-17.4%	-14.9%	-18.2%	-12.9%	-13.0%
Stabilized Yield	4.0%	4.7%	4.8%	4.7%	5.0%	4.9%
Commercial Linkage Fee as % of Total Cost	3.6%	4.3%	4.4%	3.7%	4.5%	4.6%
Commercial Linkage Fee as % of Direct Cost	8.2%	8.5%	8.2%	7.9%	8.1%	8.5%
\$15 psf Increase (53% increase over the exi	isting fee)					
Profit	(\$268,596,111)	(\$41,686,289)	(\$7,368,294)	(\$73,238,794)	(\$5,815,010)	(\$13,373,968)
Return on Cost	-30.3%	-17.8%	-15.4%	-18.6%	-13.4%	-13.5%
Stabilized Yield	4.0%	4.7%	4.8%	4.6%	4.9%	4.9%
Commercial Linkage Fee as % of Total Cost	4.1%	4.8%	4.9%	4.1%	5.0%	5.1%
Commercial Linkage Fee as % of Direct Cost	9.2%	9.6%	9.1%	8.9%	9.1%	9.5%
\$20 psf Increase (70% increase over the exi	isting fee)					
Profit	(\$272,596,111)	(\$42,911,289)	(\$7,617,794)	(\$75,098,794)	(\$6,064,510)	(\$13,923,968)
Return on Cost	-30.6%	-18.3%	-15.8%	-19.0%	-13.9%	-14.0%
Stabilized Yield	3.9%	4.6%	4.8%	4.6%	4.9%	4.9%
Commercial Linkage Fee as % of Total Cost	4.5%	5.3%	5.4%	4.6%	5.6%	5.6%
Commercial Linkage Fee as % of Direct Cost	10.2%	10.6%	10.1%	9.9%	10.2%	10.6%

strongly feas feasible

infeasible

#### Table 3 Summary of Feasibility Results – Pipeline Scenario

Prototype	1 Central SoMa - Large Cap (Large)	2 Central SoMa - Large Cap (Medium)	3 Central SoMa - Small Cap	4 Transit Center - Large Cap	5 Eastern Neighborhoods (EN) - Small Cap	6 Eastern Neighborhoods (EN) - Large Cap
EXISTING COMMERCIAL LINKAGE FEE						
Profit	\$10,653,059	\$34,280,839	\$7,873,445	\$58,176,757	\$6,610,483	\$16,127,507
Return on Cost	1.5%	18.8%	20.9%	18.9%	18.8%	20.2%
Stabilized Yield	5.8%	6.8%	6.9%	6.8%	6.8%	6.8%
Commercial Linkage Fee as % of Total Cost	3.4%	3.9%	4.0%	3.6%	4.7%	4.0%
Commercial Linkage Fee as % of Direct Cost	7.9%	8.1%	7.9%	8.0%	9.2%	8.0%
INCREASED COMMERCIAL LINKAGE FEE O	PTIONS					
\$5 psf Increase (18% increase over the exist	ting fee)					
Profit	\$5,826,599	\$32,709,259	\$7,546,631	\$56,663,337	\$6,576,929	\$15,364,227
Return on Cost	0.8%	17.8%	19.8%	18.3%	18.7%	19.1%
Stabilized Yield	5.7%	0.7%	0.8%	0.7%	0.8%	0.8%
Commercial Linkage Fee as % of Total Cost	4.0%	4.7%	4.9%	4.0%	4.8%	4.9%
Commercial Linkage Fee as % of Direct Cost	9.5%	9.9%	9.6%	9.1%	9.4%	9.9%
\$10 psf Increase (35% increase over the exis	sting fee)					
Profit	\$1,826,599	\$31,484,259	\$7,297,131	\$54,803,337	\$6,327,429	\$14,814,227
Return on Cost	0.3%	17.0%	19.1%	17.6%	17.9%	18.2%
Stabilized Yield	5.7%	6.6%	6.8%	6.7%	6.7%	6.7%
Commercial Linkage Fee as % of Total Cost	4.6%	5.3%	5.5%	4.6%	5.4%	5.6%
Commercial Linkage Fee as % of Direct Cost	10.9%	11.3%	10.9%	10.5%	10.8%	11.3%
\$15 nef Increase (53% increase over the exis	sting fee)					
Profit	(\$2,173,401)	\$30.259.259	\$7.047.631	\$52.943.337	\$6.077.929	\$14,264,227
Return on Cost	-0.3%	16.2%	18.3%	16.9%	17.0%	17.5%
Stabilized Yield	5.7%	6.6%	6.7%	6.6%	6.7%	6.7%
Commercial Linkage Fee as % of Total Cost	5.1%	6.0%	6.1%	5.2%	6.1%	6.2%
Commercial Linkage Fee as % of Direct Cost	12.3%	12.8%	12.2%	11.8%	12.2%	12.7%
\$20 psf Increase (70% increase over the exis	sting fee)					
Profit	(\$6,173,401)	\$29,034,259	\$6,798,131	\$51,083,337	\$5,828,429	\$13,714,227
Return on Cost	-0.9%	15.5%	17.5%	16.2%	16.2%	16.7%
Stabilized Yield	5.6%	6.6%	6.7%	6.6%	6.6%	6.6%
Commercial Linkage Fee as % of Total Cost	5.7%	6.6%	6.7%	5.7%	6.8%	6.8%
Commercial Linkage Fee as % of Direct Cost	13.6%	14.2%	13.5%	13.2%	13.6%	14.1%
Cost Reduction			Office Rent Increase	2		strongly feasible
Land Cost (does not apply to prototypes 5 & 6):	25%	reduction	13%	increase		feasible
Direct Cost (building construction, parking, and site work):	25%	reduction				infeasible

# Feasibility Analysis Methodology

#### **Financial Returns**

The analysis is based on six office and mixed-use development prototypes shown in **Table 1**. EPS set up static development pro formas for each prototype designed to solve for project return as a measure of feasibility. Expected returns on development investment vary based on a range of factors such as developer-specific risk tolerance and access to capital, capital and real estate market conditions, building uses, financial stability and strength of tenants, and other factors. Specifically, this analysis is based on two types of returns with each described below, taking into account capitalization rate data reported for Class A office space,<sup>1</sup> developer input regarding

<sup>&</sup>lt;sup>1</sup> Integra Realty Resources (IRR) Viewpoint publication for 2019, publishes an annual IRR Viewpoint report on commercial real estate trends across the United States that presents capitalization (cap) rates among other critical real estate market indicators. Historically, cap rates in San Francisco have ranged between 4.0 and 10 percent for occupied properties, with reversionary cap rates for new office developments being higher to account for the risk associated with new development. The 2019 IRR Viewpoint report indicates a reversionary cap rate for downtown CBD office space in San Francisco of 5.5 percent, which is among the lowest cap rates for new office space in the United States. Cap rates are often benchmarked against interest rates for long-term Treasuries, and the reversionary cap rate takes into account that long-term interest rates may increase over time among other real estate factors that may affect future values once a new building is fully stabilized.

return threshold requirements of their capital partners, as well as EPS experience with comparable projects. It is worth noting that while each developer has a specific return requirement based on its business structure, access to capital, risk tolerance, and other business-specific factors, the numbers below reflect the broader market average for a typical developer. Detailed pro formas for the baseline scenario are included in **Appendix A** and for the pipeline scenario in **Appendix B**.

- Stabilized yield, also known as cash-on-cash return, is net operating income divided by total cost. This is a common return measure for commercial property that captures performance from a long-term operator of a cash-flow asset. This measure is based on a stabilized cap rate (assumed at 5.5 percent in this analysis) plus an additional "spread" of 130 basis points to reflect a development risk premium.<sup>2</sup> As such, this analysis assumes a threshold yield of 6.8 percent or above that would be needed to make new office development feasible.
- **Return on cost** is the net building value based on the capitalization of the net operating income at stabilization (stabilized NOI divided by the cap rate) divided by total development cost. This is a typical return threshold that takes into account the spread between the cap rate and the stabilized yield, as described above. As such, this analysis assumes a required return on cost of 18 percent or above for Class A office development in San Francisco based on capital market dynamics, real estate trends, and other factors.

Financial returns are market-based, with investors facing a range of potential choices reflective of a wide range of risk factors and expected returns. With 10-year treasury yields (largely perceived as the safest and minimal risk investment that mirrors inflation) offering returns of about 2.5 percent a year, other investments with higher risk require a higher return in the capital market. In order to attract investment, particularly from institutions like pension and insurance funds that provide a significant amount of real estate investment capital, new development must offer significantly higher stabilized yields.

As described above, this analysis assumes cap rates of 5.5 percent across all prototypes once they have been developed and reached stabilized occupancy. San Francisco is largely perceived as a strong, mature, and well-established office market with some of the lowest return requirements for office investment across the nation, on par with Los Angeles and New York. However, development risk (e.g., the potential for unexpected costs associated with entitlement processes, site conditions, and fluctuations in the markets for materials and labor costs) adds an additional layer of uncertainty to investors, with a typical spread of 130 basis points needed to

<sup>&</sup>lt;sup>2</sup> The "spread" or difference between the cap rate and stabilized yield accounts for the developer return on profit reflective of the risk that development values at project stabilization may significantly differ from current conditions. This analysis uses the 130 basis point spread (1.3 percent) as the minimum threshold of feasibility for a typical office development. If a developer could secure a long-term lease with an investment grade tenant (e.g. a Fortune 100 company) for most of the office space prior to construction, the required spread would be reduced. If a property has a higher risk profile, such as a less desirable location, challenging office market, or extended entitlement and/or construction period, the required spread would increase.

attract investment to new office development projects. Even small fluctuations in stabilized yields can significantly affect investor decisions.

#### Revenues

Lease rates used in this analysis are summarized in **Table 4** and are based on CoStar data with an assumed 10 percent increase that reflects the top of the market rents developers seek to underwrite development investment. Rents are reflective of location factors within the City as well as potential view premiums likely to be supported by taller buildings. Office rents are assumed to be full-service (landlords are responsible for operating expenses), whereas retail and PDR rents are triple-net (tenants are responsible for operating expenses). The Pipeline scenario reflects development after another rent 13 percent rent increase, assumed to be needed along with assumed cost reductions in order to reach feasibility under the existing commercial linkage fee scenario, as shown in **Table 3**.

Prototype	1	2	3	4	5	6
Neighborhood Building Height	Central SoMa 200	Central SoMa 160	Central SoMa 65	Transit Center 400	EN 85	EN 130
Office (full-service per net sq. ft. per vear: rounded)	\$86	\$86	\$83	\$101	\$73	\$77
Retail (NNN per net sq. ft. per year)	\$40	\$40	\$40	\$48	\$40	\$40
PDR (NNN per net sq. ft. per year)	\$30	\$30	\$30	\$30	\$30	\$30
Gross Parking (per space per month)	\$400	\$400	\$400	\$450	\$300	\$300
Net Parking (per space per month) (1)	\$280	\$280	\$280	\$315	\$210	\$210

#### Table 4 Key Revenue Assumptions (Baseline Scenario)

(1) Excludes operating expenses assumed at 10% and parking taxes assumed at 20%.

Source: CoStar April 2019 search for lease rates by neighborhood for spaces built since 2015, parking revenue assumption provided by Seifel Consulting

This analysis assumes net parking revenue (after parking taxes and expenses) of \$210 per space per month for Eastern Neighborhoods, \$280 for Central SoMa, and \$315 for Transit Center. The parking revenues per space are based on average monthly parking rates that were provided by Seifel Consulting and are typical in San Francisco.

#### **Operating Expenses and Vacancy**

As shown in **Table 5**, commercial operating expenses depend on the lease rate structure for each asset type. Operating expenses for retail and PDR are assumed to be recoverable from the tenant, consistent with a triple-net lease structure. Parking is based on net revenues referenced above. Office operating costs reflect 30 percent of full-service rents. These expenses typically cover property management, administration, maintenance, utilities, insurance, and property taxes. Additionally, leasing commissions are assumed at 2.5 percent of gross annual revenue to account for typical fees paid to leasing brokers.

#### Table 5 Key Operating, Development, and Land Cost Assumptions (Baseline Scenario)

Prototype	1	2	3	4	5	6
Neighborhood	Central SoMa	Central SoMa	Central SoMa	Transit Center	EN	EN
Building Height	200	160	65	400	85	130
Operating Costs						
Operating Expenses (for Office)	30%	30%	30%	30%	30%	30%
Vacancy Rate	5%	5%	5%	5%	5%	5%
Leasing Commissions Mollo Roos CED Special Tax [1]	2.5% \$2.522.520	2.5% ¢1.092.510	2.5% ¢220.012	2.5% \$2,105,700	2.5%	2.5%
Pron C Early Care and Education Commercial Rents	φ3,332,320	φ1,002,010	φ229,012	φ2,105,700	φυ	φυ
Tax [2]	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
Development Costs						
Land Cost (per FAR sq. ft., rounded)	\$130	\$160	\$210	\$480	\$280	\$180
Building Cost (per gross sg.ft.)	\$420	\$400	\$380	\$450	\$380	\$400
Parking (per space)	\$66,000	\$66,000	\$66,000	\$66,000	\$66,000	\$66,000
Parking (per sq.ft.)	\$200	\$200	\$200	\$200	\$200	\$200
Site Improvement (per gross sq. ft.)	\$10	\$10	\$10	\$5	\$5	\$10
Tenant Improvements						
Office [3]	\$90	\$90	\$90	\$100	\$80	\$80
Retail [3]	\$100	\$100	\$100	\$100	\$100	\$100
Contingency	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
Architecture and Engineering	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Project and Construction Management	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Other Expenses (Legal, Inspections)	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
General and Administrative	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Financing	6.0%	6.0%	5.0%	6.0%	5.0%	6.0%
Fees [4]	Tier C	Tier C	Tier B	TCDP	Tier 3	Tier 3
Existing Jobs Housing Linkage Fee	\$23,229,240	\$7,119,620	\$1,521,619	\$10,974,620	\$1,641,589	\$3,196,020
Eastern Neighborhoods Infrastructure Impact Fee	\$17,004,675	\$5,150,175	\$1,034,175	\$0	\$1,218,000	\$2,352,000
Central SoMa IDR Purchase	\$2,812,500	\$1,093,750	\$0	\$0	\$0 \$0	\$0
Central SoMa Area Plan Fee	\$U	\$0	\$1,070,000	\$0 \$0	\$0 \$0	\$0 \$0
Central Soma Community Facilities Fee	\$1,424,500 ¢0	\$430,025 ¢0	\$93,6∠S	0⊄ € 026 740	\$U ¢0	\$U ¢0
TCDP Transportation and Street improvement Fee	\$U	\$0 \$0	\$U ¢0	\$0,030,740 \$1,033,550	\$U \$0	\$0 \$0
TCDP Transit Delay Mitigation Fee	40 \$0	30 \$0	\$0 \$0	\$1,033,550 \$134,800	40 \$0	40 \$0
Transit Center TDR nurchase (\$/sf)	φ0 \$0	ψ0 \$0	φ0 \$0	\$1,500,000	φ0 \$0	φ0 \$0
Transportation Sustainability Fee	\$19.287.563	\$5.716.983	\$1,135,805	\$8,974,403	\$1.231.340	\$2,411,483
Child Care Fee	\$1,480,000	\$453,250	\$92.315	\$688.200	\$92.315	\$203,500
Public Art Fee (% of construction cost)	1%	1%	1%	1%	1%	1%
School Impact Fee	\$496,344	\$152,132	\$32,585	\$234,668	\$35,267	\$68,292
Other Fees [5]	\$569,610	\$179,135	\$59,532	\$314,286	\$92,110	\$82,784

Mello-Roos CFD Special Tax. Estimated by Seifel Consulting.
 Prop C Early Care and Education Commercial Rents Tax effective January 1, 2019.

[4] Fees based on City of San Francisco fee schedule effective January 1, 2019, and are estimated by Seifel Consulting.

[5] Water and wastewater capacity charge.

In addition to the operating expenses described above, this analysis accounts for the local community benefit costs that include the recently approved Central SoMa Mello-Roos Community Facilities District (CFD)<sup>3</sup> and the Proposition C Early Care and Educational Commercial Rents Tax.<sup>4</sup> Both community benefit costs are charged on an annual basis and substantially affect capitalized office values, as they increase annual expenses and reduce net operating income.<sup>5</sup>

This analysis reflects a vacancy rate of 5 percent. This is an optimistic assumption with vacancy rate for office uses historically ranging between 5 and 10 percent.

#### **Development Costs**

Development costs consist of direct construction costs, indirect costs (including fees), and project contingency with key cost assumptions summarized in **Table 5**. Total costs (including land value) range between about \$720 and \$1,000 per square foot depending on the prototype. The direct cost for new construction has rapidly increased over the past several years due to strong growth in the economy, large-scale development activity, and resulting demand for construction services and materials. For the purpose of this analysis, direct construction costs are estimated to range between \$380 and \$450 per square foot with the highest cost in the Transit Center. These cost estimates are based on review of recent projects in San Francisco and reflect differences in size, height, density, and location between the prototypes. Parking costs are estimated at \$66,000 per space across all prototypes, assuming parking is provided below grade.

Indirect costs include tenant improvements (\$80 to \$100 per square foot for office and \$100 per square foot for retail), architecture and engineering (8 percent of direct costs), project and construction management (3 percent of direct costs), legal and inspections (3 percent of direct costs), general and administrative (3 percent of direct costs), financing (range of 5 to 6 percent of direct costs), and development fees.

<sup>&</sup>lt;sup>3</sup> Codified December 2018, the Central SoMa Mello-Roos Community Facilities District (CFD) Special Tax applies to prototypes in Central SoMa and is levied to fund public amenities and infrastructure in the district. The Transit Center District also has a similar CFD special tax, which was adopted earlier. The tax is \$4.36 per gross square foot for office in Central SoMa and \$5.52 per gross square foot in the Transit Center, and \$3.18 per gross square for retail in Central SoMa and \$4.02 per gross square foot in the Transit Center, subject to annual rate escalations. The Central SoMa Mello-Roos CFD Program participation requirement applies to projects in the Plan area that include new construction or the net addition of more than 25,000 gross square feet of non-residential development on "Tier B" or "Tier C" properties (Planning Code Section 423).

<sup>&</sup>lt;sup>4</sup> Effective 2019, Prop C Early Care and Education Commercial Rents Tax imposes a new gross receipts tax of 3.5 percent of building lease income on commercial spaces in the City. Each of the prototypes in this analysis (office, retail, and PDR) would be subject to this tax.

<sup>&</sup>lt;sup>5</sup> As described earlier, office values are based on stabilized net operating income divided by the assumed cap rate.

Development fees include the Child Care Fee, Public Art Fee, School Impact Fee, Transportation Sustainability Fee, Water Capacity Charge, Wastewater Capacity Charge, any neighborhoodspecific fees as well as the existing Jobs-Housing Linkage Fee.<sup>6</sup> Cost estimates are based on the City of San Francisco fee schedule effective January 1, 2019 and estimated for each prototype by the Planning Department and Seifel Consulting. Indirect costs also include a 7.5 percent contingency across all prototypes.

#### Land Values

Land values are estimated for each prototype based on CoStar sales data since 2015 for land zoned for commercial buildings by neighborhood and adjusted from a sales value per acre basis to a per floor area ratio (FAR) basis to reflect the range of densities across the prototypes. Because land values are largely determined by allowable development capacity, initial land sale comps are adjusted to result in the land value range of between \$180 and \$280 per FAR foot in Central SoMa and Eastern Neighborhoods, as shown in **Table 5.** Only the Transit Center prototype generates a higher land value of \$480 per FAR foot associated with its central transit-rich location and building heights. Determination of land value for office and mixed-use development is complicated by a wide range of factors, including market speculation, expectation in changes to land use policy and development cost structure (e.g., Prop M), regional economic and employment dynamics, capital markets, and many other variables.

#### Cost Incidence of Fee Increases

Significant increases in development impact fees, particularly those that occur unexpectedly, affect real estate development feasibility in several potential ways. Each of the three potential impacts is described below and is shown in **Figure 1**.

First and foremost, development impact fees increase development costs. As real estate investors have numerous options for investing their capital (including much lower-risk opportunities than real estate as described above), new development must achieve a market adjusted return threshold to attract capital. Thus, a significant increase in impact fees will reduce a developer's ability to attract capital unless a developer is able to decrease other development costs to offset the fee increase or achieve a higher value by raising rents.

Whether office space will be able to command a rent increase will depend on market strength and may lead to the production of fewer buildings. Commercial rents are a function of market conditions, and high office rents are only affordable to a subset of companies with certain business characteristics. Higher rents may not be achievable for many existing tenants in San Francisco given market conditions and would therefore limit the potential tenant pool (for example, may only be affordable to high valued technology companies) and could ripple through the marketplace.

<sup>&</sup>lt;sup>6</sup> Neighborhood specific impact fees include the Eastern Neighborhoods Infrastructure Impact Fee, Central SoMa TDR Purchase, Central SoMa Area Plan Fee, Central SoMa Community Facilities Fee, TCDP Transportation and Street Improvement Fee, TCDP Open Space Fee, TCDP Transit Delay Mitigation Fee, and Transit Center TDR Purchase. The City's existing Jobs-Housing Linkage Fee is \$28.57 per square foot of office and \$26.66 per square foot of retail uses.

Since the fee reduces the otherwise achievable value of development, another possible result is a decrease in land value. This may result in landowners being unwilling to sell and, therefore, may further constrain commercial development. Typically, landowners will only sell at a price that is greater than the current value of the property based on existing rents and what they perceive to be the market value of their land. In this case, a developer is unable to negotiate a lower land price, and the construction costs and profit margin are fixed, and thus the market rent or value must be higher for feasibility than would be required under either of the first two scenarios. Under these circumstances, the cost of the fee is borne by consumers (e.g., office tenants), who are paying more than they otherwise might. **Figure 1** below illustrates these dynamics.

In summary, significant increases in fees negatively affect development feasibility and increase the cost burden on development unless there are offsetting reductions in other development costs (such as land) or increases in revenues (market rents), which are not often achievable based on overall market conditions.



#### Figure 1 Cost Incidence of a Jobs-Housing Linkage Fee
## APPENDIX A

Baseline Scenario Pro Formas



Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	2.1 acres	90,000 sq.ft.
Net Area	89% efficiency ratio	870,000 sq.ft. 774 300 sq.ft
Office (Full-Service)		712,000 sq.ft.
Retail (NNN)		40,050 sq.ft.
PDR (NNN)		12,460 sq.ft.
Parking Spaces		272 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$86 per net sq. ft. per year	\$61,232,000
Retail (NNN)	\$40 per net sq. ft. per year	\$1,602,000
Net Parking Revenue	\$280 per space per month	\$913.920
Gross Annual Revenue		\$64,121,720
(less) Operating Expenses	30.0% of office full-service revenue	-\$18,369,600
(less) Vacancy Rate	5.0% of gross annual revenue	-\$3,206,086
(less) Commissions (less) Mello-Roos CED Special Tax	2.5% of gross annual revenue	-\$1,603,043 -\$3,532,520
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$2,212,273
Net Operating Income		\$35,198,198
Capitalized Value	5.50% cap rate	\$639,967,236
(less) Cost of Sale/Marketing	3.25%	-\$20,798,935
Net Project Value		\$619,168,301
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$2,500 per lot sq. ft.	\$225,000,000
Direct Costs		
Building Construction Cost	\$420 per gross sq. ft.	\$365,400,000
Site Improvement Cost	\$66,000 per space \$10 per gross sq. ft	\$17,952,000 \$8,700,000
Total Direct Costs		\$392,052,000
Indirect Costs		
Tenant Improvements (office)	\$90 per sq.ft.	\$64,080,000
Tenant Improvements (retail)	\$100 per sq.ft.	\$4,005,000
Architecture and Engineering	8.0% of direct costs	\$31.364.200
Project and Construction Management	3.0% of direct costs	\$11,761,600
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$11,761,600 \$11,761,600
Financing	6.0% of direct costs	\$23.523.100
Subtotal Indirect Costs excluding Fees		\$187,661,000
Fees (see Table 5 Fee Summary)		
Existing Jobs Housing Linkage Fee	\$27 avg. per gross sq. ft.	\$23,229,240
Eastern Neighborhoods Intrastructure Impact Fee	\$20 avg. per gross sq. π. \$3 avg. per gross sq. ft	\$17,004,675 \$2,812,500
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0
Central SoMa Community Facilities Fee	\$2 avg. per gross sq. ft.	\$1,424,500
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0 \$0
TCDP Open Space Fee TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	<del>ን</del> ሀ \$በ
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Transportation Sustainability Fee	\$22 avg. per gross sq. ft.	\$19,287,563
Child Care Fee	\$2 avg. per gross sq. ft.	\$1,480,000
Public Art Fee	1% of direct costs	\$3,920,520
School Impact Fee	\$1 avg. per gross sq. ft.	\$496,344
Other Fees Subtotal Fees	<u>\$1</u> avg. per gross sq. π. \$81 avg. per gross sq. ft	<u>\$569,610</u> \$70,224,952
	401 avg. þer gross sq. n.	\$257 885 952
Subtotal Direct and Indirect Costs		\$649 937 952
Total Costs		\$874,937.952
Profit (Net Project Value - Total Costs)		(\$255 769 651)
Return on Cost (Profit / Total Cost)		-29.2%
Stabilized Yield (NOI / Total Cost)		4.0%

Item	Assumption	Total
DEVELOPMENT PROGRAM Lot Size Gross Building Area (excl. parking)	0.8 acres	35,000 sq.ft. 270,000 sq.ft.
Net Area Office (Full-Service) Retail (NNN) PDR (NNN)	89% efficiency ratio	240,300 sq.ft. 218,050 sq.ft. 15,575 sq.ft. 4,005 sq.ft.
Parking Spaces		88 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service) Retail (NNN) PDR (NNN) Net Parking Revenue Gross Annual Revenue	\$86 per net sq. ft. per year \$40 per net sq. ft. per year \$30 per net sq. ft. per year \$280 per space per month	\$18,752,300 \$623,000 \$120,150 <u>\$295,680</u> \$19,791,130
(less) Operating Expenses (less) Vacancy Rate (less) Commissions (less) Mello-Roos CFD Special Tax (less) Prop C Early Care and Education Commercial Rents Tax	<ul> <li>30.0% of office full-service revenue</li> <li>5.0% of gross annual revenue</li> <li>2.5% of gross annual revenue</li> <li>\$4 avg. per gross sq. ft.</li> <li>3.5% of building lease income</li> </ul>	-\$5,625,690 -\$989,557 -\$494,778 -\$1,082,510 -\$682,340.75
Net Operating Income Capitalized Value	5.50% cap rate	\$10,916,255 \$198,477,355
(less) Cost of Sale/Marketing	3.23%	<u>-30,430,314</u> \$192 026 841
		ф132,020,0 <del>4</del> 1
Land Cost	\$1,000 per lot sa ft	\$35,000,000
Direct Costs		φ00,000,000
Building Construction Cost Parking Construction Cost Site Improvement Cost Total Direct Costs	\$400 per gross sq. ft. \$66,000 per space \$10 per gross sq. ft.	\$108,000,000 \$5,808,000 <u>\$2,700,000</u> \$116,508,000
Indirect Costs		
Tenant Improvements (office) Tenant Improvements (retail) Contingency Architecture and Engineering Project and Construction Management Other Expenses (Legal, Inspections) General and Administrative Financing Subtotal Indirect Costs excluding Fees	<ul> <li>\$90 per sq.ft.</li> <li>\$100 per sq.ft.</li> <li>7.5% of direct costs</li> <li>8.0% of direct costs</li> <li>3.0% of direct costs</li> <li>3.0% of direct costs</li> <li>3.0% of direct costs</li> <li>6.0% of direct costs</li> </ul>	\$19,624,500 \$1,557,500 \$8,738,100 \$9,320,600 \$3,495,200 \$3,495,200 \$3,495,200 <u>\$6,990,500</u> \$56,716,800
Fees (see Table 5 Fee Summary) <b>Existing Jobs Housing Linkage Fee</b> Eastern Neighborhoods Infrastructure Impact Fee Central SoMa TDR Purchase Central SoMa Area Plan Fee Central SoMa Community Facilities Fee TCDP Transportation and Street Improvement Fee TCDP Open Space Fee TCDP Transit Delay Mitigation Fee Transit Center TDR Purchase Transportation Sustainability Fee Child Care Fee Public Art Fee School Impact Fee Other Fees Subtotal Fees Total Indirect Costs	<b>\$26</b> avg. per gross sq. ft. \$19 avg. per gross sq. ft. \$4 avg. per gross sq. ft. \$0 avg. per gross sq. ft. \$2 avg. per gross sq. ft. \$0 avg. per gross sq. ft. \$2 avg. per gross sq. ft. \$3 avg. per gross sq. ft. \$4 avg. per gross sq. ft. \$4 avg. per gross sq. ft. \$5 avg. per gross sq. ft. \$5 avg. per gross sq. ft. \$6 avg. per gross	\$7,119,620 \$5,150,175 \$1,093,750 \$0 \$436,625 \$0 \$0 \$0 \$5,716,983 \$453,250 \$1,165,080 \$152,132 \$179,135 \$21,466,749 \$78,183,549
Subtotal, Direct and Indirect Costs		\$194,691,549
rotal Costs Profit (Net Project Value - Total Costs) Return on Cost (Profit / Total Cost) Stabilized Yield (NOI / Total Cost)		\$229,691,549 (\$37,664,709) -16.4% 4.8%

Source: Economic & Planning Systems, Inc.

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	0.3 acres	13,000 sq.ft.
Net Area	89% efficiency ratio	62,000 sq.it. 55 180 sq.ft
Office (Full-Service)		44,411 sq.ft.
Retail (NNN)		5,785 sq.ft.
PDR (NNN)		3,204 sq.ft.
Parking Spaces		23 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$83 per net sq. ft. per year	\$3,686,113
Retail (NNN)	\$40 per net sq. ft. per year	\$231,400
PDR (NNN) Net Parking Revenue	\$30 per net sq. ft. per year	\$96,120 \$77,280
Gross Annual Revenue	\$260 per space per month	<u>\$77,200</u> \$4,090,913
		φ+,000,010 • · · · • = • • ·
(less) Operating Expenses	30.0% of office full-service revenue	-\$1,105,834
(less) vacancy Rate	2.5% of gross annual revenue	-\$204,546 _\$102,273
(less) Mello-Roos CFD Special Tax	\$4 avg per gross sg ft	-\$229.012
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$140,477
Net Operating Income	-	\$2.308.771
Canitalized Value	5 50% cap rate	\$41 977 663
(less) Cost of Sale/Marketing	3.5%	<u>-\$1,469,218</u>
Net Project Value		\$40,508,445
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$300 per lot sg. ft.	\$3.900.000
Direct Costs		
Building Construction Cost	\$380 per gross sg. ft	\$23,560,000
Parking Construction Cost	\$66,000 per space	\$1.518.000
Site Improvement Cost	\$10 per gross sq. ft.	\$620,000
Total Direct Costs		\$25,698,000
Indirect Costs		
Tenant Improvements (office)	\$90 per sq.ft.	\$3,996,990
Tenant Improvements (retail)	\$100 per sq.ft.	\$578,500
Contingency Architecture and Engineering	7.5% of direct costs	\$1,927,400
Project and Construction Management	3.0% of direct costs	\$2,055,600 \$770,000
Other Expenses (Legal Inspections)	3.0% of direct costs	\$770,900
General and Administrative	3.0% of direct costs	\$770,900
Financing	5.0% of direct costs	\$1,284,900
Subtotal Indirect Costs excluding Fees		\$12,156,290
Fees (see Table 5 Fee Summary)		
Existing Jobs Housing Linkage Fee	\$25 avg. per gross sq. ft.	\$1,521,619
Eastern Neighborhoods Infrastructure Impact Fee	\$17 avg. per gross sq. ft.	\$1,034,175
Central Soma TDR Purchase	\$0 avg. per gross sq. π.	\$U ¢1 070 000
Central Solvia Alea Fiall Fee Central SoMa Community Facilities Fee	\$2 avg. per gross sq. it.	\$93 625
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Transportation Sustainability Fee	\$18 avg. per gross sq. ft.	\$1,135,805
Child Care Fee	\$1 avg. per gross sq. ft.	\$92,315
Public Art Fee	1% of direct costs	\$256,980
Other Fees	avg. per gross sq. ft. \$1 avg. per gross sq. ft.	₽0∠,000 \$50 530
Subtotal Fees	\$85 avg. per gross sq. ft.	\$5,296,635
Total Indirect Costs		\$17,452,925
Subtotal, Direct and Indirect Costs		\$43,150,925
Total Costs		\$47,050,925

Profit (Net Project Value - Total Costs) Return on Cost (Profit / Total Cost) Stabilized Yield (NOI / Total Cost)

Source: Economic & Planning Systems, Inc.

(\$6,542,480) -13.9% 4.9%

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size Gross Building Area (avel, parking)	0.5 acres	20,000 sq.ft.
Net Area	89% efficiency ratio	345,320 sq.ft.
Office (Full-Service)	,	331,080 sq.ft.
Retail (NNN) PDR (NNN)		0 sq.ft. 11 570 sq.ft
Parking Spaces		91 spaces
REVENUE ASSUMPTIONS		
	\$101 per pet so ft per vear	\$33 439 080
Retail (NNN)	\$48 per net sq. ft. per year	\$0
PDR (NNN)	\$30 per net sq. ft. per year	\$347,100
Gross Annual Revenue	\$315 per space per month	<u>\$343,980</u> \$34,130,160
	30.0% of office full-service revenue	-\$10.031.724
(less) Vacancy Rate	5.0% of gross annual revenue	-\$1,706,508
(less) Commissions	2.5% of gross annual revenue	-\$853,254
(less) Mello-Roos CFD Special Tax (less) Prop C Early Care and Education Commercial Pents Tax	\$5 avg. per gross sq. ft.	-\$2,105,700 \$1,182,516
	5.5% of building lease income	-\$1,102,510
		\$18,250,458
(less) Cost of Sale/Marketing	5.50% cap rate 3.25%	\$331,826,504 <u>-\$10,784,361</u>
Net Project Value		\$321,042,142
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$4,300 per lot sq. ft.	\$86,000,000
Direct Costs		
Building Construction Cost	\$450 per gross sq. ft.	\$174,600,000
Parking Construction Cost	\$66,000 per space \$5 per gross sq. ft	\$6,006,000 \$1,940,000
Total Direct Costs	to per gross sq. n.	\$182,546,000
Indirect Costs		
Tenant Improvements (office)	\$100 per sq.ft.	\$33,108,000
Tenant Improvements (retail)	\$100 per sq.ft.	\$0
Architecture and Engineering	8.0% of direct costs	\$13,691,000 \$14,603,700
Project and Construction Management	3.0% of direct costs	\$5,476,400
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$5,476,400
General and Administrative	3.0% of direct costs	\$5,476,400
Subtotal Indirect Costs excluding Fees	6.0% of direct costs	<u>\$10,952,800</u> \$88,784,700
		+,,
Existing Jobs Housing Linkage Fee	\$28 avg. per gross sq. ft.	\$10,974,620
Eastern Neighborhoods Infrastructure Impact Fee	\$0 avg. per gross sq. ft.	\$0
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft.	\$0 \$0
Central SoMa Community Facilities Fee	\$0 avg. per gross sq. ft	\$0 \$0
TCDP Transportation and Street Improvement Fee	\$16 avg. per gross sq. ft.	\$6,036,740
TCDP Open Space Fee	\$3 avg. per gross sq. ft.	\$1,033,550
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$134,890
Transit Center TDR Purchase Transportation Sustainability Fee	\$4 avg. per gross sq. it. \$23 avg. per gross sq. ft	\$1,500,000 \$8,974,403
Child Care Fee	\$2 avg. per gross sq. ft.	\$688,200
Public Art Fee	1% of direct costs	\$1,825,460
School Impact Fee	\$1 avg. per gross sq. ft.	\$234,668
Other Fees Subtotal Fees	<u>\$1</u> avg. per gross sq. ft. \$82 avg. per gross sg. ft	<u>\$314,286</u> \$31,716,816
Total Indirect Costs	402 a.g. po. grood og. n.	\$120,501,516
Subtotal, Direct and Indirect Costs		\$303,047,516
Total Costs		\$389,047,516
Profit (Net Project Value - Total Costs)		(\$68,005,374)
Return on Cost (Profit / Total Cost) Stabilized Yield (NOI / Total Cost)		-17.5% 4.7%

# Prototype 5 Eastern Neighborhoods (EN) - Small Cap 85

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size Gross Building Area (avel, parking)	0.2 acres	10,500 sq.ft.
Net Area	89% efficiency ratio	52.510 sq.ft.
Office (Full-Service)		44,411 sq.ft.
Retail (NNN)		0 sq.ft.
PDR (NNN)		7,209 sq.ft.
Parking Spaces		16 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$73 per net sq. ft. per year	\$3,242,003
Retail (NNN)	\$40 per net sq. ft. per year	\$0
PDR (NNN)	\$30 per net sq. ft. per year	\$216,270
Net Parking Revenue	\$210 per space per month	<u>\$40,320</u> \$3.408.503
		\$3,490,090
(less) Operating Expenses	30.0% of office full-service revenue	-\$972,601
(less) vacancy Rate	2.5% of gross annual revenue	-\$174,929.05 \$87.464.83
(less) Mello-Roos CFD Special Tax	\$0 avg. per gross sg. ft.	-\$07,404.03 \$0
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$121,040
Net Operating Income		\$2,142,558
Capitalized Value	5.50% cap rate	\$38,955,601
(less) Cost of Sale/Marketing	3.5%	-\$1,363,446
Net Project Value		\$37,592,155
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$380 per lot sq. ft.	\$3,990,000
Direct Costs		
Building Construction Cost	\$380 per gross sq. ft.	\$22,420,000
Parking Construction Cost	\$66,000 per space	\$1,056,000
Site Improvement Cost	\$5 per gross sq. ft.	<u>\$295,000</u>
I otal Direct Costs		\$23,771,000
Indirect Costs		
Tenant Improvements (office)	\$80 per sq.ft.	\$3,552,880
Contingency	\$100 per sq.ft. 7.5% of direct costs	۵۵ ¢1 782 800
Architecture and Engineering	8.0% of direct costs	\$1,782,800
Project and Construction Management	3.0% of direct costs	\$713.100
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$713,100
General and Administrative	3.0% of direct costs	\$713,100
Financing	5.0% of direct costs	<u>\$1,188,600</u>
Subtotal Indirect Costs excluding Fees		\$10,565,280
Fees (see Table 5 Fee Summary)		
Existing Jobs Housing Linkage Fee	\$28 avg. per gross sq. ft.	\$1,641,589
Eastern Neighborhoods Inirastructure Impact Fee	\$21 avg. per gross sq. π.	\$1,218,000 ¢0
Central SoMa Area Plan Fee	\$0 avg. per gross sq. it. \$0 avg. per gross sq. ft	\$0 \$0
Central SoMa Community Facilities Fee	\$0 avg. per gross sq. ft.	\$0 \$0
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Transportation Sustainability Fee	\$21 avg. per gross sq. ft.	\$1,231,340
Child Care Fee	\$2 avg. per gross sq. π.	\$92,315
School Impact Fee	\$1 avg, per gross sq. ft	\$35,267
Other Fees	\$2 avg, per gross sq. ft	\$92,110
Subtotal Fees	\$77 avg. per gross sq. ft.	\$4,548,331
Total Indirect Costs		\$15,113,611
Subtotal, Direct and Indirect Costs		\$38,884,611
Total Costs		\$42,874,611
Profit (Net Project Value - Total Costs)		(\$5,282,456)
Return on Cost (Protit / Total Cost)		-12.3%
Stapilized Tield (NUL/ LOTAL COST)		5.0%

## Prototype 6 Eastern Neighborhoods (EN) - Large Cap 130

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	0.5 acres	20,000 sq.ft.
Net Area	89% efficiency ratio	123,000 sq.ft.
Office (Full-Service)		97,900 sq.ft.
Retail (NNN)		8,900 sq.ft.
PDR (NNN)		1,780 sq.ft.
Parking Spaces		29 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$77 per net sq. ft. per year	\$7,538,300
Retail (NNN)	\$40 per net sq. ft. per year	\$356,000
PDR (NNN)	\$30 per net sq. ft. per year	\$53,400
Net Parking Revenue	\$210 per space per month	\$73,080 \$8,020,780
		\$0,020,700
(less) Operating Expenses	30.0% of office full-service revenue	-\$2,261,490
(less) vacancy rate	2.5% of gross annual revenue	-\$401,039
(less) Mello-Roos CFD Special Tax	\$0 avg, per gross sg, ft.	-\$200,520 \$0
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$278,170
Net Operating Income		\$4,879,562
Capitalized Value	5.50% cap rate	\$88,719,309
(less) Cost of Sale/Marketing	3.25%	<u>-\$2,883,378</u>
Net Project Value		\$85,835,932
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$520 per lot sq. ft.	\$10,400,000
Direct Costs		
Building Construction Cost	\$400 per gross sq. ft.	\$50,000,000
Parking Construction Cost	\$66,000 per space	\$1,914,000
Site Improvement Cost	\$10 per gross sq. ft.	<u>\$1,250,000</u>
		\$53,164,000
	¢00	¢7,000,000
Tenant Improvements (office)	\$80 per sq.ft. \$100 per sq.ft	\$7,832,000 \$890,000
Contingency	7.5% of direct costs	\$3,987,300
Architecture and Engineering	8.0% of direct costs	\$4,253,100
Project and Construction Management	3.0% of direct costs	\$1,594,900
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$1,594,900
General and Administrative	3.0% of direct costs	\$1,594,900
Financing Subtotal Indiract Casta evaluding Face	6.0% of direct costs	<u>\$3,189,800</u> \$34,036,000
		\$24,930,900
Fees (see Table 5 Fee Summary)	\$26 ava per gross sa ft	\$3 196 020
Eastern Neighborhoods Infrastructure Impact Fee	\$19 avg. per gross sq. ft.	\$2,352,000
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0
Central SoMa Community Facilities Fee	\$0 avg. per gross sq. ft.	\$0
ICDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0 \$0
ICDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0 ¢0
TCDP Transit Delay Miligation Fee	\$0 avg. per gross sq. it. \$0 avg. per gross sq. ft	\$0 \$0
Transportation Sustainability Fee	\$19 avg. per gross sq. ft	\$2 411 483
Child Care Fee	\$2 avg. per gross sq. ft.	\$203,500
Public Art Fee	1% of direct costs	\$531,640
School Impact Fee	\$1 avg. per gross sq. ft.	\$68,292
Other Fees	<u>\$1</u> avg. per gross sq. ft.	\$82,784 \$8 945 740
Subiotal Fees	\$71 avg. per gross sq. tt.	\$8,845,719
rotal mullect Costs		ΦJJ,102,019
Total Costs		900,940,019 \$97 346 610
Profit (Net Project Value - Total Costs)		(\$11 510 688)
Return on Cost (Profit / Total Cost)		-11.8%
Stabilized Yield (NOI / Total Cost)		5.0%

## APPENDIX B

Pipeline Scenario Pro Formas



Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	2.1 acres	90,000 sq.ft.
Gross Building Area (excl. parking)		870,000 sq.ft.
Office (Full-Service)	89% eniciency ratio	774,300 sq.ft. 712.000 sq.ft
Retail (NNN)		40,050 sq.ft.
PDR (NNN)		12,460 sq.ft.
Parking Spaces		272 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$97 per net sq. ft. per year	\$69,064,000
Retail (NNN)	\$40 per net sq. ft. per year	\$1,602,000
PDR (NNN) Net Parking Revenue	\$30 per net sq. π. per year \$280 per space per month	\$373,800 \$913 920
Gross Annual Revenue		\$71,953,720
(less) Operating Expenses	30.0% of office full-service revenue	-\$20,719,200
(less) Vacancy Rate	5.0% of gross annual revenue	-\$3,597,686.00
(less) Commissions	2.5% of gross annual revenue	-\$1,798,843.00
(less) Mello-Roos CFD Special Tax (less) Brop C Early Care and Education Commercial Pents Tax	\$4 avg. per gross sq. ft.	-\$3,532,520 \$2,486,303
Net Operating Income	3.5% of building lease income	\$39,819,078
Capitalized Value	5.50% cap rate	\$723.083.236
(less) Cost of Sale/Marketing	3.25%	<u>-\$23,529,455</u>
Net Project Value		\$700,453,781
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$1,875 per lot sq. ft.	\$168,750,000
Direct Costs		
Building Construction Cost	\$315 per gross sq. ft.	\$274,050,000 \$12,464,000
Site Improvement Cost	\$49,500 per space \$8 per gross sg. ft.	\$6.525.000
Total Direct Costs	to be: 3:000 of:	\$294,039,000
Indirect Costs		
Tenant Improvements (office)	\$90 per sq.ft.	\$64,080,000
Tenant Improvements (retail)	\$100 per sq.ft.	\$4,005,000
Contingency Architecture and Engineering	7.5% Of direct costs	\$22,052,900 \$23,523,100
Project and Construction Management	3.0% of direct costs	\$8,821,200
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$8,821,200
General and Administrative	3.0% of direct costs	\$8,821,200
Financing Subtotal Indiract Costs evoluting Face	6.0% of direct costs	<u>\$17,642,300</u> \$157,766,900
		\$157,700,900
Fees Existing Jobs Housing Linkage Fee	\$27 ava per gross sa ft	\$23 229 240
Eastern Neighborhoods Infrastructure Impact Fee	\$20 avg. per gross sq. ft.	\$17,004,675
Central SoMa TDR Purchase	\$3 avg. per gross sq. ft.	\$2,812,500
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0
Central Soma Community Facilities Fee	\$2 avg. per gross sq. π. \$0 avg. per gross sq. ft	\$1,424,500 \$0
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0 \$0
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Transportation Sustainability Fee	\$22 avg. per gross sq. ft.	\$19,287,563
Public Art Fee	52 avg. per gross sq. it. 1% of direct costs	\$1,400,000 \$2,940,390
School Impact Fee	\$1 avg. per gross sq. ft.	\$496,344
Other Fees	<u>\$1</u> avg. per gross sq. ft.	<u>\$569,610</u>
Subtotal Fees	\$80 avg. per gross sq. ft.	\$69,244,822
I otal Indirect Costs		\$227,011,722
Total Coste		4021,000,122
		\$003,000,722
Profit (Net Project Value - Total Costs) Return on Cost (Profit / Total Cost)		\$10,653,059 1.5%
Stabilized Yield (NOI / Total Cost)		5.8%

#### Prototye 2 Central SoMa - Large Cap (Medium) 160

Item	Assumption	Total	
DEVELOPMENT PROGRAM	0.8 acres	35.000 sa	ft
Gross Building Area (excl. parking) Net Area Office (Full-Service) Retail (NNN) PDR (NNN)	89% efficiency ratio	270,000 sq. 270,000 sq. 240,300 sq. 218,050 sq. 15,575 sq. 4,005 sq.	ft. ft. ft. ft. ft.
Parking Spaces		88 spa	aces
REVENUE ASSUMPTIONS			
Office (Full-Service)	\$97 per net sq. ft. per year	\$21,150,850	
Retail (NNN)	\$40 per net sq. ft. per year	\$623,000 \$120,150	
Net Parking Revenue Gross Annual Revenue	\$280 per space per month	\$120,150 <u>\$295.680</u> \$22,189,680	
(less) Operating Expenses	30.0% of office full-service revenue	-\$6,345,255	
(less) Vacancy Rate	5.0% of gross annual revenue	-\$1,109,484	
(less) Commissions (less) Mello-Roos CED Special Tax	2.5% of gross annual revenue \$4 avg, per gross sq. ft	-\$554,742 -\$1,082,510	
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$766,290.00	
Net Operating Income		\$12,331,399	
Capitalized Value	5.50% cap rate	\$224,207,255	
(less) Cost of Sale/Marketing	3.25%	<u>-\$7,286,736</u>	
Net Project value		\$216,920,519	
DEVELOPMENT COST ASSUMPTIONS			
Land Cost	\$750 per lot sq. ft.	\$26,250,000	
Direct Costs Building Construction Cost	\$300 per gross sg. ft	\$81 000 000	
Parking Construction Cost	\$49,500 per space	\$4,356,000	
Site Improvement Cost	\$8 per gross sq. ft.	\$2,025,000 \$87,381,000	
Indirect Costs		φ07,301,000	
Tenant Improvements (office)	\$90 per sq.ft.	\$19,624,500	
Tenant Improvements (retail)	\$100 per sq.ft.	\$1,557,500 \$6,552,600	
Architecture and Engineering	8.0% of direct costs	\$6,990,500	
Project and Construction Management	3.0% of direct costs	\$2,621,400	
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$2,621,400 \$2,621,400	
Financing	6.0% of direct costs	\$2,821,400 \$5,242,900	
Subtotal Indirect Costs excluding Fees		\$47,833,200	
Fees (see Table 4 Fee Summary)	<b>6</b> 00	AT 440 000	0.40/
Fees Eastern Neighborhoods Infrastructure Impact Fee	\$26 avg. per gross sq. ft. \$19 avg. per gross sg. ft.	\$7,119,620 \$5.150.175	34%
Central SoMa TDR Purchase	\$4 avg. per gross sq. ft.	\$1,093,750	
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0 ¢400.005	
TCDP Transportation and Street Improvement Fee	\$2 avg. per gross sq. it. \$0 avg. per gross sq. ft	\$430,025 \$0	
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0	
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0	
Transit Center TDR Purchase Transportation Sustainability Fee	\$0 avg. per gross sq. π. \$21 avg. per gross sq. ft	\$U \$5 716 983	
Child Care Fee	\$2 avg. per gross sq. ft.	\$453,250	
Public Art Fee	1% of direct costs	\$873,810	
School Impact Fee	\$1 avg. per gross sq. ft. \$1 avg. per gross sq. ft	\$152,132 \$179,135	
Subtotal Fees	\$78 avg. per gross sq. ft.	\$21,175,479	
Total Indirect Costs		\$69,008,679	
Subtotal, Direct and Indirect Costs		\$156,389,679	
Total Costs		\$182,639,679	
Profit (Net Project Value - Total Costs)		\$34,280,839 10%	
Return on Cost (Profit / Total Cost)		6.8%	

 $\label{eq:scalar} Z: \label{eq:scalar} Shared \label{eq:scalar} Projects \label{eq:scalar} Oakland \label{eq:scalar} 191000s \label{eq:scalar} 191029 \label{eq:scalar} SFJ obs \label{eq:scalar} Hard \label{eq:scalar} Projects \label{eq:scalar} Oakland \label{eq:scalar} 191029 \label{eq:scalar} SFJ obs \label{eq:scalar} Hard \label{eq:scalar} Projects \label{eq:scalar} Oakland \label{eq:scalar} 191029 \label{eq:scalar} SFJ obs \label{eq:scalar} Hard \label{eq:scalar} Projects \label{eq:scalar} Oakland \label{eq:scalar} 191029 \label{eq:scalar} SFJ obs \label{eq:scalar} Hard \label{eq:scalar} Projects \label{eq:scalar} Oakland \label{eq:scalar} 191029 \label{eq:scalar} SFJ obs \label{eq:scalar} Hard \label{eq:scalar} Projects \label{eq:scal$ 

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	0.3 acres	13,000 sq.ft.
Gross Building Area (excl. parking)	80% efficiency ratio	62,000 sq.ft. 55 180 sq.ft
Office (Full-Service)	0970 eniciency ratio	44,411 sq.ft.
Retail (NNN)		5,785 sq.ft.
PDR (NNN)		3,204 sq.ft.
Parking Spaces		23 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$94 per net sq. ft. per year	\$4,174,634
Retail (NNN)	\$40 per net sq. ft. per year	\$231,400
PDR (NNN) Net Parking Povenue	\$30 per net sq. ft. per year \$280 per space per month	\$96,120 \$77,280
Gross Annual Revenue	\$200 per space per monut	\$4,579,434
(less) Operating Expenses	30.0% of office full-service revenue	-\$1 252 390
(less) Vacancy Rate	5.0% of gross annual revenue	-\$228,972
(less) Commissions	2.5% of gross annual revenue	-\$114,486
(less) Mello-Roos CFD Special Tax	\$4 avg. per gross sq. ft.	-\$229,012
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$157,575
Net Operating Income		\$2,596,999
Capitalized Value (less) Cost of Sale/Marketing	5.50% cap rate 3.5%	\$47,218,161 <u>-\$1,652,636</u>
Net Project Value		\$45,565,525
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$225 per lot sq. ft.	\$2,925,000
Direct Costs		• ,,
Building Construction Cost	\$285 per gross sq. ft.	\$17,670,000
Parking Construction Cost	\$49,500 per space	\$1,138,500
Site Improvement Cost	\$8 per gross sq. ft.	<u>\$465,000</u>
Total Direct Costs		\$19,273,500
	<b>() ()()() () () () ()</b>	¢2,000,000
Tenant Improvements (office)	\$90 per sq.π. \$100 per sq.ft	\$3,996,990 \$578,500
Contingency	7.5% of direct costs	\$1.445.500
Architecture and Engineering	8.0% of direct costs	\$1,541,900
Project and Construction Management	3.0% of direct costs	\$578,200
Other Expenses (Legal, Inspections)	3.0% of direct costs	\$578,200
General and Administrative	3.0% of direct costs	\$578,200 \$062,700
Subtotal Indirect Costs excluding Fees	5.0% of direct costs	\$10,261,190
Fees		
Existing Jobs Housing Linkage Fee	\$25 avg. per gross sq. ft.	\$1,521,619
Eastern Neighborhoods Infrastructure Impact Fee	\$17 avg. per gross sq. ft.	\$1,034,175
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Central SoMa Area Plan Fee	\$17 avg. per gross sq. ft.	\$1,070,000
Central Soma Community Facilities Fee TCDP Transportation and Street Improvement Fee	\$2 avg. per gross sq. π. \$0 avg. per gross sq. ft	\$93,625 \$0
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0 \$0
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Transportation Sustainability Fee	\$18 avg. per gross sq. ft.	\$1,135,805
Child Care Fee	\$1 avg. per gross sq. ft.	\$92,315
PUDIIC AR Fee School Impact Fee	1% of direct costs \$1 avg, per gross sq. ft	\$192,735
Other Fees	\$1 avg. per gross sq. ft.	\$59 532
Subtotal Fees	\$84 avg. per gross sq. ft.	\$5,232,390
Total Indirect Costs		\$15,493,580
Subtotal, Direct and Indirect Costs		\$34,767,080
Total Costs		\$37,692,080

Profit (Net Project Value - Total Costs) Return on Cost (Profit / Total Cost) Stabilized Yield (NOI / Total Cost)

Source: Economic & Planning Systems, Inc.

\$7,873,445 20.9% 6.9%

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size Gross Building Area (excl. parking)	0.5 acres	20,000 sq.ft. 388 000 sq.ft
Net Area	89% efficiency ratio	345,320 sq.ft.
Office (Full-Service)		331,080 sq.ft.
PDR (NNN)		0 sq.n. 11,570 sq.ft.
Parking Spaces		91 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$114 per net sq. ft. per year	\$37,743,120
Retail (NNN)	\$48 per net sq. ft. per year	\$0
Net Parking Revenue	\$30 per net sq. ft. per year \$315 per space per month	\$347,100 \$343.980
Gross Annual Revenue		\$38,434,200
(less) Operating Expenses	30.0% of office full-service revenue	-\$11,322,936
(less) Vacancy Rate	5.0% of gross annual revenue	-\$1,921,710.00
(less) Commissions (less) Mello-Roos CFD Special Tax	\$5 avg. per gross sq. ft.	-\$960,855.00 -\$2,105,700
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$1,333,158
Net Operating Income		\$20,789,841
Capitalized Value (less) Cost of Sale/Marketing	5.50% cap rate 3.25%	\$377,997,115 -\$12 284 906
Net Project Value	0.2070	\$365,712,208
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$3,225 per lot sq. ft.	\$64,500,000
Direct Costs		
Building Construction Cost	\$338 per gross sq. ft.	\$130,950,000
Site Improvement Cost	\$49,500 per space \$4 per gross sg. ft.	\$4,504,500 \$1,455,000
Total Direct Costs	¢ . po. 3.000 ed	\$136,909,500
Indirect Costs		
Tenant Improvements (office)	\$100 per sq.ft.	\$33,108,000
Contingency	\$100 per sq.π. 7.5% of direct costs	\$0 \$10 268 200
Architecture and Engineering	8.0% of direct costs	\$10,952,800
Project and Construction Management	3.0% of direct costs	\$4,107,300
Other Expenses (Legal, Inspections) General and Administrative	3.0% of direct costs	\$4,107,300 \$4 107 300
Financing	6.0% of direct costs	<u>\$8,214,600</u>
Subtotal Indirect Costs excluding Fees		\$74,865,500
Fees	¢29 our per groce og ft	\$40.074.600
Eastern Neighborhoods Infrastructure Impact Fee	\$20 avg. per gross sq. n. \$0 avg. per gross sq. ft.	\$10,974,020 \$0
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0 \$0
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. it. \$16 avg. per gross sg. ft.	<del>پ</del> و \$6.036.740
TCDP Open Space Fee	\$3 avg. per gross sq. ft.	\$1,033,550
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$134,890
Transit Center TDR Purchase Transportation Sustainability Fee	\$4 avg. per gross sq. π. \$23 avg. per gross sq. ft	\$1,500,000 \$8,974,403
Child Care Fee	\$2 avg. per gross sq. ft.	\$688,200
Public Art Fee	1% of direct costs	\$1,369,095
School Impact Fee	\$1 avg. per gross sq. ft. \$1 avg. per gross sq. ft.	\$234,668 \$314,286
Subtotal Fees	\$81 avg. per gross sq. ft.	\$31,260,451
Total Indirect Costs		\$106,125,951
Subtotal, Direct and Indirect Costs		\$243,035,451
Total Costs		\$307,535,451
Profit (Net Project Value - Total Costs) Return on Cost (Profit / Total Cost) Stabilized Yield (NOI / Total Cost)		\$58,176,757 18.9% 6.8%

# Prototype 5 Eastern Neighborhoods (EN) - Small Cap 85

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size	0.2 acres	10,500 sq.ft.
Net Area	89% efficiency ratio	52,510 sq.ft.
Office (Full-Service)		44,411 sq.ft.
Retail (NNN)		0 sq.ft.
PDR (NNN)		7,209 sq.ft.
Parking Spaces		16 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$82 per net sq. ft. per year	\$3,641,702
Retail (NNN)	\$40 per net sq. ft. per year	\$0
PDR (NNN) Net Perking Revenue	\$30 per net sq. ft. per year	\$216,270
Net Parking Revenue Gross Annual Revenue	\$210 per space per month	<u>\$40,320</u> \$3,898,292
(less) Operating Expenses	30.0% of office full-service revenue	-\$1.092.511
(less) Vacancy Rate	5.0% of gross annual revenue	-\$194,914.60
(less) Commissions	2.5% of gross annual revenue	-\$97,457.30
(less) Mello-Roos CFD Special Tax	\$0 avg. per gross sq. ft.	\$0
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$135,029
Net Operating Income		\$2,378,380
Capitalized Value	5.50% cap rate	\$43,243,281 \$1,513,515
	3.570	<u>\$41 729 767</u>
		φ41,725,707
DEVELOPMENT COST ASSUMPTIONS		<b>*</b> ••••••
Land Cost	\$380 per lot sq. ft.	\$3,990,000
Direct Costs	\$205 K	\$40.04F.000
Building Construction Cost	\$285 per gross sq. π.	\$16,815,000
Site Improvement Cost	\$4 per gross sq. ft	\$221 300
Total Direct Costs		\$17,828,300
Indirect Costs		
Tenant Improvements (office)	\$80 per sq.ft.	\$3,552,880
Tenant Improvements (retail)	\$100 per sq.ft.	\$0
Contingency	7.5% of direct costs	\$1,337,100
Architecture and Engineering	3.0% of direct costs	\$1,420,300 \$534,800
	3.0% of direct costs	\$534,800 \$534,800
General and Administrative	3.0% of direct costs	\$534,800
Financing	5.0% of direct costs	\$891,400
Subtotal Indirect Costs excluding Fees		\$8,812,080
Fees	<b>Aaa a</b>	
Existing Jobs Housing Linkage Fee	\$28 avg. per gross sq. ft.	\$1,641,589 \$1,218,000
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft	\$1,210,000 \$0
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0
Central SoMa Community Facilities Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Transit Delay Mitigation Fee	\$0 avg. per gross sq. ft.	\$0
Transit Center TDR Purchase	\$0 avg. per gross sq. ft.	\$0
I ransportation Sustainability Fee	\$21 avg. per gross sq. $\pi$ .	\$1,231,340
Public Art Fee	φ2 avy. μει yiuss sy. it. 1% of direct costs	\$178 283
School Impact Fee	\$1 avg, per gross sq. ft.	\$35,267
Other Fees	<u>\$2</u> avg. per gross sq. ft.	<u>\$92,110</u>
Subtotal Fees	\$76 avg. per gross sq. ft.	\$4,488,904
Total Indirect Costs		\$13,300,984
Subtotal, Direct and Indirect Costs		\$31,129,284
Total Costs		\$35,119,284
Profit (Net Project Value - Total Costs)		\$6,610,483
Return on Cost (Protit / Total Cost) Stabilized Vield (NOL / Total Cost)		18.8%
Stabilized Tield (NOT / TOTAL COST)		0.0%

## Prototype 6 Eastern Neighborhoods (EN) - Large Cap 130

Item	Assumption	Total
DEVELOPMENT PROGRAM		
Lot Size Gross Building Area (avel, parking)	0.5 acres	20,000 sq.ft.
Net Area	89% efficiency ratio	111.250 sq.ft.
Office (Full-Service)		97,900 sq.ft.
Retail (NNN)		8,900 sq.ft.
PDR (NNN)		1,780 sq.ft.
Parking Spaces		29 spaces
REVENUE ASSUMPTIONS		
Office (Full-Service)	\$87 per net sq. ft. per year	\$8,517,300
Retail (NNN)	\$40 per net sq. ft. per year	\$356,000
PDR (NNN)	\$30 per net sq. ft. per year	\$53,400 \$73,000
Gross Annual Revenue	\$210 per space per month	<u>\$73,080</u> \$8,999,780
(less) Operating Expenses	30.0% of office full-service revenue	-\$2 555 190
(less) Vacancy Rate	5.0% of gross annual revenue	-\$449 989
(less) Commissions	2.5% of gross annual revenue	-\$224,995
(less) Mello-Roos CFD Special Tax	\$0 avg. per gross sq. ft.	\$0
(less) Prop C Early Care and Education Commercial Rents Tax	3.5% of building lease income	-\$312,435
Net Operating Income		\$5,457,172
Capitalized Value	5.50% cap rate	\$99,221,309
(less) Cost of Sale/Marketing	3.25%	<u>-\$3,224,693</u>
Net Project Value		\$95,996,617
DEVELOPMENT COST ASSUMPTIONS		
Land Cost	\$520 per lot sq. ft.	\$10,400,000
Direct Costs		
Building Construction Cost	\$300 per gross sq. ft.	\$37,500,000
Site Improvement Cost	\$8 per gross sq. ft	\$937 500
Total Direct Costs	φυ per gross sq. π.	\$39,873,000
Indirect Costs		
Tenant Improvements (office)	\$80 per sq.ft.	\$7,832,000
Tenant Improvements (retail)	\$100 per sq.ft.	\$890,000
	7.5% of direct costs	\$2,990,500
Architecture and Engineering Project and Construction Management	3.0% of direct costs	\$3,189,800 \$1,106,200
Other Expenses (Legal Inspections)	3.0% of direct costs	\$1,190,200
General and Administrative	3.0% of direct costs	\$1,196,200
Financing	6.0% of direct costs	\$2,392,400
Subtotal Indirect Costs excluding Fees		\$20,883,300
Fees	<b>600</b>	\$2.400.000
Eastern Neighborhoods Infrastructure Impact Fee	\$20 avg. per gross sq. n. \$19 avg. per gross sq. ft	\$2,352,000
Central SoMa TDR Purchase	\$0 avg. per gross sq. ft.	\$0
Central SoMa Area Plan Fee	\$0 avg. per gross sq. ft.	\$0
Central SoMa Community Facilities Fee	\$0 avg. per gross sq. ft.	\$0
TCDP Transportation and Street Improvement Fee	\$0 avg. per gross sq. ft.	\$0
ICDP Open Space Fee	\$0 avg. per gross sq. ft.	\$0 \$0
Transit Center TDR Purchase	\$∪ avg. per gross sq. π. \$0 avg. per gross sq. ff	\$U ¢∩
Transportation Sustainability Fee	φυ avg. μει gruss sq. π. \$19 avg. per gross sq. ft	هں \$2 411 483
Child Care Fee	\$2 avg. per gross sq. ft.	\$203,500
Public Art Fee	1% of direct costs	\$398,730
School Impact Fee	\$1 avg. per gross sq. ft.	\$68,292
Other Fees	<u>\$1</u> avg. per gross sq. ft.	<u>\$82,784</u>
Sublotal Fees	\$70 avg. per gross sq. tt.	\$8,712,809
I Utal Indifect Costs		⊅∠9,590,109
Total Costs		\$03,403,103
Profit (Not Project Value - Total Costs)		919,009,109 \$16 127 507
Return on Cost (Profit / Total Cost)		20.2%
Stabilized Yield (NOI / Total Cost)		6.8%

FILE NO. 190548

1	[Planning Code - Planning Code - Jobs Housing Linkage Fee and Inclusionary Housing]
2	
3	Ordinance amending the Planning Code to modify the Jobs Housing Linkage Fee
4	by allowing indexing of the fee, adding options for complying with the fee,
5	requiring payment of the fee no later than at the time of first certificate of
6	occupancy, dedicating funds for permanent supportive housing and the
7	preservation and acquisition of affordable housing, and to remove the monetary
8	limit for the Small Sites Funds under the Inclusionary Housing program; affirming
9	the Planning Department's determination under the California Environmental
10	Quality Act; making findings of consistency with the General Plan, and the eight
11	priority policies of Planning Code, Section 101.1; and making findings of public
12	necessity, convenience, and welfare pursuant to Planning Code, Section 302.
13	NOTE: <b>Unchanged Code text and uncodified text</b> are in plain Arial font.
14	Deletions to Codes are in <u>strikethrough italics Times New Roman font</u> . Beard amondment additions are in double underlined Arial font.
15	Board amendment additions are in <u>additione-undefined Anarionit</u> . Board amendment deletions are in strikethrough Arial font.
16	subsections or parts of tables.
17	
18	Be it ordained by the People of the City and County of San Francisco:
19	
20	Section 1. Environmental and Land Use Findings.
21	(a) The Planning Department has determined that the actions contemplated in
22	this ordinance comply with the California Environmental Quality Act (California Public
23	Resources Code Sections 21000 et seq.). Said determination is on file with the Clerk of
24	the Board of Supervisors in File No and is incorporated herein by reference. The
25	Board affirms this determination.

(b) On \_\_\_\_\_, the Planning Commission, in Resolution No. \_\_\_\_\_,
adopted findings that the actions contemplated in this ordinance are consistent, on
balance, with the City's General Plan and eight priority policies of Planning Code
Section 101.1. The Board adopts these findings as its own. A copy of said Resolution
is on file with the Clerk of the Board of Supervisors in File No. \_\_\_\_\_, and is
incorporated herein by reference.

- (c) Pursuant to Planning Code Section 302, the Board finds that this Planning
  Code amendment will serve the public necessity, convenience, and welfare for the
  reasons set forth in Planning Commission Resolution No. \_\_\_\_\_, and the Board
  incorporates such reasons herein by reference.
- 11

Section 2. Article 4 of the Planning Code is hereby amended by revising
Sections 409, 413.1, 413.4, 413.6, 413.7, 413.8, 413.9, 413.10, and 415.5, and deleting
Section 413.5, to read as follows:

15

### AND COST INFLATION FEE ADJUSTMENTS.

17

16

#### (a) Citywide Development Fee and Development Impact

SEC. 409. CITYWIDE DEVELOPMENT FEE REPORTING REQUIREMENTS

**Requirements Report.** In coordination with the Development Fee Collection Unit at DBI 18 and the Director of Planning, the Controller shall issue a report within 180 days after the 19 end of each even-numbered fiscal year that provides information on all development 20 fees established in the Planning Code collected during the prior two fiscal years 21 organized by development fee account and all cumulative monies collected over the life 22 of each development fee account, as well as all monies expended. The report shall 23 24 include: (1) a description of the type of fee in each account or fund; (2) the beginning and ending balance of the accounts or funds including any bond funds held by an 25

outside trustee; (3) the amount of fees collected and interest earned; (4) an 1 identification of each public improvement on which fees or bond funds were expended 2 and amount of each expenditure; (5) an identification of the approximate date by which 3 the construction of public improvements will commence; (6) a description of any inter-4 fund transfer or loan and the public improvement on which the transferred funds will be 5 expended; and (7) the amount of refunds made and any allocations of unexpended fees 6 that are not refunded. The report shall also provide information on the number of 7 projects that elected to satisfy development impact requirements through the provision 8 of "in-kind" physical improvements, including on-site and off-site BMR units, instead of 9 paying development fees. The report shall also include any annual reporting information 10 otherwise required pursuant to the California Mitigation Fee Act, California Government 11 Code Sections 66001 et seq. The report shall be presented by the Director of Planning to 12 the Planning Commission and to the Land Use & Economic Development Transportation 13 Committee of the Board of Supervisors. The *Rreport* shall also contain information on 14 the Controller's annual construction cost inflation adjustments to development fees 15 described in subsection (b) below, as well as information on MOHCD's separate 16 adjustment of the *Jobs-Housing Linkage and* Inclusionary Affordable Housing *Fees* 17 described in Sections 413.6(b) and 415.5(b)(3). 18

(b) Annual Development Fee Infrastructure Construction Cost
Inflation Adjustments. Prior to issuance of the Citywide Development Fee and
Development Impact Requirements Report referenced in subsection (a) above, the
Controller shall review the amount of each development fee established in the *San Francisco*-Planning Code and, with the exception of the *Jobs-Housing Linkage Fee in Section 413 et seq. and the*-Inclusionary Affordable Housing Fee in Section 415 *et seq.*,
shall adjust the dollar amount of any development fee on an annual basis every January

1 1 based solely on the Annual Infrastructure Construction Cost Inflation Estimate. *The* 

2 Office of the City Administrator's Capital Planning Group shall publish the Annual

Infrastructure Construction Cost Inflation Estimate, as published by the Office of the City 3 Administrator's Capital Planning Group and approved by the City's Capital Planning 4 Committee, no later than November 1 every year, without further action by the Board of 5 Supervisors. The Annual Infrastructure Construction Cost Inflation Estimate shall be 6 updated by the Capital Planning Group on an annual basis and no later than November 1 7 every year, in consultation with the Capital Planning Committee, in order to establish a 8 reasonable estimate of construction cost inflation for the next calendar year for a mix of 9 public infrastructure and facilities in San Francisco. The Capital Planning Group may 10 rely on past construction cost inflation data, market trends, and a variety of national, 11 state, and local commercial and institutional construction cost inflation indices in 12 developing *their its* annual estimates for San Francisco. The Planning Department and 13 the Development Fee Collection Unit at DBI shall provide notice of the Controller's 14 development fee adjustments, including the Annual Infrastructure Construction Cost 15 Inflation Estimate formula used to calculate the adjustment, and MOH<u>CD</u>'s separate 16 adjustment of the *Jobs Housing Linkage and* Inclusionary Affordable Housing Fees on the 17 Planning Department and DBI websites and to any interested party who has requested 18 such notice at least 30 days prior to the adjustment taking effect each January 1. The 19 Jobs-Housing Linkage Fee and the Inclusionary Affordable Housing Fees shall be adjusted 20 under the procedures established in Sections 413.6(b) and 415.5(b)(3). 21

22

#### SEC. 413.1. FINDINGS.

23 The Board hereby finds and declares as follows:

24 <u>A.(a)</u> Large-scale entertainment, hotel, office, <u>laboratory</u>research and development,
 25 and retail developments in the City <u>and County of San Francisco</u>-have attracted and

continue to attract additional employees to the City, and there is a causal connection 1 2 between such developments and the need for additional housing in the City, particularly housing affordable to households of lower and moderate income. Such commercial 3 uses in the City benefit from the availability of housing close by for their employees. 4 However, the supply of housing units in the City has not kept pace with the demand for 5 housing created by these new employees. Due to this shortage of housing, employers 6 will have difficulty in securing a labor force, and employees, unable to find decent and 7 affordable housing, will be forced to commute long distances, having a negative impact 8 on quality of life, limited energy resources, air quality, social equity, and already 9 10 overcrowded highways and public transport.

B.(b) There is a low vacancy rate for housing affordable to persons of lower and 11 moderate income. In part, this low vacancy rate is due to factors unrelated to large scale 12 commercial development, such as high interest rates, high land costs in the City, immigration 13 14 from abroad, demographic changes such as the reduction in the number of persons per household, and personal, subjective choices by households that San Francisco is a desirable 15 *place to live.* This low vacancy rate is *also*-due in part to large-scale commercial 16 developments, which have attracted and will continue to attract additional employees 17 and residents to the City. Consequently, some of the employees attracted to these 18 developments are competing with present residents for scarce, vacant affordable 19 housing units in the City. Competition for housing generates the greatest pressure on 20 the supply of housing affordable to households of lower and moderate income. In San 21 Francisco, office or retail uses of land generally yield higher income to the owner than 22 housing. Because of these market forces, the supply of these affordable housing units 23 24 will not be expanded. Furthermore, Federal and State housing finance and subsidy

25

programs are not sufficient by themselves to satisfy the lower and moderate income
housing requirements of the City.

- $C_{-}(c)$  The City has consistently set housing production goals to address the regional 3 and citywide forecasts for population, households, and employment. Although San Francisco has 4 seen increased housing production each successive decade since the 1970s, the City has not been 5 able to close the gap between its housing production goals and actual production. As 6 demonstrated in the "Jobs Housing Nexus Analysis" prepared by Keyser Marston Associates, 7 Inc. in June 1997, construction of new housing units in the City decreased to a low of 288 units 8 in 1993 compared to an average annual production of 1,330 units during the years 1980 through 9 10 1995. Overall housing production in the City should average approximately 2,200 units a year to keep up with the City's share of regional housing demand. 11  $D_{-}(d)$  There is a continuing shortage of low- and moderate-income housing in 12 13 San Francisco. Affordable housing production in the City averaged approximately 340 units per year during the years 1980 through 1995. However, the demand for new affordable housing 14 will be approximately 1,300 units per year for the years 2000 through 2015. 15 E. Objective 1, Policy 7 of the Residence Element of the San Francisco 16 General Plan calls for the provision of additional housing to accommodate the demands of new 17 residents attracted to the City by expanding employment opportunities caused by the growth of 18 large-scale commercial activities in the City. Such development projects should assist in meeting 19 the City's housing needs by contributing to the provision of housing. 20 *F*.—It is desirable to impose the cost of the increased burden of 21 providing housing necessitated by large-scale commercial development projects directly 22 upon the sponsors of the development projects by requiring that the project sponsors 23 24 contribute land *or money to a housing developer* or pay a fee to the City to subsidize
- 25

housing development as a condition of the privilege of development and to assist the
 community in solving those of its housing problems generated by the development.

G. The required housing exaction shall be based upon formulas derived in 3 the report entitled "Jobs Housing Nexus Analysis" prepared by Keyser Marston Associates, Inc. 4 in June 1997. The "Jobs Housing Nexus Analysis" demonstrates the validity of the nexus between 5 new, large-scale entertainment, hotel, office, research and development, and retail development 6 and the increased demand for housing in the City, and the numerical relationship between such 7 development projects and the formulas for provision of housing set forth in Section 413.1 et seq. 8 9 *H.* In-lieu fees for new office construction to the City's Office Affordable Housing Production Program, were last increased in 1994 to \$7.05 per square foot, based on the 10 "Analysis of the OAHPP Formula prepared by the Department of City Planning in November 11 1994." Existing law provides for potential increases to such fees up to 20% annually based on 12 increases to the Average Area Purchase Price Safe Harbor Limitations for New Single-Family 13 Residences for the San Francisco Primary Metropolitan Statistical Area ("PMSA") published by 14 the Internal Revenue Service. 15 I. The Internal Revenue Service last published its Average Area Purchase 16 Price Safe Harbor Limitations for New Single-Family Residences for the San Francisco PMSA 17 in 1994. In 1998 and again in 2000, the City contracted for an analysis of average area purchase 18 price for the San Francisco PMSA, in lieu of IRS publication of the index. The 2000 report 19 prepared by Vernazza Wolfe Associates for mortgage purposes, which was certified by Orrick, 20 Herrington & Sutcliffe, indicates that the 1999 updated purchase price figures for new 21 construction are \$431,568, a 73.3% increase over the 1994 purchase price of \$248,969. 22 J. If OAHPP fees had been increased consistent with these increases in the 23 Average Area Purchase Price Safe Harbor Limitations for New Single-Family Residences for the 24 San Francisco PMSA, the OAHPP in-lieu fee for net new office construction would be \$12.22 25

- 1 *per square foot, or approximately 54% of the maximum derived by the "Jobs Housing Nexus"*
- 2 Analysis" prepared by Keyser Marston Associates, Inc. in June 1997.
- K.(e) Since preparation of the Keyser Marston "Jobs Housing Nexus Analysis," the The
   Bay Area has seen dramatic increases in land acquisition costs for housing, the cost of
   new housing development and the affordability gap for low to moderate income workers
   seeking housing. Commute patterns for the region have also changed, with more
   workers who work outside of San Francisco seeking to live in the City, thus increasing
   demand for housing and decreasing housing availability.
- 9 (f) As the regional job center, San Francisco has historically had the highest ratio of
- 10 *jobs-to-housing units in the Bay Area.*
- 11 (g) The required housing exaction shall be based upon formulas derived in a periodic
- 12 *jobs housing nexus analysis. Consistent with the requirements of the California Mitigation Fee*
- 13 *Act, the jobs housing nexus analysis shall demonstrate the validity of the nexus between new,*
- 14 *large scale entertainment, hotel, office, laboratory, and retail development and the increased*
- 15 *demand for housing in the City, and the numerical relationship between such development*
- 16 *projects and the formulas for the provision of housing set forth in Section 413.1 et seq.*
- 17 (*h*) The Board of Supervisors has reviewed the Jobs Housing Nexus Analysis
- 18 prepared by Keyser Marsten Associates, Inc., dated May 2019, which is on file with the Clerk of
- 19 *the Board in Board File No.* , and adopts the findings and conclusions of that study,
- 20 *and incorporates the findings by reference herein to support the imposition of the fees under*
- 21 <u>Section 413.1 et seq.</u>
- *E. Because the shortage of affordable housing created by large-scale commercial development in the City can be expected to continue for many years, it is necessary to maintain the affordability of the housing units constructed by developers of such projects under this program. In order to maintain the long-term affordability of such housing, the City is*

1	authorized to enforce affordability requirements through mechanisms such as shared
2	appreciation mortgages, deed restrictions, enforcement instruments, and rights of first refusal
3	exercisable by the City at the time of resale of housing units built under the program.
4	M. Objective 8, Policy 2 of the Residence Element of the San Francisco
5	General Plan encourages the Commission to periodically reassess requirements placed on
6	large-scale commercial development under the Office Affordable Housing Production Program
7	("OAHPP"), predecessor to the Jobs-Housing Linkage Program.
8	SEC. 413.4. IMPOSITION OF HOUSING REQUIREMENT.
9	* * * *
10	(c) <b>Sponsor's Choice to Fulfill Requirements</b> . Prior to issuance of a
11	building or site permit for a development project subject to the requirements of Section
12	413.1 <i>et seq.</i> , the sponsor shall elect one of the <i>three</i> options listed below to fulfill any
13	requirements imposed as a condition of approval and notify the Department of their
14	choice of the following:
15	(1) <u>Contribute land of value at least equivalent to the in-lieu fee</u> ,
16	according to the formulas set forth in Section 413.1 et seq., to MOHCD pursuant to Section
17	413.7; or Contribute of a sum or land of value at least equivalent to the in-lieu fee, according to
18	the formulas set forth in Section 413.1, to one or more housing developers who will use the funds
19	or land to construct housing units pursuant to Section 413.5; or
20	(2) Pay an in-lieu fee to the Development Fee Collection Unit at
21	DBI according to the formula set forth in Section 413.6; or
22	(3) Combine the above options pursuant to Section 413.8.
23	* * * *
24	SEC. 413.5. COMPLIANCE BY PAYMENT TO HOUSING DEVELOPER.
25	

1	(a) With the written approval of the Director of MOH, the project sponsor may elect to
2	pay a sum or contribute land of value at least equivalent to the in-lieu fee to one or more housing
3	developers to meet the requirements of Section 413.1et seq. If the sponsor elects this option and
4	the Director of MOH approves it, the housing developer or developers shall be required to
5	construct at least the number of housing units determined by the following formulas for each

*type of space proposed as part of the development project and subject to Section 413.1et seq.*:

7	Net Addition Gross Sq. Ft.	× .000140 – Housing Units
8	Entertainment Space	
9	Net Addition Gross Sq. Ft.	<u>×.000110 = Housing Units</u>
10	Hotel Space	
11	Net Addition Gross Sq. Ft.	$\times$ .000270 = Housing Units
12	Office Space	
13	Net Addition Gross Sq. Ft.	×.000200 = Housing Units
14	<del>R&amp;D Space</del>	
15	Net Addition Gross Sq. Ft.	$\times$ .000140 = Housing Units
16	Retail Space	

*The housing units required to be constructed under the above formula must be affordable to qualifying households continuously for 50 years. If the sponsor elects to contribute to more than one distinct housing development under this Section, the sponsor shall not receive credit for*

*its monetary contribution to any one development in excess of the amount of the in-lieu fee, as* 

*adjusted under Section 413.6, multiplied by the number of units in such housing development.* 

(b) Prior to the issuance by DBI of the first site or building permit for a development

*project subject to Section 413.1et seq. the sponsor shall submit to the Department, with a copy to* 

*MOH*:

(1) A written housing development plan identifying the housing project or 1 2 projects to receive funds or land from the sponsor and the proposed mechanism for enforcing the requirement that the housing units constructed will be affordable to qualifying households for 50 3 vears: and 4 (2) A certification that the sponsor has made a binding commitment to contribute 5 an amount of money or land of value at least equivalent to the amount of the in-lieu fee that 6 would otherwise be required under Section 413.6 to one or more housing developers and that the 7 housing developer or developers shall use such funds or lands to develop the housing subject to 8 this Section. 9 (3) A self-contained appraisal report as defined by the Uniform Standards of 10 Professional Appraisal Practice prepared by an M.A.I. appraiser of the fair market value of any 11 land to be contributed by the sponsor to a housing developer. The date of value of the appraisal 12 shall be the date on which the sponsor submits the housing development plan and certification to 13 the Department. 14 If the sponsor fails to comply with these requirements within one year of the final 15 determination or revised final determination, it shall be deemed to have elected to pay the in-lieu 16 fee under Section 413.6, and any deferral surcharge, in order to comply with Section 413.1et 17 seq. In the event that the sponsor fails to pay the in-lieu fee within the time required by Section 18 413.6, DBI shall deny any and all site or building permits or certificates of occupancy for the 19 development project until the such payment has been made or land contributed, and the 20 21 Development Fee Collection Unit at DBI shall immediately initiate lien proceedings against the sponsor's property pursuant to Section 408 of this Article and Section 107A.13 of the San 22 Francisco Building Code to recover the fee. 23 24 (c) Within 30 days after the sponsor has submitted a written housing development project plan and, if necessary, an appraisal to the Department and MOH under Subsection(b) of 25

this Section, the Department shall notify the sponsor in writing of its initial determination as to 1 2 whether the plan and appraisal are in compliance with this Section, publish the initial determination in the next Commission calendar, and cause a public notice to be published in an 3 official newspaper of general circulation stating that such housing development plan has been 4 received and stating the Department's initial determination. In making the initial determination 5 for an application where the sponsor elects to contribute land to a housing developer, the 6 Department shall consult with the Director of Property and include within its initial 7 determination a finding as to the fair market value of the land proposed for contribution to a 8 9 housing developer. Within 10 days after such written notification and published notice, the 10 sponsor or any other person may request a hearing before the Commission to contest such initial determination. If the Department receives no request for a hearing within such 10-day period, 11 the determination of the Department shall become a final determination. Upon receipt of any 12 timely request for hearing, the Department shall schedule a hearing before the Commission 13 within 30 days. The scope of the hearing shall be limited to the compliance of the housing 14 development plan and appraisal with this Section, and shall not include a challenge to the 15 amount of the housing requirement imposed on the development project by the Department or 16 the Commission. At the hearing, the Commission may either make such revisions to the 17 Department's initial determination as it may deem just, or confirm the Department's initial 18 determination. The Commission's determination shall then become a final determination, and the 19 Department shall provide written notice of the final determination to the sponsor, MOH, and to 20 21 any person who timely requested a hearing of the Department's determination. The Department shall also provide written notice to MOH that the housing units to be constructed pursuant to 22 such plan are subject to Section 413.1et seq. 23 (d) Prior to the issuance by DBI of the first construction document for a development 24 project subject to this Section, the sponsor must: 25

1	(1) Provide written evidence to the Department that it has paid in full the sum or
2	transferred title of the land required by Subsection (a) of this Section to one or more housing
3	developers;
4	(2) Notify the Department that construction of the housing units has commenced,
5	evidenced by:
6	(A) The City's issuance of site and building permits for the entire housing
7	development project,
8	(B) Written authorization from the housing developer and the
9	construction lender that construction may proceed,
10	(C) An executed construction contract between the housing developer
11	and a general contractor, and
12	(D) The issuance of a performance bond enforceable by the construction
13	lender for 100 percent of the replacement cost of the housing project; and
14	(3) Provide evidence satisfactory to the Department that the units required to be
15	constructed will be affordable to qualifying households for 50 years through an enforcement
16	mechanism approved by the Department pursuant to Subsections (b) through (d) of this Section.
17	(e) Where the sponsor elects to pay a sum or contribute land of value equivalent to the
18	in-lieu fee to one or more housing developers, the sponsor's responsibility for completing
19	construction of and maintaining the affordability of housing units constructed ceases from and
20	after the date on which:
21	(1) The conditions of (1) through (3) of Subsection (d) of this Section have been
22	<i>met; and</i>
23	(2) A mechanism has been approved by the Director to enforce the requirement
24	that the housing units constructed will be affordable to qualifying households continuously for
25	<del>50 years.</del>

1	(f) If the project sponsor fails to comp	ly with these requirements prior to issuance of the	
2	first certificate of occupancy by DBI, it shall be	e deemed to have elected to pay the in-lieu fee	
3	under Section 413.6 and the deferral surcharge	e in order to comply with Section 413.1et seq. DBI	
4	shall deny any and all certificates of occupancy	y for the development project until such payment	
5	<del>has been made.</del>		
6	SEC. 413.6. COMPLIANCE WITH JOBS-HOUSING LINKAGE PROGRAM BY		
7	PAYMENT OF IN-LIEU FEE.		
8	(a) The amount of the fee	which may be paid by the sponsor of a	
9	development project subject to this Section in	a lieu of developing and providing the housing	
10	<i>required by Section 413.5</i> shall be determine	d by the following formulas for each type of	
11	space proposed as part of the developmer	t project and subject to this Article <u>4</u> .	
12	(1) For applicable p	projects (as defined in Section 413.3), any net	
13	addition shall pay per the Fee Schedule in Table 413.6A, and		
14	(2) For applicable projects (as defined in Section 413.3), any		
15	replacement or change of use shall pay pe	r the Fee Schedule in Table 413.6B.	
16	* * * *		
17	TABL	E 413.6A	
18	FEE SCHEDULE FOR NET ADD	ITIONS OF GROSS SQUARE FEET	
19			
20	Use	Fee per Gross Square Foot	
21	Entertainment	\$18.62	
22	Hotel	\$14.95	
23	Integrated PDR	<del>\$15.69</del>	
24	Institutional	\$0 <del>.<i>00</i></del>	
25	Office	\$ <del>19.96<u>69.60</u></del>	

1	PDR		\$0 <del>.<i>00</i></del>	
2	LaboratoryResearch & Development		\$ <del>13.30</del> 4	<u>16.43</u>
3	Residential		\$0 <del>.<i>00</i></del>	
4	Retail		\$18.62	
5	Small Enterprise Wor	kspace \$15.69		
6				
7		TABL	E 413.6B	
8	FEE SCHEDULE FC			E OR CHANGE OF USE
9				
10		•		Fee per Gross Square
11	Previous Use	New	Use	Foot
12	Entertainment, Hotel,			
13	Integrated PDR, Office,	Entertainment	, Hotel,	
14	<u>Laboratory</u> Research &	<i>Integrated PDR,</i> Office, Retail, or Small Enterprise		<b>CO</b> 00
15	<i>Development</i> , Retail, or			ֆՍ <del>.<i>ՍՍ</i></del>
16	Small Enterprise	Workspace		
17	Workspace			
18		Entertainment	, Hotel,	
19	PDR which received its	Integrated PDR, Office,		
20	First Certificate of	LaboratoryResearch &		Use Fee from Table 413.6A
21	Occupancy on or before	<i>Development</i> , Retail, or		minus \$14.09
22	April 1, 2010	Small Enterpri	se	
23		Workspace		
24	Institutional which received	Entertainment	, Hotel,	<b>CO</b> 00
25	its First Certificate of	Integrated PDR	,-Office,	ቅሀ <del>.<i>ህህ</i></del>

1	Occupancy on or before	<u>Laboratory</u> Research &	
2	April 1, 2010	<i>Development</i> , Retail, or	
3		Small Enterprise	
4		Workspace	
5 6 7 8	Institutional or PDR which received its First Certificate of Occupancy on or before April 1, 2010	Institutional, PDR, <u>Laboratory</u> <del>Research &amp;</del> <del>Development</del> , Residential	\$0. <i>00</i>
9 10 11 12	Institutional or PDR which received its First Certificate of Occupancy after April 1, 2010	Any	Use Fee from Table 413.6
13 14 15 16 17 18	Residential	Entertainment, Hotel, <i>Integrated PDR,</i> Office, PDR, <u>LaboratoryResearch &amp;</u> <del>Development</del> , Retail, or Small Enterprise Workspace	Use Fee from Table 413.6
19	No later than January	l of each year, MOHCD shall a	djust the in-lieu fee payment
20	option. No later than Novembe	<del>r 1 of each year, MOHCD shal</del>	l provide the Planning
21	Department, DBI, and the Con	troller with information on the	adjustment to the in-lieu fee
22	payment option so that it can b	e included in the Planning Dep	artment's and DBI's website notic
23	of the fee adjustments and the (	Controller's Citywide Developm	ent Fee and Development Impac

24 *Requirements Report described in Section 409(a). MOHCD is authorized to develop an* 

25 *appropriate methodology for indexing the fee, based on adjustments in the costs of constructing* 

1 *housing and in the price of housing in San Francisco consistent with the indexing for the* 

2 Residential Inclusionary Affordable Housing Program in lieu fee set out in Section 415.6. The

3 method of indexing shall be published in the Procedures Manual for the Residential Inclusionary

4 Affordable Housing Program. In making a determination as to the amount of the fee to be paid,

- 5 *the Department shall credit to the sponsor any excess Interim Guideline credits or excess credits*
- 6 *which the sponsor elects to apply against its housing requirement.*
- 7 (<u>b</u>e) Any in-lieu fee required under this Section <u>413.6</u> is due and payable 8 to the Development Fee Collection Unit at DBI at the time of and in no event later than 9 issuance of the first construction document, with an option for the project sponsor to 10 defer payment to prior to issuance of the first certificate of occupancy upon agreeing to 11 pay a deferral surcharge that would be deposited into the Citywide Affordable Housing 12 Fund in accordance with Section 107A.13.3 of the San Francisco Building Code.
- 13 (c) Notwithstanding any other provision of this Code, for any project that (1)
- 14 *received an approval from the Planning Commission or Planning Department on or before*

15 December 31, 2019, stating that the project shall be subject to any new, changed, or increased

16 Jobs Housing Linkage Fee adopted prior to that project's procurement of a Certificate of

- 17 Occupancy or Final Completion, and (2) has not procured a Certificate of Occupancy or Final
- 18 <u>Completion as of the effective date of the ordinance in Board File No.</u>, amending this

19 Section 413.6, such project shall pay the difference between the amount of the fees assessed at

- 20 *the time of site permit issuance and any additional amounts due under the new, changed, or*
- 21 *increased fee before the City may issue a Certificate of Occupancy or Final Completion.*
- 22

#### SEC. 413.7. COMPLIANCE BY LAND DEDICATION WITHIN THE CENTRAL

- 23 SOMA SPECIAL USE DISTRICT.
- (a) Controls. *Within the Central SoMa Special Use District, Pp*rojects may
   satisfy all or a portion of the requirements of Section 413. *<u>1 et seq.</u> 5, 413.6 and 413.8* via

1 dedication of land to the City for the purpose of constructing units affordable to qualifying

<u>households</u>. Projects may receive a credit against such requirements up to the value of
 the land donated, calculated pursuant to subsection (b) below.

4

#### (b) **Requirements**.

(1)The value of the dedicated land shall be determined by the 5 Director of Property pursuant to Chapter 23 of the Administrative Code, but shall not 6 exceed the actual cost of acquisition by the project sponsor of the dedicated land in an 7 arm's length transaction. Prior to issuance by DBI of the first site or building permit for a 8 development project subject to Section 413.1 et seq. the sponsor shall submit to the 9 10 Department, with a copy to MOHCD and the Director of Property, documentation sufficient to substantiate the actual cost of acquisition by the sponsor in an arm's length 11 transaction of any land to be dedicated by the sponsor to the City-and County of San 12 *Francisco*, and any additional information that would impact the value of the land. 13

14 (2) Projects are subject to the requirements of Section
15 419.5(a)(2)(A) and (C)<u>-through-(J)</u>.

## 16 SEC. 413.8. COMPLIANCE BY COMBINATION OF *PAYMENT TO HOUSING*

#### 17 DEVELOPER AND PAYMENT OF IN-LIEU FEE AND LAND DEDICATION.

With the written approval of the Director of MOHCD, the sponsor of a 18 development project subject to Section 413.1 et seq. may elect to satisfy its housing 19 requirement by a combination of *paying money or* contributing land to *the City under* 20 <u>Section 413.7</u> one or more housing developers under Section 413.5 and paying a partial 21 amount of the in-lieu fee to the Development Fee Collection Unit at DBI under Section 22 413.6. In the case of such election, the sponsor must pay a sum such that each gross 23 24 square foot of net addition of each type of space subject to Section 413.1 et seq. is accounted for in either the *payment of a sum or* contribution of land to *the City under* 25

1 <u>Section 413.7 one or more housing developers</u> or the payment of a fee to the Development

2 Fee Collection Unit. *The housing units constructed by a housing developer must conform to all* 

3 requirements of Section 413.1 et seq., including, but not limited to, the proportion that must be

4 *affordable to qualifying households as set forth in Section 413.5.* All of the requirements of

5 Sections 413.5 and 413.1 et seq.6 shall apply, including the requirements with respect to

6 the timing of issuance of site and building permits, first construction documents, and

7 certificates of occupancy for the development project and payment of the in-lieu fee.

8

#### SEC. 413.9. LIEN PROCEEDINGS.

9 A project sponsor's failure to comply with the requirements of Sections *413.5*, 10 413.6 and 413.7 shall be cause for the Development Fee Collection Unit at DBI to 11 institute lien proceedings to make the in-lieu fee, as adjusted under Section 413.6, plus 12 interest and any deferral surcharge, a lien against all parcels used for the development 13 project, in accordance with Section 408 of this Article <u>4</u> and Section 107A.13.15 of the 14 San Francisco Building Code.

15

#### SEC. 413.10. CITYWIDE AFFORDABLE HOUSING FUND.

<u>Use of Fees.</u> All monies contributed pursuant to <u>the Jobs Housing</u> 16 *(a)* Linkage Fee Program in Section 413.1 et seq. Sections 413.6 or 413.8 or assessed pursuant to 17 Section 413.9 shall be deposited in the Citywide Affordable Housing Fund ("Fund"), 18 established in Administrative Code Section 10.100-49. The receipts in the Fund 19 collected under Section 413.1 et seq. shall be used solely to increase the supply of 20 housing affordable to qualifying households subject to the conditions of this Section 21 413.10. The fees collected under this Section may not be used, by way of loan or 22 otherwise, to pay any administrative, general overhead, or similar expense of any entity. 23 24 The Mayor's Office of Housing and Community Development ("MOHCD") shall develop procedures such that, for all projects funded by the Citywide Affordable Housing Fund, 25

1	MOHCD requires the project sponsor or its successor in interest to give preference in
2	occupying units as provided for in Administrative Code Chapter 47.
3	(1) <b>Preservation and Acquisition Funds.</b>
4	(A) Designation of Funds. MOHCD shall designate and
5	separately account for 10% of all fees that it receives under Section 413.1 et seq. that are
6	deposited into the Fund to support the acquisition and rehabilitation of rent restricted affordable
7	rental housing.
8	(B) Use of Preservation and Acquisition Funds. The funds shall
9	be used exclusively to acquire and preserve existing housing with the goal of making such
10	housing permanently affordable, including but not limited to acquisition of housing through the
11	City's Small Sites Program. Units supported by monies from the Fund shall be designated as
12	housing affordable to qualified households for the life of the project. Properties supported by
13	the Preservation and Acquisition Funds must be:
14	(i) rental properties that will be maintained as rental
15	properties;
16	(ii) vacant properties that were formerly rental properties
17	as long as those properties have been vacant for a minimum of two years prior to the effective
18	date of the ordinance in Board File No, amending this Section 413.10;
19	(iii) properties that have been the subject of foreclosure;
20	<u>Or</u>
21	(iv) a Limited Equity Housing Cooperative as defined in
22	Subdivision Code Sections 1399.1 et seq. or a property owned or leased by a non-profit entity
23	modeled as a Community Land Trust.
24	
25	

1	(C) Annual Report. At the end of each fiscal year, MOHCD shall
2	issue a report to the Board of Supervisors regarding the total amount of Preservation and
3	Acquisition Funds received, and how those funds were used.
4	(D) Intent. In establishing guidelines for Preservation and
5	Acquisition Funds, the Board of Supervisors does not intend to preclude MOHCD from
6	expending other eligible sources of funding on Preservation and Acquisition as described in this
7	<u>Section 413.10.</u>
8	(2) <b>Permanent Supportive Housing.</b> MOHCD shall designate and
9	separately account for 30% of all fees that it receives under Section 413.1 et seq. that are
10	deposited into the Fund to support the development of permanent supportive housing that meets
11	the requirements of Section 413.1 et seq.
12	(b) Accounting of Funds in Central SoMa Special Use District. Pursuant
13	to Section 249.78(e)(1), all monies contributed pursuant to the Jobs-Housing Linkage
14	Program and collected within the Central SoMa Special Use District shall be paid into
15	the Citywide Affordable Housing Fund, but the funds shall be separately accounted for.
16	Consistent with the allocations in subsection (a), subsection shall be expended within the
17	area bounded by Market Street, the Embarcadero, King Street, Division Street, and
18	South Van Ness Avenue.
19	SEC. 415.5. AFFORDABLE HOUSING FEE.
20	* * * *
21	(f) <b>Use of Fees</b> . All monies contributed pursuant to the Inclusionary
22	Affordable Housing Program shall be deposited in the Citywide Affordable Housing
23	Fund (" <i>the</i> -Fund"), established in Administrative Code Section 10.100-49, except as
24	specified below. The Mayor's Office of Housing and Community Development ("MOHCD")
25	shall use the funds collected under this Section 415.5 in the following manner:

1

\* \* \* \*

(2) "Small Sites Funds." 2 (A) Designation of Funds. MOHCD shall designate and 3 separately account for 10% of all fees that it receives under Section 415.1 et seq. that 4 are deposited into the *Citywide Affordable Housing* Fund, established in Administrative Code 5 Section 10.100-49, excluding fees that are geographically targeted such as those referred 6 to in Sections 249.78(e)(1), 415.5(b)(1), and 827(b)(1), to support acquisition and 7 rehabilitation of Small Sites ("Small Sites Funds"). MOHCD shall continue to divert 10% of 8 9 all fees for this purpose until the Small Sites Funds reach a total of \$15 million, at which point MOHCD will stop designating funds for this purpose. At such time as designated Small Sites 10 Funds are expended and dip below \$15 million, MOHCD shall start designating funds again for 11 this purpose, such that at no time the Small Sites Funds shall exceed \$15 million. When the 12 total amount of fees paid to the City under Section 415.1 et seq. is less than \$10 million 13 over the preceding 12-month period, MOHCD is authorized to temporarily divert funds 14 from the Small Sites Funds for other purposes. MOHCD shall keep track of the diverted 15 funds, however, such that when the amount of fees paid to the City under Section 415.1 16 et seq. meets or exceeds \$10 million over the preceding 12-month period, MOHCD 17 shall commit all of the previously diverted funds and 10% of any new funds, subject to the 18 *cap above*, to the Small Sites Funds. 19

20

25

\* \*

(E) Intent. In establishing guidelines for Small Sites Funds, the Board
 of Supervisors does not intend to preclude MOHCD from expending other eligible
 sources of funding on Small Sites as described in this Section 415.5, *or from allocating or expending more than \$15 million of other eligible funds on Small Sites*.

\* \* \* \*
1	Section 3. Effective Date. This ordinance shall become effective 30 days after
2	enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns
3	the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or
4	the Board of Supervisors overrides the Mayor's veto of the ordinance.
5	
6	Section 4. Scope of Ordinance. In enacting this ordinance, the Board of
7	Supervisors intends to amend only those words, phrases, paragraphs, subsections,
8	sections, articles, numbers, punctuation marks, charts, diagrams, or any other
9	constituent parts of the Municipal Code that are explicitly shown in this ordinance as
10	additions, deletions, Board amendment additions, and Board amendment deletions in
11	accordance with the "Note" that appears under the official title of the ordinance.
12	
13	APPROVED AS TO FORM:
14	DENNIG J. HERRERA, GILY Allomey
15	By: AUSTINM VANG
16	Deputy City Attorney
17	n:\legana\as2019\1900478\01389234.docx
18	
19	
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23	
24	
25	



## **KEYSER MARSTON ASSOCIATES**

## PUBLIC REVIEW DRAFT

## AFFORDABLE HOUSING NEXUS STUDIES

Prepared for: County of Santa Clara

Prepared by: Keyser Marston Associates, Inc.

April 2018

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## ATTACHMENT A – RESIDENTIAL NEXUS ANALYSIS REPORT

## ATTACHMENT B – NON-RESIDENTIAL NEXUS ANALYSIS REPORT

# ATTACHMENT C – AFFORDABLE HOUSING NEXUS ADDENDUM ADDRESSING THE STANFORD UNIVERSITY CAMPUS

## I. EXECUTIVE SUMMARY

This report provides an affordable housing impact fee nexus analysis and related policy information to support consideration of affordable housing requirements for new development within the unincorporated area of the County of Santa Clara ("County"). The report is organized based on the following major land use categories:

- 1. Residential;
- 2. Non-residential; and
- 3. Stanford University Campus.

Keyser Marston Associates, Inc. (KMA) completed the residential and non-residential components of the study in 2016 in conjunction with the County's participation in a multijurisdiction study with eleven other jurisdictions in Alameda and Santa Clara counties. Analyses addressing the Stanford Campus were added in 2018 and incorporated as part of this expanded study.

The Stanford Campus has an existing affordable housing requirement established in the 2000 General Use Permit (GUP) that regulates development of the Campus. The requirement is to provide one new affordable housing unit on the Stanford Campus for every 11,763 square feet of academic space constructed or make a cash payment in-lieu of constructing the unit. If the cash option is selected, the amount is determined based on the then current affordable housing fee for commercial development in the City of Palo Alto. The County does not have an existing affordable housing requirement that applies to development in the unincorporated area outside of the Stanford Campus. This report provides nexus analyses and policy information to support an updated requirement for the Stanford Campus and a potential new affordable housing requirement throughout the unincorporated area.

## 1. Residential - Countywide Unincorporated Area

Approximately 30 to 40 new residential units are built each year within the unincorporated area of the County outside of the Stanford Campus. The development activity is primarily single family units within rural areas of the County. The nexus analysis addressing residential development is based on the link between new residential units, demand for services such as retail and restaurants, and the affordable housing needs of workers who provide these services. The nexus analysis maximum fee level conclusions are summarized below:

Table I-1 Maximum Residential Fees		
		Smaller Single Family
	Single Family Detached	Detached (County Island)
Per Market Rate Unit	\$83,000	\$48,600
Per Square Foot	\$16.60	\$18.70

Based on the findings of the nexus analysis, development activity in the unincorporated area, and requirements in other counties, KMA recommends affordable housing fees in the range of \$15 - \$16 per square foot (psf) in conjunction with consideration of a new inclusionary policy. Consistent with programs in the counties of Santa Cruz and San Mateo, it is recommended that requirements apply to all new residential units, potentially excepting smaller units below a size threshold. If fees apply to all new units, approximately \$2 million per year is estimated to be generated. Additional program recommendations are provided on page 10.

## 2. Non-Residential - Countywide Unincorporated Area

Non-residential development is very rare in the unincorporated area outside of the Stanford Campus. Just one new 4,700 square foot building was permitted during the four-year period reviewed. The nexus analysis addressing non-residential development supports consideration of affordable housing fees for non-residential development, also known as commercial linkage fees. The nexus analysis calculates maximum fee levels based on linkages among construction of new non-residential buildings, the employees that work in them, and their demand for affordable housing. The maximum fee level conclusions are summarized below:

Table I-2 Maximum Non-Residential Fees			
	Maximum Fee		
<u>Building Type</u>	<u>Per Square Foot</u>		
Office	\$113.40		
Retail	\$213.40		
Hotel	\$102.50		
Light Industrial	\$118.60		
Warehouse	\$37.80		

High fee levels are typical for an analysis of this type; however, jurisdictions generally adopt fees well below nexus maximums based on other policy considerations. Because non-residential development in the unincorporated area outside of Stanford is rare, fee revenue is expected to be minimal. If the County adopts a new commercial linkage fee program, KMA recommends consideration of fees in the range of \$3 to \$7 psf for non-residential development outside of the Stanford Campus, which is consistent with other county programs.

## 3. Stanford University Campus

Stanford is the most significant source of development activity within the unincorporated County. Under the proposed new 2018 General Use Permit for the Stanford Campus, construction of 2,275,000 square feet of new academic space is proposed through 2035. In addition, a combined 3,150 new student beds and faculty and staff housing units are proposed, of which up to 550 units are proposed to be faculty and staff units.

The report calculates maximum affordable housing impact fees based on the impact new development on the Stanford Campus has on the need for affordable housing. The nexus analysis maximum fee level findings are summarized below:

Table I-3 Maximum Stanford Campus Fees	;
	Maximum Fee
<u>Building Type</u>	<u>Per Square Foot</u>
Academic Space	\$143.10
Faculty and Staff Housing	\$69.10

The above findings represent a maximum or ceiling for potential updated fees; however, the County may take other considerations into account in setting requirements anywhere below these levels. Academic space maximum fees reflect the cost of providing affordable housing for on-campus workers with household incomes up to 120% of the Area Median Income (AMI) consistent with the approach for the Countywide residential and non-residential analyses. Maximum fees for faculty and staff housing reflect the cost of providing affordable housing to new workers in retail, restaurants, healthcare, education, and other services to households who will live in these new units, consistent with the methodology for the Countywide residential nexus analysis. Employment that supports the student beds is included as part of the academic space fee analysis as discussed on page 36. The 2000 General Use Permit (2000 GUP) includes a condition requiring Stanford to either construct one affordable housing unit on campus for each 11,763 square feet of academic development or make an appropriate cash payment to the County in lieu of constructing the affordable housing unit. The condition also requires that the cash payment made by Stanford to the County be used to fund housing within a six-mile radius of Stanford's campus.

The study identifies policy options for updated fees based on the findings of the nexus analysis, summarized below:

 For academic space, options include the maximum fee of \$143 psf, sufficient to mitigate all housing impacts through 120% of AMI; and, a fee of \$75 psf, sufficient to mitigate housing impact through 80% of AMI (Extremely Low, Very Low, and Low-Income, omitting Moderate-Income). • For faculty and staff housing, policy options include full mitigation of impacts, \$69 psf; or, a requirement to include affordable units on-site.

Table I-4 provides a summary of the policy options identified for Stanford Campus fees. The County may take these and / or other considerations into account in selecting fee levels.

Table I-4 Summary of Policy Options – Stanford Fee Levels			
		Affordable Housing Fee	
Option	Basis for Option	(\$ / Sq.Ft.)	
Academic Space Fees			
1.	Full Mitigation of Impacts through 120% AMI	\$143	
	(Extremely Low, Very Low, Low, and Moderate-Income)		
2.	Full Mitigation of Impacts through 80% of AMI	\$75	
	(Extremely Low, Very Low, Low-Income)		
Faculty and Staff Housing Fees			
1.	Full Mitigation	\$69	
2	Require On-Site Units	provide affordable units	

## **II. INTRODUCTION**

This report provides an affordable housing impact fee nexus analysis and related policy information to support the potential adoption of affordable housing fees for residential and non-residential development in the County of Santa Clara.

Keyser Marston Associates, Inc. (KMA) completed affordable housing fee nexus studies addressing residential and non-residential development throughout the unincorporated County in 2016 ("Countywide Nexus Study") to support consideration of new affordable housing requirements. The Countywide Nexus Study was prepared as part of the County's participation in a coordinated effort that included eleven other jurisdictions in Alameda and Santa Clara counties. The Countywide Nexus Study did not analyze the Stanford University Campus ("Stanford Campus") because the General Use Permit (2000 GUP) that regulates its development included conditions for inclusionary affordable housing or payment of in-lieu fees. In 2017, Stanford University applied for a subsequent General Use Permit (2018 GUP), which prompted the evaluation of the appropriate level of affordable housing fees associated with the proposed development under the new application. Accordingly, the County engaged KMA to prepare a Stanford Campus-specific affordable housing fee nexus addendum ("Addendum"). The Addendum was completed in 2018 and is included as Attachment C.

## A. Background and Context

The County of Santa Clara ("County") is interested in the impacts of new development on the demand and availability of affordable housing and is considering potential affordable housing fees applicable to residential and / or non-residential development. The nexus analyses and supporting materials summarized in this report will enable the County to consider whether to adopt new affordable housing fees applicable to residential and non-residential development in the unincorporated County. The County program to implement affordable housing fees may come in the form of affordable housing impact fees (commonly referred to as "linkage fees") or inclusionary housing requirements that provide an in-lieu fee option as an alternative to including required affordable units as part of the development. The analysis in this report supports either approach.

## B. Organization of this Report

This report is organized into the following sections:

- Section I is an executive summary;
- Section II provides an introduction;
- Section III presents a summary of KMA's findings and recommendations;

- Section IV summarizes the nexus analyses;
- Section V presents analyses and materials prepared to provide context for policy decisions, including:
  - A. Residential affordable housing requirements in other jurisdictions provides a summary of existing inclusionary and in-lieu affordable housing fee requirements for jurisdictions in Alameda and Santa Clara counties;
  - B. On-site inclusionary compliance cost analysis illustration of the revenue market rate residential projects would forgo if a percentage of units were required to be made affordable;
  - C. Non-Residential Development Costs Analysis of development costs for various types of non-residential development as context for consideration of potential fee levels for non-residential development; and
  - D. Jobs housing linkage fee programs in other jurisdictions provides information regarding adopted linkage fee programs in jurisdictions throughout the Bay Area and elsewhere in California.
- Attachment A is the full Residential Nexus Analysis report.
- Attachment B is the full Non-Residential Nexus Analysis report.
- Attachment C is the Affordable Housing Nexus Addendum Addressing the Stanford University Campus.

## **III. SUMMARY OF FINDINGS AND RECOMMENDATIONS**

In this section, KMA provides a summary of the analysis findings and recommendations for the County's consideration should the County choose to move forward with requirements applicable to residential and non-residential development. This section is organized into the following subsections:

- A. Countywide Residential;
- B. Countywide Non-Residential; and,
- C. Stanford University Campus.

Recommendations reflect consideration of the following factors:

- 1. The findings of the nexus analysis. The nexus study establishes maximum fee levels that may be charged to mitigate the impacts of new development on the need for affordable housing.
- 2. The current requirements in nearby jurisdictions.
- 3. Setting a fee high enough to support a meaningful contribution to affordable housing.
- 4. Setting a fee low enough to not discourage development.

## A. Countywide Residential Findings and Recommendations

KMA's findings and recommendations regarding a potential new affordable housing requirement applicable to residential development are presented in this section along with a summary of the factors considered by KMA. Findings specific to the Stanford Campus are presented separately in Section C.

## 1. Nexus Analysis Findings

The findings of the residential nexus analysis are summarized below. The findings per square foot refer to net residential area (exclusive of parking, corridors and other common areas).

Table III-1 Maximum Supported Residential Fees, County of Santa Clara			
		Smaller Single Family	
	Single Family Detached	Detached (County Island)	
Per Market Rate Unit	\$83,000	\$48,600	
Per Square Foot	\$16.60	\$18.70	

Source: Attachment A, Residential Nexus Analysis.

The nexus analysis was limited to single family for-sale units based on the expected development activity in the unincorporated county. Development of attached housing contemplated on the Stanford Campus is addressed separately in Section C.

If the County moves forward with a new requirement, it is contemplated that developers would have the choice of including affordable housing in their development or paying an in-lieu fee set by the Board of Supervisors. In-lieu fees would be set at, or below, the maximums supported by the nexus analysis.

## 2. Affordable Housing Requirements in Other Jurisdictions

KMA assembled and summarized the affordable housing requirements for 18 jurisdictions in Santa Clara and Alameda Counties including those participating in the multi jurisdiction work program plus nine additional cities selected by the participants. Santa Cruz and San Mateo counties were added to provide additional context specific to county programs. Table III-2 briefly summarizes the adopted affordable housing programs of the Santa Clara County cities (+ City of Fremont, and counties of Santa Cruz and San Mateo). The focus of the summary is on ownership unit requirements since few rentals are developed in the unincorporated County outside of the Stanford Campus. In-lieu fee payment as an alternative to building units on-site is permitted only for small projects in most of the city programs, where permitted at all. San Jose and Fremont are exceptions where in-lieu fee payment is allowed on projects of all sizes.

Santa Cruz County has fees applicable down to single units and a fee schedule that increases fees with the size of the unit. Units above 4,000 square feet pay the top rate of \$15 per square foot (psf) along with all project over five units. San Mateo County has fees of \$15 psf that apply to single family projects over 5 units with reduced rates for smaller developments. For single unit projects, fees apply only to the portion of the unit that exceeds 2,500 square feet.

A complete summary is provided in Section V. See also Section C. for a summary of rental unit requirements presented to provide context for potential requirements that would apply to faculty and staff housing proposed for the Stanford Campus.

Table III-2					
Affordable Housing Requirements in Other Jurisdictions - Ownership Units					
City / County	Percent	Affordability	Fee	Fee by Right?	
		Level			
Santa Cruz	15%	Moderate	Projects of 1-4 units,	Yes	
County			fee varies by unit size:		
			Up to 2,000 SF: \$2 psf		
			2,001-2,500 SF: \$3 psf		
			2,501-3,000 SF: \$5 psf 3,001-		
			4,000 SF: \$10 psf		
			4,001 and up = \$15 psf		
			Projects of 5+ units: \$15 psf		
			of habitable space		
San Mateo	Multifamily	Multifamily	Single Family:	Detached	
County	of 5+ units:	of 5+ units:	1 unit: \$5 psf over 2,500 SF	projects and	
,	20%	Extremely	2-4 units: \$5 psf for 1st	multifamily under	
		Low to	2.500 SF then \$12.50 psf	9 units only	
	Single	Moderate:	5+ units: \$15 psf	, , , , , , , , , , , , , , , , , , ,	
	Family: 15%	Single			
		Family:	Attached 5+ units:		
		Moderate	based on gap calculation		
	400/			N1/A	
Los Altos	10%	Low and	None	N/A	
	450/	Moderate	404.50		
Campbell	15%	Low and	\$34.50	Only projects	
	450/	Moderate		6 du/ ac. or less	
Santa Clara	15%	Average	Single Family: \$30 psf	Projects under 10	
		100% AMI	Townhome: \$25 psf	units only	
			Condo: \$20 pst		
Cupertino	15%	<sup>1</sup> / <sub>2</sub> Moderate,	\$15 detached; \$16.50	Projects under /	
		1/2 Median	attached	units only	
			\$20 multifamily		
San Jose	15%	Moderate	Affordability gap based on	Yes	
			attached unit re-sales.		
Mountain	10%	Median	3% of sales price	Projects under 10	
View				units only	
Sunnyvale	12.5%	Moderate	7% of sales price	Projects under 20	
				units only	
Fremont	Attached	Moderate	With on-site units:	Yes	
	3.5% + fee		Attached: \$18.50 psf		
			Detached: \$17.50 psf		
	Detached:				
	4.5% + fee		If no on-site units:		
			Attached: \$27 psf		
			Detached\$ \$26 psf		

See Table V-1 for more detail.

## 3. Market Context

Residential development activity in the unincorporated areas of the County outside of Stanford is limited. The activity is predominantly larger custom homes in the hills and, within the 'County Islands' that are surrounded by incorporated areas, and some smaller lot subdivisions. Other residential development activity includes guest units and secondary dwellings added to existing properties and the occasional mobile or manufactured home. The County does not anticipate higher density development, such as townhomes, condominiums, or apartment projects, in the unincorporated areas outside of Stanford. The following table provides a summary of residential permitting activity summarized from building permit database information provided by County staff. The County averaged between 30 to 40 dwelling units per year over the period from 2013 to 2015 and an average of 137,000 sq. ft. of habitable space built each year in the unincorporated area outside of Stanford. Based on this level of development activity, a new fee of, say, \$15 per square foot would translate into roughly \$2 million in annual fee revenue, if all new dwelling units were subject to the fee.

Table III-3 Overview of Sir	ngle Family Hom	e Permitting Activity
Year	Units	Habitable Sq.Ft.
2013	38	130,000
2014	34	160,000
2015*	39	120,000
Total	111	410,000
Average	37	137,000

Source: County of Santa Clara

2015 data is for January to November (11 months)

## 4. Program Recommendations

Following are KMA's recommendations should the County decide to proceed with a new affordable housing requirement for residential development in the unincorporated area of the County. These recommendations are focused on the unincorporated area outside of Stanford and reflect the strong residential market in the unincorporated County, nexus analysis results, a review of development activity and programs in nearby jurisdictions.

- a. *Residential Developments Subject to Program* Consider a program that applies to all new residential units in the unincorporated County, potentially excepting smaller units under a size threshold. Much of the development activity in the unincorporated area consists of single unit developments and custom homes. Unless requirements are applied to these developments, a potential new inclusionary policy may not produce many affordable units.
- b. *Fee Level* KMA recommends consideration of fees in the range of \$15 to \$16 psf, which is near the maximums supported by the nexus and consistent with levels recently

adopted by neighboring Santa Cruz and San Mateo counties. A graduated fee schedule that increases with unit size may be appropriate if the County wishes to encourage smaller units. Fees should be charged on a per square foot (psf) basis. Per square foot fees are simple and fair in that larger units pay larger fees, consistent with impacts and on-site equivalent costs.

- c. On-Site Affordable Unit Percentage Consider an on-site affordable unit percentage requirement of 15% to 20% for ownership units and 15% for rental. Set prices at moderate income or below and rents at low-income. Setting rental requirements at more than 15% would allow the State Department of Housing and Community Development (HCD), under AB 1505, to review the program to ensure that the higher inclusionary housing requirement does not diminish overall housing development. A requirement at this level will provide an incentive to utilize one of the other compliance options, such as fee payment or off-site provision of affordable units which appear to align better with the County's policy for development within rural unincorporated areas.
- d. Provide flexibility on size of affordable units but require parity with market rate units in terms of total square feet – New homes being built in the unincorporated County tend to be relatively large. While many inclusionary programs require affordable units to be the same size and bedroom count as the market rate project, affordable units need not be the same size as a 5,000 square foot market rate unit typical of the unincorporated area. However, requiring affordable units to maintain parity with the market rate units in aggregate square footage terms will help ensure inclusionary obligations are proportionate to the size of the market rate units and encourage compliance through alternatives such as fees or off-site units. As an example, a project with 7 units would owe one affordable unit based on a 15% requirement. If the average square footage of the market rate units is 5,000 square feet, then the square footage of the affordable units would also need to equal 5,000 square feet. However, multiple smaller affordable units could be provided instead of a single 5,000 square foot unit. For example, five 1,000square foot units or two 2,500-square foot affordable units. Guidelines or approval procedures addressing affordable unit size, bedroom count and bedroom size will be needed to ensure units are consistent with needs and marketable to qualified buyers.

While requirements for on-site affordable units will need to be specified, it is recognized that many projects will not have a practical ability to provide on-site affordable units due to zoning in rural areas which does not allow multiple units to be constructed on a single residentially zoned parcel. Projects that cannot provide on-site units will need to utilize the fee option or another compliance alternative such as off-site affordable units.

e. Off-Site Affordable Units – Provide an option to build affordable units off-site within incorporated communities nearest to the residential development. If the County would like to encourage utilization of this option, it could be structured to represent a

competitive choice relative to providing affordable units on-site. For example, the requirement to maintain parity with the total square footage of market rate units described above could be modified if units are provided off-site.

f. *Additions* – The nexus analysis enables the County to consider applying affordable housing fees to additions. If the County applies fees to additions, consider a minimum size threshold for fee application to limit the fee to just those additions that add significantly to the size of the dwelling unit or which add a guest house or other type of secondary dwelling unit.

## B. Countywide Non-Residential Affordable Housing Fees

The analysis prepared by KMA will enable the County to consider adoption of a new affordable housing fee applicable to non-residential development in the County. The following section provides KMA's recommendations regarding a fee range for non-residential development, excluding the Stanford Campus, should the County choose to move forward with a new fee, along with a summary of the factors considered by KMA. Stanford Campus findings are presented in Section C.

## 1. Nexus Analysis Findings

The KMA non-residential nexus analysis found very high supportable fee levels. The high fee levels supported by the analysis are not unusual for high cost areas such as the County of Santa Clara. The nexus analysis establishes only maximum fee levels. The actual fee would be set based on a number of policy considerations. The table below indicates the nexus analysis results.

Table III-4 Maximum Supported Non-Residential Fee Per Square Foot	
Office	\$113.40
Retail	\$213.40
Hotel	\$102.50
Light Industrial	\$118.60
Warehouse	\$37.80

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment B for detail.

Fee levels should be selected based on a combination of the strength of the local real estate for the building types that will pay the fee, and local policy objectives. We also believe it is appropriate to take into account the fee levels in neighboring jurisdictions and jurisdictions that are comparable to the County in real estate demand.

## 2. Fees in Other Jurisdictions

The chart below summarizes fee levels for other counties as well as the cities within the County of Santa Clara that have adopted non-residential fees. The jurisdictions with the highest fees tend to be in areas with very strong demand for non-residential space, such as Palo Alto, Cupertino, and Mountain View. Fee levels in the East Bay and elsewhere tend to be lower than those found in Santa Clara County and the Peninsula. San Jose, the largest city in the County, does not have a non-residential fee program.

For the programs in other counties, office fees range from just under \$1 per square foot in Sacramento and San Luis Obispo counties to \$25 per square foot in San Mateo County. For Retail, the counties range from \$0.77 psf (Sacramento County) to \$7.50 (Napa County) and with hotel, the range is \$0.92 psf (Sacramento County) to \$10.00 psf (San Mateo County). In neighboring Santa Cruz County, the fee is \$2 for all types of non-residential development. Alameda County, along with ten cities within Santa Clara and Alameda counties may also consider new non-residential fees as part of this multi-jurisdiction effort. Of the participating jurisdictions, thus far, the cities of Fremont and Santa Clara have adopted new non-residential fees. More details can be found in Section V and Table V-8 at the end of this report.

Table III-5 Non-Residential Housing Impact Clara	Fees – Other Co	ounties and Cit	ies in County	v of Santa	
Non-Residential Fees	Office \$/SF	Retail \$/SF	Hotel \$/SF	Industrial \$/SF	
County Programs					
San Mateo County	\$25.00	\$5.00	\$10.00	N/A	
Marin County	\$7.19	\$5.40	\$3.00	\$3.74	
Santa Cruz County	\$2.00	\$2.00	\$2.00	\$2.00	
Sonoma County	\$2.64	\$4.56	\$2.64	\$2.72	
Napa County	\$5.25	\$7.50	\$9.00	\$4.50	
Sacramento County	\$0.97	\$0.77	\$0.92	\$0.61	
San Luis Obispo County	\$0.96	\$1.36	\$1.44	\$0.58	
Cities within County of Santa Cla	Cities within County of Santa Clara				
Palo Alto	\$35.00	\$20.37	\$20.37	\$20.37	
Mountain View	\$25.00	\$2.68	\$2.68	\$25.00	
City of Santa Clara	\$20.00	\$5.00	\$5.00	\$10.00	
Cupertino	\$20.00	\$10.00	\$10.00	\$20.00	
Sunnyvale	\$15.00	\$7.50	\$7.50	\$15.00	

N/A = No fee or no applicable category

See Table V-8 for more details including features such as exemptions and size thresholds.

## 3. Total Development Costs

KMA estimated the total development cost associated with each building type and examined fee levels in the context of total costs. Total costs include construction, all permits and fees, land, financing and other. This facilitates an evaluation of whether the amount is likely to affect development decisions. Four non-residential prototype projects were selected for review of total development costs. The prototypes include office, hotel, retail, and light industrial. The cost estimates were prepared based on local information and our firm's extensive work with real estate projects throughout Silicon Valley and the Bay Area. Cost estimates were prepared in 2016 and have not been updated for subsequent escalation. More detail on the analysis can be found in Section V. The results are summarized below:

Table III-6			
Total Development Costs – Non-Residential			
Building Type	Cost		
Office	\$525 - \$625 per sq.ft.		
Hotel	\$325 - \$425 per sq.ft.		
Retail / Restaurant / Service	\$400 - \$500 per sq.ft.		
Light Industrial	\$250 - \$300 per sq.ft.		

One useful way to evaluate alternative fee levels is to examine them as a percent of total development costs. For example, at 1% to 3% of costs, we would see the following fee levels:

Table III-7				
Fees as a Percent of Development Costs				
Building Type	1%	2%	3%	
Office	\$6 psf	\$11 psf	\$17 psf	
Hotel	\$4 psf	\$7 psf	\$11 psf	
Retail / Restaurant	\$4 psf	\$9 psf	\$13 psf	
Light Industrial	\$3 psf	\$5 psf	\$8 psf	

## 4. Market Context

Based on a review of building permit activity over the four year period from 2012 to 2015, there is minimal non-residential development in the unincorporated County outside of the Stanford Campus. Two winery buildings were permitted during the period, one a new structure and one a change in use of an existing agricultural structure to a tasting room. Beyond that, virtually all building activity in the unincorporated County has occurred within the Stanford Campus.

## 5. Recommended Fee Levels for Non-Residential Outside of Stanford

Due to the very limited amount of non-residential development activity that has occurred over the past few years in the unincorporated County outside of Stanford, a new non-residential fee program could be expected to generate only a minor amount of revenue for affordable housing. If the County decides to proceed with a new non-residential affordable housing fee, KMA recommends consideration of fees within the range of \$3 to \$7 psf applicable to non-residential development within the unincorporated communities outside of the Stanford area. This level is supported by the analysis and would place the County of Santa Clara within the range of other county programs (Table III – 5). Establishing a program would position the County to collect affordable housing fees if development activity increases in the future. A minimum square footage size threshold for application of the fee could be considered so very small non-residential projects would not be subject to the fee.

## C. Stanford-Specific Affordable Housing Fee Analyses and Context Materials

This section focuses on the Affordable Housing Nexus Analysis Addendum addressing the Stanford University Campus. The Addendum was prepared to support adoption of affordable housing fees applicable to the Stanford University Campus as part of a proposed new affordable housing requirement applicable to development throughout the unincorporated area of the County. The County program to implement affordable housing fees on the Stanford Campus may come in the form of affordable housing impact fees or inclusionary housing/in-lieu fees on residential and/or non-residential development. The analysis in the Addendum supports either approach. The following section summarizes the findings of the Addendum as well as a series of materials designed to provide context for considering potential fee levels that would be appropriate for the Stanford Campus.

The Addendum analyzes the expansion of the Stanford Campus proposed under the 2018 GUP including addition of 2,275,000 square feet of academic space, 550 faculty and staff housing units and 2,600 student beds. Although a specific development scenario is analyzed, per square foot findings will remain valid even if development levels are modified. The analysis methodology is consistent with the Countywide Nexus Study with adaptations to reflect data that is specific to the Stanford Campus including survey data provided by Stanford on the household incomes of its workforce.

## Nexus Analysis Findings for the Stanford Campus

Following is a summary of maximum supported affordable housing fee levels for the Stanford Campus. See Section IV. for an overview of the nexus analysis methodology and Attachment C for full documentation.

## 1. Academic Space

The maximum supported affordable housing fee level for academic space identified in the Addendum is summarized below. Findings represent the maximum fee that could be charged for construction of new academic space to mitigate the impact on the need for affordable housing.

## Table III-8 Maximum Supported Affordable Housing Fee for Academic Space

#### \$143.10 Per Square Foot

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment C for supporting analysis.

A \$74.90 psf portion of the maximum fee relates to workers earning up to 80% of AMI (corresponding the Extremely Low, Very Low, and Low-Income categories) and the remaining \$68.20 psf portion of the fee relates to housing needs of Moderate-Income workers between 80% and 120% of AMI.

## 2. Faculty and Staff Housing

The maximum supported affordable housing fee level for faculty and staff housing identified in the Addendum is \$69.10 per square foot of net residential area (exclusive of parking, corridors and other common areas).

Table III-9 Maximum Supported Affordable Housing Fee for Faculty and Staff Housing
\$69.10 Per Square Foot

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment C for supporting analysis.

A \$51.80 psf portion of the maximum supported fee relates to workers earning up to 80% of AMI and the remaining \$17.30 psf portion of the fee relates to housing needs of Moderate-Income workers between 80% and 120% of AMI.

Stanford-specific findings are higher on a per square foot basis than those identified in the Countywide nexus study partially due to the smaller average unit size, which usually results in higher nexus findings on a per square foot basis. In addition, the analysis reflects updated data on the cost of delivering affordable units and the higher cost of providing affordable units in the vicinity of the Stanford Campus than in lower land cost locations such as Gilroy or Morgan Hill, which are reflected in the Countywide analysis.

## Materials Assembled to Provide Context for Academic Space Fees

The following section presents additional materials designed to provide context for potential fee levels applicable to academic space. The nexus analysis only establishes a maximum; the County is free to consider a range of other factors in setting fees anywhere below the maximums supported by the analysis.

Context materials include a review of:

- 1. Existing affordable housing requirements for the Stanford Campus established in the 2000 GUP;
- 2. Non-residential affordable housing fee levels for cities near the Stanford Campus;
- Affordable housing and community amenities provided in conjunction with other university expansion projects;
- 4. Provisions for affordable housing as part of Stanford projects in Palo Alto and Redwood City;
- 5. Applicability of commercial linkage fees adopted in other communities to non-profit educational institutions; and
- 6. Development costs for academic space relative to other non-residential uses.

## 1. Existing Affordable Housing Requirements Established in 2000 GUP

Under the existing 2000 GUP, Stanford is required to either construct one affordable housing unit for each 11,763 square feet of academic space or make a cash payment in-lieu of providing the units. If Stanford elects to provide the units, a range of affordability is required with one third each at Very Low (up to 50% of Area Median Income or AMI), Low (up to 80% AMI), and Moderate-Income (up to 120% AMI). If the cash option is selected, the amount due is equal to the then current affordable housing fee for commercial development in the City of Palo Alto. Payments are deposited into a County-administered Affordable Housing Fund dedicated to the creation of affordable housing within a six-mile radius of the Stanford Campus. Priority for occupancy of the units is given to Stanford employees to the extent allowable by law.

## 2. Affordable Housing Fees in Nearby Jurisdictions

Peninsula and Silicon Valley cities in the vicinity of the Stanford Campus have among the highest affordable housing fees in the Bay Area as well as nationally. High fees adopted by these communities are a reflection of strong demand for non-residential space, which enables development projects to sustain higher fees, and the acute affordable housing challenges confronted by the communities in the heart of Silicon Valley. The chart below shows selected examples. The chart is intended as a general illustration and may not reflect application of annual inflation adjustments since the time the fee survey was originally conducted in all cases. Rates reflect fees applicable to commercial development. As further discussed below, non-profit, educational and institutional uses are commonly exempted.

Table III-10 Non-Residential Affordable Housing Fees	Office \$/SF	Retail \$/SF	Hotel \$/SF
Palo Alto	\$35.00	\$20.37	\$20.37
Mountain View	\$25.00	\$2.68	\$2.68
Menlo Park	\$16.90	\$9.17	\$9.17
San Mateo County	\$25.00	\$5.00	\$10.00
Santa Clara	\$20.00	\$5.00	\$5.00
Sunnyvale	\$15.00	\$7.50	\$7.50
Cupertino	\$20.00	\$10.00	\$10.00
San Mateo	\$25.00	\$10.00	\$5.00
San Bruno	\$12.50	\$6.25	\$12.50
Redwood City	\$20.00	\$5.00	\$5.00
San Francisco	\$25.49	\$23.78	\$19.08

Fees are generally set well below the maximums that are supported by the accompanying nexus study in consideration of economic and / or other policy objectives. For example, Mountain View's nexus study supported fees of \$243 psf for retail, which is significantly higher than the \$2.68 psf fee that is currently in place. Palo Alto's nexus study supported fees of \$264 psf for Office/R&D. The City Council ultimately adopted a fee of \$35 psf.

## 3. Other University Expansion Projects - Affordable Housing and Community Amenities

KMA researched affordable housing provided by other universities in connection with university expansion projects. We identified the following university expansion projects that included provisions for affordable housing:

- Massachusetts Institute of Technology (MIT),
- Columbia University,
- > University of Southern California,
- Harvard University,
- > University of California San Francisco (UCSF), and
- > Yale-New Haven Hospital.

In addition to affordable housing, other community improvements or amenities were also provided for as part of these expansion projects; for example, traffic/transportation, education, and job training or local hiring. Table III-11 presents a summary.

Columbia University and the University of Southern California each provided \$20 million in affordable housing funds, which equates to \$2.94 per square foot and \$6.63 per square foot, respectively. The UCSF expansion project includes a 100% Below Market Rate graduate student housing project. Yale-New Haven Hospital agreed to make a \$1.2 million payment to the City's Housing & Economic Development department for general use by the City. The MIT

project, which includes new housing, retail and office space, set aside over 20% of the housing units as affordable and paid the City's commercial linkage fee equal to \$15 per square foot for the commercial component of the project. The Harvard University expansion included payment of the City of Boston's housing linkage fee, which is \$8.34 per square foot.

## 4. Stanford Projects in Palo Alto and Redwood City

The following provides a summary of affordable housing funding provided under negotiated development agreements for Stanford projects in Palo Alto and Redwood City.

- Stanford University Medical Center Expansion As part of a 2011 Development Agreement relating to the expansion and upgrade of the Stanford University Medical Center, Stanford agreed to pay \$23.2 million to the City. Funds are permitted to be used for infrastructure, sustainable neighborhoods and communities, and affordable housing. The medical center is not subject to Palo Alto's commercial linkage fee. The \$23.2 million payment equates to approximately \$18 per square foot and approximates what a commercial project would have paid as a commercial linkage fee based on fee levels in place at the time.
- Stanford Redwood City Campus As part of the development agreement for Stanford's new 35-acre, 1.5 million square foot campus which included office, medical clinics and R&D space, Stanford agreed to provide community amenities and improvements valued at \$15 million including bike lanes, educational programming for city residents, a speaker series, among other items. No affordable housing funds were provided.

# Table III-11Affordable Housing and Community Amenities

Other University Expansion Projects

	MIT	Yale-New Haven Hospital	Columbia University	University of Southern California	Harvard University	UCSF
Project	Volpe Expansion & Redevelopment	Cancer Center / North Pavilion	Manhattanville Expansion	University Park Campus Specific Plan	Allston Expansion	Dogpatch Expansion
Date	2017	2006	2009	2012	2013	2017
Description	1.7 million sf of commercial; 1,400 housing units.	500,000 sf cancer center; Mixed Use incl. 845-car parking garage, retail, comm'l and hsng; 165,000 sf medical office building.	6.8 million square foot campus expansion	2.5 million sf academic space; 350,000 sf retail; and 2,135,000 sf student / faculty housing (up to 5,400 student beds). 165,000 sf hotel. 80,000 sf K-8 school.	1.4 million sf Including academic, stadium renovation; athletic facilities; retail and Hotel	274,000 sf academic/ research neuroscience center. 170,000 sf mental health services bldg. (outpatient, research, office space). 595 units student housing.
Affordable Housing	\$26 million comm'l linkage fee (\$15 psf); housing to be 20% affordable with 280 affordable units and 20 middle-income (80- 120% AMI) units	\$1.2 million to City's Housing & Economic Development office. Not specifically for housing.	\$20 million Affordable Housing Fund (\$2.94/sf)	\$20 million fund (\$6.63/sf academic, retail, hotel space). Min. 3,000 student beds. If build 4,038 beds & 70% of students on campus, \$5MM waived.	\$11 million. (Boston charges \$8.34/sf in excess of 100,000 sf.)	The 595 units of graduate student housing will be below- market-rate.
Other Community Improvements and Amenities	Community center, traffic improvements, community fund, multi- use path, arts program, community events.	career services, outreach coordinators, traffic improvements, youth initiative, parking management.	benefits fund, legal assistance, in- kind benefits, new public school.	Grocery store, fire Station, park improvements, funding to local schools, transit/ ped / bicycle improvements.	Education / training center; flexible fund for community improvements; public space; education and workforce development.	\$10.5 million of local improvements proposed for transportation, parks, and historic rehab.

## 5. Treatment of Educational Institutions in Other Affordable Housing Fee Programs

The Stanford Campus is a non-profit educational institution. This section reviews how affordable housing fee programs in other jurisdictions would apply to this type of use.

- Programs that Would Exempt Many affordable housing fee programs include exemptions that would apply to a use like the Stanford Campus. Schools, non-profit organizations and institutional uses are common exemptions that would all generally apply to a use comparable to academic space on the Stanford Campus. Programs in effect in Palo Alto, Menlo Park, Redwood City and San Francisco are all examples of programs with exemptions that likely would apply to a use like the Stanford Campus. New Jersey's state law governing non-residential development fees, which includes the fees charged in Princeton, NJ, includes an exemption for tax-exempt educational purposes.
- Programs Where Fees Would Apply Some programs apply affordable housing fees to nearly all uses. This includes non-profit institutional uses such as the Stanford Campus. Even government buildings are subject to fees in some communities. The idea is that all employment uses contribute to the need for affordable housing and must share in the responsibility for addressing the problem.
  - Cambridge, Massachusetts recently expanded its fee program and now requires the Massachusetts Institute of Technology, Harvard, and other local institutions to pay an affordable housing fee equal to \$15 per square foot.
  - The City of Boston, where many universities are located, has a fee of \$8.34 per square foot and does not exempt universities or other institutions.
  - Santa Monica has a fee of \$10.46 per square foot applicable to institutional uses and, while K-12 educational uses are exempt, the exemption does not extend to colleges and universities.
  - The City of Los Angeles has a new fee of \$3 to \$5 per square foot (rate varies by zone) that applies to private colleges and universities.
  - Corte Madera has a fee of \$2.39 that applies to schools.
  - Boulder Colorado has a fee of \$4.08 per square foot that applies to institutional uses.

Every jurisdiction takes their local economy, development activity and major land uses into account in tailoring their program to meet local needs and objectives. The County's circumstances are unique in that a major private university represents a significant share of the non-residential development activity within the unincorporated area where the County has responsibility for land use regulation.

## 6. Fees in Relationship to Total Development Costs

KMA estimated the total development cost for four non-residential building types as summarized in Section B.3 (page 14). The purpose of providing this information was to enable an understanding of fees in relationship to their impact on the total cost of a project. This section provides similar development cost context information for academic space.

To assist in understanding how development costs for academic space compare to the more typical types of commercial development, KMA reviewed publicly available development cost data from the University of California Office of the President. Table III-12 provides examples of costs applicable to completed laboratory, office, classroom, library, student centers, and athletic facilities on various UC campuses. The most recent examples of newly built facilities were selected in each of several facility categories, using Bay Area examples where possible. As shown, costs span a wide range and can be well above that of commercial development. At the lower end, a faculty office building in the Mission Bay campus of UCSF had a project cost of \$470 per square foot, but that cost does not include the very substantial site acquisition costs for the Mission Bay campus. On the high end, costs were \$1,070 per square foot for seismic replacement of Campbell Hall on the Berkeley campus in 2011. All costs are as of the year indicated without adjustment for subsequent cost increases or other factors and would be higher if built today. In contrast to the commercial cost estimates, academic space costs generally do not include site acquisition costs because they are built on existing university property. High costs are driven by the specialized nature of these buildings, some of which include specialized systems or equipment. Distinctive architecture and materials can also be a contributor to higher costs.

Table III-12 Academic Space Development Costs University of California Examples				
<u>Name</u>	<u>Campus</u>	Facility Type	<u>Cost PSF*</u>	Year
Computational Research and Theory Facility	Berkeley	Lab	\$890	2012
MB Block 25A Academic Building	SF	Faculty offices	\$470	2012
Campbell Hall Seismic Replacement	Berkeley	Office/Lab/Class	\$1,070	2011
Ostin Music Center	LA	Music facility	\$990	2011
Teaching and Learning Center for Health Sciences	LA	Classroom	\$870	2013
Segundo Services Center	Davis	Student center	\$870	2009
C. V. Starr East Asian Library	Berkeley	Library	\$690	2005
Student Athlete High Performance Center	Berkeley	Athletic facility	\$790	2006

Source: University of California Office of the President.

\*costs have not been adjusted for subsequent changes in construction cost or other factors and generally do not include site acquisition costs.

This data is useful context in considering the burden various potential fee levels represent. Due to the comparatively high development costs associated with academic space, each dollar of

affordable housing fee will typically have a smaller percentage impact on the total project budget for a new academic building than it would have for a commercial building.

This cost data can be helpful in comparing potential academic space fee levels to fee levels for other uses. For example, office fee levels in the \$25 to \$35 per square foot range translates to approximately 4.3% to 6.1% of total development costs. Based on the higher development costs of academic space compared to office, academic space fees of \$35 to \$49 per square foot would represent a similar cost burden in percentage terms based on the representative cost ranges identified in Table III-13.

Table III-13 Relative Fee Burdens for Affordable Housing Impact Fees*				
	Academic Space	<u>Office</u>	<u>Retail</u>	
Representative Cost Range** Midpoint	\$500 - \$1,100/sf \$800/sf	\$525 - \$625/sf \$575/sf	\$400 - \$500/sf \$450/sf	
\$20 fee as percent of cost	2.5%	3.5%	4.4%	
\$25 fee as percent of cost	3.1%	4.3%	5.6%	
\$30 fee as percent of cost	3.8%	5.2%	6.7%	
\$35 fee as percent of cost	4.4%	6.1%	7.8%	
\$40 fee as percent of cost	5.0%	7.0%	8.9%	
\$50 fee as percent of cost	6.3%	8.7%	11.1%	

\*Percentages calculated at midpoint of cost range.

\*\* Academic space cost range from prior page. Office and retail ranges per Section B.3. page 14.

It should be noted that commercial cost ranges were intended as representative for Silicon Valley and costs may be somewhat higher in communities near the Stanford Campus due to their higher land costs.

## Context for Fees Applicable to Faculty and Staff Housing

The following section presents information regarding fee levels applicable to rental housing in nearby jurisdictions to provide context for potential fees applicable to faculty and staff housing. Since the faculty and staff housing is expected to be rental, the summary of fees is focused on rental fees in other communities. Affordable housing fee requirements in the comparison jurisdictions range from \$17 up to approximately \$26 per square foot. Most of the comparisons are impact fees except for San Jose, which has an in-lieu fee. Two cities have a \$17/sq. ft. fee, three have a \$20/sq. ft. rate, and East Palo Alto has a fee of \$22.70/sq. ft. Cupertino has a rate of \$25 per square foot that applies when projects exceed 35 dwelling units per acre, a density that many new apartments in the Bay Area do exceed. Following enactment of AB 1505, San Jose is replacing its rental housing impact fee of \$17 per square foot with an in-lieu fee of

\$125,000 per affordable unit owed, which converts to approximately \$26 per square foot for a 950 square foot apartment.

Table III-14           Fees in Other Jurisdictions Applicable to Rental Housing			
City	Fee Level		
Palo Alto	\$20 / sq.ft.		
East Palo Alto	\$22.70 / sq.ft.		
Mountain View	\$17 / sq. ft.		
Redwood City	\$20 / sq.ft.		
Cupertino	\$20 / sq. ft. and \$25 for projects over 35 du/acre		
San Jose	Equivalent to approx. \$26 / sq. ft.*		
Sunnyvale	\$17 / sq. ft. (\$8.50 for projects with 4 – 7 units)		

Note: Fees may not reflect application of annual index.

\*Estimate reflects fee of \$125,000 per affordable unit X 20% divided by a 950 square foot average rental unit size.

## Summary of Fee Considerations and Policy Options for Stanford Campus

The analyses and context materials assembled to help inform selection of fee levels appropriate for the Stanford Campus are synthesized into a single summary table shown below.

Table III-15					
Summary of Stanford Campus Fee Considerations					
Considerations	Affordable Housing Fee or Mitigation (\$ / Sq.Ft.)	Comment			
Academic Space Fee Considerations					
Nexus Maximum	\$143	Jurisdictions generally set fees well below			
		nexus maximums			
Existing Fee <sup>1</sup>	\$35	Established in 2000 GUP and tied to Palo			
		Alto's fee.			
Nearby Jurisdiction Fees for	\$12.50 - \$35	Palo Alto is highest @\$35. \$20 - \$25 is most			
Office Use		common.			
Affordable Housing Provided with	\$0 - \$8.34	Harvard represented top end of range.			
Other University Expansions					
Other Stanford Projects		Medical center expansion funds can be used			
- Medical Center	\$18	for affordable housing or other community			
- Redwood City Campus	N/A	needs. Redwood City campus did not include			
		an affordable housing mitigation.			
Other jurisdiction fees that would	\$2.39 - \$15	Indicated range is for jurisdictions where fees			
apply to private universities		would apply. Many programs exempt non-			
		profits and / or institutional uses.			
Fees Relative to Development	\$35 - \$49 fee	Illustrates a fee range for academic space that			
Costs for Academic Space	represents similar	would represent a similar percentage of total			
	burden to \$25 - \$35	development costs as a \$25 to \$35 fee			
	office fee as % of	applicable to office development. See Table			
	cost	III-13 for additional fee level examples.			
Faculty and Staff Housing Fee Considerations					
Nexus Maximum	\$69.10	Fees are commonly set below nexus			
		maximums based on other considerations.			
Other Jurisdiction Fees for Rental	\$17 - \$26	Upper end of the range is for San Jose.			
Housing					

## Policy Options for Fees Applicable to the Stanford Campus

The following outlines policy options for affordable housing fee levels applicable to the Stanford Campus identified in consultation with County staff. The County is free to take these and / or other considerations into account in selecting fee levels appropriate for the Stanford Campus.

<sup>&</sup>lt;sup>1</sup> Per County staff, the City of Palo Alto's affordable housing fee for office and R&D development, currently \$35 per square foot, applies for purposes of determining the cash payment in-lieu of providing affordable units under Section F.(6)(c) of the General Use Permit.

## Academic Space Policy Options

- (1) Full Mitigation If the County would like to fully mitigate the affordable housing impacts of new academic space, the fee would need to be set at the nexus maximum of \$143 psf. A fee at this level represents an added cost in the approximate range of 18% of the total cost of development for academic space.
- (2) Mitigation of Housing Need through 80% of Area Median Income (AMI) A fee of \$75 psf would be sufficient to address affordable housing impacts up to 80% of AMI (Extremely Low-, Very Low- and Low-Income, omitting Moderate-Income). A fee at this level represents an added cost in the approximate range of 9% of the total cost of development for academic space. In November 2016, the County voters approved Measure A authorizing up to \$950 million in general obligation bonds for the creation of affordable housing. The majority of this funding is designated for affordable units that serve vulnerable populations, low income individuals and families earning 80% or less of area median income, and homeless individuals. A fee set at 0% to 80% of AMI would be consistent with Measure A's commitment to addressing affordable housing needs within this income range.

## Faculty and Staff Housing Policy Options

- (1) Full Mitigation If the County would like to fully mitigate the affordable housing impacts of new faculty and staff housing, the fee would need to be set at the nexus maximum of \$69 psf. As with the academic space options described above, an alternative addressing housing need through 80% of AMI could also be considered.
- (2) Require On-Site Units The County could require deed-restricted affordable units onsite in conjunction with a new Countywide inclusionary policy. For example, the policy could require projects over a certain number of units to include affordable units on-site. If faculty and staff units are built as rentals as Stanford anticipates, under AB 1505, the County must provide at least one alternative such as land dedication or off-site affordable units.

These policy options are summarized in Table III-16 below.

Table II	Table III-16				
Summa	Summary of Policy Options				
		Affordable Housing Fee			
Option	Basis for Option	(\$ / Sq.Ft.)			
Acaden	nic Space Fees				
1.	Full Mitigation of Impacts through 120% AMI	\$143			
	(Extremely Low, Very Low, Low, and Moderate-Income)				
2.	Full Mitigation of Impacts through 80% of AMI	\$75			
	(Extremely Low, Very Low, Low-Income)				
Faculty	and Staff Housing Fees				
1.	Full Mitigation	\$69			
2	Require On-Site Units	provide affordable units			

Note: see narrative above for additional description.

## **Approaches to Indexing Fees**

Most affordable housing fee programs include a mechanism for automatic indexing in the years between major updates to help ensure fees keep pace with the cost of providing affordable units. The most common indices are the Consumer Price Index (CPI) published by the Bureau of Labor Statistics and the Building Cost Index (BCI) and Construction Cost Index (CCI), both published by Engineering News Record (ENR). Some inclusionary programs, such as San Jose's, tie changes in fees to an affordability gap calculation that is updated each year in accordance with a prescribed methodology. This approach has the advantage of keeping fees in line with changes in the cost to provide affordable units. Disadvantages are that fee levels can be more volatile from year to year and a technical analysis is required to determine the fee level each year. A more comprehensive update of fees and the underlying nexus analyses typically occurs on a longer cycle of approximately five to ten years.

## **IV. SUMMARY OF NEXUS ANALYSES**

This section provides a concise summary of the residential and non-residential nexus analyses prepared for the County of Santa Clara, including the Addendum prepared to address the Stanford Campus. The analyses provide documentation necessary for adoption of new affordable housing fees applicable to residential and non-residential development. The analyses establish maximum supportable fee levels based on the impact new residential and non-residential development has on the need for affordable housing. Findings represent the results of an impact analysis only and are <u>not</u> recommended fee levels. Full documentation of the analyses can be found in the nexus reports included as Attachments A, B and C.

## A. Countywide Residential Nexus Analysis Summary

The residential nexus analysis establishes maximum supportable fee levels applicable to residential development. The underlying concept of the residential nexus analysis is that the newly constructed units represent net new households in the County. These households represent new income in the County that will consume goods and services, either through purchases of goods and services or "consumption" of governmental services. New consumption generates new local jobs; a portion of the new jobs are at lower compensation levels; low compensation jobs relate to lower income households that cannot afford market rate units and therefore need affordable housing.



#### **Nexus Analysis Concept**

## 1. Market Rate Residential Prototypes

In collaboration with County staff, two market rate residential prototypes were selected. The selected prototypes were identified to represent new residential units likely to be built in the unincorporated area in the immediate to mid-term future.

A summary of the two residential prototypes is presented below. Market survey and building permit data were used to develop the information. Market sales prices were estimated based on KMA's market research.

Table IV-1         Prototypical Residential Units for County of Santa Clara			
		Smaller Single Family	
	Single Family Detached	Detached (County Island)	
Avg. Unit Size	5,000 SF	2,600 SF	
Avg. No. of Bedrooms	4.00	4.00	
Avg. Sales Price / Rent	\$2,000,000	\$900,000	
Per Square Foot	\$400 /SF	\$346 /SF	

## 2. Household Expenditures and Job Generation

Using the sales price applicable to each of the two market rate residential prototypes, KMA estimates the household income of the purchasing household. Household income is then translated to income available for expenditures after deducting taxes, savings and household debt, which becomes the input to the IMPLAN model. The IMPLAN model is used to estimate the employment generated by the new household spending. The IMPLAN model is an economic model widely used for the past 35 years to quantify the impacts of changes in a local economy. For ease of presentation the analysis is conducted based on an assumed project size of 100 market rate units.

A 20% downward adjustment is made to the IMPLAN employment estimates based on the expectation that a portion of jobs may be filled by existing workers who already have housing locally. The 20% adjustment is based upon job losses in declining sectors of the local economy over a historic period. Workers from declining sectors are assumed to fill a portion of the new jobs in sectors that serve residents.

The translation from market rate sales prices for the prototypical units to the estimated number of jobs in sectors such as retail, restaurants, health care and others providing goods and services to new residents is summarized in the table below.

Table IV-2 Household Income, Expenditures, Job Generation, and Net New Worker Households				
	Single Family Detached	Smaller Single Family Detached (County Island)		
Avg. Sales Price / Rent	\$2,000,000	\$900,000		
Gross Household Income	\$345,000	\$172,000		
Net Annual Income available	\$196,700	\$115,200		
Total Jobs Generated [from IMPLAN] (100 Units)	118.6	69.4		
Net New Jobs after 20% reduction for declining industries (100 units)	94.9	55.6		

See Attachment A: Residential Nexus Analysis report for full documentation.

## 3. Compensation Levels of Jobs and Household Income

The output of the IMPLAN model – the numbers of jobs by industry – is then entered into the Keyser Marston Associates jobs housing nexus analysis model to quantify the compensation levels of new jobs and the income of the new worker households. The KMA model sorts the jobs by industry into jobs by occupation, based on national data, and then attaches local wage distribution data to the occupations, using recent data specific to the County from the California Employment Development Department (EDD). The KMA model also converts the number of employees to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced. For purposes of the adjustment from jobs to housing units, the average of 1.72 workers per working household in the County is used.

Table IV-3 Adjustment from No. of Workers to No. of Households				
		Smaller Single Family		
	Single Family Detached	Detached (County Island)		
Net New Jobs (100 Units)	94.9	55.6		
Divide by No. of Workers per Worker Household	1.72	1.72		
Net new worker households (100 Units)	55.2	32.4		

The output of the model is the number of new worker households by income level (expressed in relation to the Area Median Income, or AMI) attributable to the new residential units and new households. Four categories of addressed: Extremely Low (under 30% of AMI), Very Low (30% to 50% of AMI), Low (50% to 80% of AMI) and Moderate (80% to 120% of AMI).

Following are the numbers of worker households by income level associated with the County of Santa Clara prototype units.

Table IV-4			
New Worker Households per 100 Market Rate Units			
		Smaller Single Family	
	Single Family Detached	Detached (County Island)	
Extremely Low (0%-30% AMI)	9.9	5.8	
Very Low (30%-50% AMI)	14.9	8.8	
Low (50%-80% AMI)	12.7	7.4	
Moderate (80%-120% AMI)	8.1	4.8	
Total, Less than 120% AMI	45.6	26.7	
Greater than 120% AMI	9.6	5.6	
Total, New Households	55.2	32.4	

See Attachment A: Residential Nexus Analysis report for full documentation.

Housing demand is distributed across the lower income tiers. The finding that the greatest number of households occurs in the Very Low and Low-Income tiers is driven by the fact that a large share of the jobs most directly associated with consumer spending tend to be low-paying, such as food preparation, administrative, and retail sales occupations.

## 4. Nexus Supported Maximum Fee Levels

The next step in the nexus analysis takes the number of households in the lower income categories associated with the market rate units and identifies the total subsidy required to make housing affordable. This is done for each of the prototype units to establish the 'total nexus cost,' which is the Maximum Supported Fee conclusion of the analysis. For the purposes of the analysis, KMA assumes that affordable housing fee revenues will be used to subsidize affordable rental units for households earning less than 80% of median income, and to subsidize affordable ownership units for households earning between 80% and 120% of median income.

Affordability gaps, or the needed subsidy amounts, are calculated for each of the income tiers. Then the affordability gaps (which is the difference between total development cost and unit value based on the affordable rent or sales price) are multiplied by the number of households in each income tier to produce the total nexus cost (i.e. mitigation cost.). The Maximum Supported Fees are calculated at the per-unit level and the per-square-foot level and are shown in the table below.

Table IV-5 Maximum Supported Residential Fees, County of Santa Clara			
		Smaller Single Family	
	Single Family Detached	Detached (County Island)	
Per Market Rate Unit	\$83,000	\$48,600	
Per Square Foot*	\$16.60	\$18.70	

\* Applies to net rentable / sellable area exclusive of garage space, external corridors and other common areas.

These costs express the maximum supported fees for the two residential prototype developments in the County of Santa Clara. These findings are **not** recommended fee levels.

## B. Countywide Non-Residential Nexus Analysis Summary

The non-residential nexus analysis quantifies and documents the impact of the construction of new workplace buildings (office, retail, hotels, etc.) on the demand for affordable housing. It is conducted to support the consideration of a new affordable housing fee applicable to non-residential development in the County.

Full documentation of the nexus analysis is contained in the report entitled <u>Non-Residential</u> <u>Nexus Analysis</u> included as Attachment B.

The workplace buildings that are the subject of this analysis represent a cross section of typical commercial buildings developed throughout the County in recent years and expected to be built in the near-term. For purposes of the analysis, the following five building types were identified:

- Office
- Hotel
- Retail / Restaurant / Service
- Light Industrial
- Warehouse

The nexus analysis links new non-residential buildings with new workers; these workers demand additional housing, a portion of which needs to be affordable to the workers in lower income households. The analysis begins by assuming a 100,000 square foot building for each of the five building types and then makes the following calculations:

- The total number of employees working in the building is estimated based on average employment density data.
- Occupation and income information for typical job types in the building are used to calculate how many of those jobs pay compensation at the levels addressed in the
analysis. Compensation data is from California EDD and is specific to the County of Santa Clara. Worker occupations by building type are derived from the 2014 Occupational Employment Survey by the U.S. Bureau of Labor Statistics.

- New jobs are adjusted to new households, using County demographics on the number of workers per household. We know from the Census that many workers are members of households where more than one person is employed and there is also a range of household sizes; we use factors derived from the Census to translate the number of workers into households of various size. Household income is calculated depending on the number of workers per household.
- The number of Extremely Low-, Very Low-, Low-, and Moderate-Income households generated by the new development is calculated and divided by the 100,000 square foot building size to arrive at coefficients of housing units per square foot of building area. The household income categories addressed in the analysis are the same as those in the Residential Nexus Analysis.
- The number of lower income households per square foot is multiplied by the affordability gap, or the cost of delivering housing units affordable to these income groups. This is the Maximum Supported Fee for the non-residential land uses.

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Table IV-6 Maximum Supported Non-Residential Fee Per Square Foot	
Office	\$113.40
Retail	\$213.40
Hotel	\$102.50
Light Industrial	\$118.60
Warehouse	\$37.80

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment B for detail

The results of the analysis are heavily driven by the density of employees within buildings in combination with the occupational make-up of the workers in the buildings. Retail has both high employment density and a high proportion of low paying jobs.

These figures express the maximum supported fee per square foot for the six building types. They are <u>not</u> recommended levels for fees; they represent only the maximums established by this analysis, below which fees may be set.

There is a potential for some degree of overlap between jobs counted in the Non-Residential Nexus Analysis and jobs counted in the Residential Nexus Analysis. The potential for overlap exists in jobs generated by the expenditures of County residents, such as expenditures for food, personal services, restaurant meals and entertainment. Retail is the building type that has the

greatest potential for overlap to occur because it is often oriented to serving local residents. On the other hand, the potential for overlap is far less with office, industrial, warehouse and hotel buildings that often house businesses that serve a much broader, sometimes national or international, market and that are not focused on services to local residents. Appendix C to the Non-Residential Nexus Analysis provides additional discussion and an analysis demonstrating that, even in the improbable and theoretical case of complete overlap between jobs counted in the two nexus analyses, fees at the recommended levels would remain below the maximums supported by the nexus.

# C. Nexus Addendum Addressing Stanford University Campus

The Addendum to the Countywide Nexus Study provides documentation necessary to support adoption of affordable housing fees applicable to the Stanford Campus. The analyses establish maximum supportable fee levels based on the impact new academic space and faculty and staff housing development has on the need for affordable housing. Findings represent the results of an impact analysis only. Full documentation of the analyses can be found in Attachment C.

#### Academic Space Affordable Housing Nexus Analysis

The academic space affordable housing nexus analysis quantifies and documents the impact of the construction of new academic space on the demand for affordable housing. The analysis links development of new academic space buildings with new workers; these workers demand additional housing, a portion of which needs to be affordable based on the household incomes of Stanford Campus workers. The analysis uses a similar approach to the Non-Residential Nexus Analysis but is adapted to utilize data specific to the Stanford Campus.

The analysis begins with employment counts identified in the Stanford 2018 GUP application. Employment counts are then translated into an estimated number of new housing units required at all income levels based on Census data on the number of workers per household. The number of housing units needed is then separated into income tiers using survey results provided by Stanford that identify the distribution of household incomes for its employees. The number of housing units needed is identified within four income tiers: Extremely Low-, Very Low-, Low-, and Moderate. The cost of delivering affordable housing units to each income group is determined and used to calculate the cost of mitigating the increased affordable housing need. This results in a maximum supported affordable housing fee of \$143.10 per square foot of Academic Space. This figure represents only the maximum established by the nexus analysis.

#### Table IV-7

#### Maximum Supported Affordable Housing Fee for Academic Space

#### \$143.10 Per Square Foot

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment C for supporting analysis. Based on the household income data provided by Stanford, approximately 46% of Stanford's workforce was found to qualify in one of the four affordable income categories. Combined with the high cost of developing residential units, this results in a high nexus or mitigation cost.

The existing GUP includes a condition requiring that Stanford develop or provide funding for the development of affordable housing within a 6-mile radius of the boundary of the Stanford Campus. The County anticipates that affordable housing fees collected from Stanford would continue to be used to support creation of affordable housing within a similar commute radius. Higher land costs within a 6-mile radius of the Stanford Campus results in higher affordable unit development costs than if units were to be built in lower land cost locations like Morgan Hill or Gilroy where very few Stanford workers currently live. This assumption results in higher maximum supported fee levels than if the County's policy were to provide units in lower cost locations requiring workers to commute longer distances. The approach used is consistent with the existing GUP condition and the County's track record of utilizing affordable housing funds collected from Stanford to assist in the creation of affordable units within a six-mile radius of the Campus, where it is most needed.

Maximum supported fee levels reflect the total housing need within commuting distance of the Stanford Campus. This is consistent with the approach used for the Countywide Nexus Study as well as most recent non-residential nexus studies KMA has prepared. However, were the County to seek mitigation for a reduced "County share" of workers, the fee revenue needed would represent approximately 51.8% of the maximum level identified above based on the current percentage of Stanford Campus workers who reside in the County.

# Faculty and Staff Housing Affordable Housing Nexus Analysis

The faculty and staff housing affordable housing nexus analysis establishes maximum supportable fee levels applicable to faculty and staff housing. The concept and methodology are the same as the Countywide Residential Nexus Analysis. Newly constructed faculty and staff housing units represent net new households who will consume goods and services, either through purchases or "consumption" of governmental services. New consumption generates new local jobs; a portion of the new jobs are at lower compensation levels; low compensation jobs relate to lower income households that cannot afford market rate units and therefore need affordable housing. Maximum supported affordable housing fees reflect the cost of providing affordable housing to offset the increased need. The maximum supported fee level is \$69.10 per square foot of net residential area (exclusive of parking, corridors and other common areas). Attachment C provides the complete analysis.

#### Table IV-8

# Maximum Supported Affordable Housing Fee for Faculty and Staff Housing \$69.10 Per Square Foot

Note: Nexus findings are <u>not</u> recommended fee levels. See Attachment C for supporting analysis.

#### Impacts of Student Beds are Included with Academic Space Analysis

Affordable housing impacts of the new student beds are not addressed as a separate category in the analysis because janitorial, dining hall, and other on-campus employees that support students residing in campus housing are captured in the analysis of academic space where these jobs are primarily located. This approach avoids the need to allocate employment counts between the academic space and student beds, which would be challenging, while still capturing all added Stanford Campus employees and their affordable housing needs in the analysis. While there will also be affordable housing impacts associated with off-campus spending of students living in the new student housing, this off-campus spending was not included in the analysis as a conservative analysis assumption, due to the challenge in quantifying these impacts and because these off-campus impacts are likely to be small relative to the affordable housing impacts of on-campus employment that are reflected in the analysis.

#### Conservative assumptions

The nexus studies reference the incorporation of conservative assumptions. This refers to assumptions that will tend to result in a lower calculation of maximum supported fee levels than might otherwise be possible. Conservative assumptions are made selectively where deemed prudent to ensure the results of the study are defensible and to address data limitations. For example, impacts associated with off-campus spending by residents of the student beds, as discussed in the prior paragraph, were not included in the analysis due to data limitations.

# V. CONTEXT MATERIALS

The purpose of this section is to provide information that may be useful to policy makers in considering potential amendments to the County's affordable housing requirements for residential development and potential adoption of a new affordable housing fee applicable to non-residential development. The following analyses and summary materials are included:

- Residential Affordable Housing Requirements in Other Jurisdictions Section A. provides a summary of inclusionary and impact fee requirements in other Santa Clara and Alameda county jurisdictions;
- Cost to Provide Affordable Units On-Site
   Section B analyzes the cost to a market
  rate residential project of complying with potential onsite inclusionary requirements;
- Non-Residential Development Cost Context Section C. evaluates total development costs associated with four prototypical building types to facilitate an evaluation of whether fee amounts are likely to affect development decisions; and
- Jobs Housing Linkage Fee Programs in Other Jurisdictions Section D. provides information regarding adopted linkage fee programs in jurisdictions throughout the Bay Area and elsewhere in California.

# A. Residential Affordable Housing Requirements in Other Jurisdictions

The affordable housing requirements adopted by other jurisdictions are almost always of interest to decision making bodies. Cities and counties inevitably want to know what their neighbors have in place for affordable housing requirements, and often want to examine other cities that are viewed as comparable on some level. The body of information on other programs not only presents what others are adopting, but also illustrates the broad range in program design and customized features available to meet local needs.

The work program design for Multi Jurisdiction Nexus Studies anticipated wide interest in the comparison jurisdictions to be covered. To keep the comparison task manageable, the participating cities and counties voted as to which cities were of greatest interest for inclusion in the comparison survey. For the most part, the participants selected their neighbors and the larger cities of the local region as being of most interest. It was a given that the existing requirements of all participant cities and counties would also be included. Ultimately, eight cities in the County of Santa Clara and ten cities in the County of Alameda were selected for inclusion in the comparison material. Neither of the two participating counties have existing affordable housing requirements for new development; however, information regarding the program in San Mateo County is provided.

A four-page chart summarizes the key features of each program in the survey (Table V-1). The chart was designed to focus on the major components of each city's program that would be most relevant to decision making by the participating jurisdictions, primarily the thresholds, the fee levels and on-site affordable unit requirements.

The chart was originally prepared in 2016 and has been selectively updated to reflect program updates through the end of 2017 in Hayward, Union City, Berkeley, San Jose, and the City of Santa Clara and to add the County of San Mateo.

# 1. Findings from the Survey

# Thresholds for On-Site Affordable Requirement

- Whether or not for-sale development projects have the choice "as of right" between
  paying a fee or doing on-site units is a critical feature of any program. In the eight Santa
  Clara jurisdictions, six require on-site units and offer no fee "buy out" without a special
  City Council procedure. Only San Jose and Milpitas offer the fee choice at this time. In
  contrast, of the ten Alameda jurisdictions, most offer fee payment "as of right."
- Most fee options are less costly to the developer than providing on-site units. High fees are necessary if the choice between building units or paying fees is to be at all competitive. The high fee cities, such as Fremont, aim to present a real choice and achieve some on-site compliance units as well as fee revenues.
- With the loss of redevelopment and tax increment resources dedicated to housing, many cities have revised their programs to generate more fee revenues. Programs can be revised so as to alter options or incentives for projects to provide on-site units versus pay a fee based on the City's preferences.
- The loss of redevelopment has also motivated some cities to lower minimum project sizes to collect fees on very small projects, even single units. Several Santa Clara cities in the chart have adjusted their thresholds down to three to five units for fee payment, and the recently updated Cupertino program goes down to single units. The nexus analysis fully demonstrates the impact generated by single units, and as a result, some cities view charging very small projects and single units a matter of fairness and equity in an "everybody contributes" approach to meeting affordable housing challenges.
- Following the *Palmer* decision and until adoption of AB 1505 in September 2017, impact fees were the only avenue for instituting affordable housing requirements on rentals. Many cities adopted affordable housing impact fees applicable to rental units during this period. Following enactment of AB 1505, affordable units may be required on-site as long as at least one alternative is provided, such as in-lieu fees or off-site affordable units.

#### Fee Levels

- Fee levels for rentals in the cities of north and western part of the County of Santa Clara cluster in the \$15 to \$20 per square foot range for rentals, notably Mountain View, Sunnyvale, and Cupertino.
- Fees on for sale units, where permitted, in the Santa Clara cities reflect a range of approaches and levels. Several Silicon Valley cities charge fees as a percent of sales price, a practice not used much outside of Silicon Valley. The percent of sales prices reflects the higher impacts of higher priced units, borne out in the nexus analysis. The approach also scales fees in proportion to the revenue projects would forgo were a portion of units to be made affordable on-site.
- In the East Bay, Fremont is notable for its higher fees and obligation to provide both units and pay fees. Hayward recently updated its requirements to increase its previously modest fees. Oakland is a new adoption that will phase in fees up to \$23,000 per market rate unit, less than Berkeley but higher than neighbors to the south.
- East of the East Bay hills, some programs like Pleasanton, have been in place for decades but are more modest than most of the newer ones. Dublin is, in many ways, its own special case, with vigorous development activity and affordable unit requirements.

# **On-Site Requirements**

- The Santa Clara cities (excluding Milpitas) have programs in the 10% to 20% range, with 15% most common.
- For cities within Santa Clara County, the affordability level applicable to for-sale projects is usually in the moderate-income range, with pricing of on-site units ranging from 90% to 120% AMI, depending on the city. A few cities do seek some units down to Low-Income.
- In Alameda cities, on-site requirements are most commonly at the 15% level. Berkeley
  has a 20% requirement, while Hayward and Oakland have lower requirements. The
  Fremont percentage is lower but a fee is owed in addition to on-site units.

# 2. Other General Comments

Impact / in-lieu fees are presented at adopted levels. Where a multi-year phase-in has been adopted, such as the new Oakland program, the full phase in amount is shown with clarification in the bottom comment section of the chart. Fees on rentals were included in the chart only when they are adopted as impact fees based on the *Palmer* 

ruling, which precluded on-site requirements and their in-lieu fee alternatives for rentals. Following enactment of AB 1505 in 2017 inclusionary requirements that apply to rentals have become enforceable again; however, in most cases the chart does not reflect these newly enforceable rental inclusionary program requirements.

- Fees are expressed in different ways from one city to the next. Some fees are charged per square foot, some are a flat fee per market rate unit, and some are charged per affordable unit owed, which is almost always over \$100,000 in the Bay Area. To convert per unit owed to per market rate unit, one can multiply the per unit amount by the percentage requirement.
- On-Site Requirement/Option for Rentals. Many city codes include on-site requirement language for rental projects which were not included in the chart as noted above.
- The income levels of the affordable units that are required are summarized in terms of both "eligibility" or "qualifying" levels and the pricing level that is used to establish the purchase price or rent level of the unit. The pricing level is the critical one insofar as the developer's obligation is concerned. The most typical choice for pricing level is to be consistent with the affordable housing cost definitions in the California Health & Safety Code 50052.5 and 50053.
- Virtually all cities that have on-site requirements for for-sale residential projects without the choice of fee payment, do allow fee payment with special City Council approval. Therefore, the chart notes this feature only by way of a footnote. The City's practice in granting such approvals may be more consequential than what may be written.

For more complete information on the programs, please consult the website and code language of the individual cities.

#### TABLE V-1 COMPARISON OF AFFORDABLE HOUSING REQUIREMENTS - RESIDENTIAL SANTA CLARA COUNTY CITIES

	Campbell	Los Altos	Milpitas	Santa Clara City
Year Adopted / Updated	2006	Est. 1995, update 2009	2015	Est. 1991, update 2006 and 2017
Minimum Project Size				
For Fee Payment	<b>FS,</b> <6du/Ac: 10 units FS, >6 du/Ac: n/a	n/a	FS/R: 5 units	FS/R: 3 units
For Build Requirement	<b>FS,</b> <6du/Ac: n/a <b>FS,</b> >6du/Ac: 10 units	<b>FS:</b> 5 units	no build req.	FS/R: 10 units
Impact / In-Lieu Fee	<b>FS:</b> \$34.50 /sf	none	<b>FS/R</b> : 5% building permit value	Single family: \$30 psf Townhome: \$25 psf Condo: \$20 psf Bentals: \$20 psf
Onsite Requirement/Option				
Percent of Total Units	<b>FS:</b> 15%	<b>FS:</b> 10%	<b>FS/R:</b> 5%	<b>FS/R:</b> 15%
Income Level for Qualification	FS: Low and Moderate	FS: Moderate If <10 units, one unit at Low.	FS/R: Low and Very Low	May be at a range of income levels.
Income Level for Pricing(% AMI)	FS: Moderate @ 110% Low @ 70%	Not Specified.	Not specified.	May be at a range of income levels but must average to 100% AMI or below.
Fractional Units	<0.5: round down, >0.5: round up	provide unit	not specified	pay fee or provide unit
Comments	code does not specify allocation between Low and Moderate; staff indicates approximately 50/50 allocation has been the experience.	<4 du/Ac: no requirement. Also, requirements may be waived by City Council for projects of 9 units or less.	In-lieu/impact fee introduced as temporary measure while City prepares formal nexus study. Fee has not yet been assessed.	

Abbreviations:R = RentalFS = For Sale/sf = per square footMF = Multi-Familydu = Dwelling UnitAc = AcreAMI = Area Median IncomeSF = Single Family

1. Santa Clara County and Saratoga do not currently have an inclusionary housing requirement.

Notes: This chart presents an overview, and as a result, terms are simplified. For use other than general comparison, please consult the code and staff of the jurisdiction. Virtually all cities that do not allow fee payment by right allow developers to seek Council approval of fee payment instead of on-site units, in addition to providing options for off-site construction and land dedication.

#### TABLE V-1 COMPARISON OF AFFORDABLE HOUSING REQUIREMENTS - RESIDENTIAL SANTA CLARA COUNTY CITIES (PLUS SAN MATEO COUNTY)

	Cupertino	Mountain View	San Jose	Sunnyvale	San Mateo County
Year Adopted / Updated	Est. 1992, update 2015	Est. 1999, rental impact fee in 2012, update 2015	Est. 2010.	Update 2015	Est. 2004; update 2016
Minimum Project Size					
For Fee Payment	FS/R: 1 unit	<b>FS:</b> 3 units <b>R:</b> 5 units	FS/R: 20 units	FS: 8 units R: 4 units	FS/R: 1 unit
		Mixed FS/R: 6 units			
For Build Requirement	FS: 7 units	<b>FS:</b> 10 units	no build req.	<b>FS:</b> 20 units	MF: 10 units; SF: no build rgrmt.
Impact / In-Lieu Fee	FS: Detached \$15/sf, Attached \$16.50/sf, MF \$20/sf R: <35 du/Ac \$20/sf, >35 du/Ac \$25/sf	FS: 3% of sales price R: \$17/sf	FS: based on affordability gap R: \$125,000 SF per affordable unit owed	FS: 7% of sales price R: \$8.50/sf (4-7 units), \$17/sf (8+ units)	FS: 1 unit: \$5 psf above 2,500 SF 2-4 units: \$5 psf, 1st 2,500 SF then \$12.50 SF 5+ units: \$15 MF 5+ units: based on gap calculation R: \$10
Onsite Requirement/Option					
Percent of Total Units	<b>FS/R:</b> 15%	<b>FS/R:</b> 10%	<b>FS</b> : 15%	FS: 12.5% R: On-site credits (see below)	MF 5+ units: 20%; SF: 15%
Income Level for Qualification	FS: 1/2 Median 1/2 Moderate R: 40% Low, 60% Very Low	FS: Median R: Low	FS: Moderate R: 9% Moderate 6% Very Low	FS: Moderate	MF 5+ units: FS: ELI to Mod, <= 50% @ Mod; R: ELI to Low, <= 50% @ Low; SE: Mod
Income Level for Pricing(% AMI)	FS: Moderate @ 110%, Median @ 90% R: Low @ 60%, Very Low @ 50% AMI	FS: One unit: 90% AMI Multiple units: 80 - 100% AMI R: Ranges btwn 50-80% AMI	Moderate @ 110% AMI Rental @ 80% and 50% of AMI	Moderate @ 100% AMI	State H&S code standards
Fractional Units	<.5 unit owed: pay fee .5+ unit owed: round up	pay fee or provide unit	<.5 unit owed: round down .5+ unit owed: round up	pay fee or provide unit	pay fee
Comments			Inclusionary program reinstated in 2016 following litigation. Rental requirements automatically apply following AB 1505	On-site rental: developer credited \$300,000/du (Very Low), \$150,000/du (Low). Projects with fewer than 20 units are eligible to pay in-lieu fee.	Inclusionary program applies to multifamily projects of 5+ units; impact fee program applies to single family and smaller multifamily projects.
Abbreviations:	R = Rental	FS = For Sale	/sf = per square foot	MF = Multi-Family	

Abbreviations:

R = Rental du = Dwelling Unit

Ac = Acre

/sf = per square foot AMI = Area Median Income

MF = Multi-Family SF = Single Family

Notes: This chart presents an overview, and as a result, terms are simplified. For use other than general comparison, please consult the code and staff of the jurisdiction. Virtually all cities that do not allow fee payment by right allow developers to seek Council approval of fee payment instead of on-site units, in addition to providing options for off-site construction and land dedication.

#### TABLE V-1 COMPARISON OF AFFORDABLE HOUSING REQUIREMENTS - RESIDENTIAL ALAMEDA COUNTY CITIES

Vear Adopted / Updated         2005         Est. 2002, update 2015, full phase in 2017         Update in 2017         2004         Est. 2001, update 2005           Minimum Project Size for Fige Regurrement         FS: 5 units         FS: 2 units		Albany	Fremont	Hayward	San Leandro	Union City
Minimum Project Size For See Payment         FS: 5 units         FS/R: 2 units         FS/R: 2 units         FS: 2 units         FS: 2 units         FS: 1 unit         FS: 1 unit         FS: 1 units	Year Adopted / Updated	2005	Est. 2002, update 2015, full phase-in 2017	Updated in 2017	2004	Est. 2001, update 2006
For Fee Payment.         FS: 2 units.         Condition Cupdates           namet / Det code         \$27.00 m units, \$17.50 w/ aft units.         FS: 17.50 m omap.         FS: 17.5%         FS: 15%	Minimum Project Size					
Tor Build Requirement         FS: 2 nuits         no build req.         no build req.         no build req.         FS: Xunits         no build req.           Impact / In-Lieu Fee         FS: (Market Value - Affordable Price)         FS: (Market Price)         FS: (Market Value - Affordable Price)         FS: (	For Fee Payment	FS: 5 units	FS/R: 2 units	FS/R: 2 units	FS: 2 units	FS/R: 1 unit
Impact / In-Lieu Fee       FS: (Market Value - Affordable Price)       FS: Attoched \$27.00 no units, \$17.50 w/ aff units, \$18.50 k/ aff units, \$19.50 k/ aff units, \$10.50	For Build Requirement	FS: 7 units	no build req.	no build req.	FS: 7 units	no build req.
Price)         w/ aff units         Condos (35+ DU/acre); 515/sf         Price) x units owed         Ordinance (Apri 2017); FS: 522/SF           x units owed         X units owed         X units owed         X units owed         Y = 2017); Percent of Total Units         Price) x units owed         Ordinance (Apri 2017); FS: 522/SF           Onsite Requirement/Option Percent of Total Units         FS: 15%         FS: Attached 3.5% plus \$18.50/sf Detached 74.5% plus \$18.50/sf Detached 74.5% plus \$17.50/sf R: 12.9%         FS: 10%, Condos (35+ DU/acre): 7.5% R: 6%         FS: 15%         FS: 15%           Income Level for Qualification         FS: <10 units: Low 10+ units: 50% Low, 50% Very Low 25% Low, 24% Moderate         FS: Moderate Income R: 19% Extremely Low, 33% Very Low 25% Low, 24% Moderate         FS: Moderate Income R: 50% Low, 50% Very Low 25% Low, 25% Low, 25% Low, 50% Very Low 25% Low, 26% MMI, Very Low @ 60% AMI Very Low @ 60% AMI Very Low @ 60% AMI Very Low @ 50% AMI Very Low	Impact / In-Lieu Fee	FS: (Market Value - Affordable	FS: Attached \$27.00 no units, \$18.50	<b>FS / R:</b> \$18.18/sf,	FS: (Median Sale Price - Affordable	Council Direction for Updated
kunits owed     Detached \$26.00 no units, \$17.50 w/ aff units,     Add 10% if paid at C/O     F5: 522/SF       Onsite Requirement/Option     R: \$17.50 no map, \$27.00 w/ man       Onsite Requirement/Option     FS: 15%     FS:     FS:     FS: 10%, Attached 3.5% plus \$18.50/sf Detached 4.5% plus \$17.50/sf R: 12.9%     FS: 10%, Condos (35 + DU/acre): 7.5%     FS: 15%     FS: 15%       Income Level for Qualification     FS: <10 units: Low		Price)	w/ aff units	Condos (35+ DU/acre): \$15 /sf	Price) x units owed	Ordinance (April 2017):
Onsite Requirement/Option Percent of Total Units         FS: 15%		x units owed	Detached \$26.00 no units,	Add 10% if paid at C/O		FS: \$22/SF
Income Level for Pricing(% AMI)         Not specified.         FS: Moderate Income PS: 10% AMI, Not specified.         FS: Moderate Income PS: Moderate Inco			\$17.50 w/ aff units,			R: \$14/SF
Onsite Requirement/Option Percent of Total Units         FS: 15%         FS: 15%         FS: 15%         FS: 15%         FS: 15%         FS: 15%           Percent of Total Units         FS: 15%         Attached 3.5% plus \$18.50/sf Detached 4.5% plus \$17.50/sf R: 12.9%         FS: 10%, Condos (35 + DU/acre): 7.5%         FS: 15%         FS: 15%         FS: 15%           Income Level for Qualification         FS: <10 units: Low			<b>R:</b> \$17.50 no map, \$27.00 w/ map			
Percent of Total Units       FS: 15%       FS: 15%       FS: 15%       FS: 10%, Attached 3.5% plus \$18.50/sf Detached 4.5% plus \$17.50/sf R: 6%       FS: 10%, Condos (35 + DU/acre): 7.5% R: 6%       FS: 15%       FS: 15%         Income Level for Qualification       FS: <10 units: Low	Onsite Requirement/Option					
Income Level for Qualification       FS: <10 units: Low	Percent of Total Units	<b>FS:</b> 15%	FS:	<b>FS:</b> 10%,	<b>FS:</b> 15%	<b>FS:</b> 15%
Detached 4.5% plus \$17.50/sf R: 12.9%     R: 6%       Income Level for Qualification     FS: <10 units: Low 10+ units: 50% Low, 50% Very Low     FS: Moderate income R: 19% Extremely Low, 33% Very Low, 25% Low, 24% Moderate     FS: Moderate income R: 50% Low, 50% Very Low     FS: 60% Moderate, 40% Low FS: 60% Moderate, 40% Low     FS: 60% Moderate, 30% Media Low.       Income Level for Pricing(% AMI)     Not specified.     FS: Moderate @ 110% AMI (120% w/approval)     FS: Moderate @ 110% AMI R: Low @ 60% AMI Very Low @ 50% AMI     FS: Moderate @ 110% AMI Low @ 70% AMI     FS: Moderate @ 110% AMI Low @ 70% AMI     FS: Moderate @ 110% AMI, M not specified (80-100%) Low @ 70% AMI       Fractional Units     <0.5: pay fee, >0.5: provide unit     pay fee or provide unit     pay fee or provide unit     <0.5: round down, >0.5: provide unit     pay fee or provide unit     Fee calculated based on current median sales price.     Reflects Council direction for u to ordinance that have not yeu to b interefore fee F5 knoicers sen to			Attached 3.5% plus \$18.50/sf	Condos (35+ DU/acre): 7.5 %		
R: 12.9%       R: 12.9%         Income Level for Qualification       FS: <10 units: Low			Detached 4.5% plus \$17.50/sf	<b>R:</b> 6%		
Income Level for Qualification       FS: <10 units: Low       FS: Moderate Income       FS: Moderate Income       FS: Moderate Income       FS: 60% Moderate, 40% Low       FS: 60% Moderate, 30% Media         Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120%       FS: Moderate @ 110% AMI (120%       FS: Moderate @ 110% AMI       FS: Moderate @ 110% AMI       FS: Moderate @ 110% AMI       Low.         Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120%       FS: Moderate @ 110% AMI       FS: Moderate @ 110% AMI       ES: Moderate @ 110% AMI       Low.         Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120%       Wapproval)       FS: Moderate @ 110% AMI       FS: Moderate @ 110% AMI       Low @ 70% AMI       not specified (80-100%)         Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 10% AMI, Wapproval)       FS: Low @ 60% AMI, Very Low @ 50% AMI       FS: Moderate @ 110% AMI       Low @ 70% AMI       not specified (80-100%)       Low @ 70% AMI       Not specified (80-100			<b>R:</b> 12.9%			
10+ units: 50% Low, 50% Very Low       R: 19% Extremely Low, 33% Very Low, 25% Low, 24% Moderate       R: 50% Low, 50% Very Low       Low.       Low.         Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120% W/approval)       FS: Mode	Income Level for Qualification	FS: <10 units: Low	FS: Moderate Income	FS: Moderate Income	FS: 60% Moderate, 40% Low	FS: 60% Moderate, 30% Median, 10%
Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120% W/approval)		10+ units: 50% Low, 50% Very Low	R: 19% Extremely Low, 33% Very Low,	R: 50% Low, 50% Very Low		Low.
Income Level for Pricing(% AMI)       Not specified.       FS: Moderate @ 110% AMI (120% w/approval)       FS: Moderate @ 110% AMI       FS: Moderate @ 110% AMI, Low @ 60% AMI       FS: Moderate @ 110% AMI, Low @ 70% AMI       FS: Moderate @ 110% AMI, Low @ 70% AMI         R: Low @ 60% AMI, Very Low @ 50% AMI, Extremely Low @ 30% AMI       Very Low @ 50% AMI       Very Low @ 50% AMI       Low @ 70% AMI       Low @ 70% AMI         Fractional Units       <0.5: pay fee, >0.5: provide unit       pay fee or provide unit       pay fee or provide unit       <0.5: round down, >0.5: round up       pay fee or provide unit         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the bigher fee. FS projects ren to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to addited.			25% Low, 24% Moderate			
Interviewed of the magnetic feet for the magnetic feet feet feet feet feet feet feet fee	Income Level for Pricing(% AMI)	Not specified.	FS: Moderate @ 110% AMI (120%	FS: Moderate @ 110% AMI	ES: Moderate @ 110% AML	ES: Moderate @ 110% AMI, Median
R: Low @ 60% AMI, Very Low @ 50% AMI       Very Low @ 50% AMI       Low @ 70% AMI         Fractional Units       <0.5: pay fee, >0.5: provide unit       pay fee or provide unit       pay fee or provide unit       <0.5: round down, >0.5: round up       pay fee or provide unit         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the bigher fee. FS projects ren to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to addited.			w/approval)	<b>R:</b> Low @ 60% AMI	Low @ 70% AMI	not specified (80-100%)
Very Low @ 50% AMI, Extremely Low @ 30% AMI       Very Low @ 50% AMI, Extremely Low @ 30% AMI         Fractional Units       <0.5: pay fee, >0.5: provide unit       pay fee or provide unit       output         Solution       Solution       Pay fee or provide unit       pay fee or provide unit       output         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the higher fee. FS projects reg. to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to addited.			R: Low @ 60% AMI.	Very Low @ 50% AMI		Low @ 70% AMI
Extremely Low @ 30% AMI       Extremely Low @ 30% AMI         Fractional Units       <0.5: pay fee, >0.5: provide unit       pay fee or provide unit       pay fee or provide unit       <0.5: round down, >0.5: round up       pay fee or provide unit         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the higher fee. FS projects reg. to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to addited			Very Low @ 50% AMI.			
Fractional Units       <0.5: pay fee, >0.5: provide unit       pay fee or provide unit       pay fee or provide unit       <0.5: round down, >0.5: round up       pay fee or provide unit         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the bigher fee, ES projects ren to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to additional			Extremely Low @ 30% AMI			
>0.5: provide unit       >0.5: round up         Comments       Full phase-in levels shown. Rental projects with a subdivision map pay the higher fee. FS projects reg. to       Fee calculated based on current median sales price.       Reflects Council direction for u to ordinance that have not yet adopted. Fee applies to additional projects reg. to	Fractional Units	<0.5: pay fee,	pay fee or provide unit	pay fee or provide unit	<0.5: round down,	pay fee or provide unit
Comments       Full phase-in levels shown. Rental       Fee calculated based on current       Reflects Council direction for u         projects with a subdivision map pay       median sales price.       to ordinance that have not yet         the higher fee. FS projects reg. to       adopted. Fee applies to additional projects and the subdivision map pay       adopted. Fee applies to additional projects and the subdivision map pay		>0.5: provide unit			>0.5: round up	
projects with a subdivision map pay median sales price. to ordinance that have not yet adopted. Fee applies to additional sales price.	Comments		Full phase-in levels shown. Rental		Fee calculated based on current	Reflects Council direction for updates
the higher fee. FS projects reg. to adopted Fee applies to addi			projects with a subdivision map pay		median sales price.	to ordinance that have not yet been
			the higher fee. FS projects req. to			adopted. Fee applies to additions
provide onsite units and pay fee. over 500 square feet.			provide onsite units and pay fee.			over 500 square feet.
Abbreviations: B - Bental ES - Eor Sale /sf - per square foot ME - Multi Earriby	Abbreviations	R - Rental	FS - For Sale	/sf - ner square foot	ME - Multi-Family	

k = kentai

du = Dwelling Unit

AMI =Area Median Income

MF = Multi-Family SF = Single Family

Notes: This chart presents an overview, and as a result, terms are simplified. For use other than general comparison, please consult the code and staff of the jurisdiction.

Ac = Acre

Virtually all cities that do not allow fee payment by right allow developers to seek Council approval of fee payment instead of on-site units, in addition to providing options for off-site construction and land dedication.

#### TABLE V-1 COMPARISON OF AFFORDABLE HOUSING REQUIREMENTS - RESIDENTIAL ALAMEDA COUNTY CITIES

	Alameda (city)	Berkeley	Dublin	Oakland	Pleasanton
Year Adopted / Updated	2003	Est. 1986, rental fee 2011, update adopted 2017	Est. 1997, update 2005	2016	Est. 1978, update 2000.
Minimum Project Size					
For Fee Payment	FS: 5 units	FS/R: 5 units	FS/R: 20 units	FS/R: 1 unit	FS/R: 15 units
For Build Requirement	<b>FS:</b> 10 units	no build req.	FS/R: 20 units (partial)	no build req.	no build req.
Impact / In-Lieu Fee	<b>FS:</b> \$19,076/du	FS: 62.5% x (Sale Price - Affordable Price) x units owed R: \$34,000/du or \$37,000/du if paid at C/O	<b>FS/R:</b> \$127,061 per aff unit owed (in addition to on-site)	<b>FS/R:</b> <i>MF</i> \$12,000-\$22,000, <i>SF Attached</i> \$8,000-\$20,000, <i>SF Detached</i> \$8,000-\$23,000	FS/R: <i>MF</i> \$2,783/du, <i>SF</i> <1,500 sq ft: \$2,783/du, >1,500 sq ft: \$11,228/du
Onsite Requirement/Option					
Percent of Total Units	<b>FS:</b> 15%	<b>FS/R:</b> 20%	<b>FS/R:</b> 7.5%, plus fee (12.5% without fee)	<b>FS/R:</b> Option A 5% or Option B 10%	<b>FS/R:</b> <i>MF</i> 15% <i>SF</i> 20%
Income Level for Qualification	<b>FS</b> : 47% Moderate, 27% Low, 27% Very Low	FS: Low R: Current Very Low Proposed 1/2 Very Low,	FS: 60% Moderate, 40% Low R: 50% Moderate, 20% Low, 30% Very Low	FS/R: Option A Very Low Option B Low and Moderate	FS: <i>MF</i> Low <i>SF</i> Moderate
Income Level for Pricing(% AMI)	FS: Moderate @ 110%, Low @ 70%, Very Low @ 50%	FS: Low @ 80% R: Low at 81%, Very Low at 50%.	FS: Moderate @ 110%, Low @ 70% R: Moderate @ 110%, Low @ 80%, Very Low @ 50%	FS: Moderate @ 110%, Low @ 70%, Very Low @ 50% R: Moderate 110%, Low @ 60%, Very Low @ 50%	<b>FS:</b> <i>MF</i> 80% AMI <i>SF</i> 120% AMI
Fractional Units	<0.5: round down, >0.5: round up	pay fee	<0.5: round down, >0.5: round up	pay fee or provide unit	<0.5: round down, >0.5: round up
Comments				Fees vary by neighborhood. Fees phased in through 2020. Full fee levels shown. On-site: May choose Option A or B. Based on draft ordinance prepared for April 19, 2016 council meeting.	
Abbreviations:	R = Rental	FS = For Sale	/sf = per square foot	MF = Multi-Family	

AMI =Area Median Income

SF = Single Family

Notes: This chart presents an overview, and as a result, terms are simplified. For use other than general comparison, please consult the code and staff of the jurisdiction. Virtually all cities that do not allow fee payment by right allow developers to seek Council approval of fee payment instead of on-site units, in addition to providing options for off-site construction and land dedication.

Ac = Acre

du = Dwelling Unit

# B. On-Site Compliance Cost Analysis

The County of Santa Clara does not currently have an inclusionary housing program. Should the County decide to pursue an inclusionary program, one factor in determining the appropriate program for the County is the cost to the developer of complying with the requirements. Eventually, the land values in the County will adjust to reflect the compliance costs, as developers acquiring land will know how the obligation will affect their project's economics. To assist the County in understanding the cost associated with an onsite obligation, KMA estimated the foregone revenue for the developer when units are sold at affordable prices; this is referred to as the 'onsite compliance cost.' This information is often useful as context when considering potential onsite and fee obligations.

KMA modeled the cost associated with setting aside 1% of units to sell at Moderate prices (affordable to households earning 110% of Area Median Income). With this information, the County can easily estimate the onsite compliance costs of other requirements, such as 10% Moderate or 15% Moderate, by scaling up the cost figures associated with 1%. Table V-2 presents our estimates of onsite compliance costs for ownership units. With current market rate sales prices, the cost to a developer associated with designating 1% of units as affordable to Moderate-Income ranges from \$4,500 to \$15,500 per market rate unit or \$1.73 to \$3.10 per net square foot, depending on the size and price of the unit. A 10% on-site requirement would be equivalent to ten times these levels. KMA notes that the very high market rate sales prices in the County of Santa Clara result in high onsite compliance costs, as each unit sold at affordable prices represents a significant amount of foregone revenue to the developer.

The onsite compliance cost figures should not be interpreted as recommended fee levels.

#### TABLE V-2 COST OF ONSITE COMPLIANCE AND EQUIVALENT IN-LIEU FEES RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA

		Protot	ype 1	Prototype 2		
		Single Fami	ly Detached	Smaller Single Fai	mily Detached	
Unit Size <sup>1</sup>		5,000	) sq ft	2,600 sq ft		
Number of Bedrooms <sup>1</sup>		2	1	4		
Market Rate		Per SF	Per Unit	Per SF	Per Unit	
Sales Prices <sup>1</sup>		\$400	\$2,000,000	\$346	\$900,000	
Affordable Prices <sup>2</sup>			Per Unit		Per Unit	
At Moderate Income (110%)			\$449,600		\$449,600	
Affordability Gap <sup>3</sup>			Per Unit		Per Unit	
Den Affendele Medenete Unit			¢1 550 400		¢450.400	
Per Affordable Moderate Unit			\$1,550,400		\$450,400	
4		Dor SE	Dorlinit	Dor CC	Dox Unit	
Cost of Onsite Compliance		Per Sr	Per Unit	reisr	Per Unit	
Inducionary Decontaco	1.00/ Mad	¢2.10	¢15 504	¢1 70	<u>с́л бол</u>	
Inclusionary Percentage @	1.0% 1000	\$3.10	\$15,504	\$1.73	\$4,504	

1. See Residential Nexus Analysis Table A-1.

2. Estimate calculated by KMA based on standard affordable pricing assumptions.

3. The difference between the market rate sales prices and the restricted affordable price.

4. Equivalent cost per market rate unit or square foot.

# TABLE V-2A ESTIMATED AFFORDABLE HOME PRICES - <u>Moderate Income</u> RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA

	SFD
Unit Size Household Size	4-Bedroom Unit 5-person HH
100% AMI Santa Clara County 2016	\$115,650
Annual Income @ 110%	\$127,215
% for Housing Costs Available for Housing Costs (Less) Property Taxes (Less) HOA (Less) Utilities (Less) Insurance (Less) Mortgage Insurance Income Available for Mortgage Mortgage Amount Down Payment (homebuyer cash)	35% \$44,525 (\$5,850) \$0 (\$3,552) (\$900) (\$5,765) \$28,459 \$427,100 \$22,500
Supported Home Price	\$449,600
<u>Key Assumptions</u> - Mortgage Interest Rate <sup>(1)</sup> - Down Payment <sup>(2)</sup> - Property Taxes (% of sales price) <sup>(3)</sup> - HOA (per month) <sup>(4)</sup> - Utilities (per month) <sup>(5)</sup>	5.30% 5.00% 1.30% \$0 \$296 1.25%
- wortgage insurance (% of loan amount)	1.35%

(1) Mortgage interest rate based on 15-year Freddie Mac average; assumes 30-year fixed I

<sup>(2)</sup> Down payment amount is an estimate for Moderate Income homebuyers.

<sup>(3)</sup> Property tax rate is an estimated average for new projects.

<sup>(4)</sup> Homeowners Association (HOA) dues is an estimate for the average new project.

<sup>(5)</sup> Utility allowances from Santa Clara County Housing Authority (2016).

# C. Non-Residential Development Cost Context

The non-residential development cost context analysis considers the impacts a new affordable housing fee could have on the cost of development for new office, retail, hotel, and light industrial projects. The analysis enables an understanding of the relative cost burdens new fees have on various types of commercial and industrial development projects and can be useful in scaling fees by type of project.

Since non-residential development activity in the unincorporated area of the County, excluding the Stanford Campus, has been minimal, the discussion in this section is more relevant to activity occurring in the incorporated cities that participated in the multi-jurisdiction nexus study effort. Estimates were prepared in 2016 and have not been updated to reflect subsequent cost escalation given the primary purpose is to enable an understanding of fees relative to the development costs of different types of projects.

For commercial and industrial development, the analysis considers the potential fee as a percentage of total development costs rather than a full feasibility analysis. One of the primary reasons a full feasibility analysis is not performed for the commercial land uses is because there is typically greater variation in the cost and rent structures for commercial projects than for housing projects. Development costs and rents can vary widely for office and retail projects due to the specialized nature of tenant improvements and lease terms from one tenant to another. Costs and revenues also vary widely for hotel projects since hotel products range from lower cost limited service and budget hotels to highly amenitized full service and boutique hotels. Finally, affordable housing requirements applicable to non-residential development typically represents a smaller percentage of overall project cost compared to residential requirements. For these reasons, an understanding of total development cost context has generally proved sufficient to guide the selection of fee levels on non-residential projects.

# 1. Commercial Market Context

Like the residential market, commercial projects in the County have experienced strengthening conditions in recent years due to robust job growth and the strength of the overall regional economy. According to a market report from Newmark Cornish & Carey, as of Q1 2016 there was about 9.5 million square feet of office development in construction in Silicon Valley out of a total office inventory of 75 million square feet. New retail, hotel and industrial projects are also being built or are in the planning stages in various parts of the county. This development activity is occurring within the incorporated cities.

# 2. Development Cost Analysis

For the development cost analysis, KMA utilized the following four commercial prototypes.

Office development with structured parking at 1.00 floor area ratio (FAR)

- Hotel development with surface and structured parking at 1.00 FAR
- Retail development with surface parking at 0.30 FAR .
- Light industrial development with surface parking at 0.40 FAR

In preparing these prototypes it is acknowledged that there could be some differences in overall density from one jurisdiction to another as these prototypes are intended to reflect averages for the participating jurisdictions in Santa Clara County. However, for purposes of the development cost assessment it is not necessary to analyze every variation of project density or building prototype being built or proposed to be built. The utility of the analysis lies with an understanding of the general range of development costs for new commercial projects and the impact that a new fee can have relative to those costs.

The estimates of total development costs for the commercial prototypes are shown in the following table. The costs include estimates for land acquisition, direct construction costs, and indirect and financing costs of development. In assembling the development cost estimates, KMA utilized a variety of data sources, including the following:

- Land appraisals, CoStar land comps;
- Third party construction cost data sources such as RS Means and Engineering News Record (ENR);

Table V-3 Non-Residential Development Costs Santa Clara County Participating Jurisdictions										
		Office		Hotel		Retail	Ligh	nt Industrial		
Building Square Feet Hotel Rooms	100	,000	75,0 125	000 rooms	75,0	000	100	0,000		
Parking	Stru	ucture	Surface	e & Structure	Sur	face	Sur	face		
FAR	1.00	FAR	1.00	FAR	0.30	FAR	0.40	FAR		
∟and Area	2.30	acres	1.72	acres	5.74	acres	5.74	acres		
	<u>\$/SF</u>	Total	<u>\$/SF</u>	Total	\$/SF	Total	<u>\$/SF</u>	Tota		
_and Acquisition	\$115 \$115	\$11,500,000 /land sf	\$45 \$45	\$3,380,000 /land sf	\$200 \$60	\$15,000,000 /land sf	<b>\$88</b> \$35	\$8,750,000 /land sf		
<u>Directs</u>	\$348	\$34,750,000	\$227	\$17,000,000	\$175	\$13,130,000	\$143	\$14,250,000		
ndirects										
4&E	\$21	\$2,090,000	\$14	\$1,020,000	\$11	\$790,000	\$9	\$860,000		
F&E/Tenant Improvements	\$59	\$5,850,000	\$58	\$4,380,000	\$36	\$2,700,000	\$19	\$1,900,000		
Fees & Permits (excl. Afford)	\$5	\$540,000	\$8	\$590,000	\$7	\$520,000	\$5	\$480,000		
Other Indirects & Financing	\$33	\$3,280,000	\$21	\$1,580,000	\$26	\$1,930,000	\$16	\$1,570,000		
Total Indirects & Financing	\$118	\$11,760,000	\$101	\$7,570,000	\$79	\$5,940,000	\$48	\$4,810,000		
Total Costs	\$580	\$58,010,000	\$373	\$27,950,000	\$454	\$34,070,000	\$278	\$27,810,000		

\$325 - \$425/sf

\$400 - \$500/sf

Pro forma data for current non-residential projects in the Bay Area.

\$525 - \$625/sf

Total Cost Range

\$250 - \$300/sf

Total

As shown, total development costs for the non-residential prototypes range from a low of approximately \$250-\$300/square foot for the light industrial prototype to a high of approximately \$525-\$625 for the office prototype.

# 3. Affordable Housing Fees Supported

In general, affordable housing fees on non-residential projects fall within a range of 1% to 5% of total development costs, with the upper portion of the range generally reserved for cities that have very strong market conditions driving non-residential development projects. As noted in Section D, current affordable housing fees on non-residential projects are as high as \$20-\$35/square foot (for office projects) for jurisdictions within the County that have such fees. Current fees for other non-residential projects, such as retail and hotel, tend to be more in the \$5-\$10 / square foot range.

The table below summarizes the range of potential fees on non-residential projects expressed as a percentage of total development cost. As an example, at 3% of total development cost, a new housing fee would range from approximately \$8 / square foot for light industrial uses to \$17/square foot for office uses. As is common in jobs housing linkage fee programs, light industrial projects tend to have lower fees than higher intensity/higher value projects such as office projects because it is generally more difficult for lower cost projects to absorb new fees. Exceptions include some Silicon Valley cities where distinctions between office and industrial have become blurred and both are charged at the same rate.

Table V-4 Relative Fee Burdens				
	Office	Hotel	Retail	Light Industrial
Total Cost Range	\$525 - \$625/sf	\$325 - \$425/sf	\$400 - \$500/sf	\$250 - \$300/sf
Fee at 1% of Total Cost	\$5.75	\$3.75	\$4.50	\$2.75
Fee at 2% of Total Cost	\$11.50	\$7.50	\$9.00	\$5.50
Fee at 3% of Total Cost	\$17.25	\$11.25	\$13.50	\$8.25
Fee at 4% of Total Cost	\$23.00	\$15.00	\$18.00	\$11.00
Fee at 5% of Total Cost	\$28.75	\$18.75	\$22.50	\$13.75

\*Fees calculated at 1-5% of mid-point of cost range.

The following table summarizes how newly adopted fees can be absorbed by relatively minor improvements in development economics over time. For example, a newly added fee of 20/square foot for the office prototype could be absorbed by a roughly 3% increase in rental income (20/square foot x 0.15%), a roughly 6% decrease in direct construction costs (20/square foot x 0.29%), or a roughly 17% decrease in land values (20/square foot x 0.87%). It is noted however that construction costs and rents tend to move in the same direction. Therefore, increases in rents would need to exceed increases in costs in order to produce a net gain in a project's economics.

Table V-5 Potential Market Adjustments to Absorb Every \$1/SF Fee								
	Office	Hotel	Retail	Light Industrial				
Increase in Rents/Income Decrease in Direct Costs Decrease in Land Values	0.15% 0.29% 0.87%	0.23% 0.44% 2.22%	0.19% 0.57% 0.50%	0.31% 0.70% 1.14%				

Adjustments are not additive. Each would independently be sufficient to absorb new fees. Depending on the market cycle and other factors, a combination of the above market adjustments would be expected to contribute in absorbing a new fee.

# D. Jobs Housing Linkage Fees in Other Jurisdictions

Information on other jobs housing linkage fee programs in nearby or comparable cities is often helpful context in considering new or updated fees. The following section provides information assembled regarding other programs in the Bay Area and elsewhere in California including information on customized features such as size thresholds, exemptions, and build options.

More than 40 cities and counties in California have commercial linkage fees, with the majority of these programs within the Bay Area and greater Sacramento. In Southern California, a few cities have linkage fee program including San Diego and Los Angeles, which adopted a new program at the end of 2017. Several communities in Massachusetts have linkage fees, including Boston and Cambridge. Seattle recently expanded its linkage fee program city-wide. Boulder, Colorado adopted a new city-wide program in 2015. Denver adopted a fee in 2016.

Silicon Valley and the Peninsula, which has some of the strongest real estate market conditions in the Bay Area, is where many of the jurisdictions with the highest fee levels are found. For office, fee levels range from \$15 (Sunnyvale) to \$35 per square foot (Palo Alto). Several cities have recently updated fee levels (Cupertino, Mountain View, Sunnyvale, Palo Alto), or newly adopted fees (Redwood City, Santa Clara, San Mateo, San Bruno). For retail and hotel, fee ranges are much broader as some jurisdictions have adopted similar fee levels across all building types while others have lower fee levels for retail and hotel.

Within the East Bay, fees have been adopted at a more moderate range. For office, fee levels for communities in the inner East Bay (west of the hills) range from \$3.59 (Newark) to \$8 for the newly adopted program in Fremont (as of 2020 full phase in). Retail fees range from \$2.30 (Alameda) to \$8 (Fremont as of full phase in). Oakland's program covers only office and warehouse and exempts other uses such as retail.

The table on the following page provides an overview of fee levels for selected examples in the County of Santa Clara, the Peninsula, and the East Bay. A more complete overview of these programs, and many others, is presented on Table V-8 at the end of this section.

Table V-6 Affordable Housing Fee Levels in Selected Communities							
	Office	Retail	Hotel	Industrial			
Non-Residential Fees	\$/SF	\$/SF	\$/SF	\$/SF			
Cities in Santa Clara County							
Palo Alto	\$35.00	\$20.37	\$20.37	\$20.37			
Mountain View	\$25.00	\$2.68	\$2.68	\$25.00			
City of Santa Clara	\$20.00	\$5.00	\$5.00	\$10.00			
Cupertino	\$20.00	\$10.00	\$10.00	\$20.00			
Sunnyvale	\$15.00	\$7.50	\$7.50	\$15.00			
County Programs							
Marin County	\$7.19	\$5.40	\$3.00	\$3.74			
Santa Cruz County	\$2.00	\$2.00	\$2.00	\$2.00			
Sonoma County	\$2.64	\$4.56	\$2.64	\$2.72			
Napa County	\$5.25	\$7.50	\$9.00	\$4.50			
Sacramento County	\$0.97	\$0.77	\$0.92	\$0.61			
San Luis Obispo County	\$0.96	\$1.36	\$1.44	\$0.58			
San Mateo County	\$25.00	\$5.00	\$10.00	N/A			
East Bay: West of Hills							
Fremont	\$8.00	\$8.00	\$8.00	\$4.00			
Oakland	\$5.24	N/A	N/A	N/A			
Berkeley	\$4.50	\$4.50	\$4.50	\$2.25			
Alameda (City)	\$4.52	\$4.52	\$1.85	\$0.78			
Emeryville	\$4.10	\$4.10	\$4.10	\$4.10			
Newark	\$3.59	\$3.59	\$3.59	\$0.69			
East Bay: East of Hills							
Walnut Creek	\$5.00	\$5.00	\$5.00	N/A			
Pleasanton	\$3.04	\$3.04	\$3.04	\$3.04			
Dublin	\$1.27	\$1.02	\$0.43	\$0.49			
Livermore	\$0.76	\$1.19	\$1.00	\$0.24			

N/A = No fee or no applicable category

As a way to provide context in terms of the market conditions in each of the communities, the chart on the following page shows office linkage fees in selected communities (the building type that usually has the highest fees) in relation to office rents. Office rents are an indicator of market strength and major driver of real estate values.



 Table V-7

 Office Linkage Fees vs. Average Office Rents in Selected Communities

\*Rents for City of Alameda apply to Class B/C space (Class A rents not aviailable) Sources: Office rents from market research reports prepared by Colliers International.

# **Ordinance or Program Features**

Linkage fee programs often includes features to address a jurisdiction's policy objectives or specific concerns. The most common are:

- Minimum Threshold Size A minimum threshold sets a building size over which fees are in effect. Programs with low fees often have no thresholds and all construction is subject to the fee. Thresholds, which reduce fees for smaller projects, are more common for programs with more significant fees. Some jurisdictions establish a building size over which the fee applies. Sometimes the fee applies to the whole building over the threshold, and sometimes the fee applies only to the square foot area. Thresholds are often employed to minimize costs for small infill projects in older commercial areas, when such infill is a policy objective. There is also some savings in administrative costs. The disadvantage is lost revenue. Oakland and Berkeley are examples of communities employing thresholds while Alameda, Newark, and others do not. Mountain View has a reduced charge for the first 10,000 square feet of office space and the first 25,000 square feet of retail or hotel development.
- Geographic Area Variations and Exemptions Some cities with linkage fee programs exclude specific areas such as redevelopment areas or have fees that vary based on geography. A geographic area variation can also be used to adjust the fee in jurisdictions where there is a broad difference in economic health from one subarea to

the next. This is generally more common among large cities with a diverse range of conditions.

 Specific Use Exemptions – Some cities charge all building types while others choose to exempt specific uses. A common exemption is for buildings owned by non-profits which typically encompasses religious, educational/institutional, and hospital building types.
 Some programs identify specific uses as exempt such as schools and child care centers.

A more complete listing of the programs surveyed along with information about ordinance features such as exemptions and thresholds is contained in Table V-8 at the end of this section.

SUMMARY OF JOBS HOUSING LINKAGE FEE PROGRAMS, CALIFORNIA

	Yr. Adopted/	Fee Level			Build Option/	Market	
Jurisdiction	Updated	(per Sq.Ft. unless otherwise noted)		Thresholds & Exemptions	Other	Strength	Comments
SAN FRANCISCO, PENINSU	JLA, SANTA CLA	RA COUNTY					
San Francisco	1981	Retail / Entertainment	\$23.78	25,000 gsf threshold	Yes, may	Very	Fee is adjusted annually based
Population: 829,000	Updated	Hotel	\$19.08	Exempt: freestanding pharmacy < 50,000 SF; grocery <	contribute land for	Substantial	on the construction cost
	2002, 2007	Integrated Production /Dist/Repair	\$20.04	75,000	housing.		increases.
		Office	\$25.49				
		Research and Development	\$16.98				
		Small Enterprise Workspace	\$20.04				
City of Palo Alto	1984	Office & R&D	\$35.00	Churches; universities; recreation; hospitals, private	Yes	Very	Fee is adjusted annually based
Population: 66,000	Undated 2002	Other Commercial	\$20.37	educational facilities, day care and nursery school, public		Substantial	on CPI.
	opulicu 2002			facilities are exempt			
City of Menlo Park	1998	Office & R&D	\$16.90	10.000 gross SF threshold	Yes, preferred.	Verv	Fee is adjusted annually based
Population: 33.000		Other com./industrial	\$9.17	Churches, private clubs, lodges, fraternal orgs, public	May provide	Substantial	on CPI.
			+ • · = ·	facilities and projects with few or no employees are	housing on- or off-		
				exempt.	site.		
City of Sunnyvale	1984	Industrial, Office, R&D:	\$15.00	Office fee is 50% on the first 25,000 SF of building area.	N/A	Very	Fee is adjusted annually based
Population: 146,000	Undeted 2002	Retail, Hotel	\$7.50	Exemptions for Child care, education, hospital, non-profits,		Substantial	on CPI.
	updated 2003			public uses.			
	anu 2015.						
City of Santa Clara	2017	Office 20,000 SF +	\$20.00	Assembly, day care, nursery, schools and hospitals and	Yes.	Very	Fee reflects January 2019 full
Population: 116,000		Office, under 20,000 SF	\$10.00	commercial space in a mixed use project under 20,000		Substantial	phase in levels. Fee is adjusted
		Industrial 20,000 SF +	\$10.00	square feet are exempt.			annually based on ENR.
		Industrial under 20,000 SF	\$5.00				
		Retail, Hotel, Other	\$5.00				
		Low intensity uses	\$2.00				
San Mateo	2016	Office	\$25.00	5,000 SF threshold		Very	
Population: 101,000		Hotel	\$10.00	25% fee reduction for projections paying prevailing wage.		Substantial	
		Retail	\$5.00	Schools, religious, child care centers, public and non-profit			
				uses exempt.			
San Bruno	2015	Office and R&D	\$12.50	No minimum threshold	Yes. Program	Very	Fee is adjusted annually based
Population: 43,000		Hotel	\$12.50		specifies number	Substantial	on ENR.
		Retail, Restaurant, Services	\$6.25		of units per		
					100,000 SF.		
Redwood City	2015	Office	\$20.00	5,000 SF threshold	Yes. Program	Very	Fee is adjusted annually based
Population: 80,000		Hotel	\$5.00	25% fee reduction for projections paying prevailing wage.	specifies number	Substantial	on ENR.
		Retail & Restaurant	\$5.00	Schools, child care centers, public uses exempt.	of units per		
					100,000 SF.		
City of Mountain View	Updated	Office/High Tech/Indust.	\$25.00	Fee is 50% on building area under thresholds:	Yes	Very	Fee is adjusted annually based
Population: 77,000	2002 / 2012	Hotel/Retail/Entertainment.	\$2.68			Substantial	on CPI.
	/2014			Office <10,000 SF			
				Hotel <25,000 SF			
				Retail <25,000 SF			
City of Cupertino	1993, 2015	Office/Industrial/R&D	\$20.00	No minimum threshold.	N/A	Very	Fee is adjusted annually based
Population: 60,000	0010	Hotel/Commercial/Retail	\$10.00			Substantial	on CPI.
County of San Mateo	2016	UTTICE/Medical/R&D	\$25.00	3,500 SF threshold;	Yes. Program	Very	Fee is adjusted annually based
Population: /18,000			\$10.00	25% ree reduction for prevailing wage. public, institutional,	specifies number	Substantial	on ENR.
		Retail / Restaurant /Services	Ş5.00	childcare, recreational, assisted living exempt.	of units.		
Note: This chart has been asser	bled to present an	overview, and as a result, terms are simplified. T	The information	) is recent but not all data has been undated as of the data of this report.	n some cases fees are a	diusted by an inde	ex (such as CPI) which may not be

Note: This chart has been assembled to present an overview, and as a result, terms are simplified. The information is recent but not all data has been updated as of the date of this report. In some cases, fees are adjusted by an index (such as CPI) which may not be reflected. For use other than general comparison, please consult the code and staff of the jurisdiction.

#### TABLE V - 8

SUMMARY OF JOBS HOUSING LINKAGE FEE PROGRAMS, CALIFORNIA

Jurisdiction	Yr. Adopted/ Updated	Fee Level (per Sq.Ft. unless otherwise	noted)	Thresholds & Exemptions	Build Option/ Other	Market Strength	Comments		
EAST BAY									
City of Walnut Creek	2005	Office, retail, hotel and medical	\$5.00	First 1,000 SF no fee applied.	Yes	Very	Reviewed every five years.		
Population: 66,000						Substantial			
City of Oakland	2002	Office/ Warehouse	\$5.24	25,000 SF exemption	Yes - Can build	Substantial	Fee due in 3 installments. Fee		
Population: 402,000					units equal to		adjusted with an annual		
					total eligible SF		escalator tied to residential		
					times .00004		construction cost increases.		
City of Berkeley	1993	Office	\$4.50	7,500 SF threshold.	Yes	Substantial	Annual CPI increase. May		
Population: 116,000	2014	Retail/Restaurant	\$4.50				negotiate fee downward based		
		Industrial/Manufacturing	\$2.25				on hardship or reduced impact.		
		Hotel/Lodging	\$4.50						
		Warehouse/Storage	\$2.25						
		Self-Storage	\$4.37						
		R&D	\$4.50						
City of Fremont	2017	Office, R&D, Hotel, Retail	\$8.00	Public uses, additions less than 1,000 SF,	Yes by formula	Substantial	Fees are as of 2020 full		
				manufacturing over 100,000 SF / building exempt.			phase in.		
Population: 225,000		Industrial, Mfg, Warehouse	\$4.00	Additional exceptions in initial 2 years.					
City of Emeryville	2014	All Commercial	\$4.10	Schools, daycare centers.	Yes	Substantial	Fee adjusted annually.		
City of Alameda	1989	Retail	\$2.30	No minimum threshold	Yes. Program	Moderate	Fee may be adjusted by CPI.		
Population: 76,000		Office	\$4.52		specifies # of units				
		Warehouse	\$0.78		per 100,000 SF				
		Manufacturing	\$0.78						
		Hotel/Motel	\$1,108						
City of Pleasanton	1990	Commercial, Office & Industrial	\$3.04	No minimum threshold	Yes	Moderate	Fee adjusted annually.		
Population: 73,000									
City of Dublin	2005	Industrial	\$0.49	20,000 SF threshold	N/A	Moderate			
Population: 50,000		Office	\$1.27						
		R&D	\$0.83						
		Retail	\$1.02						
		Services & Accommodation	\$0.43						
City of Newark		Commercial	\$3.59	No min threshold	Yes	Moderate	Revised annually		
Population: 44,000		Industrial	\$0.69	Schools, recreational facilities, religious institutions					
				exempt.					
City of Livermore	1999	Retail	\$1.19	No minimum threshold	Yes; negotiated on	Moderate			
Population: 84,000		Service Retail	\$0.90	Church, private or public schools exempt.	a case-by-case				
		Office	\$0.76		basis.				
		Hotel	\$583/ rm						
		Manufacturing	\$0.37						
		Warehouse	\$0.11						
		Business Park	\$0.76						
		Heavy Industrial	\$0.38						
		Light Industrial	\$0.24						
tote: This chart has been assembled to present an overview, and as a result, terms are simplified. The information is recent but not all data has been updated as of the date of this report. In some cases, fees are adjusted by an index (such as CPI) which may not be									

reflected. For use other than general comparison, please consult the code and staff of the jurisdiction.

TABLE V - 8

SUMMARY OF JOBS HOUSING LINKAGE FEE PROGRAMS, CALIFORNIA

	Yr. Adopted/	Fee Level			Build Option/	Market	
Jurisdiction	Updated	(per Sq.Ft. unless otherv	vise noted)	Thresholds & Exemptions	Other	Strength	Comments
MARIN, NAPA, SONOMA,	SANTA CRUZ						
County of Santa Cruz	2015	All Non-Residential	\$2.00	No minimum threshold. Governmental and institutional	N/A	Substantial	
Population: 267,000				uses exempt			
County of Marin	2003	Office/R&D	\$7.19	No minimum threshold	Yes, preferred.	Substantial	
Population: 257,000		Retail/Rest.	\$5.40				
		Warehouse	\$1.94				
		Hotel/Motel	\$1,745/rm				
		Manufacturing	\$3.74				
San Rafael	2005	Office/R&D	\$7.64	5,000 SF threshold.	Yes. Program	Substantial	
Population: 59,000		Retail/Rest./Pers. Services	\$5.73	Mixed use projects that provide affordable housing are	specifies number		
		Manufacturing/LI	\$4.14	exempt.	of units per 1,000		
		Warehouse	\$2.23		SF.		
		Hotel/Motel	\$1.91				
Town of Corte Madera	2001	Office	\$4.79	No minimum threshold	N/A	Substantial	
Population: 9,000		R&D lab	\$3.20				
		Light Industrial	\$2.79				
		Warehouse	\$0.40				
		Retail	\$8.38				
		Com Services	\$1.20				
		Restaurant	\$4.39				
		Hotel	\$1.20				
		Health Club/Rec	\$2.00				
		Training facility/School	\$2.39				
City of St. Helena	2004	Office	\$4.11	Small childcare facilities, churches, non-profits, vineyards,	Yes, subject to City	Substantial	
Population: 6,000		Comm./Retail	\$5.21	and public facilities are exempt.	Council approval.		
		Hotel	\$3.80				
		Winery/Industrial	\$1.26				
City of Petaluma	2003	Commercial	\$2.19	N/A	Yes, subject to City	Moderate/	Fee adjusted annually by ENR
Population: 59,000			\$2.20 I		Council approvai.	Substantiai	construction cost index.
	2205	Retail	\$3.78				5 Parts Language Instruction
County of Sonoma	2005	Office	\$2.64 \$2.64	First 2,000 SF exempt	Yes. Program	Moderate	Fee adjusted annually by ENK
Population: 492,000		Hotel	\$2.64   \$4.50	Non-profits, redevelopment areas exempt	specifies number		construction cost index.
		Retail	\$4.50   \$3.70		of units per 1,000		
			\$2.72 \$2.72		۵۴.		
City of Cototi	2000	R&D Ag Processing	\$2.72	First 2,000 CE sussest	Vac Crastfins No.	Madausta	
City of Cotati	2006	Commercial	\$2.08 \$2.15	First 2,000 SF exempt	Yes. Specifies No.	woderate	Fee adjusted annually by ENR
Population: 7,000		Industriai	\$2.13 \$2.50	Non-profits exempt.			construction cost muex.
	┨─────	Retail	\$5.55		55	/	
County of Napa		Office	\$5.25	No minimum threshold	Units or land	Moderate /	
Population: 139,000	Updated 2014	Hotel	\$9.00	Non-profits are exempt	dedication; on a	Substantiai	
		Retail	\$7.50		case by case basis.		
		Industrial	\$4.50 I				
		Warehouse	\$3.60				
City of Napa	1999	Office	\$1.00	No minimum threshold	Units or land	Moderate/	Fee has not changed since 1999.
Population: 79,000		Hotel	\$1.40	Non-profits are exempt	dedication; on a	Substantiai	Increases under consideration.
		Retail	\$0.80		case by case basis.		
		Industrial, Wine Pdn	\$0.50				
		Warehouse (30-100K)	\$0.30				
Notes This should be a been seen		Warehouse (100K+)	\$0.20			diverse difference in the d	

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Note: This chart has been assembled to present an overview, and as a result, terms are simplified. The information is recent but not all data has been updated as of the date of this report. In some cases, fees are adjusted by an index (such as CPI) which may not be reflected. For use other than general comparison, please consult the code and staff of the jurisdiction.

TABLE V - 8

SUMMARY OF JOBS HOUSING LINKAGE FEE PROGRAMS, CALIFORNIA

	Yr. Adopted/	Fee Level		Build Option/	Market	
Jurisdiction	Updated	(per Sq.Ft. unless otherwise noted)	Thresholds & Exemptions	Other	Strength	Comments
SACRAMENTO AREA						
City of Sacramento	1989	Office \$2.2	5 No minimum threshold	Pay 20% fee plus	Moderate	North Natomas area has
Population: 476,000	Most recent	Hotel \$2.1	Mortuary, parking lots, garages, RC storage, Christmas tree	build at reduced		separate fee structure
	update, 2005	R&D \$1.9	L lots, B&Bs, mini-storage, alcoholic beverage sales, reverse	nexus		
		Commercial \$1.8	vending machines, mobile recycling, and small recyclable	(not meaningful		
		Manufacturing \$1.4	collection facilities	given amount of		
		Warehouse/Office \$0.8	2	fee)		
City of Folsom	2002	Office, Retail, Lt Industrial, \$1.5	No minimum threshold	Yes	Moderate/	Fee is adjusted annually based
Population: 73,000		and Manufacturing	Select nonprofits, small child care centers, churches, mini	Provide new or	Substantial	on construction cost index
		Up to 200,000 SF, 100% of fee; 200,000-250,000 SF,	storage, parking garages, private garages, private schools	rehab housing		
		75% of fee; 250,000-300,000 SF, 50% of fee; 300,000	exempt.	affordable to very		
		and up, 25% of fee.		low income		
				households. Also,		
				land dedication.		
County of Sacramento	1989	Office \$0.9	7 No minimum threshold	N/A	Moderate	
Population: 1,450,000		Hotel \$0.9	2 Service uses operated by non-profits are exempt			
		R&D \$0.8	2			
		Commercial \$0.7	7			
		Manufacturing \$0.6				
		Indoor Recreational Centers \$0.5				
		Warehouse \$0.2	5			
City of Elk Grove	1989	Office no	e No minimum threshold	N/A	Moderate	Office fee currently waived due
Population: 158,000	(inherited from	Hotel \$1.8	7 Membership organizations (churches, non-profits, etc.),			to market conditions.
	County when	Commercial \$0.6	mini storage, car storage, marinas, car washes, private			
	incorporated)	Manufacturing \$0.7	2 parking garages and agricultural uses exempt			
		Warehouse \$0.7	7			
Citrus Heights	1989	Office \$0.9	7 No minimum threshold	N/A	Moderate	
Population: 85,000	(inherited from	Hotel \$0.9	2 Membership organizations (churches, non-profits, etc.),			
	County when	R&D \$0.8	2 mini storage, car storage, marinas, car washes, private			
	incorporated)	Commercial \$0.7	parking garages and agricultural uses exempt			
		Manufacturing \$0.6				
		Indoor Recreational Centers \$0.5				
		Warehouse \$0.2	5			
Rancho Cordova	1989	Office \$0.9	7 No minimum threshold	N/A	Moderate	
Population: 67,000	(inherited from	Hotel \$0.9	2 Membership organizations (churches, non-profits, etc.),			
	County when	R&D \$0.8	2 mini storage, car storage, marinas, car washes, private			
	incorporated)	Commercial \$0.7	7 parking garages and agricultural uses exempt			
		Manufacturing \$0.6				
		Indoor Recreational Centers \$0.5				
		Warehouse \$0.2	5			

reflected. For use other than general comparison, please consult the code and staff of the jurisdiction.

SUMMARY OF JOBS HOUSING LINKAGE FEE PROGRAMS, CALIFORNIA

	Yr. Adopted/	Fee Level			Build Option/	Market	
Jurisdiction	Updated	(per Sq.Ft. unless otherwise noted)		Thresholds & Exemptions	Other	Strength	Comments
SOUTHERN CALIFORNIA							
City of Los Angeles	2017	Non-Residential - fee varies by zone		15,000 SF threshold	N/A	Diverse	Fees adjusted annually based on
Population: 3,793,000		Low \$3.	3.00	Governmental and public institutional uses developed for		Market	CPI.
		Medium \$4.	1.00	governmental or community use, private elementary or		Conditions	
		High \$5.	5.00	high school, hospitals, grocery stores not located within			
				1/3 mile of existing grocer stores, Central City West			
				Specific Plan Area, South LA Transit Empowerment Zone.			
City of Santa Monica	108/	Retail \$9	2 75	1 000 SE threshold	N/A	Venu	Fees adjusted annually based on
Population: 92 000	Undated	Office \$11	1 21	Private K-12 schools, city projects, places of worship	17/5	Substantial	construction cost index
1 00010110111 02,000	2002, 2015	Hotel/Lodging \$3.	3.07	commercial components of affordable housing		Substantia	construction cost macx.
	,	Hospital \$6.	5.15	developments exempt.			
		Industrial \$7.	7.53				
		Institutional \$10.	0.23				
		Creative Office \$9.	9.59				
		Medical Office \$6.	5.89				
City of West Hollywood	1986	Non-Residential \$8.	3.00	N/A	N/A	Substantial	Fees adjusted by CPI annually
Population: 35,000		(per staff increase from \$4 to \$8 anticipated for FY16-17)	)				
City of San Diego	1990	Office \$1	1 76	No minimum threshold	Can dedicate land	Substantial	
Population: 1.342.000	Updated 2014	Hotel \$1.	1.06	Industrial/warehouse, non-profit hospitals exempt.	or air rights in lieu	Substantia	
···· ,· ,· ,· ···		R&D \$0.	0.80	entry in the product of the second	of fee		
		Retail \$1.	1.06				
CENTRAL COAST							
County of San Luis Obispo	2009	Retail \$1.	L.36	5,000 gsf threshold	Yes	Moderate	Fees indicated are 40% of full
Population: 277,000		Office \$0.	0.96	educational, religious, public, institutional, and residential	equivalent		phase-in level and are indexed
		Hotel/Motel \$1.	L.44	care uses	to what		annually based on the
		Industrial / Warehouse \$0.	0.58		fees would		construction cost increases.
		Commercial Greenhouses \$0.	0.03		produce		
		Other Non-Residential \$1.	1.26		produce		
City of San Luis Obispo	2007	5% of building permit valuation		2,500 gsf threshold	Yes. 2 aff. units	Moderate	
Population: 46,000					per acre.		
Note: This chart has been assem	bled to present an	overview, and as a result, terms are simplified. The information	nation	is recent but not all data has been updated as of the date of this report.	In some cases, fees are a	idjusted by an ind	ex (such as CPI) which may not be
reflected. For use other than ger	neral comparison, p	please consult the code and staff of the jurisdiction.					



# **KEYSER MARSTON ASSOCIATES**

# ATTACHMENT A

#### **RESIDENTIAL NEXUS ANALYSIS**

Prepared for: Santa Clara County

Prepared by: Keyser Marston Associates, Inc.

December 2016

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# I. INTRODUCTION

The following report is a Residential Nexus Analysis, an analysis of the linkages between the development of new residential units in the unincorporated areas of Santa Clara County and the need for additional affordable housing. The report has been prepared by Keyser Marston Associates, Inc. (KMA) for the County of Santa Clara, pursuant to contracts both parties have with the Silicon Valley Community Foundation.

The analysis was prepared as part of a coordinated work program for twelve jurisdictions in Alameda and Santa Clara Counties. Silicon Valley Community Foundation with Baird + Driskell Community Planners organized and facilitated this multi-jurisdiction effort. Silicon Valley Community Foundation, which engaged KMA to prepare the analyses, serves as the main contracting entity with each participating jurisdiction, and has provided funding support for coordination and administration of the effort. Analyses in support of affordable housing impact fees on non-residential development were also prepared as part of the multi-jurisdiction work program.

# Background, Context and Use of the Analysis

The analysis addresses market rate residential projects in Santa Clara County. The nexus analysis quantifies the linkages between new market rate units in the unincorporated areas of Santa Clara County and the demand for affordable housing.

The County of Santa Clara has always been a participant in the county-wide efforts to support an increase in the supply of affordable housing. In the future, the County is considering an increased role by adopting measure to generate revenues to help assist in the development of affordable projects throughout the county. To that end, the County is considering affordable housing impact fees applicable to both residential and non-residential development.

The nexus analysis provided herein enables the County to proceed with enactment of affordable housing impact fees applicable to residential development occurring in the unincorporated areas of Santa Clara County. The conclusions of the analysis represent maximum supportable impact fee levels based on the impact of new residential development on the need for affordable housing. Findings are not recommended fee levels.

# Background on Key Inclusionary Housing Legal Cases

The following provides background regarding two key legal cases pertaining to inclusionary programs which in recent years have motivated many California cities to undertake residential nexus studies. This section is intended as general background only; nothing in this report should be interpreted as providing specific legal guidance, which KMA is not qualified to provide.

The *Palmer* case (Palmer/Sixth Street Properties L.P. v. City of Los Angeles [2009] 175 Cal. App. 4th 1396) was decided in 2009 and precluded California cities from requiring long term rent restrictions or inclusionary requirements on rental units. Since the *Palmer* ruling, many California cities have adopted affordable housing impact fees on rental projects supported by residential nexus studies similar to this one. This could change if future state legislation restores the ability by to implement inclusionary requirements for rental projects.

In *C.B.I.A.*, (California Building Industry Association v. City of San Jose, California Supreme Court Case No. S212072, June 15, 2015), also referred to as the San Jose Case, the California Building Industry Association challenged the City of San Jose's newly adopted inclusionary program. A core contention of C.B.I.A. was that the City's inclusionary program constituted an exaction that required a nexus study to support it. The case was pending in the courts from 2010 through February 2016. Ultimately, the case was decided by the California Supreme Court in favor of the City of San Jose, finding San Jose's inclusionary program to be a valid exercise of the City's power to regulate land use and not an exaction. The U.S. Supreme Court denied C.B.I.A.'s petition to review the case. While the case was pending, there was speculation that the courts would rule in favor of C.B.I.A. and this possibility was one of the motivations for cities to prepare residential nexus studies as an additional "backup" support measure for inclusionary programs.

# The Nexus Concept

A residential nexus analysis demonstrates and quantifies the impact of new market rate housing development on the demand for affordable housing. The underlying nexus concept is that the newly constructed market rate units represent net new households in the unincorporated areas of Santa Clara County. These households represent new income in the unincorporated areas of the County that will consume goods and services, either through purchases of goods and services or 'consumption' of government services. New consumption translates to jobs; a portion of the jobs are at lower compensation levels; low compensation jobs relate to lower income households that cannot afford market rate units in the unincorporated areas of Santa Clara County and therefore need affordable housing.

#### **Nexus Analysis Concept**



#### Methodology and Models Used

The nexus analysis methodology starts with the sales price of new market rate residential units and moves through a series of linkages to the gross income of the household that purchased the unit, the income available for expenditures on goods and services, the jobs associated with the purchases and delivery of those services, the income of the workers doings those jobs, the household income of the workers and, ultimately, the affordability level of the housing needed by the worker households. The steps of the analysis from household income available for expenditures to jobs generated were performed using the IMPLAN model, a model widely used for the past 35 years to quantify the impacts of changes in a local economy, including employment impacts from changes in personal income. From job generation by industry, KMA used its own jobs housing nexus model to quantify the income of worker households by affordability level.

To illustrate the linkages by looking at a simplified example, we can take an average household that buys a house at a certain price. From that price, we estimate the gross income of the household (from mortgage rates and lending practices) and the portion of income available for expenditures. Households will "purchase" or consume a range of goods and services, such as purchases at the supermarket or services at the bank. Purchases in the local economy in turn generate employment. The jobs generated are at different compensation levels. Some of the jobs are low paying and as a result, even when there is more than one worker in the household, there are some lower and middle-income households who cannot afford market rate housing in Santa Clara County.

The IMPLAN model quantifies jobs generated at establishments that serve new residents directly (e.g., supermarkets, banks or schools), jobs generated by increased demand at firms which service or supply these establishments, and jobs generated when the new employees spend their wages in the local economy and generate additional jobs. The IMPLAN model estimates the total impact combined.

# Net New Underlying Assumption

An underlying assumption of the analysis is that households that purchase new units represent net new households in Santa Clara County. If purchasers have relocated from elsewhere in the county, vacancies have been created that will be filled. An adjustment to new construction of units would be warranted if Santa Clara County were experiencing demolitions or loss of existing housing inventory. However, the rate of housing unit removal is so low as to not warrant an adjustment or offset.

On an individual project basis, if existing units are removed to redevelop a site to higher density, then there could be a need for recognition of the existing households in that all new units might not represent net new households, depending on the program design and number of units removed relative to new units.

Since the analysis addresses net new households in Santa Clara County and the impacts generated by their consumption expenditures, it quantifies net new demands for affordable units to accommodate new worker households. As such, the impact results do not address nor in any way include existing deficiencies in the supply of affordable housing.

# **Geographic Area of Impact**

The analysis quantifies impacts occurring within Santa Clara County. While much of the impact will occur within the County, some impacts will be experienced beyond the County's boundaries. The IMPLAN model computes the jobs generated within the county and sorts out those that occur beyond the county boundaries. The KMA Jobs Housing Nexus Model analyzes the income structure of jobs and their worker households, without assumptions as to where the worker households live.

In summary, the KMA nexus analysis quantifies all the job impacts occurring within Santa Clara County and related worker households. Job impacts, like most types of impacts, occur irrespective of political boundaries. And like other types of impact analyses, such as traffic, impacts beyond political boundaries are experienced, are relevant, and are important. See the Addendum: Additional Background and Notes on Specific Assumptions at the end of this report for further discussion.

# Market Rate Residential Project Types

Two prototypical residential project types were selected by the County and KMA for analysis in this nexus study. The prototypes were intended to represent the range of product types currently being built in the unincorporated areas of Santa Clara County or which are expected in the future including:

- Single Family Detached;
- Smaller Single Family Detached (County Island).

The prototypical residential units do not include unit types applicable to Stanford because it is governed by a General Use Permit which separately addresses affordable housing needs applicable to Stanford.

# **Affordability Tiers**

The nexus analysis addresses the following four income or affordability tiers:

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

# **Report Organization**

The report is organized into the following sections:

- Section A presents information regarding the prototypical new market rate residential units and the estimated household income of purchases of those units.
- Section B describes the IMPLAN model, which is used in the nexus analysis to translate household income into the estimated number of jobs in retail, restaurants, healthcare, and other sectors serving new residents.
- Section C presents the linkage between employment growth associated with residential development and the need for new lower income housing units required in each of the four income categories.
- Section D quantifies the nexus or mitigation cost based on the cost of delivering affordable units to new worker households in each of the four income categories.
- An Addendum section provides a supplemental discussion of specific factors in relation to the nexus concept.

- Appendix A contains the market survey.
- Appendix B includes detailed tables on worker occupations and compensation levels that are a key input into the analysis.

# Disclaimers

This report has been prepared using the best and most recent data available at the time of the analysis. Local data and sources were used wherever possible. Major sources include the U.S. Census Bureau's American Community Survey, California Employment Development Department (EDD) and the IMPLAN model. While we believe all sources utilized are sufficiently sound and accurate for the purposes of this analysis, we cannot guarantee their accuracy. Keyser Marston Associates, Inc. assumes no liability for information from these and other sources.

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# II. RESIDENTIAL NEXUS ANALYSIS

# A. Market Rate Units and Household Income

This section describes the prototypical market rate residential units and the income of the purchaser households. Market rate prototypes are representative of new residential units currently being built in the unincorporated areas of Santa Clara County or that are likely to be built in the unincorporated areas of the County over the next five to ten years. Household income is estimated based on the amount necessary for the mortgage payments associated with the prototypical new market rate units and becomes the basis for the input to the IMPLAN model. These are the starting points of the chain of linkages that connect new market rate units to additional demand for affordable residential units.

This section presents a summary of the market rate prototypes and the estimated household income of purchasers of the market rate units.

# Recent Housing Market Activity and Prototypical Units

KMA worked with County staff to select two representative development prototypes envisioned to be developed in the unincorporated areas of Santa Clara County in the future. KMA then undertook a market survey of residential projects to estimate current pricing. More details on the market survey can be found in Appendix A. KMA notes that this residential nexus analysis and the selected market rate prototypes do not cover Stanford, which is governed by a General Use Permit that already addresses affordable housing needs.

In general, the County expects continued development of large custom homes in the hills. In addition, there are a few areas within the County with the potential for new homes on smaller lots; these are located in 'County Islands' surrounded by incorporated areas. The County does not anticipate higher density development, such as townhomes, condominiums, or apartment projects, in the unincorporated areas outside of Stanford.

To estimate current market prices, KMA gathered new and resales data for recently built single family homes in the unincorporated areas including San Martin, and the areas surrounding Los Gatos and Los Altos. These homes tend to be custom built and located on large lots. In addition, KMA gathered recent sales prices for the Porter Court project that was identified by County staff as an example of a smaller-lot single family detached project.

The two residential prototypes are summarized in the table below. More detail can be found on Table A-1 at the end of this section. The main objective of the survey was to review current market sales prices, per unit and per square foot, for the residential project types in the unincorporated areas of Santa Clara County.
Prototypical Residential Units for County of Santa Clara					
	Single Family Detached	Smaller Single Family Detached (County Island)			
Avg. Unit Size	5,000 SF	2,600 SF			
Avg. No. of Bedrooms	4.00	4.00			
Avg. Sales Price / Rent Per Square Foot	\$2,000,000 \$400 /SF	\$900,000 \$346 /SF			

In summary, the residential prototypes analyzed in the nexus analysis are as follows:

Source: KMA market study; see Appendix A.

It is important to note that the residential prototypes analysis is intended to reflect average or typical residential projects in the local market rather than any specific project. It would be expected that specific projects would vary to some degree from the residential prototypes analyzed.

## Income of Housing Unit Purchaser

After the prototypes are established, the next step in the analysis is to determine the income of the purchasing households in the prototypical units.

To make the determination for ownership units, terms for the purchase of residential units used in the analysis are slightly less favorable than what can be achieved at the current time since current terms are not likely to endure. A down-payment of 20%<sup>1</sup> is estimated for the smaller single family detached prototypes. A 30%<sup>2</sup> down-payment is estimated for the single family prototype, reflective of local data on down-payments for units valued over \$1.5 million. A 30-year fixed rate loan at a 5% interest is assumed. A 30-year fixed rate loan at a 5% interest is assumed. A 30-year fixed rate loan at a 5% interest is assumed. The interest rate at 5% reflects a longer term average rate based on data for the last fifteen years from 2001 to 2015.<sup>3</sup> A premium of 0.25% is added to reflect the non-conforming nature of the loans (jumbo loan). Tables A-2 and A-3 at the end of this section provide the details.

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<sup>&</sup>lt;sup>1</sup> Down payment of 20% reflects the median for new purchase loans originated in zip codes corresponding to Alameda and Santa Clara Counties derived from Freddie Mac dataset for loans issued in the 1st Quarter of 2015.

<sup>&</sup>lt;sup>2</sup> Down payment of 30% is based on Listsource data on mortgages for homes valued over \$1.5 Million that sold within Santa Clara County from Dec. 2015 to March 2016.

<sup>&</sup>lt;sup>3</sup> Based on Freddie Mac Primary Mortgage Market Survey. Reflects weekly average rates for 30 year fixed rate mortgages during the period from 1/2001 through 12/2015 applicable to the West Region and rounded to the nearest whole percentage.

All ownership product types include an estimate of homeowners' insurance and property taxes. These are included along with the mortgage payment as part of housing expenses for purposes of determining mortgage eligibility.<sup>4</sup> The analysis estimates gross household income based on the assumption that these housing costs represent, on average, approximately 35% of gross income. The assumption that housing expenses represent 35% of gross income is reflective of the local average for new purchase loans<sup>5</sup> and is consistent with criteria used by lenders to determine mortgage eligibility.<sup>6</sup>

The estimated gross household incomes of the purchasers of the prototype units are calculated in Tables A-2 and A-3 and summarized below.

Gross Household Income		
		Smaller Single
	Single Family	Family Detached
	Detached	(County Island)
Gross Household Income	\$345,000	\$172,000

# Income Available for Expenditures

The input into the IMPLAN model used in this analysis is the net income available for expenditures. To arrive at income available for expenditures, gross income must be adjusted for Federal and State income taxes, contributions to Social Security and Medicare, savings, and payments on household debt. Per KMA correspondence with the producers of the IMPLAN model (IMPLAN Group LLC), other taxes including sales tax, gas tax, and property tax are handled internally within the model as part of the analysis of expenditures. Payroll deduction for medical benefits and pre-tax medical expenditures are also handled internally within the model. Housing costs are addressed separately, as described below, and so are not deducted as part

<sup>&</sup>lt;sup>4</sup> Housing expenses are combined with other debt payments such as credit cards and auto loans to compute a Debt To Income (DTI) ratio which is a key criteria used for determining mortgage eligibility.

<sup>&</sup>lt;sup>5</sup> Freddie Mac data on new purchase loans originated in zip codes corresponding to Santa Clara and Alameda Counties for the 1st Quarter of 2015 indicates an average debt to income ratio of 37%; however, most households have other forms of debt such as credit cards, student loans, and auto loans that are included as part of this ratio and the ratio considering housing costs only would be lower. While many purchasers of higher value homes such as the single family prototype may spend less than 35% of their income on housing, the analysis conservatively assumes 35% of income is spent on housing for these households also. Selection of a lower percentage of income spent on housing would have resulted in a higher estimate of household income and greater impacts from expenditures. Application of a 35% ratio is also consistent with the California Health and Safety Code standard for relating income to housing costs for ownership units.

<sup>&</sup>lt;sup>6</sup> Fannie Mae mortgage underwriting eligibility criteria establishes a debt to income threshold of 36% above which tighter credit standards apply. A debt to income ratio of up to 45% is permitted for borrowers meeting specified credit criteria; however, most households have other forms of debt such as credit cards, student loans, and auto loans that would be considered as part of this ratio.

of this adjustment step. Table A-4 at the end of this section shows the calculation of income available for expenditures.

Income available for expenditures is estimated at approximately 57% to 67% of gross income, depending on the market rate prototype. The estimates are based on a review of data from the Internal Revenue Service and California Franchise Tax Board tax tables. Per the Internal Revenue Service, households earning between \$100,000 and \$200,000 per year, or the residents of the smaller single family units, who itemize deductions on their tax returns will pay an average of 12.4% of gross income for federal taxes. Households in the larger single family units are estimated to pay 19.5% of gross income for federal taxes, the average for households in the \$200,000 - \$500,000 range who itemize their deductions. State taxes are estimated to average 5% to 6% of gross income based on tax rates per the California Franchise Tax Board. The employee share of FICA payroll taxes for Social Security and Medicare is 7.65% of gross income. A ceiling of \$118,500 per employee applies to the 6.2% Social Security portion of this tax rate.

Savings and repayment of household debt represent another necessary adjustment to gross income. Savings includes various IRA and 401 K type programs as well as non-retirement household savings and investments. Debt repayment includes auto loans, credit cards, and all other non-mortgage debt. For residents of the smaller single family homes, savings and repayment of debt are estimated to represent a combined 8% of gross income based on the 20-year average derived from United States Bureau of Economic Analysis data. Households in the larger single family prototype are assumed to save 12% of their income based on savings rates applicable to higher income households drawn from data published by the National Bureau of Economic Research, "Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data," October 2014.

The percentage of income available for expenditure for input into the IMPLAN model is prior to deducting housing costs. The reason is for consistency with the IMPLAN model which defines housing costs as expenditures. The IMPLAN model addresses the fact that expenditures on housing do not generate employment to the degree other expenditures such as retail or restaurants do, but there is some limited maintenance and property management employment generated.

After deducting income taxes, Social Security, Medicare, savings, and repayment of debt, for purchasers of one of the new ownership prototypes, the estimated income available for expenditures is 57% - 67%. These are the factors used to adjust from gross income to the income available for expenditures for input into the IMPLAN model. As indicated above, other forms of taxation such as property tax are handled internally within the IMPLAN model.

Estimates of household income available for expenditures are presented below:

Income Available for Expenditures		
	Single Family Detached	Smaller Single Family Detached (County Island)
Gross Household Income	\$345,000	\$172,000
Percent Income available for Expenditures	57%	67%
Household Income A <i>v</i> ailable for Expenditure <sup>(1)</sup>		
One Unit	\$196,700	\$115,200
100 Units [input to IMPLAN]	\$19,670,000	\$11,520,000

(1) Calculated as gross household income X percent available for expenditures. Result includes the share of income spent on housing as the required input to the IMPLAN model is income after taxes but before deduction of housing costs as described above.

The nexus analysis is conducted on 100-unit building modules for ease of presentation, and to avoid awkward fractions. The spending associated with 100 market rate residential units is the input into the IMPLAN model. Table A-5 summarizes the conclusions of this section and calculates the household income for the 100-unit building modules.

	Single Family Detached	Smaller Single Family Detached (County Island)
Example Projects	34 homes from 2014	Porter Court
Density / Lot Size	n/a	5,000 - 8,000 sf lots
Building Type	Two -story homes	Two-story
Unit Mix	3, 4, and 5 BR	3, 4, and 5 BR
Average Unit Size	5,000 sf	2,600 sf
Average No. of Bedrooms	4.0 BR	4.0 BR
Parking Type	Attached garage	Attached garage
Average Parking Spaces	2.0	2.0
Sales Price/Rent per square foot	\$2,000,000 \$400	\$900,000 \$346



## TABLE A-2 PROTOTYPE 1 : SINGLE FAMILY DETACHED SALES PRICE TO INCOME RATIO RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

			Prototype 1 Single Family Detached
Sales Price	\$400 /SF	5,000 SF <sup>1</sup>	\$2,000,000 <sup>1</sup>
Mortgage Payment			
Downpayment @ 30%		30% <sup>2</sup>	\$600,000
Loan Amount			\$1,400,000
Interest Rate			5.25% <sup>3</sup>
Term of Mortgage			30 years
Annual Mortgage Payment	\$7,700 /mo	onth	\$92,800
Other Costs			
Property Taxes	1.30% of s	ales price <sup>4</sup>	\$26,000
Homeowner Insurance	0.10% of s	ales price <sup>5</sup>	\$2,000
Total Annual Housing Cost	\$10,100 /mc	onth	\$120,800
% of Income Spent on Hsg			35% <sup>6</sup>
Annual Household Income Re	quired		\$345,000
Sales Price to Income Ratio			5.8

#### Notes

(1) Based on KMA Market Survey.

(2) Down payment percentages are estimated based on Listsource data on mortgages for homes valued over \$1.5 Million that sold within Santa Clara County from Dec. 2015 to March 2016.

(3) Average mortgage interest rate for prior 15 years derived from Freddie Mac Primary Mortgage Market Survey, West Region (rounded to nearest whole percentage). Based on weekly average rates for 30 year fixed rate mortgages during the period from 1/2001 through 12/2015. Includes a 0.25% premium to reflect the non-conforming nature of the loan (jumbo loan).

(4) Property tax rate is inclusive of ad valorem taxes and applicable voter approved rates, fixed charges, and assessments for the jurisdiction indicated. Source: ListSource.

(5) Estimated from quotes obtained from Progressive Insurance.

(6) While most purchasers of high value homes likely spend less than 35% of their income on housing, the analysis conservatively assumes 35% of income is spent on housing. Selection of a lower percentage of income spent on housing would have resulted in a higher estimate of household income and greater impacts from expenditures.



## TABLE A-3 PROTOTYPE 2: SMALLER SINGLE FAMILY DETACHED (COUNTY ISLAND) SALES PRICE TO INCOME RATIO RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

			Prototype 2 Smaller Single Family Detached (County Island)
		1	
Sales Price	\$346 /SF	2,600 SF	\$900,000 '
Mortgage Payment			
Downpayment @ 20%		20% 2	\$180,000
Loan Amount			\$720,000
Interest Rate			5.25% <sup>3</sup>
Term of Mortgage			30 years
Annual Mortgage Payment	\$4,000 /mc	onth	\$47,700
Other Costs			
Property Taxes	1.30% of s	ales price <sup>4</sup>	\$11,700
Homeowner Insurance	0.10% of s	ales price <sup>5</sup>	\$900
Total Annual Housing Cost	\$5,000 /mc	onth	\$60,300
% of Income Spent on Hsg			35% <sup>6</sup>
Annual Household Income Red	quired		\$172,000
Sales Price to Income Ratio			5.2

#### Notes

(1) Based on KMA Market Survey.

(2) Reflects the median down payment for new purchase loans originated in zip codes corresponding to Alameda and Santa Clara Counties derived from Freddie Mac dataset for loans issued in the 1st Quarter of 2015.

(3) Average mortgage interest rate for prior 15 years derived from Freddie Mac Primary Mortgage Market Survey, West Region (rounded to nearest whole percentage). Based on weekly average rates for 30 year fixed rate mortgages during the period from 1/2001 through 12/2015. Includes a 0.25% premium to reflect the non-conforming nature of the loan (jumbo loan).

(4) Property tax rate is inclusive of ad valorem taxes and applicable voter approved rates, fixed charges, and assessments for the jurisdiction indicated. Source: ListSource.

(5) Estimated from quotes obtained from Progressive Insurance.

(6) Ratio is consistent with Fannie Mae mortgage underwriting eligibility criteria which establishes a debt to income threshold of 36% above which tighter credit standards apply. A debt to income ratio of up to 45% is permitted for borrowers meeting specified credit criteria. Ratio is also consistent with the California Health and Safety Code standard for relating income to housing costs for ownership units. Freddie Mac data on new purchase loans originated in zip codes corresponding to Santa Clara and Alameda Counties for the 1st Quarter of 2015 indicates an average debt to income ratio of 37%; however, most households have other forms of debt such as credit cards, student loans, and auto loans that are included as part of this ratio and the ratio considering housing costs only would be lower.



# TABLE A-4 INCOME AVAILABLE FOR EXPENDITURES<sup>1</sup> RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

i i ototypo i	Prototype 2	
Single Family Detached	Smaller Single Family Detached (County Island)	
100%	100%	
19.5%	12.4%	
6%	5%	
5.11%	7.65%	
12%	8%	
57%	67%	
	Single Family Detached 100% 19.5% 6% 5.11% 12%	

#### Notes:

- <sup>1</sup> Gross income after deduction of taxes and savings. Income available for expenditures is the input to the IMPLAN model which is used to estimate the resulting employment impacts. Housing costs are not deducted as part of this adjustment step because they are addressed separately as expenditures within the IMPLAN model.
- <sup>2</sup> Reflects average tax rates (as opposed to marginal) based on U.S. Internal Revenue Services, Tax Statistics, Tables 1.1 and 2.1 for 2013. Homeowners are assumed to itemize deductions. Renter households are assumed to take the standard deduction. Tax rates reflect averages for applicable income range.
- <sup>3</sup> Average tax rate estimated by KMA based on marginal rates per the California Franchise Tax Board and ratios of taxable income to gross income estimated based on U.S. Internal Revenue Service data.
- <sup>4</sup> For Social Security and Medicare. Social Security taxes estimated based upon the current ceiling on applicability of Social Security taxes of \$118,500 (ceiling applies per earner not per household) and the average number of earners per household.
- <sup>5</sup> Household savings including retirement accounts like 401k / IRA and other deductions such as interest costs on credit cards, auto loans, etc, necessary to determine the amount of income available for expenditures. The 8% rate used in the analysis for households earning less than \$225,000 is based on the average over the past 20 years computed from U.S. Bureau of Economic Analysis data, specifically the National Income and Product Accounts, Table 2.1 "Personal Income and Its Disposition." Households earning more than \$225,000 are assumed to save a higher percentage of their income, based on savings rates for the last 20 years from data published by the National Bureau of Economic Research, "Wealth Inequality in the United States Since 1913: Evidence From Capitalized Income Tax Data," October 2014.
- <sup>6</sup> Deductions from gross income to arrive at the income available for expenditures are consistent with the way the IMPLAN model and National Income and Product Accounts (NIPA) defines income available for personal consumption expenditures. Income taxes, contributions to Social Security and Medicare, and savings are deducted; however, property taxes and sales taxes are not. Housing costs are not deducted as part of the adjustment because they are addressed separately as expenditures within the IMPLAN model.



## TABLE A-5 FOR SALE PROTOTYPES: SALES PRICE TO INCOME SUMMARY RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

	Per Unit	Per Sq.Ft.	100 Unit Building Module
PROTOTYPE 1 : SINGLE FAMILY DETACHED			(Per 100 Units)
Building Sq.Ft. (excludes garage)	5,000		500,000
Sales Price	\$2,000,000	\$400	\$200,000,000
Sales Price to Income Ratio	5.8		5.8
Gross Household Income	\$345,000		\$34,500,000
Income Available for Expenditure <sup>1</sup> 57% of gross	\$196,700		\$19,670,000
PROTOTYPE 2 : SMALLER SINGLE FAMILY DETACH	ED (COUNT)	(ISLAND)	
Building Sq.Ft. (excludes garage)	2,600		260,000
Sales Price	\$900,000	\$346	\$90,000,000
Sales Price to Income Ratio	5.2		5.2
Gross Household Income	\$172,000		\$17,200,000
Income Available for Expenditure <sup>1</sup> 67% of gross	\$115,200		\$11,520,000

Notes:

(1) Represents net income available for expenditures after income tax, payroll taxes, and savings. See Table A-4 for derivation.

Source: See Table A-1 through Table A-4.

## B. The IMPLAN Model

Consumer spending by residents of new housing units will create jobs, particularly in sectors such as restaurants, health care, and retail, which are closely connected to the expenditures of residents. The widely used economic analysis tool, IMPLAN (IMpact Analysis for PLANning), was used to quantify these new jobs by industry sector.

# **IMPLAN Model Description**

The IMPLAN model is an economic analysis software package now commercially available through the IMPLAN Group, LLC. IMPLAN was originally developed by the U.S. Forest Service, the Federal Emergency Management Agency, and the U.S. Department of the Interior Bureau of Land Management and has been in use since 1979 and refined over time. It has become a widely used tool for analyzing economic impacts for a broad range of applications from major construction projects to natural resource programs.

IMPLAN is based on an input-output accounting of commodity flows within an economy from producers to intermediate and final consumers. The model establishes a matrix of supply chain relationships between industries and also between households and the producers of household goods and services. Assumptions about the portion of inputs or supplies for a given industry likely to be met by local suppliers, and the portion supplied from outside the region or study area are derived internally within the model using data on the industrial structure of the region.

The output or result of the model is generated by tracking changes in purchases for final use (final demand) as they filter through the supply chain. Industries that produce goods and services for final demand or consumption must purchase inputs from other producers, which in turn, purchase goods and services. The model tracks these relationships through the economy to the point where leakages from the region stop the cycle. This allows the user to identify how a change in demand for one industry will affect a list of over 500 other industry sectors. The projected response of an economy to a change in final demand can be viewed in terms of economic output, employment, or income.

Data sets are available for each county and state, so the model can be tailored to the specific economic conditions of the region being analyzed. This analysis utilizes the data set for Santa Clara County. As will be discussed, much of the employment impact is in local-serving sectors, such as retail, eating and drinking establishments, and medical services. The employment impacts will extend throughout the county and beyond based on where jobs are located that serve residents of the unincorporated areas of Santa Clara County. In fact, Santa Clara County is part of the larger Bay Area economy and impacts will likewise extend throughout the region. However, consistent with the conservative approach taken in the nexus analysis, only the impacts that occur within Santa Clara County are included in the analysis.

# Application of the IMPLAN Model to Estimate Job Growth

The IMPLAN model was applied to link income to household expenditures to job growth. Employment generated by the household income of residents is analyzed in modules of 100 residential units to simplify communication of the results and avoid awkward fractions. The IMPLAN model distributes spending among various types of goods and services (industry sectors) based on data from the Consumer Expenditure Survey and the Bureau of Economic Analysis Benchmark input-output study, to estimate employment generated.

Job creation, driven by increased demand for products and services, was projected for each of the industries that will serve the new households. The employment generated by this new household spending is summarized below.

Jobs Generated Per 100 Units		
	Single Family Detached	Smaller Single Family Detached (County Island)
Annual Household Expenditures (100 Units)	\$19,670,000	\$11,520,000
Total Jobs Generated (100 Units)	118.6	69.4

Table B-1 provides a detailed summary of employment generated by industry. The table shows industries sorted by projected employment. The Consumer Expenditure Survey published by the Bureau of Labor Statistics tracks expenditure patterns by income level. IMPLAN utilizes this data to reflect the pattern by income bracket. Estimated employment is shown for each IMPLAN industry sector representing 1% or more of total employment. The jobs that are generated are heavily retail jobs, jobs in restaurants and other eating establishments, and in services that are provided locally such as health care. The jobs counted in the IMPLAN model cover all jobs, full and part time, similar to the U.S. Census and all reporting agencies (unless otherwise indicated).

## TABLE B-1 IMPLAN MODEL OUTPUT EMPLOYMENT GENERATED RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

Per 100 Market Rate Units	Prototype 1	Prototype 2		
	Single Family Detached	Smaller Single Family Detached (County Island)	% of Jobs	
Household Expenditures (100 Market Rate Units)	\$19,670,000	\$11,520,000		
Jobs Generated by Industry <sup>1</sup>				
Full-service restaurants Individual and family services Limited-service restaurants All other food and drinking places	7.2 5.9 6.1 <u>3.8</u>	4.2 3.4 3.5 <u>2.2</u>	6% 5% <u>3%</u>	
Subtotal Restaurant	22.9	13.4	19%	
Retail - Food and beverage stores Retail - General merchandise stores Personal care services	4.3 3.4 2.7	2.5 2.0 1.6	4% 3% 2%	
Retail - Health and personal care stores Retail - Miscellaneious store retailers Retail - Building material and garden	1.7 1.7 1.6	1.0 1.0 1.0	1% 1% 1%	
Other personal services Retail - Clothing and accessories Retail - Motor vehicle and parts dealers	1.5 1.5 1.3	0.9 0.8 0.8	1% 1% 1%	
Retail - Nonstore retailers Subtotal Retail and Service	<u>0.5</u> 20.2	<u>0.3</u> 11.9	<u>0%</u> 17%	
Hospitals Nursing and community care facilities	5.5 2.6	3.2 1.5	5% 2%	
Home health care services Offices of physicians Offices of dentists	1.1 3.2	0.7 1.8	1% 3%	
Offices of other health practitioners Subtotal Healthcare	<u>1.8</u> 15.5	<u>1.0</u> 9.1	<u>1%</u> 13%	
Other educational services Colleges, universities Elementary and secondary schools	3.7 3.6 <u>2.2</u> 9.5	2.1 2.1 <u>1.3</u> 5.6	3% 3% <u>2%</u> 8%	
Real estate	9.5 4.3	2.5	0% 4%	
Wholesale trade Other financial investment activities	3.0 2.7	1.8 1.6	3% 2%	
Child day care services Services to private households Services to buildings	2.6 2.1 2.0	1.5 1.2 1.2	2% 2% 2%	
Automotive repair and maintenance All Other	1.8 31.8	1.0 18.6	1% 27%	
Total Number of Jobs Generated	118.6	69.4	100%	

<sup>1</sup> Estimated employment generated by expenditures of households within 100 prototypical market rate units for Industries representing more than 1% of total employment. Employment estimates are based on the IMPLAN Group's economic model, IMPLAN, for Santa Clara County (uses 2014 IMPLAN data set, the most recent available as of March 2016). Includes both fulland part-time jobs.

#### C. The KMA Jobs Housing Nexus Model

This section presents a summary of the analysis linking the employment growth associated with residential development, or the output of the IMPLAN model (see Section B), to the estimated number of lower income housing units required in each of four income categories, for each of the two residential prototype units.

## Analysis Approach and Framework

The analysis approach is to examine the employment growth for industries related to consumer spending by residents in the 100-unit modules. Then, through a series of linkage steps, the number of employees is converted to households and housing units by affordability level. The findings are expressed in terms of numbers of affordable units per 100 market rate units. The analysis addresses the affordable unit demand associated with single family detached units.

The table below shows the 2016 Area Median Income (AMI) for Santa Clara County, as well as the income limits for the four categories that were evaluated: Extremely Low (30% of AMI), Very Low (50% of AMI), Low (80% of AMI), and Moderate (120% of AMI). The income definitions used in the analysis are those published by the California Department of Housing and Community Development (HCD).

_	Household Size (Persons)					
	1	2	3	4	5	6 +
Extr. Low (Under 30% AMI)	\$23,450	\$26,800	\$30,150	\$33,500	\$36,200	\$38,900
Very Low (30%-50% AMI)	\$39,100	\$44,650	\$50,250	\$55,800	\$60,300	\$64,750
Low (50%-80% AMI)	\$59,400	\$67,900	\$76,400	\$84,900	\$91,650	\$98,450
Moderate (80%-120% AMI)	\$89,950	\$102,800	\$115,650	\$128,500	\$138,800	\$149,050
Median (100% of Median)	\$74,950	\$85,700	\$96,400	\$107,100	\$115,650	\$124,250
Source: California Department of Housing and Community Development						

## 2016 Income Limits for Santa Clara County

Source: California Department of Housing and Community Development.

The analysis is conducted using a model that KMA developed and has applied to similar evaluations in many other jurisdictions. The model inputs are all local data to the extent possible, and are fully documented in the following description.

## **Analysis Steps**

The tables at the end of this section present a summary of the nexus analysis steps for the prototype units. Following is a description of each step of the analysis.

# Step 1 – Estimate of Total New Employees

Table C-1 commences with the total number of employees associated with the new market rate units. The employees were estimated based on household expenditures of new residents using the IMPLAN model (see Section B).

## Step 2 – Changing Industries Adjustment and Net New Jobs

The local economy, like that of the U.S. as a whole, is constantly evolving, with job losses in some sectors and job growth in others. Over the past decade employment in manufacturing sectors of the local economy have declined along with governmental employment, farming, construction and financial activities employment. Jobs lost over the last decade in these declining sectors were replaced by job growth in other industry sectors.

Step 2 makes an adjustment to take ongoing changes in the economy into account recognizing that jobs added are not 100% net new in all cases. A 20% adjustment is utilized based on the long term shifts in employment that have occurred in some sectors of the local economy and the likelihood of continuing changes in the future. Long term declines in employment experienced in some sectors of the economy mean that some of the new jobs are being filled by workers that have been displaced from another industry and who are presumed to already have housing locally. Existing workers downsized from declining industries are assumed to be available to fill a portion of the new retail, restaurant, health care, and other jobs associated with services to residents.

The 20% downward adjustment used for purposes of the analysis was derived from California Employment Development Department data on employment by industry in the San Jose-Sunnyvale-Santa Clara and Oakland-Hayward-Berkeley Metropolitan Districts which encompasses the jurisdictions included in the multi-jurisdiction nexus effort. Over the ten-year period from 2005 to 2015, approximately 55,000 jobs were lost in declining industry sectors. Over the same period, growing and stable industries added a total of 268,000 jobs. The figures are used to establish a ratio between jobs lost in declining industries to jobs gained in growing and stable industries at 20%<sup>7</sup>. The 20% factor is applied as an adjustment in the analysis, effectively assuming one in every five new jobs is filled by a worker down-sized from a declining industry and who already lives locally.

The discount for changing industries is a conservative analysis assumption that may result in an understatement of impacts. The adjustment assumes workers down-sized from declining sectors of the local economy are available to fill a portion of the new service sector jobs documented in a residential nexus analysis. In reality, displaced workers from declining industry sectors of the economy are not always available to fill these new service jobs because they may retire or exit the

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<sup>&</sup>lt;sup>7</sup> The 20% ratio is calculated as 55,000 jobs lost in declining sectors excluding defense divided by 268,000 jobs gained in growing and stable sectors = 20.5% (rounded to 20%).

workforce or may be competitive for and seek employment in one of the other growing sectors of the local economy that is not oriented towards services to local residents.

# Step 3 – Adjustment from Employees to Employee Households

This step (Table C-1) converts the number of employees to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons, students, and those on public assistance. The County average of 1.72 workers per worker household (from the U. S. Census Bureau 2011-2013 American Community Survey) is used for this step in the analysis. The number of jobs is divided by 1.72 to determine the number of worker households. This ratio is distinguished from the overall number of workers per household in that the denominator includes only households with at least one worker. If the average number of workers in all households were used, it would have produced a greater demand for housing units. The 1.72 ratio covers all workers, full and part time.

# Step 4 – Occupational Distribution of Employees

The occupational breakdown of employees is the first step to arrive at income level. The output from the IMPLAN model provides the number of employees by industry sector, shown in Table B-1. The IMPLAN output is paired with data from the Department of Labor, Bureau of Labor Statistics May 2014 Occupational Employment Survey (OES) to estimate the occupational composition of employees for each industry sector.

# Step 4a – Translation from IMPLAN Industry Codes to NAICS Industry Codes

The output of the IMPLAN model is jobs by industry sector using IMPLAN's own industry classification system, which consists of 536 industry sectors. The OES occupation data uses the North American Industry Classification System (NAICS). Estimates of jobs by IMPLAN sector must be translated into estimates by NAICS code for consistency with the OES data.

The NAICS system is organized into industry codes ranging from two- to six-digits. Two-digit codes are the broadest industry categories and six-digit codes are the most specific. Within a two-digit NAICS code, there may be several three-digit codes and within each three-digit code, several four-digit codes, etc. A chart published by IMPLAN relates each IMPLAN industry sector with one or more NAICS codes, with matching NAICS codes ranging from the two-digit level to the five-digit level. For purposes of the nexus analysis, all employment estimates must be aggregated to the four, or in some cases, five-digit NAICS code level to align with OES data which is organized by four and five-digit NAICS code. For some industry sectors, an allocation is necessary between more than one NAICS code. Where required, allocations are made proportionate to total employment at the national level from the OES.

The table below illustrates analysis Step 4a in which employment estimates by IMPLAN Code are translated to NAICS codes and then aggregated at the four and five digit NAICS code level. The examples used are Child Day Care Centers and Hospitals. The process is applied to all the industry sectors.

Illustrat	ion of Model Cter	. 4 .				
liiustrat	ion of Model Step	) 4a.				
A. IMPLAN Output by B. Link to		C. Aggı	regate at	4-Digit NAICS Code		
IMPLAN	Industry Sector	Corres	ponding NAICS	Level		
<u>Jobs</u>	IMPLAN Sector	<u>Jobs</u>	NAICS Code	<u>Jobs</u>	<u>% Total</u>	4-Digit NAICS
26	487 - Child day	26	6244 Child day	2.6	100%	6244 Child day care
2.0	care services	2.0	care services	2.0	100 /0	services
5.5	482 - Hospitals	5.5	622 Hospitals	5.1	92%	6221 General Medical and Surgical
				0.2	4%	6222 Psychiatric and Substance Abuse Hospitals
				0.2	4%	6223 Specialty (except Psychiatric and Substance Abuse) Hospitals

Source: KMA, Bureau of Labor Statistics May 2014 Occupational Employment Survey.

## Step 4b – Apply OES Data to Estimate Occupational Distribution

Employment estimates by four and five-digit NAICS code from step 4a are paired with data on occupational composition within each industry from the OES to generate an estimate of employment by detailed occupational category. As shown on Table C-1, new jobs will be distributed across a variety of occupational categories. The three largest occupational categories are office and administrative support (15%), food preparation and serving (15%), and sales and related (13%). Step 4 of Table C-1 indicates the percentage and number of employee households by occupation associated with 100 market rate units.

## Step 5 – Estimates of Employee Households Meeting the Lower Income Definitions

In this step, occupations are translated to employee incomes based on recent Santa Clara County wage and salary information from the California Employment Development Department (EDD). The wage and salary information summarized in Appendix B provided the income inputs to the model.

For each occupational category shown in Table C-1, the OES data provides a distribution of specific occupations within the category. For example, within the Food Preparation and Serving Category, there are Supervisors, Cooks, Bartenders, Waiters and Waitresses, Dishwashers, etc. In total there are over 100 detailed occupation categories included in the analysis as shown

in the Appendix B tables. Each of these over 100 occupation categories has a different distribution of wages which was obtained from EDD and is specific to workers in Santa Clara County as of 2015.

For each detailed occupational category, the model uses the distribution of wages to calculate the percent of worker households that would fall into each income category. The calculation is performed for each possible combination of household size and number of workers in the household. For households with more than one worker, individual *employee* income data was used to calculate the household income by assuming multiple earner households are, on average, formed of individuals with similar incomes.

At the end of Step 5, the nexus model has established a matrix indicating the percentages of households that would qualify in the affordable income tiers for every detailed occupational category and every potential combination of household size and number of workers in the household.

# Step 6 – Distribution of Household Size and Number of Workers

In this step, we account for the distribution in household sizes and number of workers for Santa Clara County households using local data obtained from the U.S. Census. Census data is used to develop a set of percentage factors representing the distribution of household sizes and number of workers within working households. The percentage factors are specific to Santa Clara County and are derived from the 2011 – 2013 American Community Survey. Application of these percentage factors accounts for the following:

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

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

# Step 7 – Estimate of Number of Households that Meet Size and Income Criteria

Step 7 is the final step to calculate the number of worker households meeting the size and income criteria for the four affordability tiers. The calculation combines the matrix of results from Step 5 on percentage of worker households that would meet the income criteria at each potential household size / no. of workers combination, with Step 6, the percentage of worker household size / number of workers combination. The result is the percent of households that fall into each affordability tier. The percentages are then multiplied by the number of households from Step 3 to arrive at number of households in each affordability tier.

Table C-2A shows the result after completing Steps 5, 6, and 7 for the Extremely Low Income Tier. Tables C-2B, C-2C, C-2D show results for the Very Low, Low, and Moderate Income tiers.

## **Summary Findings**

Table C-3 indicates the results of the analysis for all of the affordability tiers. The table presents the number of households generated in each affordability category and the total number over 120% of Area Median Income.

The findings in Table C-3 are presented below. The table shows the total demand for affordable housing units associated with 100 market rate units.

New Worker Households per 100 Market Rate Units					
		Smaller Single Family			
	Single Family Detached	Detached (County Island)			
Extremely Low (0%-30% AMI)	9.9	5.8			
Very Low (30%-50% AMI)	14.9	8.8			
Low (50%-80% AMI)	12.7	7.4			
Moderate (80%-120% AMI)	8.1	4.8			
Total, Less than 120% AMI	45.6	26.7			
Greater than 120% AMI	9.6	5.6			
Total, New Households	55.2	32.4			

Housing demand for new worker households earning less than 120% of AMI ranges from 45.6 units per 100 market rate units for larger single family detached units to 26.7 per 100 market rate units for smaller single family detached units. Housing demand is distributed across the lower income tiers with the greatest numbers of households in the Very Low and Low tiers. The finding that the jobs associated with consumer spending tend to be low-paying jobs where the workers will require housing affordable at the lower income levels is not surprising. As noted above, direct consumer spending results in employment that is concentrated in lower paid occupations including food preparation, administrative, and retail sales.

#### TABLE C-1 NET NEW HOUSEHOLDS AND OCCUPATION DISTRIBUTION EMPLOYEE HOUSEHOLDS GENERATED RESIDENTIAL NEXUS ANALYSIS

COUNTY OF SANTA CLARA, CA

Single Family DetachedSmaller Single Family Detached (County Island)Step 1 - Employees 1118.669.4Step 2 - Adjustment for Changing Industries (20%) (2)94.955.6Step 3 - Adjustment for Number of Households (1.72) (3)55.232.4Step 4 - Occupation Distribution 4 Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Single Family Detached (County Island)Family Detached (County Island)Step 1 - Employees 1118.669.4Step 2 - Adjustment for Changing Industries (20%) (2)94.955.6Step 3 - Adjustment for Number of Households (1.72) (3)55.232.4Step 4 - Occupation Distribution 4 Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Detached (County Island)   Step 1 - Employees <sup>1</sup> 118.6 69.4   Step 2 - Adjustment for Changing Industries (20%) (2) 94.9 55.6   Step 3 - Adjustment for Number of Households (1.72) (3) 55.2 32.4   Step 4 - Occupation Distribution <sup>4</sup> 4.2% 4.2%   Management Occupations 4.1% 4.1%   Computer and Mathematical 1.2% 1.2%
Step 1 - Employees 1118.669.4Step 2 - Adjustment for Changing Industries (20%) (2)94.955.6Step 3 - Adjustment for Number of Households (1.72) (3)55.232.4Step 4 - Occupation Distribution 44.2%4.2%Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Step 2 - Adjustment for Changing Industries (20%) (2)94.955.6Step 3 - Adjustment for Number of Households (1.72) (3)55.232.4Step 4 - Occupation Distribution 4 Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Step 3 - Adjustment for Number of Households (1.72) (3)55.232.4Step 4 - Occupation Distribution 44.2%4.2%Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Step 4 - Occupation Distribution 44.2%4.2%Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Management Occupations4.2%4.2%Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Business and Financial Operations4.1%4.1%Computer and Mathematical1.2%1.2%
Computer and Mathematical 1.2% 1.2%
Architecture and Engineering 0.3% 0.3%
Life, Physical, and Social Science 0.4% 0.4%
Community and Social Services 2.3% 2.3%
Legal 0.6% 0.6%
Education. Training, and Library 5.8% 5.8%
Arts, Design, Entertainment, Sports, and Media 1.5% 1.5%
Healthcare Practitioners and Technical 7.2% 7.2%
Healthcare Support 42% 42%
Protective Service 1 1% 1 1%
Food Prenaration and Serving Related 151% 151%
Building and Grounds Cleaning and Maint 54% 54%
Personal Care and Service 75% 75%
Seles and Delated 13.4% 13.4%
Office and Administrative Support 15.2% 15.2%
Conce and Administrative Support 15.2 76 15.2 76
raining, risining, and rolesuy 0.1% 0.1%
Construction and Extraction 0.9% 0.9%
Installation, Maintenance, and Repair 3.3% 3.3%
Production 1.5% 1.5%
ransportation and Material Moving <u>4.6%</u> <u>4.6%</u>
Totals 100.0% 100.0%
Management Occupations 2.3 1.4
Business and Financial Operations 2.2 1.3
Computer and Mathematical 0.6 0.4
Architecture and Engineering 0.2 0.1
Life, Physical, and Social Science 0.2 0.1
Community and Social Services 1.3 0.7
Legal 0.4 0.2
Education, Training, and Library 3.2 1.9
Arts, Design, Entertainment, Sports, and Media 0.8 0.5
Healthcare Practitioners and Technical 4.0 2.3
Healthcare Support 2.3 1.4
Protective Service 0.6 0.4
Food Preparation and Serving Related 8.4 4.9
Building and Grounds Cleaning and Maint 3.0 1.8
Personal Care and Service 41 24
Sales and Related 74 43
Office and Administrative Support 84 49
Earming Eishing and Ecreetry 0.4 4.9
Construction and Extraction 0.5 0.0
United and Exception U.S U.S
Instantation, Maintenance, and Repair 1.8 1.1
Production U.8 U.5
Transportation and Material Moving     2.5     1.5       Totals     55.2     32.4

Notes:

<sup>1</sup> Estimated employment generated by expenditures of households within 100 prototypical market rate units from Table B-1.

<sup>2</sup> The 20% adjustment is based upon job losses in declining sectors of the local economy over the past 10 years. "Downsized" workers from declining sectors are assumed to fill a portion of new jobs in sectors serving residents. 20% adjustment calculated as 54,700 jobs lost in declining sectors divided by 267,700 jobs gained in growing and stable sectors = 20%.

<sup>3</sup> Adjustment from number of workers to households using county-wide average of 1.72 workers per worker household derived from the U.S. Census American Community Survey 2011 to 2013.

<sup>4</sup> See Appendix B Tables 1 - 2 for additional information on Major Occupation Categories.

## TABLE C-2A EXTREMELY LOW-INCOME (ELI) EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

#### Per 100 Market Rate Units

Prototype 1	Prototype 2
	Smaller Single
Single Family	Family Detached
Detached	(County Island)

## Step 5 & 6 - Extremely Low Income Households (under 30% AMI) within Major Occupation Categories<sup>2</sup>

Total ELI Households <sup>1</sup>	9.87	5.78
ELI Households <sup>1</sup> - all other occupations	1.01	0.59
ELI Households - Major Occupations	8.85	5.19
Transportation and Material Moving	0.58	0.34
Production	-	-
Installation Maintenance and Repair	0.04	0.03
Construction and Extraction	-	-
Farm, Fishing, and Forestry	-	-
Office and Admin	0.58	0.34
Sales and Related	1.70	0.99
Personal Care and Service	1.22	0.71
Building Grounds and Maintenance	0.72	0.42
Food Preparation and Serving Related	3.29	1.93
Protective Service	-	-
Healthcare Support	0.36	0.21
Healthcare Practitioners and Technical	0.01	0.01
Arts, Design, Entertainment, Sports, & Media	-	-
Education Training and Library	0.32	0.18
Legal	-	-
Community and Social Services	0.04	0.02
Life, Physical and Social Science	-	-
Architecture and Engineering	-	-
Computer and Mathematical	-	-
Business and Financial Operations	-	-
Management	0.00	0.00

(1) Includes households earning from zero through 30% of Santa Clara County Area Median Income.

## TABLE C-2B VERY LOW-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

#### Per 100 Market Rate Units

	Prototype 1	Prototype 2		
	Single Family Detached	Smaller Single Family Detached (County Island)		
Step 5 & 6 - Very Low Income Households (30	0%-50% AMI) wit	hin Major Occupation Categ	ories <sup>2</sup>	
Management	0.04	0.02		
Business and Financial Operations	0.04	0.02		
Computer and Mathematical	-	-		
Architecture and Engineering	-	-		
Life, Physical and Social Science	-	-		
Community and Social Services	0.25	0.15		
Legal	-	-		
Education Training and Library	0.80	0.47		
Arts, Design, Entertainment, Sports, & Media	-	-		
Healthcare Practitioners and Technical	0.08	0.05		
Healthcare Support	0.80	0.47		
Protective Service	-	-		
Food Preparation and Serving Related	3.07	1.80		
Building Grounds and Maintenance	1.11	0.65		
Personal Care and Service	1.49	0.87		
Sales and Related	2.34	1.37		
Office and Admin	2.16	1.27		
Farm, Fishing, and Forestry	-	-		
Construction and Extraction	-	-		
Installation Maintenance and Repair	0.36	0.21		
Production	-	-		
Transportation and Material Moving	0.88	0.52		
Very Low Households - Major Occupations	13.41	7.85		
Very Low Households <sup>1</sup> - all other occupations	1.54	0.90		
Total Very Low Inc. Households <sup>1</sup>	14.95	8.75		

(1) Includes households earning from 30% through 50% of Santa Clara County Area Median Income.

## TABLE C-2C LOW-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

#### Per 100 Market Rate Units

	Prototype 1	Prototype 2
	Single Family Detached	Smaller Single Family Detached (County Island)
Step 5 & 6 - Low Income Households (50%-80	% AMI) within Ma	jor Occupation Categories <sup>2</sup>
Management	0.15	0.09
Business and Financial Operations	0.28	0.16
Computer and Mathematical	-	-
Architecture and Engineering	-	-
Life, Physical and Social Science	-	-
Community and Social Services	0.36	0.21
Legal	-	-
Education Training and Library	0.85	0.50
Arts, Design, Entertainment, Sports, & Media	-	-
Healthcare Practitioners and Technical	0.26	0.15
Healthcare Support	0.68	0.40
Protective Service	-	-
Food Preparation and Serving Related	1.54	0.90
Building Grounds and Maintenance	0.72	0.42
Personal Care and Service	0.96	0.56
Sales and Related	1.83	1.07
Office and Admin	2.55	1.49
Farm, Fishing, and Forestry	-	-
Construction and Extraction	-	-
Installation Maintenance and Repair	0.54	0.32
Production	-	-
Transportation and Material Moving	0.64	0.38
Low Households - Major Occupations	11.38	6.66
Low Households <sup>1</sup> - all other occupations	1.30	0.76
Total Low Inc. Households <sup>1</sup>	12.68	7.43

(1) Includes households earning from 50% through 80% of Santa Clara County Area Median Income.



## TABLE C-2D MODERATE-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED RESIDENTIAL NEXUS ANALYSIS COUNTY OF SANTA CLARA, CA

Per 100 Market Rate Units	Prototype 1	Prototype 2	
	Single Family Detached	Smaller Single Family Detached (County Island)	
Step 5 & 6 - Moderate Income Households (80	0%-120% AMI) wit	hin Major Occupation C	ategories <sup>2</sup>
Management	0.35	0.21	
Business and Financial Operations	0.51	0.30	
Computer and Mathematical	-	-	
Architecture and Engineering	-	-	
Life, Physical and Social Science	-	-	
Community and Social Services	0.33	0.19	
Legal	-	-	
Education Training and Library	0.67	0.39	
Arts, Design, Entertainment, Sports, & Media	-	-	
Healthcare Practitioners and Technical	0.77	0.45	
Healthcare Support	0.37	0.22	
Protective Service	-	-	
Food Preparation and Serving Related	0.20	0.12	
Building Grounds and Maintenance	0.34	0.20	
Personal Care and Service	0.27	0.16	
Sales and Related	0.81	0.47	
Office and Admin	1.86	1.09	
Farm, Fishing, and Forestry	-	-	
Construction and Extraction	-	-	
Installation Maintenance and Repair	0.48	0.28	
Production	-	-	
Transportation and Material Moving	0.30	0.18	
Moderate Households - Major Occupations	7.28	4.26	
Moderate Households <sup>1</sup> - all other occupations	0.83	0.49	
Total Moderate Inc. Households <sup>1</sup>	8.11	4.75	

(1) Includes households earning from 80% through 120% of Santa Clara County Area Median Income.

#### **RESIDENTIAL UNIT DEMAND IMPACTS - PER 100 MARKET RATE UNITS**

	Prototype 1	Prototype 2
Number of New Households <sup>1</sup>	Single Family Detached	Smaller Single Family Detached (County Island)
Under 30% AMI	9.9	5.8
30% to 50% AMI	14.9	8.8
50% to 80% AMI	12.7	7.4
80% to 120% AMI	8.1	4.8
Subtotal through 120% AMI	45.6	26.7
Over 120% AMI	9.6	5.6
Total Employee Households	55.2	32.4

#### RESIDENTIAL UNIT DEMAND IMPACTS - PER EACH (1) MARKET RATE UNIT

	Prototype 1	Prototype 2
Number of New Households <sup>1</sup>	Single Family Detached	Smaller Single Family Detached (County Island)
Under 30% AMI	0.10	0.06
30% to 50% AMI	0.15	0.09
50% to 80% AMI	0.13	0.07
80% to 120% AMI	0.08	0.05
Subtotal through 120% AMI	0.46	0.27
Over 120% AMI	0.10	0.06
Total Employee Households	0.55	0.32

#### Notes

<sup>1</sup> Households of retail, education, healthcare and other workers that serve residents of new market rate units. AMI = Area Median Income

# D. Mitigation Costs

This section takes the conclusions of the previous section on the number of households in the lower income categories associated with the market rate units and identifies the total cost of assistance required to make housing affordable. This section puts a cost on the units for each income level to produce the "total nexus cost." This is done for each of the prototype units.

A key component of the analysis is the size of the gap between what households can afford and the cost of producing new housing for Santa Clara County, known as the 'affordability gap.' Affordability gaps are calculated for each of the four categories of Area Median Income (AMI): Extremely Low (under 30% of median), Very Low (30% to 50%), Low (50% to 80%), and Moderate (80% to 120%). The following summarizes the analysis of mitigation cost which is based on the affordability gap or net cost to deliver units that are affordable to worker households in the lower income tiers.

Because of the variation of real estate values and housing densities that exist in the different geographic areas of Santa Clara County, the affordability gaps can vary significantly from one part of the County to another. For example, land values and densities will generally be lower in South County than they are in the heart of Silicon Valley in the northern parts of the County. Because Santa Clara County can elect to subsidize affordable housing projects in both South County as well as the more urbanized northern parts of the County, the affordability gaps in this Nexus Study utilize an average of the estimated gaps in these areas.

## **County Assisted Affordable Unit Prototypes**

For estimating the affordability gap, there is a need to match a household of each income level with a unit type and size according to governmental regulations and County practices and policies. The analysis assumes that the County will assist Moderate Income households earning between 80% and 120% of Area Median Income with ownership units. The prototype affordable unit should reflect a modest unit consistent with what the County is likely to assist and appropriate for housing the average Moderate Income worker household. The typical project assumed for South County is a three-bedroom townhome unit at approximately 18 units per acre (averaging 1,300 square feet) and the typical project assumed for North County is a two-bedroom condominium unit at approximately 30 units per acre (averaging 1,100 square feet per unit).

For Low-, Very Low-, and Extremely Low-Income households, it is assumed that the County will assist in the development of multi-family rental units at a density of 30-35 units per acre in the South County and 60-90 units per acre in the North County. This represents the approximate density range of affordable housing projects the County would likely subsidize.

# **Development Costs**

KMA prepared an estimate of the total development cost for the affordable housing prototypes described above (inclusive of land acquisition costs, direct construction costs, indirect costs of development, and financing) based on a review of development pro formas for recent affordable projects, recent residential land sale comps, and other construction data sources such as RS Means. The following table summarizes the South County per-unit development cost, the North County per-unit development cost, and the average per-unit cost.

	Unit Tenure /	South County	North County	Average
Income Group	Туре	Cost	Cost	Cost
Under 30% AMI	Rental	\$407,000	\$517,000	\$462,000
30% to 50% AMI	Rental	\$407,000	\$517,000	\$462,000
50% to 80% AMI	Rental	\$407,000	\$517,000	\$462,000
80% to 120% AMI	Ownership	\$476,000	\$584,000	\$530,000

## **Development Costs for Affordable Units**

Development cost estimates were informed by KMA's review of pro forma information for over a dozen local multi-family affordable housing projects. Direct construction costs from these projects were adjusted to account for such factors as time, unit size, housing type, and project density to appropriately reflect the multi-family prototypes assumed in the analysis. Other costs, such as land acquisition costs, are more site and area specific than direct construction costs and therefore the inputs for those costs were derived from other sources. Prevailing wages are assumed in the construction of both affordable housing prototypes, as it is assumed that public funds will be used to subsidize the projects. Tables D-1, D-1a, D-3 and D-3a provide further details.

The list below identifies some of the multi-family affordable projects for which KMA had pro forma information. In addition to the following projects, KMA also had access to the pro formas for several other active, pending projects, which are not listed due to their preliminary nature.

- Ashland-Kent, Alameda County
- Downtown Hayward Senior, Hayward
- Hayward Senior II, Hayward
- Laguna Commons, Fremont
- Marea Alta, San Leandro
- Onizuka Crossing, Sunnyvale
- Dublin Veterans Housing, Dublin

- Sequoia Belle Haven, Menlo Park
- South Hayward BART, Hayward
- San Lorenzo Senior, San Lorenzo
- South Second St Studios, San Jose
- Station Center 1 & 2, Union City
- University Ave Senior, East Palo Alto

## **Unit Values**

For affordable ownership units, unit values are based on an estimate of the restricted affordable purchase price for a qualifying Moderate Income household. It is noted that the purchase price

for South County required a downward adjustment due to the fact that the calculated maximum Moderate Income purchase price, which is based on the county-wide area median income (AMI), was too close to the market rate price in South County. Because of the appreciation limits that are associated with deed-restricted affordable for-sale homes, Moderate Income purchase prices need to be set at a substantial discount relative to market rate prices. Details of the calculations are presented in Table D-2.

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

The South County unit values, North County values, and average values are summarized below. Details for these calculations are presented in Table D-3 and D-3a.

Income Group	Unit Tenure / Type	South County Unit Value	North County Unit Value	Average Unit Value
Under 30% AMI	Rental	\$205,500	\$215,500	\$210,500
30% to 50% AMI	Rental	\$281,500	\$291,500	\$286,500
50% to 80% AMI	Rental	\$320,500	\$330,500	\$325,500
80% to 120% AMI	Ownership	\$330,000	\$367,000	\$348,500

## **Unit Values for Affordable Units**

## Affordability Gap

The affordability gap is the difference between the cost of developing the affordable units and the unit value based on the restricted affordable rent or sales price.

The resulting affordability gaps are as follows:

## Affordability Gap Calculation

	Average	Average	Affordability
	Unit Value	Cost	Gap
Affordable Rental Units			
Extremely Low (Under 30% AMI)	\$210,500	\$462,000	\$251,500
Very Low (30% to 50% AMI)	\$286,500	\$462,000	\$175,500
Low (50% to 80% AMI)	\$325,500	\$462,000	\$136,500
Affordable Ownership Units			
Moderate (80% to 120% AMI)	\$348,500	\$530,000	\$181,500

AMI = Area Median Income

Tables D-1 through D-3a present the detailed affordability gap calculations. Note that the affordability gaps are the same as those assumed in the non-residential nexus analysis.

## **Total Nexus Cost / Maximum Fee Levels**

The last step in the linkage fee analysis marries the findings on the numbers of households in each of the lower income ranges associated with the two prototypes to the affordability gaps, or the costs of delivering housing to them in the unincorporated areas of Santa Clara County.

Table D-4 summarizes the analysis. The Affordability Gaps are drawn from the prior discussion. The "Total Nexus Cost per Market Rate Unit" shows the results of the following calculation:



The total nexus costs or maximum supported fee per market rate unit for each of the prototypes are as follows:

## Total Nexus Cost Per Market Rate Unit, County of Santa Clara

Income Category	Single Family Detected	Smaller Single Family
	Single Family Delached	Delached (County Island)
Extremely Low (0%-30% AMI)	\$24,800	\$14,500
Very Low (30%-50% AMI)	\$26,200	\$15,400
Low (50%-80% AMI)	\$17,300	\$10,100
Moderate (80%-120% AMI)	\$14,700	\$8,600
Total Supported Fee/ Nexus Costs	\$83,000	\$48,600

The Total Nexus Costs, or Mitigation Costs, indicated above, may also be expressed on a per square foot level. The square foot area of the prototype unit used throughout the analysis becomes the basis for the calculation (the per unit findings from above are divided by unit size to get the per square foot findings). The results per square foot of building area (based on net rentable or sellable square feet excluding parking areas, external corridors and other common areas) are as follows:

Total Nexus Cost Per Sq. Ft., County of Santa Clara					
_	Single Family Detached	Smaller Single Family Detached (County Island)			
Unit Size (Sq Ft)	5,000 SF	2,600 SF			
Extremely Low (0%-30% AMI)	\$5.00	\$5.60			
Very Low (30%-50% AMI)	\$5.20	\$5.90			
Low (50%-80% AMI)	\$3.50	\$3.90			
Moderate (80%-120% AMI)	\$2.90	\$3.30			
Total Nexus Costs	\$16.60	\$18.70			

These costs express the total linkage or nexus costs for the two prototype developments in the unincorporated areas of Santa Clara County. These total nexus costs represent the ceiling for any requirement placed on market rate development. The totals are not recommended levels for fees; they represent only the maximums established by the analysis, below which impact fee levels may be set.

I.	Affordable Prototype	
	Tenure	For-Sale
	Density	30 du/acre
	Unit Size	1,100 SF
	Bedrooms	2-Bedrooms
	Construction Type	Condominiums (Type V)
II.	Development Costs	Per Unit
	Land Acquisition	\$138,000
	Directs	\$319,000 <sup>[1]</sup>
	Indirects	\$111,000
	Financing	\$16,000
	Total Costs	\$584,000
III.	Affordable Sales Price	Per Unit
	Household Size	3 person HH
	110% of Median Income <sup>[2]</sup>	\$106,040
	Maximum Affordable Sales Price	\$367,000 <sup>[3]</sup>
IV.	Affordability Gap	Per Unit
	Affordable Sales Price	\$367,000
	(Less) Development Costs	(\$584,000)
	Affordability Gap - Moderate Income	(\$217,000)

<sup>[1]</sup> Construction costs include prevailing wages.

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

<sup>[3]</sup> See Table D-2 for Moderate Income home price estimate.



Unit Size	2-Bedroom Unit	3-Bedroom Unit	4-Bedroom Unit
Household Size			<u>5-person nn</u>
100% AMI Santa Clara County 2016	\$96,400	\$107,100	\$115,650
Annual Income @ 110%	\$106,040	\$117,810	\$127,215
% for Housing Costs	35%	35%	35%
Available for Housing Costs	\$37,114	\$41,234	\$44,525
(Less) Property Taxes	(\$4,392)	(\$4,884)	(\$5,232)
(Less) HOA	(\$2,700)	(\$2,820)	(\$2,940)
(Less) Utilities	(\$1,416)	(\$1,776)	(\$2,208)
(Less) Insurance	(\$700)	(\$800)	(\$900)
(Less) Mortgage Insurance	(\$4,698)	(\$5,211)	(\$5,603)
Income Available for Mortgage	\$23,208	\$25,743	\$27,643
Mortgage Amount	\$348,300	\$386,300	\$414,800
Down Payment (homebuyer cash)	\$18,300	\$20,350	\$21,800
Supported Home Price	\$366,600	\$406,650	\$436,600
Key Assumptions			
- Mortgage Interest Rate <sup>(1)</sup>	5.30%	5.30%	5.30%
- Down Payment <sup>(2)</sup>	5.00%	5.00%	5.00%
- Property Taxes (% of sales price) <sup>(3)</sup>	1.20%	1.20%	1.20%
- HOA (per month) <sup>(4)</sup>	\$225	\$235	\$245
- Utilities (per month) <sup>(5)</sup>	\$118	\$148	\$184
- Mortgage Insurance (% of loan amount)	1.35%	1.35%	1.35%

<sup>(1)</sup> Mortgage interest rate based on 15-year Freddie Mac average; assumes 30-year fixed rate mortgage.

<sup>(2)</sup> Down payment amount is an estimate for Moderate Income homebuyers.

<sup>(3)</sup> Property tax rate is an estimated average for new projects.

<sup>(4)</sup> Homeowners Association (HOA) dues is an estimate for the average new project.

<sup>(5)</sup> Utility allowances from Santa Clara County Housing Authority (2016).

			Extremely Low	Very Low	Low Income
Ι.	Affordable Prototype				
	Tenure Average Unit Size Density			Rental 800 square feet ~60-90 du/acre	
II.	Development Costs <sup>[1]</sup>		Per Unit	Per Unit	Per Unit
	Land Acquisition Directs Indirects Financing Total Development Costs		\$55,000 \$328,000 \$115,000 <u>\$19,000</u> \$517,000	\$55,000 \$328,000 \$115,000 \$19,000 \$517,000	\$55,000 \$328,000 \$115,000 <u>\$19,000</u> \$517,000
III.	Supported Financing		Per Unit	Per Unit	Per Unit
	Affordable Rents Average Number of Bedrooms Maximum TCAC Rent <sup>[2]</sup> (Less) Utility Allowance <sup>[3]</sup> Maximum Monthly Rent		2 Bedrooms \$753 (\$74) \$679	2 Bedrooms \$1,256 (\$74) \$1,182	2 Bedrooms \$1,507 (\$74) \$1,433
	Net Operating Income (NOI) Gross Potential Income Monthly Annual Other Income (Less) Vacancy Effective Gross Income (EGI) (Less) Operating Expenses (Less) Property Taxes <sup>[4]</sup> Net Operating Income (NOI)	5.0%	Per Unit       \$679       \$8,148       \$250       (\$420)       \$7,978       (\$5,600)       \$0       \$2,378	Per Unit       \$1,182       \$14,184       \$250       (\$722)       \$13,712       (\$5,600)       \$0       \$8,112	Per Unit       \$1,433       \$17,196       \$250       (\$872)       \$16,574       (\$5,600)       \$0       \$10,974
	Permanent Financing Permanent Loan (tax exempt) Deferred Developer Fee 4% Tax Credit Equity Total Sources	5.0%	\$32,000 \$2,500 <u>\$181,000</u> \$215,500	\$108,000 \$2,500 <u>\$181,000</u> \$291,500	\$147,000 \$2,500 <u>\$181,000</u> \$330,500
IV.	Affordability Gap		Per Unit	Per Unit	Per Unit
	Supported Permanent Financing		\$215,500	\$291,500	\$330,500
	(Less) Total Development Costs		(\$517,000)	(\$517,000)	(\$517,000)
	Affordability Gap		(\$301,500)	(\$225,500)	(\$186,500)

<sup>[1]</sup> Development costs estimated by KMA based on affordable project pro formas in Santa Clara County (includes prevailing wages) and residential land sale comps.

<sup>[2]</sup> Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits.

<sup>[3]</sup> Utility allowances from Santa Clara County Housing Authority (2016).

<sup>[4]</sup> Assumes tax exemption for non-profit general partner.

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Ι.	Affordable Prototype		
	Tenure	For-Sale	
	Density	18 du/acre	
	Unit Size	1,300 SF	
	Bedrooms	3-Bedrooms	
	Construction Type	Townhomes	
11	Development Costs	Per I Init	
	Land Acquisition	\$73,000	
	Directs	\$299,000 <sup>[1]</sup>	
	Indirects	\$90,000	
	Financing	\$14,000	
	Total Costs	\$476,000	
III.	Affordable Sales Price	Per Unit	
	Household Size	4 person HH	
	110% of Median Income <sup>[2]</sup>	\$117,810	
	Maximum Affordable Sales Price	\$407,000 <sup>[3]</sup>	
IV.	Affordability Gap	Per Unit	
	Affordable Sales Price	\$330,000 <sup>[4]</sup>	
	(Less) Development Costs	(\$476,000)	
	Affordability Gap - Moderate Income	(\$146,000)	

<sup>[1]</sup> Construction costs includes prevailing wages.

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

<sup>[3]</sup> See Table D-2 for Moderate Income home price estimate.

<sup>[4]</sup> Moderate income home price in South County adjusted from maximums to reflect appropriate discount from unrestricted market rate prices.



			Extremely Low	Very Low	Low Income
I.	Affordable Prototype				
	Tenure Average Unit Size Density			Rental 900 square feet ~30-40 du/acre	
II.	Development Costs [1]		Per Unit	Per Unit	Per Unit
	Land Acquisition Directs Indirects Financing Total Costs		\$37,000 \$261,000 \$91,000 \$18,000 \$407,000	\$37,000 \$261,000 \$91,000 \$18,000 \$407,000	\$37,000 \$261,000 \$91,000 \$18,000 \$407,000
III.	Supported Financing				
	Affordable Rents Average Number of Bedrooms Maximum TCAC Rent <sup>[2]</sup> (Less) Utility Allowance <sup>[3]</sup> Maximum Monthly Rent		2 Bedrooms \$753 (\$74) \$679	2 Bedrooms \$1,256 (\$74) \$1,182	2 Bedrooms \$1,507 (\$74) \$1,433
	Net Operating Income (NOI) Gross Potential Income Monthly Annual Other Income (Less) Vacancy Effective Gross Income (EGI) (Less) Operating Expenses (Less) Property Taxes <sup>[4]</sup> Net Operating Income (NOI)	5.0%	Per Unit \$679 \$8,148 \$250 (\$420) \$7,978 (\$5,600) \$0 \$2,378	Per Unit \$1,182 \$14,184 \$250 (\$722) \$13,712 (\$5,600) \$0 \$8,112	Per Unit \$1,433 \$17,196 \$250 (\$872) \$16,574 (\$5,600) \$0 \$10,974
	Permanent Financing Permanent Loan (tax exempt) Deferred Developer Fee 4% Tax Credit Equity Total Sources		\$32,000 \$2,500 <u>\$171,000</u> \$205,500	\$108,000 \$2,500 \$171,000 \$281,500	\$147,000 \$2,500 \$171,000 \$320,500
IV.	Supported Financing				
	Supported Permanent Financing		\$205,500	\$281,500	\$320,500
	(Less) Total Development Costs		(\$407,000)	(\$407,000)	(\$407,000)
	Affordability Gap		(\$201,500)	(\$125,500)	(\$86,500)

<sup>[1]</sup> Development costs estimated by KMA based on affordable project pro formas in Santa Clara County (includes prevailing wages) and residential land sale comps.

<sup>[2]</sup> Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits.

<sup>[3]</sup> Utility allowances from Santa Clara County Housing Authority (2016).

<sup>[4]</sup> Assumes tax exemption for non-profit general partner.

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#### TOTAL NEXUS COST PER MARKET RATE UNIT

			Nexus Cost Per Market Rate Unit <sup>3</sup>		
			Prototype 1	Prototype 2	
_	Affordability Gap Per Unit	:	Single Family Detached	Smaller Single Family Detached (County Island)	
Household Income Level					
Under 200/ AMI	¢251 500	1	¢04.800	¢14 500	
Under 50% Alvir	φ251,500		<b>Φ</b> 24,000	φ14,500	
30% to 50% AMI	\$175,500	1	\$26,200	\$15,400	
50% to 80% AMI	\$136,500	1	\$17,300	\$10,100	
80% to 120% AMI	\$181,500	2	\$14,700	\$8,600	
Total Supported F	ee Per Unit		\$83,000	\$48,600	

#### TOTAL NEXUS COST PER SQUARE FOOT<sup>4</sup>

	Nexus Cost Per Square Foot <sup>4</sup>		
	Prototype 1	Prototype 2	
	Single Family	Smaller Single	
	Detached	(County Island)	
Avg. Unit Size (SF) Household Income Level	5,000 SF	2,600 SF	
Under 30% AMI	\$5.00	\$5.60	
30% to 50% AMI	\$5.20	\$5.90	
50% to 80% AMI	\$3.50	\$3.90	
80% to 120% AMI	\$2.90	\$3.30	
Total Supported Fee Per Sq.Ft.	\$16.60	\$18.70	

Notes: <sup>1</sup> Assumes affordable rental units. Affordability gaps represent the remaining affordability gap after tax credit financing. See affordability gap section for details.

 $^{2}\ {\rm Affordability}\ {\rm gap}\ {\rm for\ moderate}\ {\rm income\ households}\ {\rm based\ on\ ownership\ unit.}$ 

<sup>3</sup> Nexus cost per unit calculated by multiplying the affordable unit demand from Table C-3 by the affordability

<sup>4</sup> Nexus cost per square foot computed by dividing the nexus cost per unit from above by the average unit size.

Prepared by: Keyser Marston Associates, Inc.

\\SF-FS2\wp\19\19312\001\Residential tables\Santa Clara County\County of Santa Clara residential 10-25-16; 12/2/2016; dd

# III. ADDENDUM: ADDITIONAL BACKGROUND AND NOTES ON SPECIFIC ASSUMPTIONS

# No Excess Supply of Affordable Housing

An assumption of this residential nexus analysis is that there is no excess supply of affordable housing available to absorb or offset new demand; therefore, new affordable units are needed to mitigate the new affordable housing demand generated by development of new market rate residential units. Based on a review of the current Census information for Santa Clara County, conditions are consistent with this underlying assumption. According to the Census (2010 to 2014 ACS), approximately 41% of all households in the County were paying thirty percent or more of their income on housing. In addition, housing vacancy is minimal.

# **Geographic Area of Impact**

The analysis quantifies impacts occurring within Santa Clara County. While many of the impacts will occur within the County, some impacts will be experienced beyond the County's boundaries. The IMPLAN model computes the jobs generated within the county and sorts out those that occur beyond the county boundaries. The KMA Jobs Housing Nexus Model analyzes the income structure of jobs and their worker households, without assumptions as to where the worker households live.

In summary, the nexus analysis quantifies all the jobs impacts occurring within the county and related worker households. Job impacts, like most types of impacts, occur irrespective of political boundaries. And like other types of impact analyses, such as traffic, impacts beyond jurisdictional boundaries are experienced, are relevant, and are important.

For clarification, counting all impacts associated with new housing units does not result in double counting, even if all jurisdictions were to adopt similar programs. The impact of a new housing unit is only counted once, in the jurisdiction in which it occurs. Obviously, within a metropolitan region such as the Bay Area, there is much commuting among jurisdictions, and cities house each other's workers in a very complex web of relationships. The important point is that impacts of residential development are only counted once.

# Affordability Gap

The use of the affordability gap for establishing a maximum fee supported from the nexus analysis is grounded in the concept that a jurisdiction will be responsible for delivering affordable units to mitigate impacts. The nexus analysis has established that units will be needed at one or more different affordability levels and the type of unit to be delivered depends on the income/affordability level. The County is anticipated to assist in the development of rental units for households with incomes up to 80% of AMI and ownership units for moderate income households with incomes from 80% to 120% of AMI.
The units assisted by the public sector for affordable households are usually small in square foot area (for the number of bedrooms) and modest in finishes and amenities. As a result, in some communities these units are similar in physical configuration to what the market is delivering at market rate; in other communities (particularly very high income communities), they may be smaller and more modest than what the market is delivering. Parking, for example, is usually the minimum permitted by the code. Where there is a wide range in land cost per acre or per unit, it may be assumed that affordable units are built on land parcels in the lower portion of the cost range. KMA tries to develop a total development cost summary that represents the lower half of the average range, but not so low as to be unrealistic.

# **Excess Capacity of Labor Force**

In the context of economic downturns such as the last recession, the question is sometimes raised as to whether there is excess capacity in the labor force to the extent that consumption impacts generated by new households will be in part, absorbed by existing jobs and workers, thus resulting in fewer net new jobs. In response, an impact analysis of this nature is a one-time impact requirement to address impacts generated over the life of the project. Recessions are temporary conditions; a healthy economy will return and the impacts will be experienced. The economic cycle also self-adjusts. Development of new residential units is likely to be reduced until conditions improve or there is confidence that improved conditions are imminent. When this occurs, the improved economic condition of the households in the local area will absorb the current underutilized capacity of existing workers, employed and unemployed. By the time new units become occupied, economic conditions will have likely improved.

# The Burden of Paying for Affordable Housing

The burden of affordable housing is also borne by many sectors of the economy and society, including but not limited to residential developers. A most important source in recent years of funding for affordable housing development comes from the federal government in the form of tax credits (which result in reduced income tax payment by tax credit investors in exchange for equity funding). Additionally, there are other federal grant and loan programs administered by the Department of Housing and Urban Development and other federal agencies. The State of California also plays a major role with a number of special financing and funding programs. Much of the state money is funded by voter approved bond measures paid for by all Californians.

Local governments play a large role in affordable housing. In addition, private sector lenders play an important role, some voluntarily and others less so with the requirements of the Community Reinvestment Act. Then there is the non-profit sector, both sponsors and developers that build much of the affordable housing.

In summary, all levels of government and many private parties, for profit and non-profit contribute to supplying affordable housing. Residential developers are not being asked to bear

the burden alone any more than they are assumed to be the only source of demand or cause for needing affordable housing in our communities. Based on past experience, affordable housing requirements placed on residential development will satisfy only a small percentage of the affordable housing needs in Santa Clara County.

# APPENDIX A: RESIDENTIAL MARKET SURVEY

## I. INTRODUCTION

One of the underlying components of the Residential Nexus Study is the identification of residential building prototypes that are expected to be developed in the unincorporated areas for Santa Clara County both today and in the future, and what the market prices for those prototypes will be. These market prices are then used to estimate the incomes of the new households that will live in the new units and quantify the number and types of jobs created as a result of their demand for goods and services. In this Appendix A, KMA describes the residential building prototypes utilized for the analysis, summarizes the residential market data researched, and describes the market price point conclusions drawn therefrom.

## **II. RESIDENTIAL PROTOTYPES**

KMA worked with County staff to select representative development prototypes envisioned to be developed in the unincorporated areas of Santa Clara County in the future. KMA notes that this residential nexus analysis does not cover Stanford, which is governed by a General Use Permit that already addresses affordable housing needs.

In general, the County expects continued development of large custom homes in the hills. In addition, there are a few areas within the County with the potential for new homes on smaller lots; these are located in 'County Islands' surrounded by incorporated areas. The County does not anticipate higher density development, such as townhomes, condominiums, or apartment projects, in the unincorporated areas outside of Stanford.

The prototypes are presented on Appendix A Table 1 and summarized below.

## Santa Clara County Residential Prototypes

			Average
		Lot Size / Density	Unit Size
For-Sale	Prototypes		
1) Si	ngle Family Detached	n/a	5,000 sq. ft.
2) Sr	naller Single Family Detached	5.000 9.000 og ft	2.600 og ft
(C	county Island location)	5,000 – 8,000 Sq. II.	2,000 sq. ii.

Source: KMA in collaboration with Santa Clara County. See Appendix A, Table 1 for more information.

# **III. MARKET SURVEY & PRICING ESTIMATES**

# A. Residential Building Activity

The County has limited opportunities for new residential units. KMA reviewed residential building permits issued in 2014 to calculate the average size of new custom homes in the County. Per input from County staff, the most recent example of a smaller lot housing

development is the Porter Court project; KMA reviewed sales data on this project to inform the smaller prototype.

Home prices in the unincorporated areas of Santa Clara County vary significantly by location. The median home price in San Martin, for example, was \$825,000 in 2014, while the median in Alviso was \$482,500. Other areas are significantly more expensive, such as Mt. Hamilton and the unincorporated areas bordering Los Altos and Los Gatos.

# B. Recent Home Prices of Newer Residential Units

KMA gathered new and resales data for recently built single family homes in the unincorporated areas including San Martin, and the areas surrounding Los Gatos and Los Altos. These homes tend to be custom built and located on large lots. Appendix A Table 2 presents market sales prices for these units. In addition, KMA gathered recent sales prices for the Porter Court project that was identified by County staff as an example of a smaller-lot single family detached project.

# C. For-Sale Prototype Price Estimates

The current pricing for new homes and the resale pricing of newer home developments formed the basis for KMA's prototype price estimates. The prototype pricing estimates took into consideration that, in general, newly built homes sell for a premium over re-sales, all else being equal.

The table below summarizes KMA's conclusions regarding current for-sale prototype unit size and pricing.

	Unit Size	Price	Price PSF	
Single Family Detached	5,000 sq. ft.	\$2,000,000	\$400	
Smaller Single Family Detached	2,600 sq. ft.	\$900,000	\$346	
(County Island location)				
			<u>.</u> .	-

#### For-Sale Prototype Price Estimates

Source: KMA market study in collaboration with the County of Santa Clara.

# **IV. MARKET SURVEY CONCLUSIONS**

A full description of the prototypes, including examples of recent developments, average unit sizes, bedroom mix, parking ratios, and densities are shown in Appendix A Table 1. The prototypes are the starting point of the nexus analysis.

	Single Family Detached	Smaller Single Family Detached (County Island)
Example Projects	34 homes from 2014	Porter Court
Density / Lot Size	n/a	5,000 - 8,000 sf lots
Building Type	Two -story homes	Two-story
Unit Mix	3, 4, and 5 BR	3, 4, and 5 BR
Average Unit Size	5,000 sf	2,600 sf
Average No. of Bedrooms	4.0 BR	4.0 BR
Parking Type	Attached garage	Attached garage
Average Parking Spaces	2.0	2.0
Sales Price/Rent per square foot	\$2,000,000 \$400	\$900,000 \$346



#### Median Home Prices, Santa Clara County Jurisdictions

	<u>2014</u>	<u>2013</u>	<u>% Change</u>	
Los Altos	\$2,351,000	\$2,016,000	17%	
Palo Alto	\$2,100,000	\$1,720,000	22%	
Saratoga	\$1,876,500	\$1,610,000	17%	
Cupertino	\$1,428,500	\$1,200,000	19%	
Los Gatos	\$1,410,000	\$1,265,000	11%	
Mountain View	\$975,050	\$805,000	21%	
Sunnyvale	\$875,000	\$764,750	14%	
San Martin	\$825,000	\$655,000	26%	
Campbell	\$820,000	\$702,500	17%	
Santa Clara	\$745,000	\$638,000	17%	
Santa Clara County	\$710,000	\$648,000	10%	
Milpitas	\$652,000	\$585,000	11%	
Morgan Hill	\$650,500	\$635,000	2%	
San Jose	\$630,000	\$572,000	10%	
Gilroy	\$575,000	\$500,000	15%	
Alviso	\$482,500	\$472,500	2%	

#### San Martin Median Home Sale Price, 2005-Present

Year	Median Price	<u>%Change</u>
2005	\$950,000	
2006	\$1,100,000	16%
2007	\$1,000,000	-9%
2008	\$870,750	-13%
2009	\$620,000	-29%
2010	\$566,000	-9%
2011	\$498,500	-12%
2012	\$580,000	16%
2013	\$655,000	13%
2014	\$825,000	26%
Dec-15	\$930,000	





#### Alviso Median Home Sale Price, 2005-2014

Year	Median Price	<u>%Change</u>
2005	\$545,000	
2006	\$710,000	30%
2007	\$683,500	-4%
2008	\$298,000	-56%
2009	\$347,500	17%
2010	\$325,000	-6%
2011	\$330,000	2%
2012	\$370,000	12%
2013	\$472,500	28%
2014	\$482,500	2%
Dec-15	data not available	





#### Mt. Hamilton Median Home Sale Price, 2006-Present

* very few sales each year.						
Year	Median Price	<u>%Change</u>				
2006	\$1,572,500					
2007	\$980,000	-38%				
2008	\$1,330,000	36%				
2009	no data					
2010	\$900,000					
2011	\$880,000	-2%				
2012	\$918,000	4%				
2013	\$1,180,000	29%				
2014	no data					
Dec-15	no data					



#### Stanford Median Home Sale Price

\* very few sales each year.

Year	Median Price	Percent Change
2006	\$2,150,000	C C
2007	no data	
2008	\$1,400,000	
2009	no data	
2010	no data	
2011	no data	
2012	\$2,530,000	
2013	\$3,450,000	36%
2014	no data	
Dec-15	no data	
Dec-15	no data	

Source: DataQuick. Includes single family and attached homes; includes new homes and resales.



#### APPENDIX A TABLE 3 RECENT HOME SALES RESIDENTIAL NEXUS ANALYSIS UNINCORPORATED SANTA CLARA COUNTY

#### Units Built Since 2000 and Sold Since November 2013

Single Family Units	Yr. Built	Unit	BD	BA	Net SF	Lot SF	Sale Price	\$/SF	Sale Date
SAN MARTIN									
12890 Foothill Ave	2003		4	5	4,171	198,065	\$1,450,000	\$348	06/25/2015
13150 Santa Teresa Blvd	2011		5	5	6,089	150,120	\$1,300,000	\$213	04/28/2015
2035 Vincent Dr	2002		4	5	4,415	89,319	\$1,730,000	\$392	03/30/2015
1100 Vintage Ct	2002		5	5	4,835	182,964	\$2,350,000	\$486	02/05/2015
12660 New Ave	2000		2	3	2,521	220,212	\$863,000	\$342	06/30/2014
1435 Lakeview Ct	2006		4	3	5,104	132,419	\$2,350,000	\$460	06/05/2014
1275 Lions Peak Ln	2011		6	5	6,604	101,267	\$3,250,000	\$492	05/15/2014
1405 Lakeview Ct	2002		6	5	4,654	138,849	\$1,950,000	\$419	05/12/2014
13085 Harding Ave	2000		3	4	4,209	211,164	\$1,825,000	\$434	05/01/2014
15185 Center Ave	2006		3	3	2,005	90,896	\$910,000	\$454	03/27/2014
1110 Vintage Ct	2009		6	4	5,822	142,322	\$2,125,000	\$365	03/25/2014
2030 Vincent Dr	2006		4	4	4,650	89,136	\$1,425,000	\$306	11/06/2013
Average					4,590	145,561	\$1,794,000	\$393	-
Unincorporated Los Altos									
1571 Fairway Drive	2015		5	5	3 950	21 780	\$4 450 000	\$1 127	2/26/2015
11662 Par Ave	2010		4	35	2 267	6 271	\$2 498 000	\$1 102	3/1/2015
11650 Par Ave	2014		4	3.5	3 070	6 447	\$2,588,000	\$843	2/17/2015
1380 Country Club Rd	2003		4	3	2 973	0,117	\$3,100,000	\$1.043	10/13/2015
975 Lundy Lane	2015		4	3.5	3,246	10,701	\$2,979,000	\$918	6/3/2015
Unincorporated Los Gatos									
19268 Skyline Blvd.	2015		4	5.5	5,000	47,480	\$1,750,000	\$350	2/1/2015
San Jose									
4534 Porter Ct	2013		5	3	2,334	6,237	\$935,000	\$401	10/13/2015
4503 Porter Ct	2012		5	4	2,735	6,263	\$932,500	\$341	01/22/2014
4510 Porter Ct	2012		5	3	2,334	6,027	\$734,000	\$314	03/18/2013
4626 Porter Ct	2013		5	4	2,735	6,085	\$814,500	\$298	05/28/2013
4511 Porter Ct	2012		5	4	2,735	6,709	\$812,000	\$297	03/18/2013
4545 Porter Ct	2013		4	3	2,431	7,477	\$894,000	\$368	11/06/2013
4541 Porter Ct	2013		4	3	2,431	6,208	\$849,000	\$349	11/06/2013
4546 Porter Ct	2013		5	3	2,334	6,081	\$805,500	\$345	08/12/2013
4522 Porter Ct	2012		5	4	2,735	6,249	\$827,000	\$302	03/18/2013
4507 Porter Ct	2012		5	3	2,334	6,211	\$735,000	\$315	12/06/2012
4538 Porter Ct	2013		5	4	2,735	6,047	\$884,500	\$323	08/16/2013
4542 Porter Ct	2013		5	3	2,334	6,254	\$775,500	\$332	09/09/2013
4537 Porter Ct	2013		5	3	2,334	6,027	\$834,000	\$357	11/06/2013
4502 Porter Ct	2012		5	4	2,735	7,903	\$775,500	\$284	11/08/2012
4506 Porter Ct	2012		5	4	2,735	6,001	\$797,000	\$291	12/06/2012
4530 Porter Ct	2013		5	3	2,334	6,001	\$752,500	\$322	05/28/2013
Average					2,522	6,361	\$822,344	\$328	

#### **TEAR-DOWNS**

Sampling of 6 tear-down purchases for 2015 building permits:

Average purchase price of \$1.69 million, ranging from \$990,000 to \$2,600,000.

Locations include unincorporated Los Gatos, San Jose and Los Altos.

Sources: ListSource, Redfin.com, zillow.com, November 2015.



# APPENDIX B: WORKER OCCUPATIONS AND COMPENSATION LEVELS

#### RESIDENTIAL NEXUS APPENDIX B TABLE 1 WORKER OCCUPATION DISTRIBUTION, 2014 SERVICES TO HOUSEHOLDS EARNING \$100 - \$150K, RESIDENT SERVICES RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

Working Draft

	Worker Occupation Distribution <sup>1</sup>
	Services to Households Earning
Major Occupations (2% or more)	\$100,000 to \$150,000
Management Occupations	4.0%
Business and Financial Operations Occupations	3.8%
Community and Social Service Occupations	2.2%
Education, Training, and Library Occupations	4.0%
Healthcare Practitioners and Technical Occupations	7.9%
Healthcare Support Occupations	4.7%
Food Preparation and Serving Related Occupations	15.7%
Building and Grounds Cleaning and Maintenance Occupations	5.2%
Personal Care and Service Occupations	7.1%
Sales and Related Occupations	12.9%
Office and Administrative Support Occupations	14.8%
Installation, Maintenance, and Repair Occupations	3.4%
Transportation and Material Moving Occupations	4.3%
All Other Worker Occupations - Services to Households Earning \$100,000 to \$150,000	<u>10.1%</u>
INDUSTRY TOTAL	100.0%

<sup>1</sup> Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.



#### **RESIDENTIAL NEXUS APPENDIX B TABLE 2** AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$100,000 TO \$150,000 **RESIDENTIAL NEXUS ANALYSIS** CITY OF SANTA CLARA, CA

		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 1 of 4			
Management Occupations			
Chief Executives	\$232,600	3.2%	0.1%
General and Operations Managers	\$157,600	34.7%	1.4%
Sales Managers	\$167,900	4.6%	0.2%
Administrative Services Managers	\$122,400	4.1%	0.2%
Financial Managers	\$168,700	9.3%	0.4%
Food Service Managers	\$57,200	6.1%	0.2%
Medical and Health Services Managers	\$159,700	7.1%	0.3%
Property, Real Estate, and Community Association Managers	\$74,600	9.5%	0.4%
Social and Community Service Managers	\$79,300	4.3%	0.2%
All other Management Occupations (Avg. All Categories)	<u>\$139,700</u>	<u>17.1%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$139,700	100.0%	4.0%
Business and Financial Operations Occupations			
Human Resources Specialists	\$89,400	5.1%	0.2%
Management Analysts	\$111,500	5.2%	0.2%
Training and Development Specialists	\$95,300	3.9%	0.2%
Market Research Analysts and Marketing Specialists	\$110,200	6.7%	0.3%
Business Operations Specialists, All Other	\$98,100	10.6%	0.4%
Accountants and Auditors	\$94,200	22.2%	0.9%
Financial Analysts	\$109,600	10.5%	0.4%
Personal Financial Advisors	\$104,400	14.3%	0.5%
Loan Officers	\$89,100	5.3%	0.2%
All Other Business and Financial Operations Occupations (Avg. All Categori	¢ <u>\$100,200</u>	<u>16.3%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$100,200	100.0%	3.8%
Community and Social Service Occupations			
Substance Abuse and Behavioral Disorder Counselors	\$38,300	4.8%	0.1%
Educational, Guidance, School, and Vocational Counselors	\$69,900	6.1%	0.1%
Mental Health Counselors	\$59,300	8.1%	0.2%
Rehabilitation Counselors	\$44,200	5.9%	0.1%
Child, Family, and School Social Workers	\$52,000	14.1%	0.3%
Healthcare Social Workers	\$77,300	7.7%	0.2%
Mental Health and Substance Abuse Social Workers	\$52,400	6.3%	0.1%
Social and Human Service Assistants	\$42,100	23.5%	0.5%
Community and Social Service Specialists, All Other	\$48,600	4.4%	0.1%
Clergy	\$56,300	4.5%	0.1%
All Other Community and Social Service Occupations (Avg. All Categories)	<u>\$52,300</u>	<u>14.6%</u>	<u>0.3%</u>
Weighted Mean Annual Wage	\$52,300	100.0%	2.2%

Working Draft



#### RESIDENTIAL NEXUS APPENDIX B TABLE 2 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$100,000 TO \$150,000 RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

CITY OF SANTA CLARA, CA			Working Draft
		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 2 of 4			
Education, Training, and Library Occupations			
Vocational Education Teachers, Postsecondary	\$56,500	4.8%	0.2%
Preschool Teachers, Except Special Education	\$37,700	13.9%	0.6%
Elementary School Teachers, Except Special Education	\$72,500	5.9%	0.2%
Secondary School Teachers, Except Special and Career/Technical Education	\$76,100	4.1%	0.2%
Self-Enrichment Education Teachers	\$47,700	10.7%	0.4%
Teachers and Instructors, All Other, Except Substitute Teachers	\$55,900	7.6%	0.3%
Substitute Teachers	\$40,700	3.1%	0.1%
Teacher Assistants	\$32,700	13.9%	0.6%
All Other Education, Training, and Library Occupations (Avg. All Categories)	<u>\$47,600</u>	<u>35.9%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$47,600	100.0%	4.0%
Healthcare Practitioners and Technical Occupations			
Pharmacists	\$141,300	4.0%	0.3%
Physicians and Surgeons All Other	\$153,300	3.9%	0.3%
Physical Therapists	\$103,000	3.5%	0.3%
Registered Nurses	\$123,500	30.9%	2.5%
Dental Hygienists	\$96,500	3.8%	0.3%
Pharmacy Technicians	\$45,900	5.4%	0.4%
Licensed Practical and Licensed Vocational Nurses	\$60,400	8.3%	0.7%
All Other Healthcare Practitioners and Technical Occupations (Avg. All Cate	\$108,000	40.2%	3.2%
Weighted Mean Annual Wage	\$108,000	100.0%	7.9%
Healthcare Support Occupations	<b>#07 400</b>	00.0%	4.00/
Home Health Aldes	\$27,400	22.2%	1.0%
Nursing Assistants	\$35,100	30.0%	1.4%
Massage Therapists	\$44,200 \$44,200	4.9%	0.2%
Defilial Assistants Medical Assistants	\$44,100 ¢44,100	9.9%	0.5%
All Other Healthcare Support Occupations (Aug. All Octogorice)	\$44,100 \$26,400	13.0%	0.7%
All Other Healthcare Support Occupations (Avg. All Categories)	<u>\$36,400</u>	<u>17.2%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$36,400	100.0%	4.7%
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	\$36,900	6.9%	1.1%
Cooks, Fast Food	\$21,300	4.2%	0.7%
Cooks, Restaurant	\$27,500	8.7%	1.4%
Food Preparation Workers	\$24,400	6.8%	1.1%
Bartenders	\$26,300	6.9%	1.1%
Combined Food Preparation and Serving Workers, Including Fast Food	\$23,000	25.0%	3.9%
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	\$23,100	3.6%	0.6%
Waiters and Waitresses	\$25,500	19.8%	3.1%
Dining Room and Cafeteria Attendants and Bartender Helpers	\$21,300	3.1%	0.5%
Dishwashers	\$20,300	4.0%	0.6%
All Other Food Preparation and Serving Related Occupations (Avg. All Cate	<u>\$25,200</u>	<u>11.0%</u>	<u>1.7%</u>
Weighted Mean Annual Wage	\$25,200	100.0%	15.7%

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#### RESIDENTIAL NEXUS APPENDIX B TABLE 2 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$100,000 TO \$150,000 RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

CITY OF SANTA CLARA, CA			Working Draft
		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 3 of 4			
Building and Grounds Cleaning and Maintenance Occupations			
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping	\$53,600	3.5%	0.2%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$29,000	45.5%	2.4%
Maids and Housekeeping Cleaners	\$31,100	11.9%	0.6%
Landscaping and Groundskeeping Workers	\$33,400	30.4%	1.6%
All Other Building and Grounds Cleaning and Maintenance Occupations (Av	\$31,700	8.8%	0.5%
Weighted Mean Annual Wage	\$31,700	100.0%	5.2%
Personal Care and Service Occupations			
First-Line Supervisors of Personal Service Workers	\$42,800	3.7%	0.3%
Nonfarm Animal Caretakers	\$32,400	5.7%	0.4%
Hairdressers, Hairstvlists, and Cosmetologists	\$24,600	17.6%	1.2%
Manicurists and Pedicurists	\$21,900	4.3%	0.3%
Childcare Workers	\$30.300	12.0%	0.8%
Personal Care Aides	\$26,300	32.7%	2.3%
Fitness Trainers and Aerobics Instructors	\$44,200	5.4%	0.4%
Recreation Workers	\$31,100	4.4%	0.3%
All Other Personal Care and Service Occupations (Avg. All Categories)	\$28.800	14.2%	1.0%
Weighted Mean Annual Wage	\$28,800	100.0%	7.1%
Sales and Related Occupations			
First-Line Supervisors of Retail Sales Workers	\$51,400	9.3%	1.2%
Cashiers	\$26,600	27.2%	3.5%
Counter and Rental Clerks	\$35,600	4.5%	0.6%
Retail Salespersons	\$29,200	35.9%	4.6%
Securities, Commodities, and Financial Services Sales Agents	\$91,800	4.0%	0.5%
Sales Representatives, Services, All Other	\$89,500	4.2%	0.5%
Sales Representatives, Wholesale and Manufacturing, Except Technical and	\$77,000	3.9%	0.5%
Real Estate Sales Agents	\$64,600	2.8%	0.4%
All Other Sales and Related Occupations (Avg. All Categories)	\$39,600	8.2%	1.1%
Weighted Mean Annual Wage	\$39,600	100.0%	12.9%
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70,600	6.7%	1.0%
Bookkeeping, Accounting, and Auditing Clerks	\$50,300	7.7%	1.1%
Customer Service Representatives	\$48,200	9.4%	1.4%
Receptionists and Information Clerks	\$36 600	8.8%	1.4%
Stock Clerks and Order Fillers	\$31,300	10.6%	1.6%
Executive Secretaries and Executive Administrative Assistants	\$67,200	3.4%	0.5%
Medical Secretaries	\$48,100	4.4%	0.7%
Secretaries and Administrative Assistants. Except Legal. Medical. and Exec	\$45.000	11.5%	1.7%
Office Clerks, General	\$40,900	14.2%	2.1%
All Other Office and Administrative Support Occupations (Avg. All Categorie	\$45,700	23.3%	3.4%
Weighted Mean Annual Wage	\$45,700	100.0%	14.8%



#### RESIDENTIAL NEXUS APPENDIX B TABLE 2 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$100,000 TO \$150,000 RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA. CA

CITY OF SANTA CLARA, CA			Working Draft
		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 4 of 4			
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	7.8%	0.3%
Telecommunications Equipment Installers and Repairers, Except Line Install	\$65,800	3.3%	0.1%
Automotive Body and Related Repairers	\$46,400	7.0%	0.2%
Automotive Service Technicians and Mechanics	\$52,700	21.1%	0.7%
Maintenance and Repair Workers, General	\$47,300	33.5%	1.1%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Catego	<u>\$53,200</u>	<u>27.3%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$53,200	100.0%	3.4%
Transportation and Material Moving Occupations			
Bus Drivers, School or Special Client	\$38,000	5.5%	0.2%
Driver/Sales Workers	\$34,400	7.8%	0.3%
Heavy and Tractor-Trailer Truck Drivers	\$47,200	11.7%	0.5%
Light Truck or Delivery Services Drivers	\$39,300	10.6%	0.5%
Taxi Drivers and Chauffeurs	\$29,300	3.6%	0.2%
Parking Lot Attendants	\$21,500	9.3%	0.4%
Automotive and Watercraft Service Attendants	\$25,700	3.0%	0.1%
Cleaners of Vehicles and Equipment	\$25,800	8.6%	0.4%
Laborers and Freight, Stock, and Material Movers, Hand	\$31,700	19.9%	0.9%
Packers and Packagers, Hand	\$25,300	6.9%	0.3%
All Other Transportation and Material Moving Occupations (Avg. All Categor	<u>\$32,900</u>	<u>13.3%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$32,900	100.0%	4.3%

89.9%

<sup>1</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>2</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County updated by the California Employment Development Department to 2015 wage levels.

<sup>3</sup> Including occupations representing 3% or more of the major occupation group



#### RESIDENTIAL NEXUS APPENDIX B TABLE 3 WORKER OCCUPATION DISTRIBUTION, 2014 SERVICES TO HOUSEHOLDS EARNING \$150K+, RESIDENT SERVICES RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

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	Worker Occupation Distribution <sup>1</sup>
	Services to Households Earning
Major Occupations (2% or more)	\$150,000 and up
Management Occupations	4.1%
Business and Financial Operations Occupations	4.0%
Community and Social Service Occupations	2.2%
Education, Training, and Library Occupations	5.6%
Healthcare Practitioners and Technical Occupations	7.0%
Healthcare Support Occupations	4.1%
Food Preparation and Serving Related Occupations	14.7%
Building and Grounds Cleaning and Maintenance Occupations	5.3%
Personal Care and Service Occupations	7.2%
Sales and Related Occupations	13.0%
Office and Administrative Support Occupations	14.7%
Installation, Maintenance, and Repair Occupations	3.3%
Transportation and Material Moving Occupations	4.5%
All Other Worker Occupations - Services to Households Earning \$150,000 and up	<u>10.3%</u>
INDUSTRY TOTAL	100.0%

<sup>1</sup> Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.



#### RESIDENTIAL NEXUS APPENDIX B TABLE 4 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$150,000 AND UP RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 1 of 4			
Management Occupations			
Chief Executives	\$232,600	3.3%	0.1%
General and Operations Managers	\$157,600	34.7%	1.4%
Sales Managers	\$167,900	4.5%	0.2%
Administrative Services Managers	\$122,400	4.2%	0.2%
Financial Managers	\$168,700	9.2%	0.4%
Food Service Managers	\$57,200	5.6%	0.2%
Medical and Health Services Managers	\$159,700	6.0%	0.2%
Property, Real Estate, and Community Association Managers	\$74,600	8.5%	0.3%
Social and Community Service Managers	\$79,300	4.3%	0.2%
All other Management Occupations (Avg. All Categories)	\$140,800	19.7%	0.8%
Weighted Mean Annual Wage	\$140,800	100.0%	4.1%
Business and Financial Operations Occupations			
Human Resources Specialists	\$89,400	5.0%	0.2%
Management Analysts	\$111,500	5.2%	0.2%
Training and Development Specialists	\$95,300	4.3%	0.2%
Market Research Analysts and Marketing Specialists	\$110,200	6.6%	0.3%
Business Operations Specialists, All Other	\$98,100	10.9%	0.4%
Accountants and Auditors	\$94,200	21.8%	0.9%
Financial Analysts	\$109,600	10.4%	0.4%
Personal Financial Advisors	\$104,400	14.2%	0.6%
Loan Officers	\$89,100	5.2%	0.2%
All Other Business and Financial Operations Occupations (Avg. All Categories)	<u>\$100,200</u>	<u>16.4%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$100,200	100.0%	4.0%
Community and Social Service Occupations			
Substance Abuse and Behavioral Disorder Counselors	\$38,300	4.4%	0.1%
Educational, Guidance, School, and Vocational Counselors	\$69,900	8.0%	0.2%
Mental Health Counselors	\$59,300	7.6%	0.2%
Rehabilitation Counselors	\$44,200	5.8%	0.1%
Child, Family, and School Social Workers	\$52,000	14.6%	0.3%
Healthcare Social Workers	\$77,300	7.0%	0.2%
Mental Health and Substance Abuse Social Workers	\$52,400	5.8%	0.1%
Social and Human Service Assistants	\$42,100	23.5%	0.5%
Community and Social Service Specialists, All Other	\$48,600	4.5%	0.1%
Clergy	\$56,300	4.5%	0.1%
All Other Community and Social Service Occupations (Avg. All Categories)	<u>\$52,500</u>	<u>14.5%</u>	<u>0.3%</u>
Weighted Mean Annual Wage	\$52,500	100.0%	2.2%

Working Draft



#### RESIDENTIAL NEXUS APPENDIX B TABLE 4 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$150,000 AND UP RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

CITY OF SANTA CLARA, CA			Working Draft
		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 2 of 4			
Education, Training, and Library Occupations			
Vocational Education Teachers, Postsecondary	\$56,500	5.0%	0.3%
Preschool Teachers, Except Special Education	\$37,700	13.3%	0.7%
Elementary School Teachers, Except Special Education	\$72,500	5.7%	0.3%
Secondary School Teachers, Except Special and Career/Technical Education	\$76,100	4.0%	0.2%
Self-Enrichment Education Teachers	\$47,700	10.5%	0.6%
Teachers and Instructors, All Other, Except Substitute Teachers	\$55,900	7.7%	0.4%
Substitute Teachers	\$40,700	3.0%	0.2%
Teacher Assistants	\$32,700	13.3%	0.7%
All Other Education, Training, and Library Occupations (Avg. All Categories)	<u>\$47,800</u>	<u>37.5%</u>	<u>2.1%</u>
Weighted Mean Annual Wage	\$47,800	100.0%	5.6%
Healthcare Practitioners and Technical Occupations			
Pharmacists	\$141.300	4.5%	0.3%
Physicians and Surgeons All Other	\$153,300	3.8%	0.3%
Physical Therapists	\$103,000	3.4%	0.2%
Registered Nurses	\$123,500	30.2%	2.1%
Dental Hygienists	\$96,500	3.6%	0.3%
Pharmacy Technicians	\$45,900	6.1%	0.4%
Licensed Practical and Licensed Vocational Nurses	\$60,400	8.1%	0.6%
All Other Healthcare Practitioners and Technical Occupations (Avg. All Categories	\$107,500	40.3%	2.8%
Weighted Mean Annual Wage	\$107,500	100.0%	7.0%
Healthcare Support Occupations	<b>#07 400</b>		4.00/
Home Health Aldes	\$27,400 \$25,400	23.5%	1.0%
Nursing Assistants	\$35,100	29.3%	1.2%
Massage Therapists	\$44,200 ¢44,200	4.9%	0.2%
Medical Assistants	\$44,100 \$44,100	9.0 <i>%</i>	0.4%
All Other Healthears Support Occupations (Avg. All Categorias)	\$44,100 \$26,200	17.270	0.0 %
An Other Healthcare Support Occupations (Avg. An Categories) Weighted Mean Annual Wage	<u>\$36,200</u> <b>\$36,200</b>	<u>17.5%</u> 100.0%	<u>0.7%</u> 4.1%
	<i>+</i> ,		
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	\$36,900	6.9%	1.0%
Cooks, Fast Food	\$21,300	4.1%	0.6%
Cooks, Restaurant	\$27,500	8.6%	1.3%
Food Preparation Workers	\$24,400	6.9%	1.0%
Bartenders	\$26,300	7.0%	1.0%
Combined Food Preparation and Serving Workers, Including Fast Food	\$23,000	25.0%	3.7%
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	\$23,100	3.7%	0.5%
vvalters and Waltresses	\$25,500	19.6%	2.9%
Dining Room and Cateteria Attendants and Bartender Helpers	\$21,300	3.2%	0.5%
	\$20,300	4.0%	0.6%
All Other Food Preparation and Serving Related Occupations (Avg. All Categories	) <u>\$25,200</u>	<u>11.1%</u>	<u>1.6%</u>
Weighted Mean Annual Wage	\$25,200	100.0%	14.7%



#### RESIDENTIAL NEXUS APPENDIX B TABLE 4 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$150,000 AND UP RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA, CA

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		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 3 of 4			
Building and Grounds Cleaning and Maintenance Occupations			
Eirst-Line Supervisors of Landscaping Lawn Service, and Groundskeeping Worke	\$53,600	3.5%	0.2%
Janitors and Cleaners. Except Maids and Housekeeping Cleaners	\$29.000	46.1%	2.4%
Maids and Housekeeping Cleaners	\$31,100	11.0%	0.6%
Landscaping and Groundskeeping Workers	\$33,400	30.5%	1.6%
All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All (	\$31,700	8.9%	0.5%
Weighted Mean Annual Wage	\$31,700	100.0%	<u>0.3%</u> 5.3%
Personal Care and Service Occupations			
First Line Supervisors of Personal Service Workers	\$42,800	3.7%	0.3%
Nonfarm Animal Caretakers	\$32.400	6.0%	0.5%
Hairdressers Hairstylists and Cosmetologists	\$24 600	15.3%	1.1%
Manicuriete and Pedicuriete	¢24,000 \$21,000	3.7%	0.3%
Childeare Workers	\$21,900 \$30,300	15 2%	0.3%
Personal Care Aides	\$30,300	31.5%	2.3%
Fitness Trainers and Aerobics Instructors	\$20,500 \$44,200	5.8%	2.5%
Recreation Workers	\$31 100	4 4 %	0.4%
All Other Personal Care and Service Occupations (Avg. All Categories)	\$29,100	14.4%	1.0%
Weighted Mean Annual Wage	\$ <b>29,100</b>	<u>14.4 %</u> 100.0%	<u>1.0%</u> 7.2%
Salas and Balatad Occupations			
Eiret Line Supervisere of Poteil Sales Workers	¢51 400	0.4%	1 20/
Coobiers	\$31,400 \$26,600	9.4 %	1.2 %
Caulters and Bantal Clarka	\$20,000 \$25,600	27.270	0.5%
Detail Seleenereene	\$35,000 \$30,000	4.270	0.5%
Retail Salespersons	\$29,200 ¢01,000	30.2%	4.7%
Securities, Commodities, and Financial Services Sales Agents	\$91,800 ¢90,500	4.1%	0.5%
Sales Representatives, Services, All Other	φο9,500 ¢77,000	4.2%	0.5%
Sales Representatives, wholesale and Manufacturing, Except reclinical and Sciel	\$77,000 \$64,600	3.9% 2.5%	0.5%
All Other Soles and Boleted Occupations (Aug. All Cotogorise)	\$04,000 \$20,600	2.3%	0.3%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$39,000</u>	<u>0.2%</u>	<u>1.1%</u>
weighted mean Annual wage	\$39,600	100.0%	13.0%
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70,600	6.6%	1.0%
Bookkeeping, Accounting, and Auditing Clerks	\$50,300	7.8%	1.1%
Customer Service Representatives	\$48,200	9.5%	1.4%
Receptionists and Information Clerks	\$36,600	8.3%	1.2%
Stock Clerks and Order Fillers	\$31,300	10.8%	1.6%
Executive Secretaries and Executive Administrative Assistants	\$67,200	3.6%	0.5%
Medical Secretaries	\$48,100	3.8%	0.6%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$45,000	11.9%	1.7%
Office Clerks, General	\$40,900	14.5%	2.1%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$45,700</u>	<u>23.3%</u>	<u>3.4%</u>
Weighted Mean Annual Wage	\$45,700	100.0%	14.7%



#### RESIDENTIAL NEXUS APPENDIX B TABLE 4 AVERAGE ANNUAL WORKER COMPENSATION, 2015 SERVICES TO HOUSEHOLDS EARNING \$150,000 AND UP RESIDENTIAL NEXUS ANALYSIS CITY OF SANTA CLARA. CA

CITY OF SANTA CLARA, CA			Working Draft
		% of Total	% of Total
	2015 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 4 of 4			
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	7.8%	0.3%
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$65,800	2.8%	0.1%
Automotive Body and Related Repairers	\$46,400	6.8%	0.2%
Automotive Service Technicians and Mechanics	\$52,700	20.9%	0.7%
Maintenance and Repair Workers, General	\$47,300	33.2%	1.1%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$53,100</u>	<u>28.5%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$53,100	100.0%	3.3%
Transportation and Material Moving Occupations			
Bus Drivers, School or Special Client	\$38,000	6.6%	0.3%
Driver/Sales Workers	\$34,400	7.3%	0.3%
Heavy and Tractor-Trailer Truck Drivers	\$47,200	11.7%	0.5%
Light Truck or Delivery Services Drivers	\$39,300	10.4%	0.5%
Taxi Drivers and Chauffeurs	\$29,300	3.8%	0.2%
Parking Lot Attendants	\$21,500	9.6%	0.4%
Automotive and Watercraft Service Attendants	\$25,700	2.7%	0.1%
Cleaners of Vehicles and Equipment	\$25,800	8.0%	0.4%
Laborers and Freight, Stock, and Material Movers, Hand	\$31,700	19.5%	0.9%
Packers and Packagers, Hand	\$25,300	6.8%	0.3%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$33,000</u>	<u>13.5%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$33,000	100.0%	4.5%

89.7%

<sup>1</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>2</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County updated by the California Employment Development Department to 2015 wage levels.

<sup>3</sup> Including occupations representing 3% or more of the major occupation group





# **KEYSER MARSTON ASSOCIATES**

# ATTACHMENT B

## NON-RESIDENTIAL NEXUS ANALYSIS

Prepared for County of Santa Clara

Prepared by: Keyser Marston Associates, Inc.

December 2016

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## I. INTRODUCTION

The following report is a Jobs Housing Nexus Analysis, an analysis of the linkages between non-residential development and the need for additional affordable housing in Santa Clara County. This Jobs Housing Nexus Analysis has been prepared in support of affordable housing impact fees that may be levied on non-residential development. The report has been prepared by Keyser Marston Associates, Inc. (KMA) for Santa Clara County, pursuant to contracts both parties have with the Silicon Valley Community Foundation.

The analysis was prepared as part of a coordinated work program for twelve jurisdictions in Santa Clara and Alameda Counties. Silicon Valley Community Foundation with Baird + Driskell Community Planners organized and facilitated this multi-jurisdiction effort. Silicon Valley Community Foundation, which engaged KMA to prepare the analyses, serves as the main contracting entity with each participating jurisdiction, and has provided funding support for coordination and administration of the effort. Analyses in support of affordable housing impact fees on residential development were also prepared as part of the multi-jurisdiction work program.

The County of Santa Clara has always been a participant in countywide efforts to support an increase in the supply of affordable housing. In the future, the County is considering an increased role by adopting measure to generate additional revenues to help assist in the development of affordable projects. To that end, the County is considering affordable housing impact fees on both residential and non-residential. The nexus analysis contained in this report will provide documentation enabling the County to adopt a fee on non-residential development.

## Purpose

The purpose of a Jobs-Housing Nexus Analysis is to quantify and document the impact of the development of new workplace buildings (commercial and industrial) and the employees that work in them, on the demand for affordable housing. Because jobs in all buildings cover a range of compensation levels, there are housing needs at all affordability levels. This analysis quantifies the need for lower and moderate income housing created by each type of workplace building.

The analysis may be used as the foundation for enacting an affordable housing impact fee or "commercial linkage fee" to be levied on non-residential development in Santa Clara County. The conclusions of the analysis represent maximum supportable impact fee levels based on the impact of new non-residential development on the need for affordable housing. Findings are not recommended fee levels. The County is free to take a range of policy considerations into account in setting fees anywhere below the maximums identified in this report.

The relationships established in this analysis may also be useful for other applications such as negotiation of an affordable housing component as part of a development agreement for a large commercial project.

## **Analysis Scope**

This analysis examines five types of workplace buildings, per direction of County staff.

- Office, which includes traditional office users such as law firms, accountants, real estate and insurance agencies, as well as high tech, research & development (R&D), and medical office space.
- Hotel, which covers the range from full service hotels to minimum service extended stay lodging.
- Retail, which includes all types of retail, restaurants, and personal services.
- Light Industrial, which includes light manufacturing and maintenance and repair industries, such as auto service and body repair businesses. This category also includes research & development, to reflect the fact that some R&D occurs in light industrial-type buildings instead of in office buildings.
- Warehouse, or large structures primarily devoted to storage, typically with a small amount of office space.

The household income categories addressed in the analysis are:

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

## **Report Organization**

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

- Section I provides an introduction and describes the purpose and organization of this report.
- Section II presents a summary of the nexus concept and some of the key issues and underlying assumptions in the analyses linking jobs and housing demand.
- Section III presents an analysis of the jobs and housing relationships associated with each workplace building type and concludes with a quantification of the number of households at each income level associated with each building type.
- Section IV contains a summary of the costs of delivering housing units affordable to households at the income levels under study, allocated to each square foot of building area, and provides the conclusions regarding maximum supported fee levels.
- Appendix A provides a discussion of various specific factors and assumptions in relation to the nexus concept to supplement the overview provided in Section II.
- Appendix B contains support information on worker occupations and incomes and an identification of the industry categories represented within each building type.
- Appendix C provides an analysis to address the potential for overlap between jobs counted in the Residential and Non-Residential Nexus Analyses.

## **Data Sources and Qualifications**

The analyses in this report have been prepared using the best and most recent data available. Local and current data were used whenever possible. Sources such as the American Community Survey of the U.S. Census, the 2010 Census, Bureau of Labor Statistics and California Employment Department (EDD) data were used extensively. Other sources and analyses used are noted in the text and footnotes. While we believe all sources utilized are sufficiently accurate for the purposes of the analyses, we cannot guarantee their accuracy. KMA assumes no liability for information from these or other sources.

## II. THE NEXUS CONCEPT

This section outlines the nexus concept and some of the key issues surrounding the impact of new non-residential development on the demand for affordable housing units in Santa Clara County. The nexus analysis and discussion focus on the relationships among development, growth, employment, income of workers and demand for affordable housing. The analysis describes the impact of new construction of workplace buildings and the need for additional affordable housing, quantified both in terms of number of units and the justified fee to provide those affordable units.

## Background

The first jobs-housing linkage fee programs were adopted by the cities of San Francisco and Boston in the mid-1980s. To support the fees, the City of San Francisco commissioned an early version of a nexus analysis.

In 1987, the California legislature enacted AB 1600, the Mitigation Fee Act, which requires local agencies proposing an impact fee on a development project to identify the purpose and use of the fee, and to determine that there is a reasonable relationship between the fee's use and the development project on which the fee is imposed. The local agency must also demonstrate that there is a reasonable relationship between the fee amount and the cost of mitigating the problem that the fee addresses. Studies by local governments designed to fulfill the requirements of AB 1600 are often referred to as "nexus" studies. While commercial linkage fees for affordable housing are not clearly "fees" as defined by the Mitigation Fee Act, the methodology and findings specified by the Act are appropriate for any nexus study.

Commercial linkage fees were upheld in *Commercial Builders of Northern California v. City of Sacramento.* Commercial builders in Sacramento sued the City following the City's adoption of a housing linkage fee. Both the U.S. District Court and the Ninth Circuit Court of Appeals upheld the commercial linkage fees adopted by the City of Sacramento. The Supreme Court of the United States denied the builders' petition to hear the case, allowing the ruling of the Ninth Circuit to stand.

## The Nexus Methodology

An overview of the basic nexus concept and methodology is helpful to understand the discussion and concepts presented in this section. The nexus analysis links new commercial buildings with new workers; these workers demand additional housing in proximity to the jobs, a portion of which needs to be affordable to the workers in lower income households.

Below is a description of the major calculations of the analysis. For analysis purposes, buildings of 100,000 square feet are assumed and then the following calculations are made:

- The total number of employees working in the building is estimated based on average employment density data.
- Occupation and income information for typical job types in the building is used to calculate how many of those jobs pay compensation at the various income levels (Extremely Low, Very Low, Low, and Moderate) addressed in the analysis.
   Compensation data is from the California Employment Development Department (EDD) and is specific to Santa Clara County. Worker occupations by building type are derived from the 2014 Occupational Employment Survey by the U.S. Bureau of Labor Statistics and weighted to reflect the industry mix in Santa Clara County.
- Census data indicate that many workers are members of households where more than one person is employed and that there is a range of household sizes; factors derived from the Census are used to translate the workers in the building into Extremely Low, Very Low, Low, and Moderate-income households of various sizes.
- Then, the Extremely Low, Very Low-, Low- and Moderate-Income households are divided by the building size to arrive at the number of housing units per square foot of building area, for each income category.
- In the last step, the number of households per square foot in each income category is multiplied by the costs of delivering housing units affordable to these income groups.

# **Discount for Changing Industries**

The local economy, like that of the U.S. as a whole, is constantly evolving, with job losses in some sectors and job growth in others. Over the past decade employment in manufacturing sectors of the local economy have declined along with governmental employment, farming, construction and financial activities employment. Jobs lost over the last decade in these declining sectors were replaced by job growth in other industry sectors.

The analysis makes an adjustment to take these declines, changes and shifts within all sectors of the economy into account, recognizing that jobs added are not 100% net new in all cases. A 20% adjustment is utilized based on the long term shifts in employment that have occurred in some sectors of the local economy and the likelihood of continuing changes in the future. Long term declines in employment experienced in some sectors of the economy mean that some of the new jobs are being filled by workers that have been displaced from another industry and who are presumed to already have housing locally. The analysis makes the assumption that existing workers downsized from declining industries are available to fill a portion of jobs in new workplace buildings built in Santa Clara County.

The 20% downward adjustment used for purposes of the analysis was derived from California Employment Development Department data on employment by industry in the San Jose-Sunnyvale-Santa Clara and Oakland-Hayward-Berkeley Metropolitan Districts, where the jurisdictions included in the multi-jurisdiction nexus effort are located. Over the ten-year period from 2005 to 2015, approximately 55,000 jobs were lost in declining industry sectors. Over the same period, growing and stable industries added a total of 268,000 jobs. The figures are used to establish a ratio between jobs lost in declining industries to jobs gained in growing and stable industries at 20%<sup>1</sup>. The 20% factor is applied as an adjustment in the analysis, effectively assuming one in every five new jobs is filled by a worker down-sized from a declining industry and who already lives locally.

The discount for changing industries represents a conservative assumption because many displaced workers may exit the workforce entirely by retiring. In addition, development of new workspace buildings will typically occur only to the extent there is positive net demand after reoccupancy of buildings vacated by businesses in declining sectors of the economy. To the extent existing buildings are re-occupied, the discount for changing industries is unnecessary because new buildings would represent net new growth in employment. The 20% adjustment is conservative in that it is mainly necessary to cover a special case in which buildings vacated by declining industries cannot be readily occupied by other users due to their special purpose nature or because of obsolescence.

## **Other Factors and Assumptions**

Appendix A provides a discussion of other specific factors in relation to the nexus concept including housing needs of the existing population, multiplier effects (indirect and induced jobs), and economic cycles.

<sup>&</sup>lt;sup>1</sup> The 20% ratio is calculated as 55,000 jobs lost in declining sectors excluding defense divided by 268,000 jobs gained in growing and stable sectors = 20.5% (rounded to 20%).

#### III. JOBS HOUSING NEXUS ANALYSIS

This section presents a summary of the analysis linking the development of the five types of workplace buildings to the estimated number of lower income housing units required in each of four income categories. This section should not be read or reproduced without the narrative presented in the previous sections.

#### Analysis Approach and Framework

The analysis establishes the jobs housing nexus for individual commercial land use categories, quantifying the connection between employment growth in Santa Clara County and affordable housing demand.

The analysis examines the employment associated with the development of workplace building prototypes. Then, through a series of steps, the number of employees is converted to households and housing units by income level. The findings are expressed in terms of numbers of households per 100,000 square feet, for ease of presentation. In the final step, we convert the numbers of households for an entire building to the number of households per square foot.

#### **Household Income Limits**

The analysis estimates demand for affordable housing in four household income categories: Extremely Low, Very Low, Low and Moderate Income. Household incomes for these affordability categories are published by the California Department of Housing and Community Development (HCD). The income limits are shown below.

		H	ousehold Siz	ze (Persons)		
	1	2	3	4	5	6 +
Extr. Low (Under 30% AMI)	\$23,450	\$26,800	\$30,150	\$33,500	\$36,200	\$38,900
Very Low (30%-50% AMI)	\$39,100	\$44,650	\$50,250	\$55,800	\$60,300	\$64,750
Low (50%-80% AMI)	\$59,400	\$67,900	\$76,400	\$84,900	\$91,650	\$98,450
Moderate (80%-120% AMI)	\$89,950	\$102,800	\$115,650	\$128,500	\$138,800	\$149,050
Median (100% of Median)	\$74,950	\$85,700	\$96,400	\$107,100	\$115,650	\$124,250

#### 2016 Income Limits for Santa Clara County

Source: California Department of Housing and Community Development.

## **Analysis Steps**

The analysis is conducted using a model that KMA has developed for application in many jurisdictions for which the firm has conducted similar analyses. The model inputs are all local data to the extent possible, and are fully documented.

Tables 1 through 4 at the end of this section summarize the nexus analysis steps for the five building types. Following is a description of each step of the analysis:

# Step 1 – Estimate of Total New Employees

The first step in Table 1 identifies the total number of direct employees who will work in the building type being analyzed. Average employment density factors are used to make the calculation.

The employment density estimates are drawn from several sources, including local information, KMA experience in other jurisdictions, some survey data, and other sources, tailored to the character of development in Santa Clara County and the types of tenancies expected in the commercial buildings in the County.

- Office 300 square feet per employee. This represents an average of a range that includes traditional office uses, high tech activities, research & development (R&D) space, and medical offices. There is some variation within this range, with high tech at the high end and some R&D and medical office at the lower end.
- Retail 400 square feet per employee. This reflects a mix of retail and restaurant space and also a whole range of personal services. Restaurant space typically has a higher employment density, while retail space ranges widely depending on the type of retail, with furniture stores, for example, representing the lower end. The density range within this category is wide, with some types of retail as much as five times as dense as other types.
- Hotel 800 square feet per employee. The 800 square feet per employee average covers a range from higher service hotels, which are far more employment intensive, to minimal service extended stay hotels which have very low employment density.
- Light Industrial 400 square feet per employee. This density covers flex space, typically leased to a mix of office, light manufacturing, R&D and storage uses. This designation may also be applied to auto related servicing and other activities of a semi-industrial character.
- Warehouse 2,000 square feet per employee. This reflects that the primary activity in the building is assumed to be storage. A small amount of office or administrative space is assumed within warehouse structures. The warehouse category, for fee purposes, is often defined as structures over a threshold size, such as 50,000 square feet. Also some cities use this category to cover heavy manufacturing when the density of employment is similarly low.

KMA conducted the analysis on 100,000 square foot buildings. This facilitates the presentation of the nexus findings, as it allows jobs and housing units to be presented in whole numbers that can be more readily understood. At the conclusion of the analysis, the findings are divided by building size to express the linkages per square foot, so that the findings can be applied to buildings of any size.

# Step 2 – Adjustment for Changing Industries

This step is an adjustment to take into account any declines, changes and shifts within all sectors of the economy and to recognize that new space is not always 100% equivalent to net new employees. A 20% downward adjustment is utilized to recognize long-term employment shifts and the likelihood of continuing changes in the local economy (see Section II discussion).

## Step 3 – Adjustment from Employees to Employee Households

This step (Table 1) converts the number of employees to the number of employee households, recognizing that that there is, on average, more than one worker per household, and thus the number of housing units needed for new workers is less than the number of new workers. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons and students.

The number of workers per household in a given geographic area is a function of household size, labor force participation rate and employment availability, as well as other factors. According to the 2011-2013 ACS, the number of workers per worker household in Santa Clara County was 1.72, including full- and part-time workers. The total number of jobs created is divided by 1.72 to determine the number of new households. This is a conservative estimate because it excludes all non-worker households (such as students and the retired). If the average number of workers in all households was used, it would have produced a greater demand for housing units.

## Step 4 – Occupational Distribution of Employees

Estimating the occupational breakdown of employees is the first step to arrive at income levels. The Bureau of Labor Statistics publishes data on the distribution of occupations within industries. The industries included in the analysis vary by building type.

- For office buildings, the mix of industries was customized based on employment by industry sector in Santa Clara County using California Employment Development Department (EDD) data. This category is inclusive of research and development, software development firms and other high tech users, medical and dental offices along with small firms such as realtors, insurance agents, employment services, legal and business services.
- For retail space, the industries include a mix of retail, restaurant and personal service uses tailored to Santa Clara County based on current employment levels reported by EDD.
- For hotel buildings, the industry includes Hotels, Motels and other accommodations, excluding casino hotels.

- For light industrial buildings, the industries include light manufacturing, research and development, and automotive and other maintenance and repair services. The categories are weighted to reflect the mix of these industries within Santa Clara County.
- For warehouse buildings, the applicable industry category is Warehouse & Storage.

Once the industries are selected, the May 2014 National Industry-Specific Occupational Estimates, published by the Bureau of Labor Statistics (BLS), are used to translate industries to occupations. At the end of this step, the occupational composition of employees in the five types of buildings has been estimated. The occupational compositions that reflect the expected mix of activities in the new buildings are presented in the tables in Appendix B.

- Office employment in Santa Clara County includes a range of computer and mathematical (23%), administrative support (21%), business and financial (11%), and management occupations (9%), among others.
- Retail employment consists of predominantly food preparation and serving occupations (41%) and sales related occupations (32%), with office and administrative support occupations making up an additional 9%.
- Hotels employ workers primarily from three main occupation categories: building and grounds cleaning and maintenance (maid service, etc.), food preparation and serving related, and office and administrative support, which together make up 77% of Hotel workers. Other Hotel occupations include personal care, management, sales, production and maintenance and repair.
- Light industrial occupations consist of scientific occupations (15%), production jobs (15%), maintenance and repair jobs (11%), office and administrative (11%), and others.
- Warehouse workers are largely engaged in transportation and material moving (60%), followed by office and administrative support.

The results of Step #4 are shown on Table 1 at the end of this section; the table shows both the percentage of total employee households and the number of employee households in the prototype buildings.

# Step 5 – Estimated Employee Household Income

In this step, occupations are translated to employee incomes based on recent Santa Clara County wage and salary information from EDD. The wage and salary information summarized in the tables in Appendix B provided the income inputs to the analysis. Worker compensation used in the analysis assumes full time employment (40 hours per week) based on EDD's convention for reporting annual compensation.

In the even numbered Appendix B tables, EDD data provides a distribution of specific occupations within the category. For example, within the Food Preparation and Serving

Category, there are Supervisors, Cooks, Bartenders, Waiters and Waitresses, Dishwashers, etc. For each detailed occupational category, the model uses the distribution of wages to calculate the percent of worker households that would fall into each income category. The occupations with the lowest compensation levels are in Retail and Hotel buildings.

The calculation is performed for each possible combination of household size and number of workers in the household. For households with more than one worker, individual *employee* income data was used to calculate the household income by assuming multiple earner households are, on average, formed of individuals with similar incomes. The model recognizes that many, but not all households have multiple incomes.

# Step 6 – Distribution of Household Size and Number of Workers

In this step, the model examines the demographics of Santa Clara County in order to identify the percentage of households applicable to each potential combination of household size and number of workers. Percentages are calculated using data from the 2011-2013 American Community Survey. This data enables the analysis to account for the following:

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

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

# Step 7 – Estimate of Number of Households that Meet Size and Income Criteria

This is the final step to calculate the number of worker households meeting the size and income criteria for the four affordability tiers. The calculation combines the matrix of results from Step 5 on percentage of worker households that would meet the income criteria at each potential household size/number of workers combination, with Step 6, the percentage of worker households that have each given household size/number of workers combination. The result is the percentage of households that fall into each affordability tier. The percentages are then multiplied by the number of households from Step 3 to arrive at the number of households in each affordability tier.

Table 2-A shows the results after completing Steps 5, 6, and 7 for the Extremely Low Income Tier. The methodology is repeated for each of the lower income tiers (Tables 2-B, 2-C, and 2-D), resulting in a total count of worker households per 100 units.

# Summary by Income Level

Table 3 at the end of this section indicates the results of the analysis for each of the five building types, for all of the income categories. The table presents the number of households in each

affordability category, the total number up to 120% of median, and the remaining households earning over 120% of median associated with a 100,000 square foot building.

The findings in Table 3 are summarized below:

	Office	Retail	Hotel	Light Industrial	Warehouse
Extremely Low (0%-30% AMI)	2.6	36.0	15.1	6.5	3.7
Very Low Income (30%-50% AMI)	12.0	40.8	19.6	16.7	7.3
Low Income (50%-80% AMI)	22.0	26.2	13.7	22.1	6.2
Moderate Income (80%-120% AMI)	30.7	8.5	6.2	23.5	3.9
Subtotal through 120% AMI	67.3	111.5	54.6	68.8	21.2
Above Moderate (over 120% AMI)	88.0	5.0	3.6	47.6	2.1
Total	155.3	116.5	58.2	116.5	23.3

#### New Worker Households by Income Level per 100,000 square feet

The table below summarizes the percentage of total new worker households that falls into each income category. As indicated, over 90% of Retail / Restaurant, Hotel and Warehouse worker households are below the 120% of median income level. By contrast, in Office buildings, only approximately 40% of worker households fall below 120% of the median.

	<b>.</b>			Light	
	Office	Retail	Hotel	Industrial	Warehouse
Extremely Low (0%-30% AMI)	1.7%	30.9%	26.0%	5.6%	15.9%
Very Low Income (30%-50% AMI)	7.7%	35.0%	33.6%	14.4%	31.5%
Low Income (50%-80% AMI)	14.2%	22.5%	23.5%	19.0%	26.8%
Moderate Income (80%-120% AMI)	19.8%	7.3%	10.7%	20.2%	16.7%
Subtotal through 120% AMI	43.4%	95.7%	93.8%	59.1%	90.9%
Above Moderate (over 120% AMI)	56.6%	4.3%	6.2%	40.9%	9.1%
Total	100%	100%	100%	100%	100%

## Nexus Analysis Result: Affordable Housing Need by Income Tier

## Summary by Square Foot Building Area

The analysis thus far has used 100,000 square foot buildings. In this step, the conclusions are translated to households per square foot by income level (see Table 4).

For example, for office buildings, household generation per square foot is as follows:

New Worker Households Per Square Foot of New Office Space						
Extremely Low (0%-30% AMI)	0.00002634					
Very Low Income (30%-50% AMI)	0.00012013					
Low Income (50%-80% AMI)	0.00022013					
Moderate Income (80%-120% AMI)	0.00030683					
Total, Less than 120% AMI	0.00067343					

This is the summary of the housing nexus analysis, or the linkage from buildings to employees to housing demand, by income level. We believe that it is a conservative approximation that most likely understates the households at each income level generated by these building types.
#### TABLE 1 NET NEW HOUSEHOLDS AND OCCUPATION DISTRIBUTION BY BUILDING TYPE JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Per 100,000 Sq.Ft. of Building Area	Office	Retail	Hotel	Light Industrial	Warehouse
Step 1 - Estimate of Number of Employees					
Employment Density (SF/Employee)	300	400	800	400	2,000
Number of Employees Per 100,000 SF Building A	333	250	125	250	50
Step 2 - Net New Employees after Declining Industries Adjustment (20%)	267	200	100	200	40
Step 3 - Adjustment for Number of Households (1.72)	155.3	116.5	58.2	116.5	23.3
Step 4 - Occupation Distribution <sup>(1)</sup>					
Management Occupations	9.0%	2.3%	4.5%	8.8%	3.5%
Business and Financial Operations	11.2%	0.5%	1.5%	6.4%	2.0%
Computer and Mathematical	23.4%	0.1%	0.1%	7.1%	0.5%
Architecture and Engineering	4.9%	0.0%	0.0%	9.5%	0.2%
Life, Physical, and Social Science	2.8%	0.0%	0.0%	15.2%	0.0%
Community and Social Services	0.2%	0.0%	0.0%	0.3%	0.0%
Legal	1.9%	0.0%	0.0%	0.3%	0.0%
Education, Training, and Library	1.1%	0.0%	0.0%	0.4%	0.0%
Arts, Design, Entertainment, Sports, and Media	2.7%	0.4%	0.3%	1.1%	0.1%
Healthcare Practitioners and Technical	4.2%	1.9%	0.0%	1.6%	0.1%
Healthcare Support	2.4%	0.3%	0.5%	0.4%	0.0%
Protective Service	0.3%	0.3%	1.6%	0.1%	0.7%
Food Preparation and Serving Related	0.2%	40.7%	24.7%	0.5%	0.1%
Building and Grounds Cleaning and Maint	0.2%	0.7%	31.9%	0.6%	1.0%
Personal Care and Service	0.3%	2.8%	1.0%	0.0%	0.0%
Salas and Balated	6.5%	21.6%	2.0%	2 20/	1 70/
Office and Administrative Support	20.0%	0.20/	2.2 /0	5.570 11 10/	1.7 /0
Earming Eiching and Earactry	20.9%	9.370	20.370	0.2%	0.1%
Construction and Extraction	0.0%	0.070	0.0%	0.3%	0.1%
Installation Maintenance, and Banair	0.0%	0.1/0	0.170 E 00/	0.370	2.1%
Dreduction	2.0%	2.3%	5.0%	11.170	3.2%
	2.3%	Z.1%	2.2%	15.1%	4.0%
Totals	<u>2.1%</u> 100.0%	<u>4.5%</u> 100.0%	<u>1.1%</u> 100.0%	<u>6.2%</u> 100.0%	<u>60.3%</u> 100.0%
Management Occupations	14.0	2.7	2.6	10.2	0.8
Business and Financial Operations	17.5	0.6	0.9	7.5	0.5
Computer and Mathematical	36.4	0.1	0.0	8.2	0.1
Architecture and Engineering	7.6	0.0	0.0	11 1	0.1
Life Develoal and Social Science	13	0.0	0.0	17.7	0.1
Community and Social Social Social	4.5	0.0	0.0	0.2	0.0
	0.5	0.0	0.0	0.3	0.0
	2.9	0.0	0.0	0.3	0.0
Education, Training, and Library	1.7	0.0	0.0	0.4	0.0
Arts, Design, Entertainment, Sports, and Media	4.3	0.4	0.1	1.2	0.0
Healthcare Practitioners and Technical	6.5	2.2	0.0	1.9	0.0
Healthcare Support	3.7	0.4	0.3	0.5	0.0
Protective Service	0.5	0.3	0.9	0.4	0.2
Food Preparation and Serving Related	0.4	47.4	14.4	0.6	0.0
Building and Grounds Cleaning and Maint.	1.3	0.8	18.6	0.7	0.2
Personal Care and Service	0.5	3.2	2.3	0.1	0.0
Sales and Related	10.1	36.8	1.3	3.9	0.4
Office and Administrative Support	32.4	10.8	11.8	13.0	5.2
Farming, Fishing, and Forestry	0.1	0.0	0.0	0.3	0.0
Construction and Extraction	0.1	0.2	0.0	0.4	0.0
Installation Maintenance and Popoir	3.1	0.2	20	12.0	0.0
Production	J. I 2 E	2.1	∠.ઝ 1.0	17.0	0.7
Floudellon	3.0	2.4 E 0	1.3	17.0	0.9
Transportation and Material Moving	<u>ು.ು</u> 155.3	<u>5.2</u> 116.5	<u>0.6</u> 58.2	<u>7.2</u> 116.5	<u>14.1</u> 23.3

Notes:

(1) Appendix B Tables 1 through 10 contain additional information regarding worker occupation categories.

#### TABLE 2-A ESTIMATE OF QUALIFYING HOUSEHOLDS - EXTREMELY LOW INCOME JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

#### Analysis for Households Earning from 0% to 30% of Median

	Office	Retail	Hotel	Light Industrial	Warehouse		
Per 100,000 Sq.Ft. of Building Area							
Step 5, 6, & 7 - Households Earning from 0% to 30% of Median <sup>(1)</sup>							
Management	0.00	0.01	0.01	0.00	0.00		
Business and Financial Operations	0.00	0.00	0.00	0.00	0.00		
Computer and Mathematical	0.00	0.00	0.00	0.00	0.00		
Architecture and Engineering	0.00	0.00	0.00	0.00	0.00		
Life, Physical and Social Science	0.00	0.00	0.00	0.02	0.00		
Community and Social Services	0.00	0.00	0.00	0.00	0.00		
Legal	0.00	0.00	0.00	0.00	0.00		
Education Training and Library	0.00	0.00	0.00	0.00	0.00		
Arts, Design, Entertainment, Sports, and Media	0.00	0.00	0.00	0.00	0.00		
Healthcare Practitioners and Technical	0.01	0.00	0.00	0.00	0.00		
Healthcare Support	0.00	0.00	0.00	0.00	0.00		
Protective Service	0.00	0.00	0.00	0.00	0.00		
Food Preparation and Serving Related	0.00	19.15	5.50	0.00	0.00		
Building Grounds and Maintenance	0.00	0.00	4.50	0.00	0.00		
Personal Care and Service	0.00	1.24	0.71	0.00	0.00		
Sales and Related	0.41	10.54	0.19	0.47	0.00		
Office and Admin	1.69	1.53	2.91	0.65	0.69		
Farm, Fishing, and Forestry	0.00	0.00	0.00	0.00	0.00		
Construction and Extraction	0.00	0.00	0.00	0.00	0.00		
Installation Maintenance and Repair	0.00	0.10	0.13	0.30	0.03		
Production	0.00	0.51	0.41	2.65	0.14		
Transportation and Material Moving	0.00	1.32	0.00	2.03	2.68		
HH earning up to 30% of Median - major occupations	2.11	34.40	14.36	6.11	3.53		
HH earning from 0% to 30% of Median - all other occupatio	0.52	1.63	0.78	0.40	0.17		
Total Households Earning from 0% to 30% of Median	2.6	36.0	15.1	6.5	3.7		

#### Notes:

### TABLE 2-B ESTIMATE OF QUALIFYING HOUSEHOLDS - VERY LOW INCOME JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

#### Analysis for Households Earning 30% to 50% of Median

	Office	Retail	Hotel	Light Industrial	Warehouse		
Per 100,000 Sq.Ft. of Building Area							
Step 5, 6, & 7 - Households Earning from 30% to 50% of Median <sup>(1)</sup>							
Management	0.00	0.13	0.26	0.00	0.00		
Business and Financial Operations	0.15	0.00	0.00	0.08	0.01		
Computer and Mathematical	0.36	0.00	0.00	0.05	0.00		
Architecture and Engineering	0.06	0.00	0.00	0.07	0.00		
Life, Physical and Social Science	0.00	0.00	0.00	1.24	0.00		
Community and Social Services	0.00	0.00	0.00	0.00	0.00		
Legal	0.00	0.00	0.00	0.00	0.00		
Education Training and Library	0.00	0.00	0.00	0.00	0.00		
Arts, Design, Entertainment, Sports, and Media	0.00	0.00	0.00	0.00	0.00		
Healthcare Practitioners and Technical	0.18	0.00	0.00	0.00	0.00		
Healthcare Support	0.00	0.00	0.00	0.00	0.00		
Protective Service	0.00	0.00	0.00	0.00	0.00		
Food Preparation and Serving Related	0.00	17.90	5.45	0.00	0.00		
Building Grounds and Maintenance	0.00	0.00	6.68	0.00	0.00		
Personal Care and Service	0.00	1.22	0.90	0.00	0.00		
Sales and Related	1.13	13.09	0.27	0.73	0.00		
Office and Admin	7.75	3.37	3.86	2.99	1.60		
Farm, Fishing, and Forestry	0.00	0.00	0.00	0.00	0.00		
Construction and Extraction	0.00	0.00	0.00	0.00	0.00		
Installation Maintenance and Repair	0.00	0.54	0.66	2.46	0.15		
Production	0.00	0.81	0.49	5.53	0.29		
Transportation and Material Moving	0.00	1.87	0.00	2.56	4.95		
HH earning from 30%-50% of Median - major occupations	9.62	38.94	18.57	15.71	7.00		
HH earning from 30% to 50% of Median - all other occupati	2.39	1.84	1.01	1.03	0.34		
Total Households Earning from 30% to 50% of Median	12.0	40.8	19.6	16.7	7.3		

#### Notes:

### TABLE 2-C ESTIMATE OF QUALIFYING HOUSEHOLDS - LOW INCOME JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

#### Analysis for Households Earning from 50% to 80% of Median

	Office	Retail	Hotel	Light Industrial	Warehouse		
Per 100,000 Sq.Ft. of Building Area							
Step 5, 6, & 7 - Households Earning from 50% to 80% of Median <sup>(1)</sup>							
Management	0.21	0.28	0.46	0.14	0.03		
Business and Financial Operations	2.06	0.00	0.00	0.95	0.07		
Computer and Mathematical	1.95	0.00	0.00	0.34	0.00		
Architecture and Engineering	0.53	0.00	0.00	0.58	0.00		
Life, Physical and Social Science	0.00	0.00	0.00	3.17	0.00		
Community and Social Services	0.00	0.00	0.00	0.00	0.00		
Legal	0.00	0.00	0.00	0.00	0.00		
Education Training and Library	0.00	0.00	0.00	0.00	0.00		
Arts, Design, Entertainment, Sports, and Media	0.00	0.00	0.00	0.00	0.00		
Healthcare Practitioners and Technical	0.64	0.00	0.00	0.00	0.00		
Healthcare Support	0.00	0.00	0.00	0.00	0.00		
Protective Service	0.00	0.00	0.00	0.00	0.00		
Food Preparation and Serving Related	0.00	9.03	2.85	0.00	0.00		
Building Grounds and Maintenance	0.00	0.00	4.41	0.00	0.00		
Personal Care and Service	0.00	0.62	0.56	0.00	0.00		
Sales and Related	1.89	9.32	0.26	0.77	0.00		
Office and Admin	10.35	3.01	3.20	4.08	1.50		
Farm, Fishing, and Forestry	0.00	0.00	0.00	0.00	0.00		
Construction and Extraction	0.00	0.00	0.00	0.00	0.00		
Installation Maintenance and Repair	0.00	0.78	0.94	3.83	0.23		
Production	0.00	0.66	0.33	5.14	0.27		
Transportation and Material Moving	0.00	1.31	0.00	1.73	3.85		
HH earning from 50% to 80% of Median - major occupatior	17.63	25.01	12.99	20.73	5.94		
HH earning from 50% to 80% of Median - all other occupati	4.38	1.18	0.70	1.36	0.29		
Total Households Earning from 50% to 80% of Median	22.0	26.2	13.7	22.1	6.2		

#### Notes:

### TABLE 2-D ESTIMATE OF QUALIFYING HOUSEHOLDS - MODERATE INCOME JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

#### Analysis for Households Earning from 80% to 120% of Median

	Office	Retail	Hotel	Light Industrial	Warehouse
Per 100,000 Sq.Ft. of Building Area					
Step 5, 6, & 7 - Households Earning from 80% to 120% of	Median <sup>(1)</sup>				
Management	1.12	0.47	0.55	0.81	0.13
Business and Financial Operations	4.11	0.00	0.00	1.84	0.12
Computer and Mathematical	6.30	0.00	0.00	1.35	0.00
Architecture and Engineering	1.55	0.00	0.00	2.10	0.00
Life, Physical and Social Science	0.00	0.00	0.00	4.74	0.00
Community and Social Services	0.00	0.00	0.00	0.00	0.00
Legal	0.00	0.00	0.00	0.00	0.00
Education Training and Library	0.00	0.00	0.00	0.00	0.00
Arts, Design, Entertainment, Sports, and Media	0.00	0.00	0.00	0.00	0.00
Healthcare Practitioners and Technical	1.29	0.00	0.00	0.00	0.00
Healthcare Support	0.00	0.00	0.00	0.00	0.00
Protective Service	0.00	0.00	0.00	0.00	0.00
Food Preparation and Serving Related	0.00	1.18	0.55	0.00	0.00
Building Grounds and Maintenance	0.00	0.00	2.53	0.00	0.00
Personal Care and Service	0.00	0.13	0.16	0.00	0.00
Sales and Related	2.43	2.71	0.22	0.72	0.00
Office and Admin	7.79	2.02	1.15	3.21	0.99
Farm, Fishing, and Forestry	0.00	0.00	0.00	0.00	0.00
Construction and Extraction	0.00	0.00	0.00	0.00	0.00
Installation Maintenance and Repair	0.00	0.70	0.69	3.53	0.19
Production	0.00	0.34	0.06	3.08	0.16
Transportation and Material Moving	0.00	0.59	0.00	0.66	2.12
HH earning from 80% to 120% of Median - major occupatic	24.58	8.13	5.91	22.05	3.71
HH earning from 80% to 120% of Median - all other occupa	6.10	0.38	0.32	1.45	0.18
Total Households Earning from 80% to 120% of Median	30.7	8.5	6.2	23.5	3.9

#### Notes:

#### TABLE 3 WORKER HOUSEHOLDS BY AFFORDABILITY LEVEL JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

#### Per 100,000 Sq.Ft. of Building Area

-	Office	Retail	Hotel	Light Industrial	Warehouse
NUMBER OF HOUSEHOLDS BY INCOME TIER (1)	)				
Extremely Low (0% - 30% AMI)	2.6	36.0	15.1	6.5	3.7
Very Low Income (30% - 50% AMI)	12.0	40.8	19.6	16.7	7.3
Low Income (50% to 80% AMI)	22.0	26.2	13.7	22.1	6.2
Moderate Income (80% to 120% AMI)	30.7	8.5	6.2	23.5	3.9
Subtotal - Affordable Categories	67.3	111.5	54.6	68.8	21.2
Above Moderate Income (> 120% AMI)	88.0	5.0	3.6	47.6	2.1
= Total New Worker Households	155.3	116.5	58.2	116.5	23.3
PERCENTAGE OF HOUSEHOLDS BY INCOME T	IER				
Extremely Low (0% - 30% AMI)	1.7%	30.9%	26.0%	5.6%	15.9%
Very Low Income (30% - 50% AMI)	7.7%	35.0%	33.6%	14.4%	31.5%
Low Income (50% to 80% AMI)	14.2%	22.5%	23.5%	19.0%	26.8%
Moderate Income (80% to 120% AMI)	19.8%	7.3%	10.7%	20.2%	16.7%
Subtotal - Affordable Categories	43.4%	95.7%	93.8%	59.1%	90.9%
Above Moderate Income (> 120% AMI)	56.6%	4.3%	6.2%	40.9%	9.1%
= Total	100%	100%	100%	100%	100%

#### Notes:

(1) Appendix B Tables 1 through 10 for information regarding worker compensation levels.

# TABLE 4 HOUSING DEMAND NEXUS FACTORS PER SQ.FT. OF BUILDING AREA JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

	Office	Retail	Hotel	Light Industrial	Warehouse
Extremely Low (0% - 30% AMI)	0.00002634	0.00036032	0.00015136	0.00006512	0.00003708
Very Low Income (30% - 50% AMI)	0.00012013	0.00040780	0.00019575	0.00016744	0.00007346
Low Income (50% to 80% AMI)	0.00022013	0.00026196	0.00013698	0.00022089	0.00006236
Moderate Income (80% to 120% AMI)	0.00030683	0.00008511	0.00006229	0.00023495	0.00003889
Total	0.00067343	0.00111520	0.00054638	0.00068840	0.00021179

## Number of Housing Units per Square Foot of Building Area<sup>(1)</sup>

### Notes:

<sup>(1)</sup>Calculated by dividing number of households in Table 3 by 100,000 square feet to convert to households per square foot of building.

## IV. TOTAL HOUSING NEXUS COSTS

This section takes the conclusions of the previous section on the number of households in the Extremely Low, Very Low, Low, and Moderate Income categories associated with each building type, and identifies the total cost of assistance required to make housing affordable. This section puts a cost on the units at each income level to produce the "total nexus cost."

A key component of the analysis is the size of the gap between what households can afford and the cost of producing new housing for Santa Clara County, known as the 'affordability gap.' Affordability gaps are calculated for each of the four categories of Area Median Income (AMI): Extremely Low (under 30% of median), Very Low (30% to 50%), Low (50% to 80%), and Moderate (80% to 120%). The following summarizes the analysis of mitigation cost which is based on the affordability gap or net cost to deliver units that are affordable to worker households in the lower income tiers.

Because of the variation of real estate values and housing densities that exist in the different geographic areas of Santa Clara County, the affordability gaps can vary significantly from one part of the County to another. For example, land values and densities will generally be lower in South County than they are in the heart of Silicon Valley in the northern parts of the County. Because Santa Clara County can elect to subsidize affordable housing projects in both South County as well as the more urbanized northern parts of the County, the affordability gaps in this Nexus Study utilize an average of the estimated gaps in these areas.

## **County Assisted Affordable Unit Prototypes**

For estimating the affordability gap, there is a need to match a household of each income level with a unit type and size according to governmental regulations and County practices and policies. The analysis assumes that the County will assist Moderate Income households earning between 80% and 120% of Area Median Income with ownership units. The prototype affordable unit should reflect a modest unit consistent with what the County is likely to assist and appropriate for housing the average Moderate Income worker household. The typical project assumed for South County is a three-bedroom townhome unit at approximately 18 units per acre (averaging 1,300 square feet) and the typical project assumed for North County is a two-bedroom condominium unit at approximately 30 units per acre (averaging 1,100 square feet per unit).

For Low-, Very Low-, and Extremely Low-Income households, it is assumed that the County will assist in the development of multi-family rental units at a density of 30-35 units per acre in the South County and 60-90 units per acre in the North County. This represents the approximate density range of affordable housing projects the County would likely subsidize.

## **Development Costs**

KMA prepared an estimate of the total development cost for the affordable housing prototypes described above (inclusive of land acquisition costs, direct construction costs, indirect costs of development, and financing) based on a review of development pro formas for recent affordable projects, recent residential land sale comps, and other construction data sources such as RS Means. The following table summarizes the South County per-unit development cost, the North County per-unit development cost, and the average per-unit cost.

	Unit Tenure /	South County	North County	Average
Income Group	Туре	Cost	Cost	Cost
Under 30% AMI	Rental	\$407,000	\$517,000	\$462,000
30% to 50% AMI	Rental	\$407,000	\$517,000	\$462,000
50% to 80% AMI	Rental	\$407,000	\$517,000	\$462,000
80% to 120% AMI	Ownership	\$476,000	\$584,000	\$530,000

## **Development Costs for Affordable Units**

Development cost estimates were informed by KMA's review of pro forma information for over a dozen local multi-family affordable housing projects. Direct construction costs from these projects were adjusted to account for such factors as time, unit size, housing type, and project density to appropriately reflect the multi-family prototypes assumed in the analysis. Other costs, such as land acquisition costs, are more site and area specific than direct construction costs and therefore the inputs for those costs were derived from other sources. Prevailing wages are assumed in the construction of both affordable housing prototypes, as it is assumed that public funds will be used to subsidize the projects. Tables 5, 5A, 7 and 7A provide further details.

The list below identifies some of the multi-family affordable projects for which KMA had pro forma information. In addition to the following projects, KMA also had access to the pro formas for several other active, pending projects, which are not listed due to their preliminary nature.

- Ashland-Kent, Alameda County
- Downtown Hayward Senior, Hayward
- Hayward Senior II, Hayward
- Laguna Commons, Fremont
- Marea Alta, San Leandro
- Onizuka Crossing, Sunnyvale
- Dublin Veterans Housing, Dublin

- Sequoia Belle Haven, Menlo Park
- South Hayward BART, Hayward
- San Lorenzo Senior, San Lorenzo
- South Second St Studios, San Jose
- Station Center 1 & 2, Union City
- University Ave Senior, East Palo Alto

## **Unit Values**

For affordable ownership units, unit values are based on an estimate of the restricted affordable purchase price for a qualifying Moderate Income household. It is noted that the purchase price for South County required a downward adjustment due to the fact that the calculated maximum

Moderate Income purchase price, which is based on the county-wide area median income (AMI), was too close to the market rate price in South County. Because of the appreciation limits that are associated with deed-restricted affordable for-sale homes, Moderate Income purchase prices need to be set at a substantial discount relative to market rate prices. Details of the calculations are presented in Table 6.

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

The South County unit values, North County values, and average values are summarized below. Details for these calculations are presented in Table 7 and 7A.

Income Group	Unit Tenure / Type	South County Unit Value	North County Unit Value	Average Unit Value
Under 30% AMI	Rental	\$205,500	\$215,500	\$210,500
30% to 50% AMI	Rental	\$281,500	\$291,500	\$286,500
50% to 80% AMI	Rental	\$320,500	\$330,500	\$325,500
80% to 120% AMI	Ownership	\$330,000	\$367,000	\$348,500

## Unit Values for Affordable Units

## Affordability Gap

The affordability gap is the difference between the cost of developing the affordable units and the unit value based on the restricted affordable rent or sales price.

The resulting affordability gaps are as follows:

## Affordability Gap Calculation

	Average	Average	Affordability
	Unit Value	Cost	Gap
Affordable Rental Units			
Extremely Low (Under 30% AMI)	\$210,500	\$462,000	\$251,500
Very Low (30% to 50% AMI)	\$286,500	\$462,000	\$175,500
Low (50% to 80% AMI)	\$325,500	\$462,000	\$136,500
Affordable Ownership Units			
Moderate (80% to 120% AMI)	\$348,500	\$530,000	\$181,500

AMI = Area Median Income

Tables 5 through 7A present the detailed affordability gap calculations. Note that the affordability gaps are the same as those assumed in the residential nexus analysis.

## **Maximum Fees Supported by Analysis**

The last step in the nexus analysis calculates the cost of delivering affordable housing to the households created by new non-residential development.

Table 8 summarizes the analysis. The demand for affordable units in each income range that is generated per square foot of building area is drawn from Table 4 in the previous section. The "Maximum Fee per Square Foot" represents the results of the following calculation:

Affordability	Х	No. affordable units	=	Maximum Fee Per
Gap		generated per square		Square Foot of
(from above)		foot of building area.		Building Area
		(from Table 4)		

The maximum impact fees for the five building types in Santa Clara County are as follows:

## Maximum Fee Per Square Foot of Building Area

	Maximum
	Supported Fee
Building Type	Per Square Foot
Office	\$113.40
Retail	\$213.40
Hotel	\$102.50
Light Industrial	\$118.60
Warehouse	\$37.80

Note: Nexus findings are <u>not</u> recommended fee levels. See Table 8 for detail. These totals represent the maximum impact fee that could be charged for new non-residential construction to mitigate its impacts on the need for affordable housing. The totals are <u>not</u> recommended fee levels; they represent only the maximums established by this analysis.

These total nexus or mitigation costs are high due to the low compensation levels of many jobs, coupled with the high cost of developing residential units. Higher employment densities also contribute to higher nexus costs. These factors are especially pronounced with the Retail category, yielding a very high nexus cost.

EDD data for 2015 indicates compensation for Retail workers in Santa Clara County averages approximately \$33,000 per year. This means many workers qualify as Very Low Income (fourperson households earning \$55,800 and below<sup>2</sup>); as shown in Table 3, approximately two-thirds of Retail workers fall in the Extremely Low or Very Low Income categories. Virtually all Retail employee households earn less than 120% of the median income. Hotel workers have similar compensation levels (averaging \$36,000 annually); however, since there are fewer employees per square feet of building area, the resulting mitigation costs are much lower on a per square foot basis.

## **Conservative Assumptions**

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

- Only direct employees are counted in the analysis. Many indirect employees are also associated with each new workspace. Indirect employees in an office building, for example, include security, delivery personnel, building cleaning and maintenance personnel, and a whole range of others. Hotels do have many of these workers on staff, but hotels also "contract out" a number of services that are not taken into account in the analysis. In addition, there are 'induced' employment effects when the direct employees spend their earnings in the local economy. It would certainly be appropriate to include the affordable housing demand generated by the indirect and induced jobs in this nexus analysis. For simplicity, however, and because the results using only direct employees are significantly higher than the fee levels that are typically considered for adoption, we limit it to direct employees only.
- A downward adjustment of 20% has been reflected in the analysis to account for declining industries and the potential that displaced workers from declining sectors of the economy will fill a portion of jobs in new workplace buildings. This is a conservative assumption because many displaced workers may exit the workforce entirely by retiring. In addition, development of new workspace buildings will typically occur only to the

<sup>&</sup>lt;sup>2</sup> Income criteria vary by household size.

extent net new demand exists after space vacated by businesses in declining sectors of the economy has been re-occupied. The 20% adjustment is conservative in that it is mainly necessary to cover a special case scenario in which buildings vacated by declining industries cannot be readily occupied by other users due to their special purpose nature or due to obsolescence.

- Annual incomes for workers reflect full time employment based upon EDD's convention for reporting the compensation information. In fact, many workers work less than full time; therefore, annual compensations used in the analysis are probably overstated, especially for Retail and Hotel, which tend to have a high number of part time employees.
- Affordability gaps are based upon the assumption that 4% Low Income Housing Tax Credit financing will be available. This reduces the affordability gap that needs to be filled if affordable units are to be made available.

In summary, many less conservative assumptions could be made that would justify a much higher maximum linkage fee.

I.	Affordable Prototype	
	Tenure	For-Sale
	Density	30 du/acre
	Unit Size	1,100 SF
	Bedrooms	2-Bedrooms
	Construction Type	Condominiums (Type V)
II.	Development Costs	Per Unit
	Land Acquisition	\$138,000
	Directs	\$319,000 <sup>[1]</sup>
	Indirects	\$111,000
	Financing	\$16,000
	Total Costs	\$584,000
III.	Affordable Sales Price	Per Unit
	Household Size	3 person HH
	110% of Median Income $^{[2]}$	\$106,040
	Maximum Affordable Sales Price	\$367,000 <sup>[3]</sup>
IV.	Affordability Gap	Per Unit
	Affordable Sales Price	\$367,000
	(Less) Development Costs	(\$584,000)
	Affordability Gap - Moderate Income	(\$217,000)

<sup>[1]</sup> Construction costs include prevailing wages.

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

<sup>[3]</sup> See Table 6 for Moderate Income home price estimate.

Ι.	Affordable Prototype		
	Tenure	For-Sale	
	Density	18 du/acre	
	Unit Size	1,300 SF	
	Bedrooms	3-Bedrooms	
	Construction Type	Townhomes	
	Development Costs		
П.	Development Costs	Per Unit	
	Land Acquisition	\$73,000	
	Directs	\$299,000 <sup>[1]</sup>	
	Indirects	\$90,000	
	Financing	\$14,000	
	Total Costs	\$476,000	
ш.	Affordable Sales Price	Per Unit	
	Household Size	4 person HH	
	110% of Median Income <sup>[2]</sup>	\$117,810	
	Maximum Affordable Sales Price	\$407 000 <sup>[3]</sup>	
		φ+07,000	
IV.	Affordability Gap	Per Unit	
	Affordable Sales Price	\$330,000 <sup>[4]</sup>	
	(Less) Development Costs	(\$476,000)	
	Affordability Gap - Moderate Income	(\$146,000)	

<sup>[1]</sup> Construction costs includes prevailing wages.

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

<sup>[3]</sup> See Table 6 for Moderate Income home price estimate.

<sup>[4]</sup> Moderate income home price in South County adjusted from maximums to reflect appropriate discount from unrestricted market rate prices.



Unit Size	2-Bedroom Unit	3-Bedroom Unit	4-Bedroom Unit
Household Size	<u>3-person HH</u>	4-person HH	<u>5-person HH</u>
100% AMI Santa Clara County 2016	\$96,400	\$107,100	\$115,650
Annual Income @ 110%	\$106,040	\$117,810	\$127,215
% for Housing Costs	35%	35%	35%
Available for Housing Costs	\$37,114	\$41,234	\$44,525
(Less) Property Taxes	(\$4,392)	(\$4,884)	(\$5,232)
(Less) HOA	(\$2,700)	(\$2,820)	(\$2,940)
(Less) Utilities	(\$1,416)	(\$1,776)	(\$2,208)
(Less) Insurance	(\$700)	(\$800)	(\$900)
(Less) Mortgage Insurance	(\$4,698)	(\$5,211)	(\$5,603)
Income Available for Mortgage	\$23,208	\$25,743	\$27,643
Mortgage Amount	\$348,300	\$386,300	\$414,800
Down Payment (homebuyer cash)	\$18,300	\$20,350	\$21,800
Supported Home Price	\$366,600	\$406,650	\$436,600
Key Assumptions			
- Mortgage Interest Rate <sup>(1)</sup>	5.30%	5.30%	5.30%
- Down Payment <sup>(2)</sup>	5.00%	5.00%	5.00%
- Property Taxes (% of sales price) <sup>(3)</sup>	1.20%	1.20%	1.20%
- HOA (per month) <sup>(4)</sup>	\$225	\$235	\$245
- Utilities (per month) <sup>(5)</sup>	\$118	\$148	\$184
- Mortgage Insurance (% of loan amount)	1.35%	1.35%	1.35%

<sup>(1)</sup> Mortgage interest rate based on 15-year Freddie Mac average; assumes 30-year fixed rate mortgage.

<sup>(2)</sup> Down payment amount is an estimate for Moderate Income homebuyers.

<sup>(3)</sup> Property tax rate is an estimated average for new projects.

<sup>(4)</sup> Homeowners Association (HOA) dues is an estimate for the average new project.

<sup>(5)</sup> Utility allowances from Santa Clara County Housing Authority (2016).



			Extremely Low	Very Low	Low Income
Ι.	Affordable Prototype				
	Tenure Average Unit Size Density			Rental 800 square feet ~60-90 du/acre	
II.	Development Costs [1]		Per Unit	Per Unit	Per Unit
Ш.	Land Acquisition Directs Indirects Financing Total Development Costs <b>Supported Financing</b> <u>Affordable Rents</u> Average Number of Bedrooms Maximum TCAC Rent <sup>[2]</sup>		\$55,000 \$328,000 \$115,000 <u>\$19,000</u> \$517,000 Per Unit 2 Bedrooms \$753	\$55,000 \$328,000 \$115,000 <u>\$19,000</u> \$517,000 Per Unit 2 Bedrooms \$1,256	\$55,000 \$328,000 \$115,000 \$517,000 Per Unit 2 Bedrooms \$1,507
	(Less) Utility Allowance <sup>[3]</sup> Maximum Monthly Rent <u>Net Operating Income (NOI)</u> Gross Potential Income Monthly Annual Other Income (Less) Vacancy Effective Gross Income (EGI) (Less) Operating Expenses (Less) Property Taxes <sup>[4]</sup> Net Operating Income (NOI) Permanent Einancing	5.0%	(\$74) \$679 <u>Per Unit</u> \$679 \$8,148 \$250 (\$420) \$7,978 (\$5,600) \$0 \$2,378	(\$74) \$1,182 <u>Per Unit</u> \$1,182 \$14,184 \$250 (\$722) \$13,712 (\$5,600) <u>\$0</u> \$8,112	(\$74) \$1,433 <u>Per Unit</u> \$1,433 \$17,196 \$250 (\$872) \$16,574 (\$5,600) <u>\$0</u> \$10,974
	Permanent Financing Permanent Loan (tax exempt) Deferred Developer Fee 4% Tax Credit Equity Total Sources	5.0%	\$32,000 \$2,500 <u>\$181,000</u> \$215,500	\$108,000 \$2,500 <u>\$181,000</u> \$291,500	\$147,000 \$2,500 \$181,000 \$330,500
IV.	Affordability Gap		Per Unit	Per Unit	Per Unit
	Supported Permanent Financing (Less) Total Development Costs		\$215,500 (\$517,000)	\$291,500 (\$517.000)	\$330,500 (\$517,000)
	Affordability Gap		(\$301,500)	(\$225,500)	(\$186,500)

<sup>[1]</sup> Development costs estimated by KMA based on affordable project pro formas in Santa Clara County (includes prevailing wages) and residential land sale comps.

<sup>[2]</sup> Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits.

<sup>[3]</sup> Utility allowances from Santa Clara County Housing Authority (2016).

<sup>[4]</sup> Assumes tax exemption for non-profit general partner.

			Extremely Low	Very Low	Low Income
Ι.	Affordable Prototype				
	Tenure Average Unit Size Density			Rental 900 square feet ~30-40 du/acre	
II.	Development Costs [1]		Per Unit	Per Unit	Per Unit
	Land Acquisition Directs Indirects Financing Total Costs		\$37,000 \$261,000 \$91,000 \$18,000 \$407,000	\$37,000 \$261,000 \$91,000 \$18,000 \$407,000	\$37,000 \$261,000 \$91,000 \$18,000 \$407,000
III.	Supported Financing				
	<u>Affordable Rents</u> Average Number of Bedrooms Maximum TCAC Rent <sup>[2]</sup> (Less) Utility Allowance <sup>[3]</sup> Maximum Monthly Rent		2 Bedrooms \$753 \$74) \$679	2 Bedrooms \$1,256 (\$74) \$1,182	2 Bedrooms \$1,507 (\$74) \$1,433
	Net Operating Income (NOI) Gross Potential Income Monthly Annual Other Income (Less) Vacancy Effective Gross Income (EGI) (Less) Operating Expenses (Less) Property Taxes <sup>[4]</sup> Net Operating Income (NOI)	5.0%	Per Unit \$679 \$8,148 \$250 (\$420) \$7,978 (\$5,600) \$0 \$2,378	Per Unit \$1,182 \$14,184 \$250 (\$722) \$13,712 (\$5,600) \$0 \$8,112	Per Unit \$1,433 \$17,196 \$250 (\$872) \$16,574 (\$5,600) \$0 \$10,974
	<u>Permanent Financing</u> Permanent Loan (tax exempt) Deferred Developer Fee 4% Tax Credit Equity Total Sources		\$32,000 \$2,500 <u>\$171,000</u> \$205,500	\$108,000 \$2,500 \$171,000 \$281,500	\$147,000 \$2,500 <u>\$171,000</u> \$320,500
IV.	Supported Financing				
	Supported Permanent Financing		\$205,500	\$281,500	\$320,500
	(Less) Total Development Costs		(\$407,000)	(\$407,000)	(\$407,000)
	Affordability Gap		(\$201,500)	(\$125,500)	(\$86,500)

<sup>[1]</sup> Development costs estimated by KMA based on affordable project pro formas in Santa Clara County (includes prevailing wages) and residential land sale comps.

<sup>[2]</sup> Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits.

<sup>[3]</sup> Utility allowances from Santa Clara County Housing Authority (2016).

<sup>[4]</sup> Assumes tax exemption for non-profit general partner.

## TABLE 8 TOTAL HOUSING NEXUS COST JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

	Nexus Cost Per Sq.Ft. of Building Area <sup>3</sup>					
INCOME CATEGORY	Affordability Gap Per Unit	Office	Retail	Hotel	Light Industrial	Warehouse
Extremely Low (0% - 30% AMI)	\$251,500 <sup>1</sup>	\$6.60	\$90.60	\$38.10	\$16.40	\$9.30
Very Low Income (30% - 50% AMI)	\$175,500 <sup>1</sup>	\$21.10	\$71.60	\$34.40	\$29.40	\$12.90
Low Income (50% to 80% AMI)	\$136,500 <sup>1</sup>	\$30.00	\$35.80	\$18.70	\$30.20	\$8.50
Moderate Income (80% to 120% AMI)	\$181,500 <sup>2</sup>	\$55.70	\$15.40	\$11.30	\$42.60	\$7.10
Total		\$113.40	\$213.40	\$102.50	\$118.60	\$37.80

Notes:

<sup>(1)</sup> Assumes rental units. Affordability Gap reflected is the remaining gap after financing available through 4% tax credits. See Table 7.

<sup>(2)</sup> Assumes ownership unit. See Table 5.

<sup>(3)</sup> Calculated by multiplying housing demand factors from Table 4 by the affordability gap.

# APPENDIX A: DISCUSSION OF VARIOUS FACTORS IN RELATION TO NEXUS CONCEPT

This appendix provides a discussion of various specific factors and assumptions in relation to the nexus concept to supplement the overview provided in Section II.

# 1. Addressing the Housing Needs of a New Population vs. the Existing Population

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

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

Local analyses of housing conditions have found that new housing affordable to lower income households is not being added to the supply in sufficient quantity to meet the needs of new employee households. If this were not the case and significant numbers of units were being added to the supply to accommodate the low to moderate income groups, or if residential units were experiencing significant long term vacancy levels, particularly in affordable units, then the need for new units would be questionable.

# 2. No Excess Supply of Affordable Housing

An assumption of this residential nexus analysis is that there is no excess supply of affordable housing available to absorb or offset new demand; therefore, new affordable units are needed to mitigate the new affordable housing demand generated by development of new market rate residential units. Based on a review of the current Census information for Santa Clara County, conditions are consistent with this underlying assumption. According to the Census (2010 to 2014 ACS), approximately 41% of all households in the County were paying thirty percent or more of their income on housing. In addition, housing vacancy is minimal.

# 3. Substitution Factor

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

## 4. Indirect Employment and Multiplier Effects

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

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

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

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

## 5. Economic Cycles

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

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

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

In contrast, during a vigorous economic boom period, conditions exist in which elevated impacts are experienced on a temporary basis. As an example, compression of employment densities can occur as firms add employees while making do with existing space. Compressed employment densities mean more jobs added for a given amount of building area. Boom periods also tend to go hand-in-hand with rising development costs and increasing home prices. These factors can bring market rate housing out of reach of a larger percentage of the workforce and increase the cost of delivering affordable units.

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

APPENDIX B: SUPPORTING NEXUS TABLES

### APPENDIX B TABLE 1 2014 NATIONAL OFFICE WORKER DISTRIBUTION BY OCCUPATION JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Major Occupations (3% or more)	2014 National Office Industry Occupation Distribution		
Management Occupations	2,478,949	9.0%	
Business and Financial Operations Occupations	3,102,766	11.2%	
Computer and Mathematical Occupations	6,461,261	23.4%	
Architecture and Engineering Occupations	1,358,359	4.9%	
Healthcare Practitioners and Technical Occupations	1,152,766	4.2%	
Sales and Related Occupations	1,789,343	6.5%	
Office and Administrative Support Occupations	5,752,417	20.9%	
All Other Office Occupations	<u>5,488,426</u>	<u>19.9%</u>	
INDUSTRY TOTAL	27,584,287	100.0%	

Industries weighted to reflect Santa Clara County industry mix.

#### APPENDIX B TABLE 2 AVERAGE ANNUAL COMPENSATION, 2015 OFFICE WORKER OCCUPATIONS JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

		% of Total	% of Total
	2015 Avg.	Occupation	Office
Occupation <sup>1</sup>	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Page 1 of 3			
Management Occupations			
General and Operations Managers	\$157,600	25.0%	2.2%
Marketing Managers	\$190,500	7.0%	0.6%
Sales Managers	\$167,900	6.3%	0.6%
Computer and Information Systems Managers	\$186,700	20.1%	1.8%
Financial Managers	\$168,700	9.1%	0.8%
Architectural and Engineering Managers	\$190,600	4.3%	0.4%
Managers, All Other	\$163,400	5.6%	0.5%
All Other Management Occupations (Avg. All Categories)	<u>\$162,300</u>	<u>22.8%</u>	<u>2.0%</u>
Weighted Mean Annual Wage	\$170,200	100.0%	9.0%
Business and Financial Operations Occupations			
Human Resources Specialists	\$89,400	7.2%	0.8%
Management Analysts	\$111,500	13.8%	1.5%
Training and Development Specialists	\$95,300	4.0%	0.5%
Market Research Analysts and Marketing Specialists	\$110,200	12.6%	1.4%
Business Operations Specialists, All Other	\$98,100	12.3%	1.4%
Accountants and Auditors	\$94,200	21.7%	2.4%
Financial Analysts	\$109,600	5.2%	0.6%
All Other Business and Financial Operations (Avg. All Categories)	\$96,400	<u>23.2%</u>	<u>2.6%</u>
Weighted Mean Annual Wage	\$100,100	100.0%	11.2%
Computer and Mathematical Occupations			
Computer Systems Analysts	\$110,000	12.4%	2.9%
Computer Programmers	\$95.300	10.2%	2.4%
Software Developers, Applications	\$144,400	28.4%	6.7%
Software Developers, Systems Software	\$140,300	11.5%	2.7%
Web Developers	\$108,100	4.1%	1.0%
Network and Computer Systems Administrators	\$101,500	6.2%	1.4%
Computer User Support Specialists	\$76,500	11.1%	2.6%
All Other Computer and Mathematical Occupations (Avg. All Categories)	<u>\$125,60</u> 0	<u>16.0%</u>	<u>3.8</u> %
Weighted Mean Annual Wage	\$120,000	100.0%	23.4%



		% of Total	% of Total
	2015 Avg.	Occupation	Office
Occupation '	Compensation <sup>2</sup>	<u>Group</u> <sup>3</sup>	<u>Workers</u>
Page 2 of 3			
Architecture and Engineering Occupations			
Architects, Except Landscape and Naval	\$89,500	6.0%	0.3%
Civil Engineers	\$101,200	11.2%	0.6%
Computer Hardware Engineers	\$138,100	8.0%	0.4%
Electrical Engineers	\$130,000	7.6%	0.4%
Electronics Engineers, Except Computer	\$132,400	6.3%	0.3%
Industrial Engineers	\$116,300	5.0%	0.2%
Mechanical Engineers	\$113,300	10.3%	0.5%
Engineers, All Other	\$124,100	4.9%	0.2%
Architectural and Civil Drafters	\$61,900	5.4%	0.3%
Electrical and Electronics Engineering Technicians	\$70,200	4.5%	0.2%
All Other Architecture and Engineering Occupations (Avg. All Categories)	<u>\$113,400</u>	<u>30.8%</u>	<u>1.5%</u>
Weighted Mean Annual Wage	\$111,000	100.0%	4.9%
Healthcare Practitioners and Technical Occupations			
Dentists, General	\$158,300	7.4%	0.3%
Physicians and Surgeons, All Other	\$153,300	6.1%	0.3%
Registered Nurses	\$123,500	12.9%	0.5%
Dental Hygienists	\$96,500	15.6%	0.7%
Veterinary Technologists and Technicians	\$38,700	4.1%	0.2%
Licensed Practical and Licensed Vocational Nurses	\$60,400	5.6%	0.2%
All Other Healthcare Practitioners and Technical Occupations (Avg. All Categories	) <u>\$111,800</u>	<u>48.4%</u>	<u>2.0%</u>
Weighted Mean Annual Wage	\$111,100	100.0%	4.2%
Sales and Related Occupations			
First-Line Supervisors of Non-Retail Sales Workers	\$115,400	4.5%	0.3%
Advertising Sales Agents	\$78,900	6.9%	0.4%
Insurance Sales Agents	\$75,400	5.9%	0.4%
Securities, Commodities, and Financial Services Sales Agents	\$91,800	4.6%	0.3%
Sales Representatives, Services, All Other	\$89,500	33.6%	2.2%
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Press	c \$118,700	11.8%	0.8%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scie	r \$77,000	5.8%	0.4%
Real Estate Sales Agents	\$64,600	5.5%	0.4%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$55,500</u>	<u>21.5%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$83,200	100.0%	6.5%

Occupation <sup>1</sup>	2015 Avg. <u>Compensation <sup>2</sup></u>	% of Total Occupation <u>Group <sup>3</sup></u>	% of Total Office <u>Workers</u>
Page 3 of 3			
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70,600	6.7%	1.4%
Bookkeeping, Accounting, and Auditing Clerks	\$50,300	8.3%	1.7%
Customer Service Representatives	\$48,200	15.5%	3.2%
Receptionists and Information Clerks	\$36,600	5.9%	1.2%
Executive Secretaries and Executive Administrative Assistants	\$67,200	4.8%	1.0%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$45,000	10.6%	2.2%
Office Clerks, General	\$40,900	13.6%	2.8%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$48,100</u>	<u>34.5%</u>	<u>7.2%</u>
Weighted Mean Annual Wage	\$48,700	100.0%	20.9%
Weighted Average Annual Wage - All Occupations	\$100,000	=	80.1%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2015 wage levels.

### APPENDIX B TABLE 3 2014 NATIONAL RETAIL WORKER DISTRIBUTION BY OCCUPATION JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Major Occupations (2% or more)	2014 National Retail Industry Occupation Distribution		
Management Occupations	628,109	2.3%	
Food Preparation and Serving Related Occupations	11,168,090	40.7%	
Personal Care and Service Occupations	761,400	2.8%	
Sales and Related Occupations	8,674,839	31.6%	
Office and Administrative Support Occupations	2,539,341	9.3%	
Installation, Maintenance, and Repair Occupations	632,209	2.3%	
Production Occupations	572,365	2.1%	
Transportation and Material Moving Occupations	1,225,101	4.5%	
All Other Retail Occupations	<u>1,239,781</u>	<u>4.5%</u>	
INDUSTRY TOTAL	27,441,236	100.0%	

Industries weighted to reflect Santa Clara County industry mix.

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#### APPENDIX B TABLE 4 AVERAGE ANNUAL COMPENSATION, 2015 RETAIL WORKER OCCUPATIONS JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Occupation <sup>1</sup>	2015 Avg. <u>Compensation <sup>2</sup></u>	% of Total Occupation <u>Group <sup>3</sup></u>	% of Total Retail <u>Workers</u>
Page 1 of 2			
Management Occupations			
General and Operations Managers	\$157,600	50.1%	1.1%
Sales Managers	\$167,900	11.9%	0.3%
Food Service Managers	\$57,200	28.3%	0.6%
All Other Management Occupations (Avg. All Categories)	<u>\$162,300</u>	<u>9.8%</u>	<u>0.2%</u>
Weighted Mean Annual Wage	\$130,900	100.0%	2.3%
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	\$36,900	7.1%	2.9%
Cooks, Fast Food	\$21,300	5.0%	2.0%
Cooks, Restaurant	\$27,500	9.8%	4.0%
Food Preparation Workers	\$24,400	6.5%	2.6%
Combined Food Preparation and Serving Workers, Including Fast Food	\$23,000	28.3%	11.5%
Waiters and Waitresses	\$25,500	21.2%	8.6%
Dishwashers	\$20,300	4.2%	1.7%
All Other Business and Financial Operations (Avg. All Categories)	<u>\$25,300</u>	<u>18.0%</u>	<u>7.3%</u>
Weighted Mean Annual Wage	\$25,300	100.0%	40.7%
Personal Care and Service Occupations			
First-Line Supervisors of Personal Service Workers	\$42,800	4.3%	0.1%
Nonfarm Animal Caretakers	\$32,400	10.8%	0.3%
Hairdressers, Hairstylists, and Cosmetologists	\$24,600	51.9%	1.4%
Manicurists and Pedicurists	\$21,900	12.5%	0.3%
Skincare Specialists	\$30,400	4.7%	0.1%
All Other Personal Care and Service Occupations (Avg. All Categories)	<u>\$29,100</u>	<u>15.8%</u>	<u>0.4%</u>
Weighted Mean Annual Wage	\$26,900	100.0%	2.8%
Sales and Related Occupations			
First-Line Supervisors of Retail Sales Workers	\$51,400	12.0%	3.8%
Cashiers	\$26,600	31.0%	9.8%
Retail Salespersons	\$29,200	50.3%	15.9%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$55,500</u>	<u>6.7%</u>	<u>2.1%</u>
Weighted Mean Annual Wage	\$32,800	100.0%	31.6%

		% of Total	% of Total
Occupation <sup>1</sup>	2015 Avg. Compensation <sup>2</sup>	Occupation <u>Group <sup>3</sup></u>	Retail <u>Workers</u>
Page 2 of 2			
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70,600	6.4%	0.6%
Bookkeeping, Accounting, and Auditing Clerks	\$50,300	6.9%	0.6%
Customer Service Representatives	\$48,200	11.3%	1.0%
Receptionists and Information Clerks	\$36,600	4.1%	0.4%
Shipping, Receiving, and Traffic Clerks	\$36,500	4.9%	0.5%
Stock Clerks and Order Fillers	\$31,300	47.3%	4.4%
Office Clerks, General	\$40,900	8.2%	0.8%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$48,100</u>	<u>10.9%</u>	<u>1.0%</u>
Weighted Mean Annual Wage	\$40,100	100.0%	9.3%
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	7.9%	0.2%
Computer, Automated Teller, and Office Machine Repairers	\$46,200	6.7%	0.2%
Automotive Service Technicians and Mechanics	\$52,700	37.4%	0.9%
Tire Repairers and Changers	\$32,300	9.4%	0.2%
Maintenance and Repair Workers, General	\$47,300	7.8%	0.2%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$55,900</u>	<u>30.8%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$53,100	100.0%	2.3%
Production Occupations			
First-Line Supervisors of Production and Operating Workers	\$68,400	6.2%	0.1%
Bakers	\$29,200	16.2%	0.3%
Butchers and Meat Cutters	\$35,100	20.5%	0.4%
Meat, Poultry, and Fish Cutters and Trimmers	\$27,500	4.2%	0.1%
Laundry and Dry-Cleaning Workers	\$26,300	15.3%	0.3%
Pressers, Textile, Garment, and Related Materials	\$24,300	6.1%	0.1%
All Other Production Occupations (Avg. All Categories)	<u>\$40,800</u>	<u>31.6%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$35,700	100.0%	2.1%
Transportation and Material Moving Occupations			
Driver/Sales Workers	\$34,400	18.0%	0.8%
Light Truck or Delivery Services Drivers	\$39,300	16.2%	0.7%
Parking Lot Attendants	\$21,500	6.7%	0.3%
Cleaners of Vehicles and Equipment	\$25,800	6.8%	0.3%
Laborers and Freight, Stock, and Material Movers, Hand	\$31,700	23.6%	1.1%
Packers and Packagers, Hand	\$25,300	13.8%	0.6%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$37,300</u>	<u>15.0%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$32,300	100.0%	4.5%
Weighted Average Annual Wage - All Occupations	\$33,000	=	91.0%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2015 wage levels.

### APPENDIX B TABLE 5 2014 NATIONAL HOTEL WORKER DISTRIBUTION BY OCCUPATION JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Major Occupations (2% or more)	2014 National Hotel Industry Occupation Distribution	
	Cecupation	Distribution
Management Occupations	68,960	4.5%
Food Preparation and Serving Related Occupations	379,520	24.7%
Building and Grounds Cleaning and Maintenance Occupations	489,570	31.9%
Personal Care and Service Occupations	61,530	4.0%
Sales and Related Occupations	33,960	2.2%
Office and Administrative Support Occupations	310,980	20.3%
Installation, Maintenance, and Repair Occupations	76,990	5.0%
Production Occupations	34,090	2.2%
All Other Hotel Occupations	<u>78,960</u>	<u>5.1%</u>
INDUSTRY TOTAL	1,534,560	100.0%



#### APPENDIX B TABLE 6 AVERAGE ANNUAL COMPENSATION, 2015 HOTEL WORKER OCCUPATIONS JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

2015 Avg. Compensation <sup>1</sup> Occupation Sroup <sup>2</sup> Hetel Workers       Page 1 of 2 Management Occupations General and Operations Managers     \$157,600     22.9%     1.0%       Sales Managers     \$167,900     9.3%     0.4%       Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$168,700     4.4%     0.2%       Lodging Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$58,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$168,200     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Cooks, Restaurant     \$27,500     13.8%     3.4%       Bartenders     \$26,500     7.3%     2.1%       Dining Room and Cateteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%     4.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,500     18.1%     4.5%       Dining Room and Cateteria Attendants and Bartender Helpers			% of Total	% of Total
Occupation     Compensation 2     Group 2     Workers       Page 1 of 2 Management Occupations     \$157,600     22.9%     1.0%       Sales Managers     \$157,600     2.9%     1.0%       Financial Managers     \$158,700     4.4%     0.2%       Food Service Managers     \$158,700     4.4%     0.2%       Lodging Managers     \$158,700     4.4%     0.2%       Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Food Preparation and Serving Related Occupations     First-Line Supervisors of Food Preparation and Serving Workers     \$36,900     5.3%     1.3%       Cooks, Restaurant     \$27,500     13.8%     3.4%       Bartenders     \$26,300     7.8%     1.9%       Waitresses     \$25,500     3.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     16.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,500     18.1%     4.5%       Weighted Mean Annual Wage		2015 Avg.	Occupation	Hotel
Page 1 of 2       Management Occupations     5157,600     22.9%     1.0%       Sales Managers     \$167,900     9.3%     0.4%       Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$57,200     11.1%     0.5%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     First-Line Supervisors of Food Preparation and Serving Workers     \$26,300     7.3%       Food Servers, Nonrestaurant     \$27,500     13.8%     3.4%       Bartenders     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$32,000     6.5%     1.6%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Disitwashers     \$22,300     6.5%     1.6%     Maid       All Other Business and Financial Operations (Avg. All Categories)     \$25,800     100.0%     24.7% <th>Occupation <sup>1</sup></th> <th>Compensation<sup>2</sup></th> <th><u>Group <sup>3</sup></u></th> <th><u>Workers</u></th>	Occupation <sup>1</sup>	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Page 1 of 2       Management Occupations       General and Operations Managers     \$157,600     22.9%     1.0%       Sales Managers     \$167,900     9.3%     0.4%       Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Food Preparation and Serving Related Occupations     F     F     1.3%     3.4%       Cooks, Restaurant     \$27,500     13.8%     3.4%     0.4%     1.9%       Waiters and Waitesses     \$26,300     7.8%     1.9%     1.9%     1.9%       Values and Valuesses     \$25,500     29.5%     7.3%     Food Servers, Nonrestaurant     \$33,200     6.3%     1.1%       Dishwashers     \$20,300     6.5%     1.6%     Alf     Dishwashers     \$20,300     6.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.5%				
Management Occupations     9157,600     22.9%     1.0%       General and Operations Managers     \$167,900     9.3%     0.4%       Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$57,200     11.1%     0.5%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     1.3%       Cooks, Restaurant     \$27,500     13.8%     3.4%       Bartenders     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$26,300     7.8%     1.9%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$22,300     16.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,500     18.1%     4.5%       Weighted Mean Annual Wage     \$26,300     5.8%	Page 1 of 2			
General and Operations Managers     \$157,600     22.9%     1.0%       Sales Managers     \$167,900     9.3%     0.4%       Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$57,200     11.1%     0.5%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     3.4%       Gooks, Restaurant     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%     Alf%       All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.5%       Weighted Mean Annual Wage     \$26,300     100.0%<	Management Occupations			
Sales Managers     \$167,900     9.3%     0.4%       Financial Managers     \$188,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     3.4%       Bartenders     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$26,300     7.8%     1.9%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%     4.5%       Building and Grounds Cleaning and Maintenance Occupations     \$25,300     100.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     \$31,100     85.1%     27.1%       Mids and Housekeeping Cleaners     \$29,000	General and Operations Managers	\$157,600	22.9%	1.0%
Financial Managers     \$168,700     4.4%     0.2%       Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     3.4%       Bartenders     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$26,300     7.8%     1.9%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     16.5%     1.6%       Dishwashers     \$22,300     6.5%     1.6%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$22,300     6.5%     1.6%       Janitors and Cleaning and Maintenance Occupations     \$11.5%     4.5%     Weighted Mean Annual Wage     \$26,300     1.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     \$11.9%	Sales Managers	\$167,900	9.3%	0.4%
Food Service Managers     \$57,200     11.1%     0.5%       Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     3.4%       Bartenders     \$26,500     7.8%     1.9%       Waitresses     \$25,500     2.9.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$26,300     18.1%     4.5%       Weighted Mean Annual Wage     \$26,300     16.1%     1.9%       Using and Grounds Cleaning and Maintenance Occupations     \$25,300     18.1%     4.5%       Building and Grounds Cleaning and Maintenance Occupations     \$31,100     8.1%     1.9%       Maids and Housekeeping of Leaners     \$29,000     6.1%     1.9%       Janitors and Cleaners, Except Maids and Housekeeping Cleaners     <	Financial Managers	\$168,700	4.4%	0.2%
Lodging Managers     \$54,300     40.2%     1.8%       All Other Management Occupations (Avg. All Categories)     \$162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     \$27,500     13.8%     3.4%       Cooks, Restaurant     \$27,500     13.8%     3.4%       Bartenders     \$22,500     7.8%     1.9%       Waiters and Waitresses     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     16.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%     Alf%       All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.5%       Weighted Mean Annual Wage     \$29,000     6.1%     1.9%     Janitors and Cleaning and Maintenance Occupations     555,800     5.8%     1.9%       Janitors and Cleaners, Except Maids and Housekeeping Cleaners     \$29,000     6.1%     1.9%       Janitors and Cleaners, Except Maids a	Food Service Managers	\$57,200	11.1%	0.5%
All Other Management Occupations (Avg. All Categories)     § 162,300     12.2%     0.5%       Weighted Mean Annual Wage     \$ 107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations     5     1.3%     3.4%       Cooks, Restaurant     \$ 27,500     13.8%     3.4%       Bartenders     \$ 26,300     7.8%     1.9%       Waiters and Waitresses     \$ 25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$ 33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$ 21,300     18.1%     4.5%       Weighted Mean Annual Wage     \$ 26,300     18.1%     4.5%       Weighted Mean Annual Wage     \$ 26,300     100.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     \$ 55,800     5.8%     1.9%       Janitors and Cleaners, Except Maids and Housekeeping Cleaners     \$ 29,000     6.1%     1.9%       Maids and Housekeeping Cleaners     \$ 24,00     3.0%     1.0%       Maids and Housekeeping Cleaners     \$ 23,000     6.1%     1.9%       Janitors and Cleaning and Main	Lodging Managers	\$54,300	40.2%	1.8%
Weighted Mean Annual Wage     \$107,000     100.0%     4.5%       Food Preparation and Serving Related Occupations	All Other Management Occupations (Avg. All Categories)	<u>\$162,300</u>	<u>12.2%</u>	<u>0.5%</u>
Food Preparation and Serving Workers   \$36,900   5.3%   1.3%     First-Line Supervisors of Food Preparation and Serving Workers   \$36,900   5.3%   1.3%     Cooks, Restaurant   \$27,500   13.8%   3.4%     Bartenders   \$26,300   7.8%   1.9%     Waiters and Waitresses   \$25,500   29.5%   7.3%     Food Servers, Nonrestaurant   \$33,200   8.3%   2.1%     Dining Room and Cafeteria Attendants and Bartender Helpers   \$21,300   10.5%   2.6%     Dishwashers   \$20,300   6.5%   1.6%   1.6%     All Other Business and Financial Operations (Avg. All Categories)   \$226,300   100.0%   24.7%     Building and Grounds Cleaning and Maintenance Occupations   First-Line Supervisors of Housekeeping Cleaners   \$29,000   6.1%   1.9%     Janitors and Cleaners, Except Maids and Housekeeping Cleaners   \$29,000   6.1%   1.9%     Maids and Housekeeping Cleaners   \$31,100   85.1%   27.1%     All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C   \$31,900   3.0%   1.0%     Weighted Mean Annual Wage   \$32,400   1.0%   0.2% <th>Weighted Mean Annual Wage</th> <th>\$107,000</th> <th>100.0%</th> <th>4.5%</th>	Weighted Mean Annual Wage	\$107,000	100.0%	4.5%
First-Line Supervisors of Food Preparation and Serving Workers   \$36,900   5.3%   1.3%     Cooks, Restaurant   \$27,500   13.8%   3.4%     Bartenders   \$26,300   7.8%   1.9%     Waiters and Waitresses   \$25,500   29.5%   7.3%     Food Servers, Nonrestaurant   \$33,200   8.3%   2.1%     Dining Room and Cafeteria Attendants and Bartender Helpers   \$21,300   10.5%   2.6%     Dishwashers   \$20,300   6.5%   1.6%     All Other Business and Financial Operations (Avg. All Categories)   \$25,300   18.1%   4.5%     Weighted Mean Annual Wage   \$26,300   100.0%   24.7%     Building and Grounds Cleaning and Maintenance Occupations   \$55,800   5.8%   1.9%     Maids and Housekeeping Cleaners   \$29,000   6.1%   1.9%     Maids and Housekeeping Cleaners   \$31,100   85.1%   27.1%     All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C \$31,900   3.0%   1.0%     Weighted Mean Annual Wage   \$32,400   100.0%   31.9%     Personal Care and Service Occupations   \$23,900   1.0%   31.9%	Food Preparation and Serving Related Occupations			
Cooks, Restaurant     \$27,500     13.8%     3.4%       Bartenders     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Disiwashers     \$20,300     6.5%     1.6%     All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.5%       Weighted Mean Annual Wage     \$26,300     100.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     \$55,800     5.8%     1.9%       First-Line Supervisors of Housekeeping and Janitorial Workers     \$55,800     5.8%     1.9%       Maids and Housekeeping Cleaners     \$29,000     6.1%     1.9%       Maids and Housekeeping Cleaners     \$31,100     85.1%     27.1%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C     \$31,900     3.0%     1.0%       Weighted Mean Annual Wage     \$32,400     100.0%     31.9%       Personal Care and Service O	First-Line Supervisors of Food Preparation and Serving Workers	\$36,900	5.3%	1.3%
Bartenders     \$26,300     7.8%     1.9%       Waiters and Waitresses     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.55%       Weighted Mean Annual Wage     \$26,300     100.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     First-Line Supervisors of Housekeeping and Janitorial Workers     \$55,800     5.8%     1.9%       Maids and Housekeeping Cleaners     \$31,100     85.1%     27.1%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C     \$31,900     3.0%     1.0%       Weighted Mean Annual Wage     \$32,400     100.0%     31.9%       Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers     \$42,800     4.3%     0.2%       Amusement and Recreation Attendants     \$23,900     15.0%     0.6%     0.6%	Cooks, Restaurant	\$27,500	13.8%	3.4%
Waiters and Waitresses     \$25,500     29.5%     7.3%       Food Servers, Nonrestaurant     \$33,200     8.3%     2.1%       Dining Room and Cafeteria Attendants and Bartender Helpers     \$21,300     10.5%     2.6%       Dishwashers     \$20,300     6.5%     1.6%       All Other Business and Financial Operations (Avg. All Categories)     \$25,300     18.1%     4.5%       Weighted Mean Annual Wage     \$26,300     100.0%     24.7%       Building and Grounds Cleaning and Maintenance Occupations     \$55,800     5.8%     1.9%       Janitors and Cleaners, Except Maids and Housekeeping Cleaners     \$29,000     6.1%     1.9%       Maids and Housekeeping Cleaners     \$31,100     85.1%     27.1%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C     \$31,900     3.0%     1.0%       Weighted Mean Annual Wage     \$32,400     100.0%     31.9%       Personal Care and Service Occupations     \$42,800     4.3%     0.2%       Amusement and Recreation Attendants     \$23,900     15.0%     0.6%       Baggage Porters and Bellhops     \$25,000     34.4%     1.4% </td <td>Bartenders</td> <td>\$26,300</td> <td>7.8%</td> <td>1.9%</td>	Bartenders	\$26,300	7.8%	1.9%
Food Servers, Nonrestaurant\$33,2008.3%2.1%Dining Room and Cafeteria Attendants and Bartender Helpers\$21,30010.5%2.6%Dishwashers\$20,3006.5%1.6%All Other Business and Financial Operations (Avg. All Categories)\$25,30018.1%4.5%Weighted Mean Annual Wage\$26,300100.0%24.7%Building and Grounds Cleaning and Maintenance Occupations\$55,8005.8%1.9%First-Line Supervisors of Housekeeping and Janitorial Workers\$55,8006.1%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%Other Personal Care and Service Occupations (Avg. All Categories)\$21,1009.8%Other Personal Care and Service Occupations (Avg. All Categories)\$21,00018.6%Other P	Waiters and Waitresses	\$25,500	29.5%	7.3%
Dining Room and Cafeteria Attendants and Bartender Helpers\$21,30010.5%2.6%Dishwashers\$20,3006.5%1.6%All Other Business and Financial Operations (Avg. All Categories)\$25,30018.1%4.5%Weighted Mean Annual Wage\$26,300100.0%24.7%Building and Grounds Cleaning and Maintenance Occupations\$55,8005.8%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$29,0006.1%1.9%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Personal Care and Service OccupationsWeighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service Occupations\$23,90015.0%0.6%Baggage Porters and Bellhops\$22,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%Mointenance Occupations (Avg. All Categories)\$29,10018.6%0.7%	Food Servers, Nonrestaurant	\$33,200	8.3%	2.1%
Dishwashers\$20,3006.5%1.6%All Other Business and Financial Operations (Avg. All Categories)\$25,30018.1%4.5%Weighted Mean Annual Wage\$26,300100.0%24.7%Building and Grounds Cleaning and Maintenance Occupations\$55,8005.8%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service Occupations\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$21,90018.6%Weinbard Mean Annual Wage\$22,90017.8%0.7%	Dining Room and Cafeteria Attendants and Bartender Helpers	\$21,300	10.5%	2.6%
All Other Business and Financial Operations (Avg. All Categories)\$25,30018.1%4.5%Weighted Mean Annual Wage\$26,300100.0%24.7%Building and Grounds Cleaning and Maintenance Occupations\$55,8005.8%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Veighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service Occupations\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,00018.6%Ordierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%Weighted Mean Annual Wage\$29,00016.6%0.7%	Dishwashers	\$20,300	6.5%	1.6%
Weighted Mean Annual Wage\$26,300100.0%24.7%Building and Grounds Cleaning and Maintenance OccupationsFirst-Line Supervisors of Housekeeping and Janitorial Workers\$55,8005.8%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service Occupations\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%Orncierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	All Other Business and Financial Operations (Avg. All Categories)	\$25,300	18.1%	4.5%
Building and Grounds Cleaning and Maintenance Occupations     First-Line Supervisors of Housekeeping and Janitorial Workers   \$55,800   5.8%   1.9%     Janitors and Cleaners, Except Maids and Housekeeping Cleaners   \$29,000   6.1%   1.9%     Maids and Housekeeping Cleaners   \$31,100   85.1%   27.1%     All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C   \$31,900   3.0%   1.0%     Weighted Mean Annual Wage   \$32,400   100.0%   31.9%     Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers   \$42,800   4.3%   0.2%     Amusement and Recreation Attendants   \$23,900   15.0%   0.6%     Baggage Porters and Bellhops   \$25,000   34.4%   1.4%     Concierges   \$32,900   17.8%   0.7%     Recreation Workers   \$31,100   9.8%   0.4%     All Other Personal Care and Service Occupations (Avg. All Categories)   \$29,100   18.6%   0.7%	Weighted Mean Annual Wage	\$26,300	100.0%	24.7%
First-Line Supervisors of Housekeeping and Janitorial Workers\$55,8005.8%1.9%Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	Building and Grounds Cleaning and Maintenance Occupations			
Janitors and Cleaners, Except Maids and Housekeeping Cleaners\$29,0006.1%1.9%Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	First-Line Supervisors of Housekeeping and Janitorial Workers	\$55 800	5.8%	1.9%
Maids and Housekeeping Cleaners\$31,10085.1%27.1%All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C\$31,9003.0%1.0%Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	Janitors and Cleaners. Except Maids and Housekeeping Cleaners	\$29,000	6.1%	1.9%
All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All C Weighted Mean Annual Wage\$31,900 \$32,4003.0% 100.0%1.0% 31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,800 \$23,9004.3% 15.0%0.2% 0.6%Amusement and Recreation Attendants\$23,900 \$25,00015.0% 34.4%0.6% 0.6%Baggage Porters and Bellhops\$25,000 \$32,90034.4% 1.4% 0.7% 0.6%Concierges Recreation Workers\$31,100 \$31,1009.8% \$0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,100 \$29,10018.6% 	Maids and Housekeeping Cleaners	\$31,100	85.1%	27.1%
Weighted Mean Annual Wage\$32,400100.0%31.9%Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All	\$31,900	3.0%	1.0%
Personal Care and Service OccupationsFirst-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	Weighted Mean Annual Wage	\$32,400	100.0%	31.9%
First-Line Supervisors of Personal Service Workers\$42,8004.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	Personal Care and Service Occupations			
Amusement and Recreation Attendants\$42,000\$4.3%0.2%Amusement and Recreation Attendants\$23,90015.0%0.6%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%	First Line Supervisers of Personal Service Workers	¢42 800	1 3%	0.2%
Antisement and Recreation Attendants\$23,50013.0%0.0%Baggage Porters and Bellhops\$25,00034.4%1.4%Concierges\$32,90017.8%0.7%Recreation Workers\$31,1009.8%0.4%All Other Personal Care and Service Occupations (Avg. All Categories)\$29,10018.6%0.7%Weinshed Maan Annual Wase\$28,400100.0%4.0%		\$42,000	4.5%	0.2%
Daggage Forters and Demotys   \$25,000   \$4.4%   1.4%     Concierges   \$32,900   17.8%   0.7%     Recreation Workers   \$31,100   9.8%   0.4%     All Other Personal Care and Service Occupations (Avg. All Categories)   \$29,100   18.6%   0.7%	Annusement and Relibons	φ23,900 \$25,000	34.4%	0.0%
Recreation Workers   \$32,500   17.8%   0.7%     All Other Personal Care and Service Occupations (Avg. All Categories)   \$29,100   18.6%   0.7%	Concieraes	φ∠0,000 \$32,000	34.4% 17.8%	0.7%
All Other Personal Care and Service Occupations (Avg. All Categories) \$29,100 18.6% 0.7%   Weinsteid Mean Annual Ware \$28,400 100.0% 100.0%	Recreation Workers	\$32,900 \$31,100	9.8%	0.7%
An Other Fersonal Care and Service Occupations (Avg. An Categories) <u>929,100</u> <u>10.0%</u> <u>0.1%</u>	All Other Personal Care and Service Occupations (Avg. All Categories)	¢30,100	18 6%	0.4%
	An Other resonal Care and Service Occupations (Avy. An Categories)	<u>\$23,100</u>	10.0%	<u>0.7%</u>

		% of Total	% of Total
<b>O</b>	2015 Avg.	Occupation	Hotel
Occupation	Compensation -	Group -	<u>Workers</u>
Page 2 of 2			
Sales and Related Occupations			
Cashiers	\$26,600	24.1%	0.5%
Retail Salespersons	\$29,200	11.7%	0.3%
Sales Representatives, Services, All Other	\$89,500	50.6%	1.1%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$55,500</u>	<u>13.5%</u>	<u>0.3%</u>
Weighted Mean Annual Wage	\$62,700	100.0%	2.2%
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70,600	7.5%	1.5%
Bookkeeping, Accounting, and Auditing Clerks	\$50,300	5.2%	1.1%
Hotel, Motel, and Resort Desk Clerks	\$26,300	71.8%	14.5%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$48,100</u>	<u>15.5%</u>	<u>3.1%</u>
Weighted Mean Annual Wage	\$34,300	100.0%	20.3%
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	8.0%	0.4%
Maintenance and Repair Workers, General	\$47,300	89.8%	4.5%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$55,900</u>	<u>2.1%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$50,200	100.0%	5.0%
Production Occupations			
Bakers	\$29,200	6.7%	0.1%
Laundry and Dry-Cleaning Workers	\$26,300	85.0%	1.9%
All Other Production Occupations (Avg. All Categories)	<u>\$40,800</u>	<u>8.3%</u>	<u>0.2%</u>
Weighted Mean Annual Wage	\$27,700	100.0%	2.2%
Weighted Average Annual Wage - All Occupations	\$36,000	-	92.6%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2015 wage levels.

### APPENDIX B TABLE 7 2014 NATIONAL LIGHT INDUSTRIAL WORKER DISTRIBUTION BY OCCUPATION JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Major Occupations (2% or more)	2014 National Light Industrial Industry Occupation Distribution	
Management Occupations	349,650	8.8%
Business and Financial Operations Occupations	256,476	6.4%
Computer and Mathematical Occupations	282,133	7.1%
Architecture and Engineering Occupations	379,825	9.5%
Life, Physical, and Social Science Occupations	605,361	15.2%
Sales and Related Occupations	132,409	3.3%
Office and Administrative Support Occupations	444,439	11.1%
Installation, Maintenance, and Repair Occupations	444,487	11.1%
Production Occupations	602,981	15.1%
Transportation and Material Moving Occupations	245,346	6.2%
All Other Light Industrial Occupations	<u>245,863</u>	<u>6.2%</u>
INDUSTRY TOTAL	3,988,970	100.0%

Industries weighted to reflect Santa Clara County industry mix. Includes Research & Development.



#### APPENDIX B TABLE 8 AVERAGE ANNUAL COMPENSATION, 2015 LIGHT INDUSTRIAL WORKER OCCUPATIONS JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

		% of Total	% of Total	
	2015 Avg.	Occupation	Light Industrial	
Occupation <sup>1</sup>	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>	
Page 1 of 3				
Management Occupations				
General and Operations Managers	\$157,600	25.3%	2.2%	
Marketing Managers	\$190,500	4.5%	0.4%	
Computer and Information Systems Managers	\$186,700	6.4%	0.6%	
Financial Managers	\$168,700	5.4%	0.5%	
Industrial Production Managers	\$147,500	4.2%	0.4%	
Architectural and Engineering Managers	\$190,600	9.6%	0.8%	
Natural Sciences Managers	\$177,200	15.9%	1.4%	
Managers, All Other	\$163,400	8.3%	0.7%	
All Other Management Occupations (Avg. All Categories)	<u>\$162,300</u>	<u>20.5%</u>	<u>1.8%</u>	
Weighted Mean Annual Wage	\$168,800	100.0%	8.8%	
Business and Financial Operations Occupations				
Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$81,100	8.7%	0.6%	
Compliance Officers	\$93,800	8.3%	0.5%	
Cost Estimators	\$77,900	4.4%	0.3%	
Human Resources Specialists	\$89,400	6.2%	0.4%	
Management Analysts	\$111,500	11.1%	0.7%	
Training and Development Specialists	\$95,300	4.6%	0.3%	
Market Research Analysts and Marketing Specialists	\$110,200	9.6%	0.6%	
Business Operations Specialists, All Other	\$98,100	18.8%	1.2%	
Accountants and Auditors	\$94,200	13.5%	0.9%	
Financial Analysts	\$109,600	4.7%	0.3%	
All Other Business and Financial Operations (Avg. All Categories)	<u>\$96,400</u>	<u>10.1%</u>	0.6%	
Weighted Mean Annual Wage	\$97,200	100.0%	6.4%	
Computer and Mathematical Occupations				
Computer Systems Analysts	\$110,000	10.5%	0.7%	
Computer Programmers	\$95,300	6.0%	0.4%	
Software Developers, Applications	\$144,400	19.1%	1.4%	
Software Developers, Systems Software	\$140,300	18.6%	1.3%	
Network and Computer Systems Administrators	\$101,500	9.0%	0.6%	
Computer User Support Specialists	\$76,500	7.7%	0.5%	
Statisticians	\$152,500	5.0%	0.4%	
All Other Computer and Mathematical Occupations (Avg. All Categories)	<u>\$125,600</u>	<u>24.1%</u>	<u>1.7%</u>	
Weighted Mean Annual Wage	\$123,900	100.0%	7.1%	
		% of Total	% of Total	
--	---------------------------	--------------------	------------------	--
	2015 Avg.	Occupation	Light Industrial	
Occupation <sup>1</sup>	Compensation <sup>2</sup>	Group <sup>3</sup>	Workers	
Page 2 of 3				
Architecture and Engineering Occupations				
Aerospace Engineers	\$109,700	8.2%	0.8%	
Biomedical Engineers	\$119,300	5.3%	0.5%	
Computer Hardware Engineers	\$138,100	5.2%	0.5%	
Electrical Engineers	\$130,000	9.6%	0.9%	
Electronics Engineers, Except Computer	\$132,400	6.8%	0.6%	
Industrial Engineers	\$116,300	10.3%	1.0%	
Mechanical Engineers	\$113,300	16.3%	1.6%	
Engineers, All Other	\$124,100	8.4%	0.8%	
Electrical and Electronics Engineering Technicians	\$70,200	4.8%	0.5%	
Engineering Technicians, Except Drafters, All Other	\$77,400	4.6%	0.4%	
All Other Architecture and Engineering Occupations (Avg. All Categories)	<u>\$113,400</u>	<u>20.4%</u>	<u>1.9%</u>	
Weighted Mean Annual Wage	\$115,000	100.0%	9.5%	
Lite, Physical, and Social Science Occupations Biochemists and Biophysicists	\$112 100	9.4%	1 4%	
Medical Scientists, Except Epidemiologists	\$103,700	21.7%	3.3%	
Chemists	\$84,200	9.4%	1.4%	
Biological Technicians	\$59,400	12.5%	1.1%	
	\$54,900	12.0%	0.6%	
Social Science Research Assistants	\$50,800	5.9%	0.0%	
All Other Life Reveied, and Social Science Occupations (Avg. All Categories)	\$30,000 \$86,000	37.0%	5.6%	
	<u>\$80,000</u>	<u>37.076</u>	<u>5.0%</u>	
weighted mean Annual wage	\$85,500	100.0%	15.2%	
Sales and Related Occupations				
Cashiers	\$26,600	11.5%	0.4%	
Counter and Rental Clerks	\$35,600	8.9%	0.3%	
Retail Salespersons	\$29,200	12.0%	0.4%	
Sales Representatives, Services, All Other	\$89,500	14.9%	0.5%	
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Proc	\$118,700	17.8%	0.6%	
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scient	\$77,000	20.2%	0.7%	
All Other Sales and Related Occupations (Avg. All Categories)	\$55,500	14.7%	0.5%	
Weighted Mean Annual Wage	\$67,900	100.0%	3.3%	
Office and Administrative Support Occupations				
First line Supervisors of Office and Administrative Support Workers	\$70,600	5 5%	0.6%	
Rockkooping Accounting and Auditing Clorks	\$70,000 \$50,300	9.0%	1.0%	
Customer Service Benrecentatives	\$30,300 ¢48,200	0.9%	1.0%	
Customer Service Representatives	\$40,200 ¢cc 500	9.3%	1.0%	
Froudulon, Fianning, and Expediting Olerks	900,000 ¢26 500	4.3% 5.00/	0.3%	
Shipping, Receiving, and Tranc Clerks Executive Secretarias and Executive Administrative Assistants	\$30,000 \$67,000	J.9%	0.7%	
Executive Secretaries and Executive Administrative Assistants	Φ01,200	9.4%	1.0%	
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$45,000 \$40,000	10.3%	2.0%	
	\$40,900	18.4%	2.1%	
	<u>\$48,100</u>	<u>19.9%</u>	2.2%	
Weighted Mean Annual Wage	\$49,600	100.0%	11.1%	

Occupation <sup>1</sup> Co	2015 Avg. Compensation <sup>2</sup>	Occupation <u>Group <sup>3</sup></u>	Light Industrial <u>Workers</u>
Occupation 1 Co	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Page 3 of 3			
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	8.3%	0.9%
Computer, Automated Teller, and Office Machine Repairers	\$46,200	4.9%	0.5%
Automotive Body and Related Repairers	\$46,400	13.9%	1.5%
Automotive Service Technicians and Mechanics	\$52,700	33.6%	3.7%
Industrial Machinery Mechanics	\$57,100	6.1%	0.7%
Maintenance and Repair Workers, General	\$47,300	7.4%	0.8%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	\$55,900	<u>25.9%</u>	2.9%
Weighted Mean Annual Wage	\$54,500	100.0%	11.1%
Production Occupations			
First-Line Supervisors of Production and Operating Workers	\$68,400	6.8%	1.0%
Team Assemblers	\$35,200	10.7%	1.6%
Bakers	\$29,200	4.5%	0.7%
Food Batchmakers	\$24,300	4.5%	0.7%
Printing Press Operators	\$38,800	6.7%	1.0%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$47,000	6.0%	0.9%
Dental Laboratory Technicians	\$45,600	7.2%	1.1%
Packaging and Filling Machine Operators and Tenders	\$29,200	7.9%	1.2%
HelpersProduction Workers	\$26,800	4.8%	0.7%
All Other Production Occupations (Avg. All Categories)	<u>\$40,800</u>	<u>41.0%</u>	<u>6.2%</u>
Weighted Mean Annual Wage	\$39,800	100.0%	15.1%
Transportation and Material Moving Occupations			
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	\$53,500	4.5%	0.3%
Heavy and Tractor-Trailer Truck Drivers	\$47,200	4.8%	0.3%
Light Truck or Delivery Services Drivers	\$39,300	6.8%	0.4%
Automotive and Watercraft Service Attendants	\$25,700	10.5%	0.6%
Industrial Truck and Tractor Operators	\$38,500	5.9%	0.4%
Cleaners of Vehicles and Equipment	\$25,800	36.9%	2.3%
Laborers and Freight, Stock, and Material Movers, Hand	\$31,700	11.2%	0.7%
Packers and Packagers, Hand	\$25,300	9.8%	0.6%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$37,300</u>	<u>9.7%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$31,500	100.0%	6.2%
Weighted Average Annual Wage - All Occupations	\$80,000	=	93.8%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2015 wage levels.

#### APPENDIX B TABLE 9 2014 NATIONAL WAREHOUSE WORKER DISTRIBUTION BY OCCUPATION JOBS HOUSING NEXUS ANALYSIS SANTA CLARA COUNTY, CA

Major Occupations (2% or more)	2014 National Warehouse Industry Occupation Distribution		
Management Occupations	25,100	3.5%	
Business and Financial Operations Occupations	14,700	2.0%	
Office and Administrative Support Occupations	161,880	22.3%	
Installation, Maintenance, and Repair Occupations	23,190	3.2%	
Production Occupations	29,150	4.0%	
Transportation and Material Moving Occupations	438,040	60.3%	
All Other Warehouse Occupations	<u>34,030</u>	<u>4.7%</u>	
INDUSTRY TOTAL	726,090	100.0%	

		% of Total	% of Total
	2015 Avg.	Occupation	Warehouse
Occupation <sup>1</sup>	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Page 1 of 2			
Management Occupations			
General and Operations Managers	\$157,600	37.2%	1.3%
Sales Managers	\$167,900	4.9%	0.2%
Administrative Services Managers	\$122,400	5.3%	0.2%
Transportation, Storage, and Distribution Managers	\$118,800	36.1%	1.2%
All Other Management Occupations (Avg. All Categories)	<u>\$162,300</u>	<u>16.6%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$143,000	100.0%	3.5%
Business and Financial Operations Occupations			
Wholesale and Retail Buyers, Except Farm Products	\$66,100	9.9%	0.2%
Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$81,100	7.7%	0.2%
Human Resources Specialists	\$89,400	12.2%	0.2%
Logisticians	\$99,600	15.2%	0.3%
Training and Development Specialists	\$95,300	9.1%	0.2%
Market Research Analysts and Marketing Specialists	\$110,200	5.3%	0.1%
Business Operations Specialists, All Other	\$98,100	18.9%	0.4%
Accountants and Auditors	\$94,200	10.0%	0.2%
All Other Business and Financial Operations (Avg. All Categories)	<u>\$96,400</u>	<u>11.8%</u>	<u>0.2%</u>
Weighted Mean Annual Wage	\$92,600	100.0%	2.0%
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$70.600	5.4%	1.2%
Customer Service Representatives	\$48.200	8.5%	1.9%
Shipping, Receiving, and Traffic Clerks	\$36,500	21.2%	4.7%
Stock Clerks and Order Fillers	\$31,300	34.5%	7.7%
Office Clerks, General	\$40,900	6.0%	1.3%
All Other Office and Administrative Support Occupations (Avg. All Categories)	\$48,100	24.3%	5.4%
Weighted Mean Annual Wage	\$40,600	100.0%	22.3%

		% of Total	% of Total
Occupation <sup>1</sup>	2015 Avg. <u>Compensation <sup>2</sup></u>	Occupation <u>Group <sup>3</sup></u>	Warehouse <u>Workers</u>
Page 2 of 2			
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$80,600	9.1%	0.3%
Bus and Truck Mechanics and Diesel Engine Specialists	\$58,600	7.7%	0.2%
Maintenance and Repair Workers, General	\$47,300	61.6%	2.0%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$55,900</u>	<u>21.6%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$53,100	100.0%	3.2%
Production Occupations			
First-Line Supervisors of Production and Operating Workers	\$68,400	8.3%	0.3%
Team Assemblers	\$35,200	19.1%	0.8%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$47,000	21.9%	0.9%
Packaging and Filling Machine Operators and Tenders	\$29,200	17.1%	0.7%
HelpersProduction Workers	\$26,800	9.8%	0.4%
All Other Production Occupations (Avg. All Categories)	<u>\$40,800</u>	<u>23.8%</u>	<u>1.0%</u>
Weighted Mean Annual Wage	\$40,000	100.0%	4.0%
Transportation and Material Moving Occupations			
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	\$53,500	4.9%	2.9%
Heavy and Tractor-Trailer Truck Drivers	\$47,200	8.1%	4.9%
Industrial Truck and Tractor Operators	\$38,500	21.0%	12.7%
Laborers and Freight, Stock, and Material Movers, Hand	\$31,700	42.8%	25.8%
Machine Feeders and Offbearers	\$31,400 4	5.4%	3.2%
Packers and Packagers, Hand	\$25,300	10.4%	6.3%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$37,300</u>	<u>7.4%</u>	<u>4.5%</u>
Weighted Mean Annual Wage	\$35,200	100.0%	60.3%
Weighted Average Annual Wage - All Occupations	\$42,000		95.3%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the Bureau of Labor Statistics Occupational Employment Survey assumes that hourly paid employees are employed full-time. Annual compensation is calculated by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2014 Occupational Employment Survey data applicable to Santa Clara County.

<sup>4</sup> Wage data not available for Santa Clara County; wages estimated based on Alameda County wages for that occupation.

# APPENDIX C: NON-DUPLICATION BETWEEN POTENTIAL RESIDENTIAL AND NON-RESIDENTIAL IMPACT FEE PROGRAMS

The County of Santa Clara is considering establishing an impact fee on non-residential and certain residential construction to help mitigate the impacts of the new buildings on the demand for affordable housing in the County. KMA conducted both a Non-Residential Nexus Analysis and a Residential Nexus to enable the potential adoption of affordable housing impact fees; in this appendix, KMA conducts an 'overlap analysis' to determine whether any double-counting of impacts is possible.

To briefly summarize the Non-Residential Nexus Analysis (which is a jobs-housing nexus analysis), the logic begins with jobs located in new workplace buildings including office buildings, retail spaces and hotels. The nexus analysis then identifies the compensation structure of the new jobs depending on the building type, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

In the Residential Nexus Analysis, the logic begins with the households purchasing or renting new market rate units. The purchasing power of those households generates new jobs in the local economy. The nexus analysis quantifies the jobs created by the spending of the new households and then identifies the compensation structure of the new jobs, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

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

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

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Complete overlap between jobs counted in the Non-Residential Nexus Analysis and jobs counted in the Residential Nexus Analysis could occur only in a very narrow set of theoretical circumstances. The following analysis demonstrates that the combined mitigation requirements do not exceed the nexus even if every job counted in the Residential Nexus Analysis is also counted in the Non-Residential Nexus Analysis. As discussed, the theoretical possibility of 100% overlap exists mainly with retail jobs that serve residents of new housing in Santa Clara County; therefore, the overlap analysis is focused on the retail land use.

## Recommended Non-Residential Fee as a Percent of Maximum Fee

The Non-Residential Nexus Analysis calculates the maximum mitigation amount supported by the analysis. KMA indicated that if the County moves forward with a program, consideration of a fee in the range of \$3 - \$7 per square foot for non-residential development in the unincorporated County outside of the Stanford Campus was recommended and would place the County within the range of other counties. The overlap analysis is conducted based on this range; if the County ultimately selects a higher fee level, the overlap analysis should be revised to the higher fee level.

Building Type	Maximum Nexus Amount	Maximum Recommended Fee Level	Percent of Maximum
Retail	\$213.40	\$7.00	3%

The conclusion is that the maximum recommended fee level for Santa Clara County represents 3% of the nexus cost. So, at most, the Non-Residential fee would mitigate approximately 3% of the demand for affordable units generated by new non-residential space.

KMA notes that new residents of the unincorporated area of Santa Clara County will also make retail purchases in incorporated cities in Santa Clara County, some of which have non-residential housing impact fee programs in place. However, based on development patterns for the unincorporated area of the County only a minor share of expenditures by residents of new single family units is likely occur within the few cities that have retail fees in excess of the \$7 level tested in this overlap analysis.

# Recommended Residential Impact Fee as a Percent of Maximum Fee

KMA has recommended that the County consider a residential affordable housing impact fee in the range of \$15 to \$16 per square foot level. The table below compares the maximum supported fee amounts to the maximum recommended fee of up to \$16 per square foot. Again, if the County ultimately selects a higher fee level, this overlap analysis should be revised.

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Maximum Recommended Fee as Percent of Maximum Fee Amount							
		Smaller Single Family					
	Single Family	Detached					
	Detached	(County Island)					
Maximum Nexus Amount	\$16.60	\$18.70					
Max Recommended Fee	\$16.00	\$16.00					
Max Fee as Percent of Nexus	96%	86%					

The conclusion is that the maximum recommended affordable housing impact fee level represents 86% to 96% of the maximum supported by the Residential Nexus analysis.

### **Combined Requirements within Nexus Maximums**

The highest non-residential fee level recommended mitigates 3% of the maximum supported impact fee amount in Santa Clara County. The maximum recommended impact fee level for residential development represents up to 96% of the maximum supported impact fee amount. Therefore, the combined affordable housing mitigations would not exceed the nexus even if there were 100% overlap in the jobs counted in the two nexus analyses.

Maximum Percent of Housing Demand Mitigated					
	Single Family				
Max Residential Fee as Percent of Residential Nexus	96%				
Max Non-Res. Fee as Percent of Non- Residential Nexus for Retail	3%				
Maximum Percent of Demand Mitigated	99%				

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# **KEYSER MARSTON ASSOCIATES**

# PUBLIC REVIEW DRAFT

ATTACHMENT C

# AFFORDABLE HOUSING NEXUS ANALYSIS ADDENDUM

Addressing the

# STANFORD UNIVERSITY CAMPUS

Prepared for: County of Santa Clara

Prepared by: Keyser Marston Associates, Inc.

April 2018

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# I. INTRODUCTION

In 2016, a set of affordable housing nexus studies ("Countywide Nexus Study") was prepared by Keyser Marston Associates, Inc. (KMA) for the County of Santa Clara ("County") in support of the potential adoption of affordable housing requirements applicable to new residential and non-residential development throughout the unincorporated area of the County. Due to unique aspects of the Stanford University Campus ("Stanford Campus") and the special General Use Permit that regulates its development and has historically included provisions for affordable housing, the Stanford Campus was not analyzed as part of the Countywide Nexus Study. This Affordable Housing Nexus Analysis Addendum ("Addendum") supplements the Countywide Nexus Study by providing analyses in support of adoption of affordable housing requirements applicable to the Stanford Campus.

# Purpose

The Addendum addresses linkages between new development on the Stanford Campus, added employment, and added demand for affordable housing. Because Stanford Campus employees have a range of compensation levels and household incomes, there are housing needs at all affordability levels. This analysis quantifies the increased need for affordable housing created by development of the Stanford Campus and determines maximum supported fees based on the cost of mitigating the increased affordable housing need.

# Background on Countywide Nexus Study

The Countywide Nexus Study was prepared in 2016 as part of a multi-jurisdiction effort encompassing twelve jurisdictions including Alameda and Santa Clara counties and ten cities (five cities in each county). The Countywide Nexus Study was prepared to support potential adoption of affordable housing requirements applicable to development in the unincorporated County. The Countywide Nexus Study includes a Non-Residential Nexus Analysis addressing affordable housing impacts of office, retail, hotel, light industrial and warehouse uses and a Residential Nexus Analysis addressing market rate residential development in the unincorporated County outside of the Stanford Campus. As explained above, the Stanford Campus was not addressed initially as part of the Countywide Nexus Study.

# A. Analysis Scope

The analysis addresses affordable housing impacts from development of the Stanford Campus under the 2018 GUP in two primary components:

 Academic Space, a category that includes all types of non-residential campus facilities such as classrooms and lecture halls, laboratory and research facilities, dining halls, office, administrative, service and support space. A total of 2,275,000 square feet of academic space is proposed to be added under the 2018 GUP. • **Faculty and Staff Housing**, consisting of 550 housing units available primarily to faculty and staff on two sites with a combined 13.5 acres.

At the conclusion of the analysis, impact analysis results are converted to a per square foot and per unit basis so that fees may be charged as individual phases or components are constructed. Impact findings on a per square foot or per unit basis will generally hold even if the total amount of academic space or number of faculty and staff units to be built under the 2018 GUP is adjusted.

In addition to the above, 2,600 student beds encompassing an estimated 1,225,000 net square feet are proposed to accommodate growth in the student population. Affordable housing impacts of the student beds are not addressed as a separate category in the analysis because janitorial, dining hall, and other on-campus employees that support students residing in campus housing are captured in the analysis of academic space where jobs are primarily located. While the student beds will also support some off-campus employment in retail and other services, affordable housing impacts associated with off-campus retail and other services to students are not included in the analysis due to the difficulty in accurately quantifying these impacts, as a conservative analysis assumption, and because it is anticipated that a large share of food service and other needs for students residing on-campus will be met on-campus and therefore is captured in the academic space analysis.

The methodology used for this Addendum is consistent with that applied in the Countywide Nexus Analysis with adaptations to incorporate data specific to the Stanford Campus provided by Stanford. The academic space analysis uses the same approach as the Non-Residential Analysis conducted as part of the Countywide Nexus Study; however, employment and household income data are specific to the Stanford Campus. The faculty and staff housing analysis uses the same approach as the Residential Nexus Analysis completed as part of the Countywide Nexus Study but is customized to reflect rents applicable to these units estimated based on rates applicable to existing Stanford faculty and staff housing.

# Household Income Categories

The household income categories addressed in the analysis are the same as those used for purposes of the Countywide Nexus Study and include the following:

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

The 2017 Income Limits for the County published by the California Department of Housing and Community Development are as follows:

### Table I-1

2017 Income Limits for County of Santa Clara									
		h	lousehold S	Size (Persol	ns)				
	1	2	3	4	5	6 +			
Extr. Low (Under 30% AMI)	\$25,100	\$28,650	\$32,250	\$35,800	\$38,700	\$41,550			
Very Low (30%-50% AMI)	\$41,800	\$47,800	\$53,750	\$59,700	\$64,500	\$69,300			
Low (50%-80% AMI)	\$59,400	\$67,900	\$76,400	\$84,900	\$91,650	\$98,450			
Moderate (80%-120% AMI)	\$95,150	\$108,750	\$122,350	\$135,950	\$146,850	\$157,700			
Median (100% of Median) \$79,300 \$90,650 \$101,950 \$113,300 \$122,350 \$131,450									

The above 2017 income limits are used for the analysis of faculty and staff housing, some components of the academic space analysis and for the affordability gap calculations. Income limits for 2015 are used for portions of the academic space analysis in which comparisons are made to 2015 household income data provided by Stanford.

## B. Report Organization

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

- Section I provides an introduction and describes the purpose and organization of this report.
- Section II presents the Affordable Housing Nexus Analysis for Academic Space, concluding with the maximum supported fee level per square foot of academic space.
- Section III presents the Affordable Housing Nexus Analysis for Faculty and Staff Housing, concluding with the maximum supported affordable housing fee level per unit or square foot of faculty and staff housing.
- Section IV contains the affordability gap analysis representing the net cost of delivering each unit of housing affordable to households at the income levels under study.
- Appendix A contains support information on worker occupations and incomes used in the faculty and staff housing analysis.
- Appendix B provides supporting analysis to identify the household income levels of contract and janitorial service workers as part of the academic space analysis.
- Appendix C provides an analysis to address the potential for overlap between residential and non-residential affordable housing fees.

# C. Data Sources and Qualifications

The analyses in this report have been prepared using the best and most recent data available. Local and current data were used whenever possible. Employment estimates reflect the figures identified by Stanford in its GUP application submittal. Household income estimates for academic space workers are based on survey results provided by Stanford. Other sources include the American Community Survey of the U.S. Census, the 2010 Census, Bureau of Labor Statistics and California Employment Department (EDD), and data sets for the economic modeling software IMPLAN. Additional sources are noted in the text and footnotes. While we believe all sources utilized are sufficiently accurate and reliable for the purposes of the analyses, we cannot guarantee their accuracy. KMA assumes no liability for information from these or other sources.

## II. ACADEMIC SPACE AFFORDABLE HOUSING NEXUS ANALYSIS

This section presents the analysis linking development of new academic space on the Stanford University Campus to the estimated number of affordable housing units required in each of four income categories. The analysis is the same in concept as the Non-Residential Nexus Analysis prepared by Keyser Marston Associates, Inc. in December 2016 ("Non-Residential Nexus") addressing development of non-residential space Countywide. The specific data sources and some analysis steps used in this Addendum differ from the Non-Residential Nexus due to use of data provided by Stanford specific to Campus employees.

Following is a brief overview of the major steps of the analysis:

- A. Number of Workers Identify number of employees associated with development of new academic space on the Stanford Campus. Data contained in the Stanford General Use Permit application is used for this purpose.
- **B.** Number of Households Adjust from the number of workers to the number of households recognizing many workers are members of households where more than one person is employed. Data from the U.S. Census is used to make this adjustment.
- C. Household Income The number of worker households within each of the four income categories addressed in the analysis (Extremely Low, Very Low, Low, and Moderate) is estimated based on survey data on household incomes for Stanford workers. For contract workers, published data on worker occupations and compensation levels from the Bureau of Labor Statistics and California Employment Development Department is used to estimate household incomes.
- D. Mitigation Cost and Maximum Fee Level The final step is to determine the cost of providing affordable housing to the new worker households qualifying in one of the four affordability tiers. This represents the full mitigation cost for the affordable housing impacts of expansion of the Stanford Campus and the ceiling for any affordable housing fee that may be imposed. Maximum fee level findings are expressed on a per square foot basis.

Section II is organized into subsections that address each of the above major steps. The analysis and discussion are focused on the Stanford Campus; however, findings may be used to support affordable housing fees that apply to private universities more generally.

# A. Number of Workers

The first step in the analysis is to identify the number of workers added by the expansion of Academic Space on the Stanford Campus under the proposed 2018 GUP.

# Total Number of Workers

The estimated number of new workers to be added to the Stanford Campus is identified in the 2018 GUP Application prepared by Stanford. In total, it is estimated that 5,556 workers will be added by buildout of academic space under the 2018 GUP within the following seven categories:

- Staff regular employees in non-academic positions;
- Faculty professors and other academic positions such as lecturers and coaches;
- Postdoctoral Scholars have a doctoral degree and work under the mentorship of a Stanford faculty member;
- Contract includes employees of restaurants, dining and childcare facilities operated by third parties (most food service workers are direct employees of Stanford and included in the staff category);
- Janitorial workers for contract janitorial service providers;
- Casual and Temporary summer camp, summer grounds, special academic project staff, and other workers who are less than 50% of a Full Time Equivalent (FTE) and / or work no longer than six months of the year; and
- **Contingent** workers in an academic or teaching position that are employed less than 50% of FTE and/or for less than six months.

Table II-1 summarizes the employment counts by category. Non-employee academic affiliates such as adjunct professors and visiting scholars are not included in the analysis of workforce housing needs because Stanford is not their employer.

# Considerations Regarding Students and Postdoctoral Scholars

Students are excluded from the analysis since the analysis is focused on the housing needs of workers. In addition, much of the increased student population will be housed in on-campus student housing to be constructed as part of the 2018 GUP. New student beds sufficient to house all 1,700 additional undergraduate students and 918 of the 1,200 projected additional

graduate students is proposed to be constructed as part of the 2018 GUP. This results in a net increase in off-campus housing need for 282 units for graduate students out of a total proposed new student population of 2,900.

Postdoctoral scholars are included in the analysis because they create a demand for housing. Research universities such as Stanford depend on postdoctoral scholars to serve an essential function in the operation of the university and the conduct of research. Postdoctoral scholars are commonly hired to complete specific research projects or tasks and to fulfill commitments under grants awarded to faculty. Postdoctoral scholars are compensated for their work and rely on that compensation to meet housing and other expenses. Stanford classifies postdoctoral scholars as "non-matriculated, non-degree seeking students" in their written policies, a status that allows for deferral of student loan repayment; however, their role resembles that of an employee. The specific classification that is applied is not important to the analysis because inclusion of the housing needs of postdoctoral scholars would be appropriate in either case. Of course, postdoctoral scholars typically accept positions with longer term academic careers in mind and often anticipate higher pay as they advance. However, as they move on to other positions, new postdoctoral scholars replace them at similar pay levels. The notion of career advancement is no different for postdoctoral scholars than for workers in other positions and fields who hope to advance over time. As workers advance in their careers, prior positions are filled by more junior workers. Therefore, even if the compensation level of an individual worker increases, it does not necessarily change the compensation structure of the organization overall. For these reasons, postdoctoral scholars are included in the analysis with household incomes estimated based on data provided by Stanford.

# Adjustments to Employee Counts for Analysis of Housing Impacts

Two adjustments to employee counts are made for purposes of the analysis of housing impacts to remove workers who are not fully attributable to Stanford or who do not result in a net increase in housing need:

Part time worker adjustment – Casual, temporary and contingent employees working less than 50% time and / or less than six months of the year are adjusted to reflect the fact that housing needs for these workers may not be fully attributable to Stanford because employment at Stanford represents supplemental or temporary income or because they hold multiple jobs. Housing needs for workers employed more than 50% FTE is assumed to be 100% attributable to Stanford; for workers employed from 20% to 50% FTE, housing needs are assumed to be 50% attributable to Stanford; and for workers at 20% of FTE or less, housing needs are not assumed to attributable to Stanford at all because it may represent supplemental income or temporary employment as opposed to a primary job for that worker. The part time worker adjustments reduce the count of employees whose housing needs are considered attributable to Stanford by 992 workers.

 Declining industries adjustment – This adjustment recognizes the possibility that not all jobs added by the 2018 GUP will be net new to the local economy. Long term declines in employment experienced in some sectors of the economy mean some jobs may be filled by workers displaced from another industry and who are presumed to already have housing locally. A 20% adjustment is utilized in the analysis based on long term shifts in employment that have occurred in some sectors of the local economy and the likelihood of continuing changes in the future. See the Non-Residential Nexus Analysis for additional information about how this adjustment was derived.

The declining industries adjustment is not applied to faculty, postdoctoral scholars and contingent workers given these jobs are not likely to be filled by existing local workers downsized from a job in a declining industry. Efforts to fill academic positions are not focused on or limited to workers already living in the local area. Stanford regularly attracts top faculty and researchers from throughout the U.S. and positions are often filled through an extremely competitive search process in which workers downsized from other local industries are unlikely to participate.

Table II-1	0040.0					- ' 1		
workers Added with	2018 G	UP and Ac	ijustmer	its for Anal	ysis of Hous	sing impacts		
	04-66	<b>F</b> 14	Post-	0			0	Tatal
	Staff	Faculty	DOC	Contract	Janitorial	and remp	Contingent	Total
No. of Workers <sup>(1)</sup>	2,438	789	961	72	57	966	273	5,556
Remove workers 20% FTE or less <sup>(2)</sup>	0	0	0	0	0	(596)	(197)	(793)
Adjust workers 20%- 50% FTE <sup>(2)</sup>	0	0	0	0	0	(163)	(36)	(199)
Workers after part time adjustment	2,438	789	961	72	57	207	40	4,564
Adjust for Declining Industries @20%	(488)	N/A	N/A	(14)	(11)	(41)	N/A	(554)
Net New Workers After Adjustments	1,950	789	961	58	46	166	40	4,010

As shown in Table II-1, the number of workers considered in the analysis of housing impacts is 4,010 after adjustments for part time workers and declining industries.

(1) From Tables 2 and 5, Chapter 5, GUP Application, Stanford University.

(2) Adjustments are based on data provided by Stanford.

# B. Number of Households

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

The number of workers per household in a given geographic area is a function of household size, labor force participation rate and employment availability, as well as other factors. According to the 2011-2015 ACS, the number of workers per worker household in the County was 1.77, including full- and part-time workers. For post-doctoral scholars, the adjustment from number of workers to number of households uses a different factor derived from the Stanford Annual Transportation Survey of 2.14. The total number of jobs created is divided by the number of workers per worker households.

Table II-2 New Employee Households, 2018-2035									
			Post-			Casual			
	Staff	Faculty	Doc	Contract	Janitorial	and Temp	Contingent	Total	
Net New Workers	1,950	789	961	58	46	166	40	4,010	
Workers Per Worker Household	1.77	1.77	2.14	1.77	1.77	1.77	1.77		
Net New Households	1,102	446	449	33	26	94	23	2,172	

# C. Household Incomes

Household incomes for workers to be added by the 2018 GUP are estimated using data collected as part of Stanford's Annual Transportation Survey conducted in 2015. The survey provides data on household income by category of employee. The data was compared to income criteria published by the California Housing and Community Development Department (HCD) to determine the percentage of workers who qualify within each of the four income categories (Extremely Low, Very Low, Low and Moderate). For contract and janitorial services workers, published sources on worker occupations and incomes are used given the survey does not address contract and third-party workers.

### Survey Data

Stanford conducts an annual survey as part of a program to evaluate the performance of transportation demand measures. The survey is primarily conducted online but is supplemented by in-person surveys conducted on mobile devices to ensure employees who do not have

access to computers have a means to participate. The response rate by category of employee was estimated by KMA and summarized in Table II-3 below based on the reported number of responses and the campus population figures as of 2015 indicated in the GUP application. Response rates were highest for staff and lowest for faculty and casual and temporary employees.

Table II-3         Survey Response Rate by Category of Worker									
	Staff	Faculty	Post-Doc	Casual and Temp	Total				
Number of Campus Workers, 2015	8,612	2,959	2,264	3,470	17,305				
Number of Survey Responses	4,023	367	738	311	5,439				
Response Rate	47%	12%	33%	9%	31%				

The survey covers staff, faculty, postdoctoral scholars, casual and temporary employees. The survey is not a random sample of the Stanford Campus workforce and is potentially subject to systematic bias if employees who chose to participate have characteristics different from those who elected not to participate in the survey. While imperfect, the data is the best data source available on the household incomes of Stanford workers and is deemed sufficiently reliable for purposes of the analysis. A cross-check of the Stanford data against publicly available data from the U.S. Census was performed, as described on page 14, which provided confirmation as to the reliability of the Stanford data.

The survey provides the number of households within a series of income ranges which have been converted to percentages in Table II-4 below.

Table II-4										
Percent of Survey Respondents by Household Income Range										
				Casual						
Household Income	Staff	Faculty	Post-Doc	and Temp						
\$300,000 and over	6%	43%	1%	4%						
\$250,000 to \$299,999	5%	16%	1%	3%						
\$200,000 to \$249,999	9%	16%	1%	6%						
\$150,000 to \$199,999	13%	13%	8%	11%						
\$130,000 to \$149,999	7%	4%	5%	6%						
\$115,000 to \$129,999	7%	2%	4%	5%						
\$100,000 to \$114,999	9%	2%	7%	6%						
\$80,000 to \$99,999	11%	3%	10%	9%						
\$65,000 to \$79,999	13%	0%	7%	7%						
\$50,000 to \$64,999	15%	0%	38%	8%						
\$35,000 to \$49,999	3%	0%	17%	10%						
\$25,000 to \$34,999	0%	0%	0%	8%						
\$15,000 to \$24,999	0%	0%	0%	9%						
\$10,000 to \$14,999	0%	0%	1%	3%						
Under \$10,000	0%	0%	0%	5%						
Total	100%	100%	100%	100%						

### Percent of Households by Income Category

The percentage of worker households within each of the four income categories was estimated by comparing the survey data summarized above to published income limits from the California Department of Housing and Community Development (HCD) shown below in Table II-5. 2015 income limits are used for this component of the analysis to be consistent with the year applicable to the household income data.

Table II-5         2015 Income Limits for Santa Clara County											
	Household Size (Persons)										
	1	2	3	4	5	6 +					
Extr. Low (Under 30% AMI)	\$22,350	\$25,550	\$28,750	\$31,900	\$34,500	\$37,050					
Very Low (30%-50% AMI)	\$37,250	\$42,550	\$47,850	\$53,150	\$57,450	\$61,700					
Low (50%-80% AMI)	\$59,400	\$67,900	\$76,400	\$84,900	\$91,650	\$98,450					
Moderate (80%-120% AMI)	\$89,300	\$102,050	\$114,800	\$127,550	\$137,750	\$147,950					
Median (100% of Median)	\$74,400	\$85,050	\$95,650	\$106,300	\$114,800	\$123,300					

Source: California Department of Housing and Community Development

The income ranges from the survey do not align with HCD income categories. To estimate how many worker households fall within each of the four income categories, it was necessary to estimate the distribution of worker incomes within each of the reported income ranges. For purposes of the estimates, an even distribution within the income ranges is assumed.

Tables II-12 through II-15 at the end of Section II. provide additional survey results on household income by household size and the percentage of worker households estimated to fall into one of the four income tiers for each household size category.

# Contingent employees

The survey data did not include contingent employees which are estimated to represent around 1% of total housing demand. Stanford indicates contingent employees are primarily academic and other teaching staff who work less than six months of the year, or less than half time. Since contingent employees have a role that is most comparable to faculty, household incomes for the 23 contingent worker households is estimated based on the household income data for faculty. It is likely that contingent workers have somewhat lower household incomes than faculty, especially considering some may not work full time. For part-time contingent workers, it is impractical to assess potential supplemental income from non-Stanford sources. In in the absence of better data, data on faculty household incomes of contingent workers. Since contingent workers represent a relatively small share of overall housing demand, even if this approach overstates their household incomes somewhat, it would be unlikely to have a material effect on the findings of the analysis.

# Third Party Contract and Janitorial Workers

For contract and janitorial service workers, household incomes are estimated using published sources because they were not covered by the Stanford survey. Published sources used to estimate incomes for contract workers include 2017 compensation data from the California Employment Development Department (EDD) and data on worker occupations from the Bureau of Labor Statistics Occupational Employment Survey. The data sources and methodology are the same as used in the Non-Residential Nexus.

The following steps are used to estimate household incomes for contract and janitorial workers:

- Worker Occupations The occupational breakdown of workers is estimated using data from the Bureau of Labor Statistics on the distribution of occupations within industries. For contract workers, the distribution of occupations is based on the industry sector for restaurants. For janitorial service workers, the mix of occupations reflects KMA's selection of representative occupations applicable to janitorial services from within a broader industry category for services to buildings and dwellings.
- 2. Worker Income Employee incomes are estimated using EDD data for the County on wage and salaries by individual occupation. The distribution of wages reported by EDD is used to estimate the percent of worker households that would fall into each of the four HCD income categories for every potential combination of household size and number of workers in the household. For households with more than one worker, individual

employee income data is used to estimate household income by assuming multiple earner households are, on average, formed of individuals with similar incomes.

- 3. *Household Size and Number of Workers* The percentage of households applicable to each potential household size and number of workers combination is calculated using data from the 2011-2015 American Community Survey.
- 4. *Household Income Category* The percentage of worker households qualifying as Extremely Low, Very Low, Low, or Moderate is estimated by multiplying the results of the two prior steps (percent of worker households that fall into each income category for every potential combination of household size and number of workers and the percent of households applicable to each household size and number of workers combination).

This approach was applied for purposes of the 59 contract and janitorial service worker households which represent approximately 3% of the 2,172 total worker households addressed in the analysis.

For the analysis of contract and janitorial service workers, 2017 income limits are used consistent with the 2017 compensation levels applied. The 2017 income limits are shown in Table II-6.

Table II-6         2017 Income Limits for Santa Clara County										
	Household Size (Persons)									
	1	2	3	4	5	6 +				
Extr. Low (Under 30% AMI)	\$25,100	\$28,650	\$32,250	\$35,800	\$38,700	\$41,550				
Very Low (30%-50% AMI)	\$41,800	\$47,800	\$53,750	\$59,700	\$64,500	\$69,300				
Low (50%-80% AMI)	\$59,400	\$67,900	\$76,400	\$84,900	\$91,650	\$98,450				
Moderate (80%-120% AMI)	\$95,150	\$108,750	\$122,350	\$135,950	\$146,850	\$157,700				
Median (100% of Median) \$79,300 \$90,650 \$101,950 \$113,300 \$122,350										
Source: California Department of H	lousing and (	Community De	evelopment							

Appendix A Tables 1 through 7 present the analysis supporting the estimated distribution of contract and janitorial employee households by income tier.

# Summary by Household Income Level

The estimated percentage of workers by household income category is summarized in Table II-7A. Faculty have the highest household incomes with all but 4% earning over 120% of median income. Contract food service and janitorial service workers are estimated to have the lowest incomes with nearly all earning 120% of AMI or below. Overall, approximately 46% of employee households are estimated to fall into one of the four income tiers through 120% of AMI. This is a similar percentage to office workers as identified in the Countywide Nexus Study.

Table II – 7A Estimated Distribution of Employee Households by Income Category									
Income Category	Staff	Faculty	Post- Doc	Contract	Janitorial	Casual and Temp	Contingent	Weighted Average	
Extremely Low	0.6%	0.0%	0.9%	33.3%	25.2%	18.2%	0.0%	2.1%	
Very Low	3.3%	0.0%	11.1%	36.6%	36.4%	13.3%	0.0%	5.5%	
Low	20.0%	0.4%	42.4%	21.9%	20.9%	12.9%	0.4%	20.1%	
Moderate	<u>23.6%</u>	<u>3.5%</u>	<u>21.6%</u>	<u>6.8%</u>	<u>14.7%</u>	<u>18.0%</u>	<u>3.5%</u>	<u>18.3%</u>	
Subtotal	47.5%	3.9%	75.9%	98.7%	97.3%	62.3%	3.9%	46.0%	
Above Moderate	<u>52.5%</u>	<u>96.1%</u>	<u>24.1%</u>	<u>1.3%</u>	<u>2.7%</u>	<u>37.7%</u>	<u>96.1%</u>	<u>54.0%</u>	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Source: Stanford University, California Department of Housing and Community Development, KMA.									
See Tables II-12 to	ll-15 and A <sub>l</sub>	opendix B T	able 1 to 7	for supporting	g information.				

The distribution of household incomes from Table II-7A is applied to the number of households from Table II-2 to calculate the number of affordable units needed by income category. It is estimated that a total of 999 affordable units are needed to house all new employee households with incomes from 0% to 120% of AMI. Most of the affordable unit need is at the Low (50% to 80% AMI) and Moderate-Income level (80% to 120% AMI) which together account for 83% of the total affordable unit need.

Table II-7B Number of New Employee Households by Income Category									
			Post-						
Income Category	Staff	Faculty	Doc	Contract	Janitorial	and Temp	Contingent	Total	
Extremely Low	6	-	4	11	7	17	-	45	
Very Low	36	-	50	12	9	12	-	120	
Low	220	2	190	7	5	12	0	437	
Moderate	260	16	97	2	4	17	1	396	
Subtotal	523	18	341	32	25	58	1	999	
Above Moderate	579	428	108	0	1	35	22	1,173	
Total	1,102	446	449	33	26	94	23	2,172	

Cross Check of Stanford Survey Data to Verify Reasonableness

To validate the reasonableness of the survey data provided by Stanford, KMA used U.S. Census data as a secondary cross-check. U.S. Census American Community Survey (ACS) data on the household incomes of workers employed in colleges, universities and professional schools in the County was accessed using the data set available through the Public Use Microdata Sample (PUMS) program. Household incomes were then compared against household income limits to identify the distribution by income category shown in Table II-7C, column A. The Stanford data from Table II-7A is summarized in column B for comparison.

Table II-7C – Cross Check of Stanford Data Against U.S. Census								
Household Income Category	A. Census Data Applicable to College and University Workers*	B. Stanford 2015 Survey Data [Used in Analysis]						
Extremely Low	5.6%	2.1%						
Very Low	5.6%	5.5%						
Low	10.5%	20.1%						
Moderate	<u>18.5%</u>	<u>18.3%</u>						
Total through 120% of AMI	40.2%	46.0%						

\*Derived from the U.S. Census American Community Survey data for 2011-2016 on the household incomes of workers in the County of Santa Clara in the industry category for Colleges, universities, and professional schools, including junior colleges.

College and university workers within the County as a whole have a 3.5% greater share represented in the Extremely Low-Income category and a 9.6% lower share in the Low-Income category. The share of workers in the Very Low and Moderate-Income categories are approximately the same between the U.S. Census and Stanford data sets. It is expected that there would be some difference between the Stanford data and publicly available data sets to the extent occupations and compensation levels of Stanford workers vary from those of other colleges and universities in the County. Overall, the cross check provides added confidence in the reasonableness of the Stanford-provided survey data. Since the Stanford data is a more accurate reflection of the household incomes of Stanford's workforce than the U.S. Census data would be, the Stanford data is used in the analysis.

### Adjustment to Avoid Potential Double Counting with Faculty and Staff Analysis

The affordable housing nexus analysis for faculty and staff housing is based on an estimate of the employment associated with household consumption of goods and services. While most employment associated with expenditures by residents of the faculty and staff housing will occur off-campus, a share of expenditures can be expected to occur on campus. Expenditures on lunch are an obvious example. Childcare is another. To avoid potential double counting of affordable housing needs between the two nexus analyses, an adjustment is made to remove one third of all affordable housing need identified for the faculty and staff housing, as quantified in Section III., from the amount included in the Academic space analysis. While it is likely that less than one third of household spending by residents of the faculty and staff housing will occur on campus, in the absence of specific data on the level of on-campus spending by these households, a conservative adjustment factor is applied.

Table II-8 Adjustment to Avoid Potential Double Counting with Faculty and Staff Analysis								
Income Category	Employee Households: Academic Space	Less: Adjustment to Avoid Potential for Double Counting with Faculty and Staff Housing Analysis	Adjusted Total Employee Households					
Extremely Low	45	(7)	38					
Very Low	120	(11)	108					
Low	437	(9)	429					
Moderate	396	(8)	389					
Subtotal	999	(35)	964					

# Summary by Square Foot Building Area

The analysis thus far has identified the employee housing need associated with the entire Stanford Campus expansion under the proposed 2018 GUP. In this section, conclusions are translated to housing need per square foot of building area. The conversion is made by dividing the number of employee housing units that are needed within each income category by the total square feet of academic space proposed to be added under the 2018 GUP. Table II-9 shows the results of this calculation.

Table II-9         Net New Employee Households Per Square Foot of Academic Space								
Income Category	Net New Employee Households	Employee Households Per Square Foot of Academic Space <sup>(1)</sup>						
Extremely Low	38	0.00001662						
Very Low	108	0.00004765						
Low	429	0.00018839						
Moderate	<u>389</u>	0.00017094						
Total through 120% of AMI	964	0.00042359						

(1) Calculated by dividing the number of households by the 2,275,000 square feet of Academic Space added with the proposed 2018 GUP.

This is the summary of the housing nexus analysis linking expansion of academic space on the Stanford Campus to employees to housing demand by income level. We believe these findings represent a reasonable estimate of the affordable housing demand associated with development of new academic space.

# Affordability Gap

A key component of the analysis is the affordability gap, which represents the subsidy required to make the unit affordable to households in each of the four categories of Area Median Income (AMI): Extremely Low (under 30% of median), Very Low (30% to 50%), Low (50% to 80%), and Moderate (80% to 120%). Fees are anticipated to be used to provide financial assistance to affordable projects built by non-profit affordable housing developers. For Extremely Low, Very

Low, and Low Income units, the affordability gap assumes that the County would assist affordable rental units financed with 4% tax credits. For Moderate Income, a for-sale unit is assumed to be assisted. Development costs anticipate that fees applicable to the Stanford Campus will be primarily used to assist in creation of affordable units near the Stanford Campus, consistent with the existing GUP condition, which establishes a six-mile radius for affordable units assisted with the Stanford Affordable Housing Fund. See Section IV. for additional discussion and supporting calculations for the affordability gaps shown below.

Table II-10 Affordability Gaps	
Extremely Low (Under 30% AMI)	(\$402,000)
Very Low (30% to 50% AMI)	(\$321,000)
Low (50% to 80% AMI)	(\$281,000)
Moderate (80% to 120% AMI)	(\$399,000)

AMI = Area Median Income;

See Section IV. for supporting analysis.

## Maximum Supported Fees Per Square Foot of Academic Space

The last step in the nexus analysis calculates the cost of delivering affordable housing to the new households. The demand for affordable units in each income range per square foot of building area from Table II-9 is multiplied by the affordability gaps from Table II-10 to determine the mitigation cost per square foot of academic space. The calculation is shown in Table II-11, below:

Table II - 11           Mitigation Costs per Square Foot of Academic Space (Maximum Supported Fee)								
	Α.	В.	С.					
Income Category	Housing Need Per Square Foot of Academic Space	Mitigation Cost Per Affordable Unit (Affordability Gap)	Mitigation Cost Per Square Foot of Academic Space (= A. X B.)					
Extremely Low	0.00001662	\$402,000	\$6.70					
Very Low	0.00004765	\$321,000	\$15.30					
Low	0.00018839	\$281,000	\$52.90					
Moderate	0.00017094	\$399,000	<u>\$68.20</u>					
Total Mitigation Cost / Maximum Supported Fee			\$143.10					

Note: Nexus findings are not recommended fee levels.

The maximum supported fee level is \$143.10 per square foot of academic space. This represents the maximum fee that could be charged for construction of new academic space to mitigate its impacts on the need for affordable housing. Maximum fee levels are technical analysis findings not policy recommendations.

While a large share of Stanford employees have household incomes high enough to exceed 120% of AMI, approximately 46% still qualify in one of the four affordable income categories.

Combined with the high cost of developing residential units, this results in a high nexus or mitigation cost.

#### I. Number of Survey Respondents by Household Income Range and Household Size - Staff

	Household Size						Total All	
-	1	2	3	4	5	6+	Responses	Percent
Household Income								
\$300,000 and over	5	67	62	94	20	9	257	6%
\$250,000 to \$299,999	5	71	47	55	14	7	199	5%
\$200,000 to \$249,999	20	130	100	96	17	4	367	9%
\$150,000 to \$199,999	26	223	128	113	24	14	528	13%
\$130,000 to \$149,999	27	129	71	45	19	7	298	7%
\$115,000 to \$129,999	40	109	61	43	13	9	275	7%
\$100,000 to \$114,999	67	154	78	53	16	8	376	9%
\$80,000 to \$99,999	111	145	84	63	22	23	448	11%
\$65,000 to \$79,999	155	168	91	70	30	15	529	13%
\$50,000 to \$64,999	140	191	136	72	28	21	588	15%
\$35,000 to \$49,999	34	32	25	20	4	8	123	3%
\$25,000 to \$34,999	4	5	4	3	2	1	19	0%
\$15,000 to \$24,999	2	4	4	2	0	0	12	0%
\$10,000 to \$14,999	0	1	1	0	1	0	3	0%
Under \$10,000	1	0	0	0	0	0	1	0%
Total	637	1,429	892	729	210	126	4,023	100%

Source: 2015 Stanford Annual Transportation Survey.

#### II. Household Income Category Applicable to Survey Respondents - Staff

		Household Size						Percent
Income Category	1	2	3	4	5	6+	Responses	of Total
Extremely Low	2	5	7	4	3	2	23	0.6%
Very Low	10	21	24	36	18	23	132	3.3%
Low	117	239	209	142	57	41	805	20.0%
Moderate	259	302	183	137	46	25	950	23.6%
Above Moderate	249	862	470	410	87	35	2,113	52.5%
Total	637	1,429	892	729	210	126	4,023	100.0%

#### I. Number of Survey Respondents by Household Income Range and Household Size - Faculty

			Household	Total All				
_	1	2	3	4	5	6+ Re	sponses	Percent
Household Income								
\$300,000 and over	7	59	34	40	12	7	159	43%
\$250,000 to \$299,999	6	26	13	13	1	0	59	16%
\$200,000 to \$249,999	8	27	10	9	5	1	60	16%
\$150,000 to \$199,999	8	19	2	15	2	1	47	13%
\$130,000 to \$149,999	1	7	3	1	1	0	13	4%
\$115,000 to \$129,999	0	4	2	2	0	0	8	2%
\$100,000 to \$114,999	3	4	1	1	0	0	9	2%
\$80,000 to \$99,999	4	4	1	1	0	0	10	3%
\$65,000 to \$79,999	0	0	1	0	0	0	1	0%
\$50,000 to \$64,999	1	0	0	0	0	0	1	0%
\$35,000 to \$49,999	0	0	0	0	0	0	0	0%
\$25,000 to \$34,999	0	0	0	0	0	0	0	0%
\$15,000 to \$24,999	0	0	0	0	0	0	0	0%
\$10,000 to \$14,999	0	0	0	0	0	0	0	0%
Under \$10,000	0	0	0	0	0	0	0	0%
Total	38	150	67	82	21	9	367	100%

Source: 2015 Stanford Annual Transportation Survey.

#### II. Household Income Category Applicable to Survey Respondents - Faculty

	Household Size						rotal All	Percent
Income Category	1	2	3	4	5	6+ Re	esponses	of Total
Extremely Low	-	-	-	-	-	-		0.0%
Very Low	-	-	-	-	-	-	-	0.0%
Low	1	-	1	0	-	-	2	0.4%
Moderate	2	5	2	3	0	-	13	3.5%
Above Moderate	35	145	64	78	21	9	353	96.1%
Total	38	150	67	82	21	9	367	100.0%

I. Number of Survey Respondents by Household Income Range and Household Size - Postdoc Scholar

			Household	1				
-	1	2	3	4	5	6+ Re	esponses	Percent
Household Income								
\$300,000 and over	0	3	1	2	0	0	6	1%
\$250,000 to \$299,999	0	0	1	1	0	2	4	1%
\$200,000 to \$249,999	0	8	1	0	1	1	11	1%
\$150,000 to \$199,999	0	32	14	8	2	0	56	8%
\$130,000 to \$149,999	0	22	8	4	1	1	36	5%
\$115,000 to \$129,999	0	19	7	6	0	1	33	4%
\$100,000 to \$114,999	4	36	10	5	0	0	55	7%
\$80,000 to \$99,999	7	43	14	6	2	1	73	10%
\$65,000 to \$79,999	15	22	8	7	1	0	53	7%
\$50,000 to \$64,999	85	102	47	31	10	6	281	38%
\$35,000 to \$49,999	35	50	21	8	3	5	122	17%
\$25,000 to \$34,999	2	0	0	0	0	0	2	0%
\$15,000 to \$24,999	0	0	1	0	0	0	1	0%
\$10,000 to \$14,999	1	0	2	1	0	0	4	1%
Under \$10,000	1	0	0	0	0	0	1	0%
Total	150	337	135	79	20	17	738	100%

Source: 2015 Stanford Annual Transportation Survey.

#### II. Household Income Category Applicable to Survey Respondents - Postdoc Scholar

		Household Size						Percent
Income Category	1	2	3	4	5	6+	Responses	of Total
Extremely Low	2	-	3	1	-	1	7	0.9%
Very Low	7	25	18	15	8	9	82	11.1%
Low	83	131	56	33	7	2	313	42.4%
Moderate	50	66	26	15	1	2	159	21.6%
Above Moderate	8	115	32	16	4	3	178	24.1%
Total	150	337	135	79	20	17	738	100.0%

I.	No. of Survey	Respondents by	/ Household Income	e and Household Size	- Casual and	<b>Temporary Workers</b>
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	Household Size						Total All	
	1	2	3	4	5	6+	Responses	Percent
Household Income								
\$300,000 and over	1	5	2	2	1	2	13	4%
\$250,000 to \$299,999	1	4	2	1	0	0	8	3%
\$200,000 to \$249,999	1	8	3	3	2	1	18	6%
\$150,000 to \$199,999	4	13	10	5	2	0	34	11%
\$130,000 to \$149,999	1	14	0	2	1	0	18	6%
\$115,000 to \$129,999	1	9	2	4	0	0	16	5%
\$100,000 to \$114,999	1	12	4	3	0	0	20	6%
\$80,000 to \$99,999	5	11	8	4	0	0	28	9%
\$65,000 to \$79,999	6	13	2	1	1	0	23	7%
\$50,000 to \$64,999	6	7	4	2	5	2	26	8%
\$35,000 to \$49,999	8	13	3	5	2	1	32	10%
\$25,000 to \$34,999	6	8	4	2	2	2	24	8%
\$15,000 to \$24,999	7	5	8	6	2	1	29	9%
\$10,000 to \$14,999	3	2	0	0	2	1	8	3%
Under \$10,000	2	7	5	0	0	0	14	5%
Total	53	131	57	40	20	10	311	100%

Source: 2015 Stanford Annual Transportation Survey.

#### II. Household Income Category Applicable to Survey Respondents - Casual Workers

_		Household Size						Percent
Income Category	1	2	3	4	5	6+	Responses	of Total
Extremely Low	10	14	15	7	6	4	57	18.2%
Very Low	9	14	5	6	5	2	41	13.3%
Low	11	16	6	4	4	0	40	12.9%
Moderate	11	23	12	9	0	-	56	18.0%
Above Moderate	13	63	19	14	6	3	117	37.7%
Total	53	131	57	40	20	10	311	100.0%

## **III. AFFORDABLE HOUSING NEXUS ANALYSIS – FACULTY AND STAFF HOUSING**

The following section provides an analysis of the linkages between the development of new faculty and staff housing on the Stanford Campus and the need for additional affordable housing. This analysis supplements the findings of the Residential Nexus Analysis conducted as part of the Countywide Nexus Study by providing nexus support for adoption of affordable housing fees that would apply to faculty and staff housing developed on the Stanford Campus.

## Faculty and Staff Housing

In its 2018 GUP application, Stanford indicated that it plans to build up to 550 housing units that can be occupied by faculty and staff (Housing, 6.13). Historically, Stanford has built both ownership units (long-term leaseholds) and rental units for its faculty and staff. For the new housing, Stanford has indicated the units are expected to be rental although Stanford would not be precluded from offering the units for sale. For purposes of the nexus analysis, KMA assumes the new units will be rental. If units had been assumed to be for-sale rather than rental, it is likely that maximum affordable housing fees supported by the nexus analysis would have been somewhat higher; therefore, the assumption that the units will be rented is the more conservative approach and consistent with Stanford's stated plans.

Stanford has indicated that rents for the new faculty and staff units will be comparable to existing Stanford faculty and staff housing units, which are offered at rents somewhat below the prevailing market rates in Palo Alto. Stanford has indicated that the units are not proposed to be income restricted and income would not be used as a basis for prioritizing tenants. Units are prioritized primarily according to category of employment at the university with the highest level of priority provided to faculty, senior fellows, and key staff.<sup>1</sup> Data on rents applicable to existing faculty and staff housing, KMA estimates households will need to earn an average of 150% of AMI to afford the rents.

### **Nexus Concept**

The underlying concept of the analysis is that newly constructed faculty and staff housing units represent new households in the County who will consume goods and services, either through purchases of goods and services or 'consumption' of government services. New consumption translates to jobs; a portion of the jobs are at lower compensation levels; low compensation jobs relate to lower income households that cannot afford market rate units in the local area and therefore need affordable housing.

<sup>&</sup>lt;sup>1</sup> Stanford University Rental Housing Programs Eligibility Criteria accessed at <u>https://fsh.stanford.edu/brochures/EligibilityRental.pdf</u>

# Methodology

The methodology used for the faculty and staff nexus analysis is the same as the Residential Nexus Analysis included as part of the Countywide Nexus Study. The affordable housing impacts documented in the analysis are for workers in new jobs providing goods and services to residents of the faculty and staff housing. These are new jobs located primarily off-campus in sectors such as retail, restaurants and education that provide goods and services to the new residents.

The nexus analysis starts with the estimated rental rate for the faculty and staff housing, and moves through a series of linkages from the estimated gross income of the household that rents the unit, the income available for expenditures on goods and services, the jobs associated with the purchases and delivery of those services, the income of the workers doings those jobs, the household income of the workers and, ultimately, the affordability level of the housing needed by the worker households.

The steps of the analysis from household income available for expenditures to jobs generated are performed using the IMPLAN model, a model widely used for the past 35 years to quantify the impacts of changes in a local economy, including employment impacts from changes in personal income. From job generation by industry, KMA used its own jobs housing nexus model to quantify the income of worker households by affordability level. The analysis quantifies impacts occurring within the County of Santa Clara. While much of the impact will occur within the County, some impacts will be experienced beyond the County's boundaries. The IMPLAN model computes the jobs generated within the County and sorts out those that occur beyond the County boundaries. In summary, the KMA nexus analysis quantifies all the job impacts occurring within the County of Santa Clara and related worker households. Job impacts, like most types of impacts, occur irrespective of political boundaries. And like other types of impact analyses, such as traffic, impacts beyond jurisdiction boundaries may be mitigated by the jurisdiction where the development creating the impact is located.

# A. Faculty/Staff Units and Household Income

This section defines the estimated size and rent levels for the new faculty and staff housing units which is then used to estimate the incomes of the households who will live in the units. Typical unit sizes and rents are based on existing faculty and staff housing owned by Stanford. Household income is estimated based on the amount necessary to afford the rents and becomes the basis for the input to the IMPLAN model. These are the starting points of the chain of linkages that connect new faculty/staff housing units to additional demand for affordable housing.

# Rental Rates for Faculty and Staff Housing

KMA researched asking rents at existing Stanford-owned faculty apartments, including Stanford West in Palo Alto and The Colonnade in Los Altos.

Stanford West is a 628-unit apartment complex with a mix of 1 and 2-bedroom units available for rent by Stanford-affiliated households. The units range from 700 square feet to almost 1,400 square feet, with rents in the \$2,400 to \$4,500 range. This translates to between \$3 and \$4 per square foot. Based on the publicly available data, the average unit is around 945 square feet with an asking rent of \$3,382, or \$3.58 per square foot for qualifying Stanford-affiliated households. A share of the (non-BMR) units at Stanford West are offered to Stanford affiliates at rents that fall within the upper end of the range affordable to Moderate Income households; however, priority for occupancy is provided to faculty, senior fellows and key staff who may earn more than 120% of AMI and so cannot be assumed to address a need for Moderate Income households.

The Colonnade is a 167-unit apartment project in Los Altos purchased by Stanford for use as faculty and staff housing. One-bedroom units range from 547 to 1,024 square feet with asking rents from \$2,391 to \$3,311 per month. Two-bedroom units range from 955 to 1,222 square feet and rent for \$3,458 to \$4,396 per month. More information on rents for these two apartment projects can be found in Table III-7 at the end of this section.

Based on the available data, KMA estimates that the new rental units will average 950 square feet and 1.7 bedrooms and rent for approximately \$3,300 per month, or \$3.47 per square foot.

Table III-1 Prototypical Faculty/Staff Housing Units						
	Faculty/Staff Housing					
Avg. Unit Size	950 SF					
Avg. No. of Bedrooms	1.70					
Average Rent	\$3,300 /mo.					
Per Square Foot	\$3.47 /SF					

# Income of Households in Faculty / Staff Housing

The next step in the analysis is to estimate the income of the households who will live in the faculty/ staff housing based on the rent level. Households living in the units will need to have sufficient income to afford the rents; therefore, their incomes will not reflect the distribution of income for Stanford Campus workers overall. KMA estimated the income required to afford rents in the faculty and staff housing units and used that income level for the analysis.

Household income for renter households is estimated based on the assumption that housing costs, including rent and utilities, represents on average 30% of gross household income. The 30% factor was selected for consistency with the California Health and Safety Code standard for
relating income to affordable rent levels.<sup>2</sup> The resulting relationship is that the annual household income is 3.3 times annual rent, or \$136,000 per year as shown in Table III-2. While it is recognized that many households do spend more than 30% of their income on rent, based on Census data for the County<sup>3</sup>, within the highest income category addressed (\$75,000 and above), around 80% of households spend less than 30% of their income on rent. Based on the estimated incomes for residents of the faculty and staff housing, data applicable to higher income households is likely a better representation than the overall average, particularly given rents available to Stanford affiliates are favorable relative to the overall housing market and priority for the units is given to key faculty and staff that may have incomes above the minimum needed to afford the rents. Since use of a figure below 30% would have produced higher maximum supported fees, application of the 30% factor provides a conservative estimate. Supporting calculations are provided in Table III-8 at the end of this section.

Table III – 2 Gross Household Income	
	Faculty/Staff Housing
Gross Household Income	\$136,000

## Income Available for Expenditures

The input into the IMPLAN model used in this analysis is the net income available for expenditures. To arrive at income available for expenditures, gross income must be adjusted for Federal and State income taxes, contributions to Social Security and Medicare, savings, and payments on household debt. Per KMA correspondence with the producers of the IMPLAN model (IMPLAN Group LLC), other taxes including sales tax, gas tax, and property tax are handled internally within the model as part of the analysis of expenditures. Payroll deduction for medical benefits and pre-tax medical expenditures are also handled internally within the model. Housing costs are addressed separately, as described below, and so are not deducted as part of this adjustment step. Table III-9 at the end of this section shows the calculation of income available for expenditures.

Income available for expenditures is estimated at approximately 66% of gross income, based on a review of data from the Internal Revenue Service and California Franchise Tax Board tax tables. Per the Internal Revenue Service, households earning between \$100,000 and \$200,000 per year who do not itemize deductions on their tax returns will pay an average of 14% of gross income for federal taxes. State taxes are estimated to average 4% of gross income based on tax rates per the California Franchise Tax Board. The employee share of FICA payroll taxes for Social Security and Medicare is 7.65% of gross income. A ceiling of \$127,200 per employee applies to the 6.2% Social Security portion of this tax rate.

<sup>&</sup>lt;sup>2</sup> Health and Safety Code Section 50052.5 defines affordable rent levels based on 30% of income.

<sup>&</sup>lt;sup>3</sup> American Community Survey Data for the County of Santa Clara, 2016 1-year sample.

Savings and repayment of household debt represent another necessary adjustment to gross income. Savings includes various IRA and 401 K type programs as well as non-retirement household savings and investments. Debt repayment includes student loans, auto loans, credit cards, and all other non-mortgage debt. Savings and repayment of debt are estimated to represent a combined 8% of gross income based on the 20-year average derived from United States Bureau of Economic Analysis data.

The percent of income available for expenditure (which is input into the IMPLAN model) is prior to deducting housing costs. The reason is for consistency with the IMPLAN model, which defines housing as an expenditure. The IMPLAN model addresses the fact that expenditures on housing do not generate employment to the degree other expenditures such as retail or restaurants do, but there is some limited maintenance and property management employment generated.

After deducting income taxes, Social Security, Medicare, savings, and repayment of debt, the estimated income available for expenditures is 66%. This factor is used to adjust from gross income to the income available for expenditures for input into the IMPLAN model. As indicated above, other forms of taxation such as property tax are handled internally within the IMPLAN model.

A final adjustment is made to account for standard operational vacancy in rental units of 5%, a level of vacancy considered average for rental units in a healthy market.

Table III- 3 Income Available for Expenditures	
	Faculty/Staff Housing
Gross Household Income	\$136,000
Percent Income available for Expenditures	66%
Spending Adjustment / Rental Vacancy	5%
Household Income Available for Expenditure <sup>(1)</sup>	
One Unit	\$85,300
550 Units [input to IMPLAN]	\$46,900,000

The estimate of household income available for expenditures is presented below:

(1) Calculated as gross household income X percent available for expenditures. Result includes the share of income spent on housing as the required input to the IMPLAN model is income after taxes but before deduction of housing costs as described above.

The estimated household spending associated with the 550 faculty and staff housing units is the input into the IMPLAN model. Table III-3 summarizes the conclusions of this section and calculates the household income for the 550 faculty and staff housing units.

## B. The IMPLAN Model

Consumer spending by residents of new housing units will create jobs, particularly in sectors such as restaurants, health care, and retail, which are closely connected to the expenditures of residents. The widely used economic analysis tool, IMPLAN (IMpact Analysis for PLANning), was used to quantify these new jobs by industry sector.

## **IMPLAN Model Description**

The IMPLAN model is an economic analysis software package now commercially available through the IMPLAN Group, LLC. IMPLAN was originally developed by the U.S. Forest Service, the Federal Emergency Management Agency, and the U.S. Department of the Interior Bureau of Land Management and has been in use since 1979 and refined over time. It has become a widely used tool for analyzing economic impacts for a broad range of applications from major construction projects to natural resource programs.

IMPLAN is based on an input-output accounting of commodity flows within an economy from producers to intermediate and final consumers. The model establishes a matrix of supply chain relationships between industries and also between households and the producers of household goods and services. Assumptions about the portion of inputs or supplies for a given industry likely to be met by local suppliers, and the portion supplied from outside the region or study area are derived internally within the model using data on the industrial structure of the region.

The output or result of the model is generated by tracking changes in purchases for final use (final demand) as they filter through the supply chain. Industries that produce goods and services for final demand or consumption must purchase inputs from other producers, which in turn, purchase goods and services. The model tracks these relationships through the economy to the point where leakages from the region stop the cycle. This allows the user to identify how a change in demand for one industry will affect a list of over 500 other industry sectors. The projected response of an economy to a change in final demand can be viewed in terms of economic output, employment, or income.

Data sets are available for each county and state, so the model can be tailored to the specific economic conditions of the region being analyzed. This analysis utilizes the data set for the County of Santa Clara. As will be discussed, much of the employment impact is in local-serving sectors, such as retail, eating and drinking establishments, and medical services. It is likely that most employment impacts will occur in nearby jurisdictions such as Palo Alto however, employment impacts will also extend throughout the county and beyond based on where jobs are located that serve residents of the Stanford Campus. In particular, a share of spending will likely occur in the adjacent cities of Menlo Park and East Palo Alto, located in San Mateo County. Although employment impacts extending to other Bay Area counties could have been considered, consistent with the conservative approach taken in the nexus analysis and the

approach utilized for purposes of the Countywide Nexus Study, only the impacts that occur within the County are included in the analysis.

## Application of the IMPLAN Model to Estimate Job Growth

The IMPLAN model was applied to link income to household expenditures to job growth. The estimated annual household spending of the residents of the 550 faculty and staff housing units is the input to the IMPLAN model. The IMPLAN model then distributes spending among various types of goods and services (industry sectors) based on data from the Consumer Expenditure Survey and the Bureau of Economic Analysis Benchmark input-output study, to estimate employment generated.

Job creation, driven by increased demand for products and services, was projected for each of the industries that will serve the new households. The employment generated by this new household spending is summarized below.

Table III - 4 Jobs Generated from Household Faculty / Staff Units	d Spending of 550
_	Faculty/Staff Housing
Annual Household Expenditures (550 Units)	\$46,900,000
Total Jobs Generated (550 Units)	282.4

Table III-11 at the end of Section III provides a detailed breakdown of the employment by industry sorted by projected employment. The Consumer Expenditure Survey published by the Bureau of Labor Statistics tracks expenditure patterns by income level. IMPLAN utilizes this data to reflect the pattern by income bracket. Estimated employment is shown for each IMPLAN industry sector representing 1% or more of total employment. The jobs that are generated are heavily retail jobs, jobs in restaurants and other eating establishments, and in services that are provided locally such as health care.

## C. The KMA Jobs Housing Nexus Model

This section presents a summary of the analysis linking the employment growth associated with the new faculty and staff housing, or the output of the IMPLAN model (see Section B), to the estimated number of lower income housing units required in each of four income categories.

The analysis uses the same methodology as the Countywide Nexus Study. Analysis inputs are all local data to the extent possible and are fully documented in the following description. The analysis uses 2017 wage levels reported by the California Employment Development

Department and 2017 income limits published by the California Department of Housing and Community Development identified in Table II-1.

# Analysis Steps

The tables at the end of Section III. present a summary of the nexus analysis steps for the faculty and staff Housing units. Following is a description of each step of the analysis.

## Step 1 – Estimate of Total New Employees

Table III-12 commences with the total number of employees associated with the new faculty and staff housing units. The employees were estimated based on household expenditures of the new residents using the IMPLAN model (see Section B).

# Step 2 – Changing Industries Adjustment and Net New Jobs

Step 2 makes an adjustment to recognize that jobs added to the economy are not 100% net new in all cases. Long term declines in employment experienced in some sectors of the economy mean that some of the new jobs are being filled by workers that have been displaced from another industry and who are presumed to already have housing locally. A 20% downward adjustment is utilized consistent with the Countywide Nexus Analysis and the academic space analysis. The 20% factor is based on the relationship between jobs lost in declining sectors of the local economy and jobs gained in growing and stable industries over the last 10 years. See the Non-Residential Nexus Analysis for additional information about how the 20% adjustment factor was derived.

Given the robust economic conditions that are present, it is possible that long term declines in employment within declining sectors of the economy have occurred to a lesser degree near the Stanford Campus than in other areas of the County or region. However, due to the regional nature of the housing and employment markets, workers displaced from a declining sector in say, Alameda County, could potentially be available to fill new jobs near the Stanford Campus. Therefore, the Changing Industries Adjustment reflects consideration of economic shifts that have occurred within a broader area and are not just focused on economic conditions in the immediate vicinity of the Stanford Campus.

## Step 3 – Adjustment from Employees to Employee Households

This step (Table III-12) converts the number of employees to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons, students, and those on public assistance. The County average of 1.77 workers per

worker household (from the U. S. Census Bureau 2011-2015 American Community Survey) is used for this step in the analysis. The number of jobs is divided by 1.77 to determine the number of worker households. The 1.77 ratio covers all workers, full and part time.

# Step 4 – Occupational Distribution of Employees

The occupational breakdown of employees is the first step to arrive at income level. The output from the IMPLAN model provides the number of employees by industry sector, shown in Table III-11. The IMPLAN output is then paired with data from the Department of Labor, Bureau of Labor Statistics May 2016 Occupational Employment Survey (OES) to estimate the occupational composition of employees for each industry sector. As shown in Table III-12, new jobs will be distributed across a variety of occupational categories. The three largest occupational categories are office and administrative support (15%), food preparation and serving (15%), and sales and related (13%). Step 4 of Table III-12 indicates the percentage and number of employee households by occupation associated with the 550 faculty/staff units.

# Step 5 – Estimates of Employee Households Meeting the Lower Income Definitions

In this step, occupations are translated to employee incomes based on recent wage and salary information for workers in the County from the California Employment Development Department (EDD). The wage and salary information summarized in Appendix A provided the income inputs to the analysis.

For each occupational category shown in Table III-12, the OES data provides a distribution of specific occupations within the category. For example, within the Food Preparation and Serving Category, there are Supervisors, Cooks, Bartenders, Waiters and Waitresses, Dishwashers, etc. In total, there are over 100 detailed occupation categories included in the analysis, as shown in the Appendix A tables. Each of these occupation categories has a different distribution of wages, which was obtained from EDD and is specific to workers in the County as of 2017.

For each detailed occupational category, the model uses the distribution of wages to calculate the percent of worker households that would fall into each income category. The calculation is performed for each possible combination of household size and number of workers in the household. For households with more than one worker, individual *employee* income data was used to calculate the household income by assuming multiple earner households are, on average, formed of individuals with similar incomes.

At the end of Step 5, the nexus model has established a matrix indicating the percentages of households that would qualify in the affordable income tiers for every detailed occupational category and every potential combination of household size and number of workers in the household.

## Step 6 – Distribution of Household Size and Number of Workers

In this step, we account for the distribution in household sizes and number of workers for County households using local data obtained from the U.S. Census. Census data is used to develop a set of percentage factors representing the distribution of household sizes and number of workers within working households. The percentage factors are specific to the County and are derived from the 2011 – 2015 American Community Survey. Application of these percentage factors accounts for the following:

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

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

## Step 7 – Estimate of Number of Households that Meet Size and Income Criteria

Step 7 is the final step to calculate the number of worker households meeting the size and income criteria for the four affordability tiers. The calculation combines the matrix of results from Step 5 on percentage of worker households that would meet the income criteria at each potential household size / no. of workers combination, with Step 6, the percentage of worker household having a given household size / number of workers combination. The result is the percent of households that fall into each affordability tier. The percentages are then multiplied by the number of households from Step 3 to arrive at number of households in each affordability tier. Table III-13A at the end of Section III shows the result after completing Steps 5, 6, and 7 for the Extremely Low-Income Tier. Tables III-13B to D show results for the Very Low, Low, and Moderate-Income tiers.

## **Summary Findings**

Table III-5 summarized the total demand for affordable housing units associated with 550 new faculty/staff housing units. The table presents the number of households generated in each affordability category and the total number over 120% of Area Median Income. Table III-14 at the end of this section provides results for each one (1) unit of faculty and staff housing.

Table III - 5 New Worker Households 550 Faculty/Staff Units	
Extremely Low (0%-30% AMI)	21.5
Very Low (30%-50% AMI)	34.3
Low (50%-80% AMI)	26.4
Moderate (80%-120% AMI)	22.6
Total, Less than 120% AMI	104.7
Greater than 120% AMI	22.9
Total, New Households	127.6

The 550 faculty/staff housing units are estimated to create a demand for an additional 105 new affordable housing units (up to 120% AMI) for workers in services such as retail, restaurants and education. Housing demand for new worker households earning less than 120% of AMI is distributed across the lower income tiers with the greatest number of households in the Very Low tier. The finding that the jobs associated with consumer spending tend to be low-paying jobs where the workers will require housing affordable at the lower income levels is not surprising. As noted above, direct consumer spending results in employment that is concentrated in lower paid occupations including food preparation, administrative, and retail sales.

## D. Mitigation Cost

This section takes the conclusions of the previous section on the number of households in the lower income categories associated with the market rate units and identifies the total cost of assistance required to make housing affordable. This section puts a cost on the units for each income level to produce the "total nexus cost."

As with the academic space analysis, mitigation costs are based on an analysis of the affordability gap or net subsidy required to make the unit affordable to households in each of the four categories of Area Median Income: Extremely Low, Very Low, Low, and Moderate. Affordability gaps used for purposes of the faculty and staff housing analysis are the same as those used in the academic space analysis. See Section IV for discussion and calculations used to determine the affordability gaps.

Table III-6 summarizes the analysis of mitigation costs. Affordability gaps are drawn from Section IV. The total nexus cost is calculated by multiplying the number of affordable units needed by the affordability gap and dividing by the number of faculty and staff units to calculate the mitigation cost per unit. The nexus cost per square foot is then computed by dividing the per unit nexus cost by the average square footage size of the units. The resulting maximum affordable housing fee applicable to the faculty and staff housing is \$65,600 per unit or \$69.10 per net square foot. These maximum fee levels are technical analysis findings not policy recommendations.

Table III – 6 Total Nexus Cost Per Faculty/	Staff Housing Unit	:		
	Α.	В.	C.	D.
	Affordable Units			
	Needed / 550		Total Nexus	Total Nexus Cost /
	Faculty and	Affordability	Cost / Maximum	Maximum Fee Per
	Staff Units	Gap	Fee Per Unit	Square Foot *
				= C. / 950 SF
			=A. X B / 550	avg unit size
Extremely Low (0%-30% AMI)	21.5	\$402,000	\$15,700	\$16.50
Very Low (30%-50% AMI)	34.3	\$321,000	\$20,000	\$21.10
Low (50%-80% AMI)	26.4	\$281,000	\$13,500	\$14.20
Moderate (80%-120% AMI)	22.6	\$399,000	\$16,400	\$17.30
Total	104.7		\$65,600	\$69.10

\*Per net square foot excluding parking, common areas, and corridors exterior to units.

## TABLE III-7 ASKING RENTS AT STANFORD OWNED APARTMENTS AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

#### Asking Rents Available to Stanford Affiliates

#### Stanford West Apartments, Palo Alto

	<u># of Units</u>	BR	BA	<u>SF</u>	Starting Rent	<u>\$/SF</u>
A1	29	1	1	698	\$2,438	\$3.49
A1	29	1	1	734	\$2,412	\$3.29
A1	29	1	1	725	\$2,529	\$3.49
A2	4	1	1	699	\$2,535	\$3.63
A3	29	1	1	714	\$2,526	\$3.54
A3	29	1	1	756	\$2,641	\$3.49
A4	58	1	1	766	\$2,665	\$3.48
A5	8	1	1	807	\$2,751	\$3.41
A6	58	1	1	877	\$2,707	\$3.09
B1	29	2	2	952	\$3,900	\$4.10
B1	29	2	2	991	\$3,903	\$3.94
B2	38	2	2	994	\$3,914	\$3.94
B2	39	2	2	995	\$3,804	\$3.82
B2	39	2	2	995	\$3,804	\$3.82
B3	6	2	2	1,012	\$4,174	\$4.12
B3	6	2	2	1,013	\$3,987	\$3.94
B4	53	2	1.5	1,066	\$3,950	\$3.71
B4	54	2	1.5	1,105	\$3,919	\$3.55
C1 & C3	33	3	2	1,363	\$4,466	\$3.28
C2	<u>29</u>	<u>3</u>	<u>2</u>	<u>1,333</u>	<u>\$4,380</u>	<u>\$3.29</u>
Average	628	1.7	1.5	945	\$3,382	\$3.58

Source: Stanford West website. https://stanfordwest.stanford.edu/prospective-residents/living-here/floor-plans

#### The Colonnade, Los Altos

One Bedrooms	547 - 1024 sf \$2,391 - \$3,311 \$3.23 - \$4.37
Two Bedrooms	955 - 1,222 sf \$3,458 - \$4,396 \$3.60-\$3.62

Source: Colonnade website: http://www.leaselosaltos.com/pricing/

## TABLE III-8 FACULTY/STAFF HOUSING RENT TO INCOME RATIO AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

Faculty/Staff Housing Market Rent Unit Size 950 SF <sup>1</sup> \$3.300 1 Monthly Utilities<sup>2</sup> \$105 Monthly housing cost \$3,405 Annual housing cost \$40.861 30% <sup>3</sup> % of Income Spent on Rent **Annual Household Income Required** \$136,000 Annual Rent to Income Ratio 3.3

#### Notes

(1) Estimated based on unit sizes and rents for existing faculty and staff housing.

(2) Monthly utilities include direct-billed utilities and landlord reimbursements estimated based on County Housing Authority utility allowance schedule.

(3) While landlords may permit rental payments to represent a slightly higher share of total income, 30% is used based on the relationship established in the California Health and Safety Code and used throughout housing policy to relate income to affordable rental housing costs.

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# TABLE III-9 INCOME AVAILABLE FOR EXPENDITURES<sup>1</sup> AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

	Faculty/Staff Housing
Gross Income	100%
Less:	
Federal Income Taxes <sup>2</sup>	14.0%
State Income Taxes <sup>3</sup>	4%
FICA Tax Rate <sup>4</sup>	7.65%
Savings & other deductions <sup>5</sup>	8%
Percent of Income Available	66%
for Expenditures <sup>6</sup> [Input to IMPLAN model]	

Notes:

- <sup>1</sup> Gross income after deduction of taxes and savings. Income available for expenditures is the input to the IMPLAN model which is used to estimate the resulting employment impacts. Housing costs are not deducted as part of this adjustment step because they are addressed separately as expenditures within the IMPLAN model.
- <sup>2</sup> Reflects average tax rate (as opposed to marginal) based on U.S. Internal Revenue Services, Tax Statistics, Tables 1.1 and 2.1 for 2014. Renter households are assumed to take the standard deduction. Tax rates reflect average for income range.
- <sup>3</sup> Average tax rate estimated by KMA based on marginal rates per the California Franchise Tax Board and ratios of taxable income to gross income estimated based on U.S. Internal Revenue Service data.
- <sup>4</sup> For Social Security and Medicare. Social Security taxes estimated based upon the current ceiling on applicability of Social Security taxes of \$127,200 (ceiling applies per earner not per household) and the average number of earners per household.
- <sup>5</sup> Household savings including retirement accounts like 401k / IRA and other deductions such as interest costs on credit cards, auto loans, etc, necessary to determine the amount of income available for expenditures. The 8% rate used in the analysis is based on the average over the past 20 years computed from U.S. Bureau of Economic Analysis data, specifically the National Income and Product Accounts, Table 2.1 "Personal Income and Its Disposition."
- <sup>6</sup> Deductions from gross income to arrive at the income available for expenditures are consistent with the way the IMPLAN model and National Income and Product Accounts (NIPA) defines income available for personal consumption expenditures. Income taxes, contributions to Social Security and Medicare, and savings are deducted; however, property taxes and sales taxes are not. Housing costs are not deducted as part of the adjustment because they are addressed separately as expenditures within the IMPLAN model.

## TABLE III-10 NEW MARKET RATE RESIDENTIAL HOUSEHOLD SUMMARY AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

		Per Unit Per	Sq.Ft.	Total for 550 Units
FACULTY/STAFF HOUSING Units Building Sg.Ft.		950		<b>550 Units</b> 522,500
Rent Monthly Monthly with Utilities Annual with Utilities		\$3,300 \$3.4 \$3,405 \$40,861	17 /SF	\$1,815,000 \$22,474,000
Rent to Income Ratio		3.3		3.3
Gross Household Income Income Available for Expenditure <sup>1</sup> Less: Vacancy <sup>2</sup> Adjusted Expenditures	66% of gross 5% vacancy	\$136,000 \$89,800 <u>(\$4,500)</u> \$85,300		\$74,800,000 \$49,370,000 <u>(\$2,470,000)</u> <b>\$46,900,000</b>

Notes:

(1) Represents net income available for expenditures after income tax, payroll taxes, and savings. See Table III-9 for derivation.(2) Allowance to account for standard operational vacancy.

Source: See Table III-8 and III-9.



## TABLE III-11 IMPLAN MODEL OUTPUT EMPLOYMENT GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

#### Total for 550 Faculty / Staff Units

	Total	% of Jobs
Household Expenditures	\$46,900,000	
(550 Faculty / Staff Units)		
Jobs Generated by Industry <sup>1</sup>		
Full-service restaurants	17.0	6%
Limited-service restaurants	14.5	5%
All other food and drinking places	<u>9.3</u>	<u>3%</u>
Subtotal Restaurant	40.7	14%
Retail - Food and beverage stores	9.5	3%
Retail - General merchandise stores	8.2	3%
Retail - Clothing and clothing accessories stores	5.1	2%
Retail - Miscellaneous store retailers	4.1	1%
Retail - Health and personal care stores	3.8	1%
Retail - Motor vehicle and parts dealers	3.2	1%
Retail - Building material and garden stores	3.1	1%
Subtotal Retail and Service	37.1	13%
Hospitals	15.3	5%
Offices of physicians	8.5	3%
Nursing and community care facilities	5.4	2%
Offices of other health practitioners	4.5	2%
Offices of dentists	3.8	1%
Home health care services	34	1%
Subtotal Healthcare	41.0	15%
Other educational services	53	2%
Colleges universities and professional schools	5.0	2%
Elementary and secondary schools	4.2	1%
Subtotal Education	<u>4.2</u> 14.8	<u>1%</u> 5%
Individual and family convises	12.0	E0/
Real estate	11.6	3%
Real estate	7.6	4 70
Other financial investment activities	7.0	3%
Wholesale trade	0.9	270
Poligious organizations	0.4	270
Services to buildings	0.0	270
Automative repair and maintenance, execut ear weekee	5.5	270
Automotive repair and maintenance, except car wasnes	4.7	2% 10/
Child day ages agertians	4.2	1%
Other personal services	3.1 3.7	1 70
Curici personal services	J.1 2 1	170
Funus, musis, and only initialicial vehicles	ວ. I ງ ໑	1%
All Other	∠.o 69.4	1% 25%
Total Number of Jobs Generated	282.4	100%

<sup>1</sup> Estimated employment generated by expenditures of households within 550 Faculty / Staff units for Industries representing more than 1% of total employment. Employment estimates are based on the IMPLAN Group's economic model, IMPLAN, for Santa Clara County (uses 2015 IMPLAN data set, the most recent available as of October 2017). Includes both full- and part-time jobs.

### TABLE III-12 NET NEW HOUSEHOLDS AND OCCUPATION DISTRIBUTION EMPLOYEE HOUSEHOLDS GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

	Faculty/Staff Housing
Step 1 - Employees <sup>1</sup>	282.4
Step 2 - Adjustment for Changing Industries (20%) (2)	225.9
Step 3 - Adjustment for Number of Households (1.77) (3)	127.6
Step 4 - Occupation Distribution <sup>4</sup>	
Management Occupations	4.4%
Business and Financial Operations	4.7%
Computer and Mathematical	1.3%
Architecture and Engineering	0.3%
Life, Physical, and Social Science	0.3%
Community and Social Services	2.5%
Legal	0.5%
Education, Training, and Library	4.2%
Arts. Design. Entertainment. Sports. and Media	1.4%
Healthcare Practitioners and Technical	8.1%
Healthcare Support	4.5%
Protective Service	1.1%
Food Preparation and Serving Related	15.1%
Building and Grounds Cleaning and Maint.	5.4%
Personal Care and Service	7.4%
Sales and Related	13.0%
Office and Administrative Support	15.3%
Farming, Fishing, and Forestry	0.1%
Construction and Extraction	1.1%
Installation, Maintenance, and Repair	3.6%
Production	1.4%
Transportation and Material Moving	4.5%
Totals	100.0%
Management Occupations	5.6
Business and Financial Operations	6.0
Computer and Mathematical	1.6
Architecture and Engineering	0.4
Life, Physical, and Social Science	0.4
Community and Social Services	3.2
Legal	0.6
Education, Training, and Library	5.3
Arts, Design, Entertainment, Sports, and Media	1.8
Healthcare Practitioners and Technical	10.3
Healthcare Support	5.7
Protective Service	1.4
Food Preparation and Serving Related	19.2
Building and Grounds Cleaning and Maint.	6.9
Personal Care and Service	9.5
Sales and Related	16.6
Office and Administrative Support	19.5
Farming, Fishing, and Forestry	0.1
Construction and Extraction	1.3
Installation, Maintenance, and Repair	4.6
Production	1.8
Transportation and Material Moving	<u>5.7</u>
Totals	127.6

#### Notes:

Estimated employment generated by expenditures of

households within 550 faculty / staff units from Table III-11.

<sup>2</sup> The 20% adjustment is based upon job losses in declining sectors of the local economy over the past 10 years. "Downsized" workers from declining sectors are assumed to fill a portion of new jobs in sectors serving residents. 20% adjustment calculated as 54,700 jobs lost in declining sectors divided by 267,700 jobs gained in growing and stable sectors = 20%.

<sup>3</sup> Adjustment from number of workers to households using county-wide average of 1.77 workers per worker household derived from the U.S. Census American Community Survey 2011 to 2015.

<sup>4</sup> See Appendix A Tables 1 - 2 for additional information on Major Occupation Categories.

## TABLE III-13A EXTREMELY LOW-INCOME (ELI) EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

#### Total for 550 Faculty / Staff Units

Faculty/Staff
Housing

### Step 5 & 6 - Extremely Low Income Households (under 30% AMI) within Major Occupation Categories<sup>2</sup>

Management	0.01
Business and Financial Operations	0.00
Computer and Mathematical	-
Architecture and Engineering	-
Life, Physical and Social Science	-
Community and Social Services	0.13
Legal	-
Education Training and Library	0.37
Arts, Design, Entertainment, Sports, & Media	-
Healthcare Practitioners and Technical	0.04
Healthcare Support	0.75
Protective Service	-
Food Preparation and Serving Related	6.19
Building Grounds and Maintenance	1.65
Personal Care and Service	2.86
Sales and Related	4.38
Office and Admin	1.61
Farm, Fishing, and Forestry	-
Construction and Extraction	-
Installation Maintenance and Repair	0.12
Production	-
Transportation and Material Moving	1.14
– ELI Households - Major Occupations	19.25
ELI Households <sup>1</sup> - all other occupations	2.27
Total ELI Households <sup>1</sup>	21.52

(1) Includes households earning from zero through 30% of Santa Clara County Area Median Income.

## TABLE III-13B VERY LOW-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

Total for 550 Faculty / Staff Units

	Housing			
Step 5 & 6 - Very Low Income Households (30%-50% AMI) within Major Occupation Categories <sup>2</sup>				
Management	0.13			
Business and Financial Operations	0.12			
Computer and Mathematical	-			
Architecture and Engineering	-			
Life, Physical and Social Science	-			
Community and Social Services	0.69			
Legal	-			
Education Training and Library	1.31			
Arts, Design, Entertainment, Sports, & Media	-			
Healthcare Practitioners and Technical	0.21			
Healthcare Support	1.86			
Protective Service	-			
Food Preparation and Serving Related	6.90			
Building Grounds and Maintenance	2.51			
Personal Care and Service	3.42			
Sales and Related	5.52			
Office and Admin	5.15			
Farm, Fishing, and Forestry	-			
Construction and Extraction	-			
Installation Maintenance and Repair	0.86			
Production	-			
Transportation and Material Moving	1.98			
– Very Low Households - Major Occupations	30.66			
Very Low Households <sup>1</sup> - all other occupations	3.62			
– Total Very Low Inc. Households <sup>1</sup>	34.28			

Faculty/Staff

(1) Includes households earning from 30% through 50% of Santa Clara County Area Median Income.

## TABLE III-13C LOW-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

#### Total for 550 Faculty / Staff Units

	Faculty/Staff Housing	
Step 5 & 6 - Low Income Households (50%-80	% AMI) within Major Occu	pation Categories <sup>2</sup>
Management	0.36	
Business and Financial Operations	0.58	
Computer and Mathematical	-	
Architecture and Engineering	-	
Life, Physical and Social Science	-	
Community and Social Services	0.76	
Legal	-	
Education Training and Library	1.25	
Arts, Design, Entertainment, Sports, & Media	-	
Healthcare Practitioners and Technical	0.61	
Healthcare Support	1.45	
Protective Service	-	
Food Preparation and Serving Related	4.18	
Building Grounds and Maintenance	1.47	
Personal Care and Service	1.92	
Sales and Related	3.49	
Office and Admin	5.06	
Farm, Fishing, and Forestry	-	
Construction and Extraction	-	
Installation Maintenance and Repair	1.08	
Production	-	
Transportation and Material Moving	1.37	
Low Households - Major Occupations	23.57	
Low Households <sup>1</sup> - all other occupations	2.78	
- Total Low Inc. Households <sup>1</sup>	26.36	

(1) Includes households earning from 50% through 80% of Santa Clara County Area Median Income.

## TABLE III-13D MODERATE-INCOME EMPLOYEE HOUSEHOLDS<sup>1</sup> GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

Total for 550 Faculty / Staff Units

Faculty/Staff	
Housing	

#### Step 5 & 6 - Moderate Income Households (80%-120% AMI) within Major Occupation Categories<sup>2</sup>

Management	0.92
Business and Financial Operations	1.36
Computer and Mathematical	-
Architecture and Engineering	-
Life, Physical and Social Science	-
Community and Social Services	0.94
Legal	-
Education Training and Library	1.42
Arts, Design, Entertainment, Sports, & Media	-
Healthcare Practitioners and Technical	2.06
Healthcare Support	1.24
Protective Service	-
Food Preparation and Serving Related	1.24
Building Grounds and Maintenance	0.96
Personal Care and Service	0.87
Sales and Related	1.92
Office and Admin	4.91
Farm, Fishing, and Forestry	-
Construction and Extraction	-
Installation Maintenance and Repair	1.41
Production	-
Transportation and Material Moving	0.92
- Moderate Households - Major Occupations	20.18
Moderate Households <sup>1</sup> - all other occupations	2.38
- Total Moderate Inc. Households <sup>1</sup>	22.56

(1) Includes households earning from 80% through 120% of Santa Clara County Area Median Income.

### TABLE III-14 IMPACT ANALYSIS SUMMARY EMPLOYEE HOUSEHOLDS GENERATED AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

### RESIDENTIAL UNIT DEMAND IMPACTS - TOTAL FOR 550 FACULTY / STAFF UNITS

Number of New Households <sup>1</sup>	Faculty/Staff Housing
Under 30% AMI	21.5
30% to 50% AMI	34.3
50% to 80% AMI	26.4
80% to 120% AMI	22.6
Subtotal through 120% AMI	104.7
Over 120% AMI	22.9
Total Employee Households	127.6

### **RESIDENTIAL UNIT DEMAND IMPACTS - PER EACH (1) UNIT**

Number of New Households <sup>1</sup>	Faculty/Staff Housing
Under 30% AMI	0.04
30% to 50% AMI	0.06
50% to 80% AMI	0.05
80% to 120% AMI	0.04
Subtotal through 120% AMI	0.19
Over 120% AMI	0.04
Total Employee Households	0.23

#### <u>Notes</u>

<sup>1</sup> Households of retail, education, healthcare and other workers that serve residents of new units.

AMI = Area Median Income

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## **IV. AFFORDABILITY GAP ANALYSIS**

A key component of an impact analysis is the mitigation cost. In an affordable housing nexus analysis, the mitigation cost is the 'affordability gap' - the financial gap between what lower income households can afford to pay and the cost of producing new housing. Affordability gaps are calculated for each of the four categories of Area Median Income (AMI): Extremely Low (under 30% of median), Very Low (30% to 50%), Low (50% to 80%), and Moderate (80% to 120%).

# Location of Affordable Units to be Assisted

The existing GUP condition requires that Stanford University develop or provide funding for the development of affordable housing within a 6-mile radius of the boundary of the Stanford Campus. The County anticipates that affordable housing fees collected from Stanford would continue to be primarily used to support creation of affordable housing within a similar commute radius to Stanford Campus. Higher land costs within a 6-mile radius of the Stanford Campus results in higher affordable unit development costs than if units were to be built in lower land cost locations like Morgan Hill or Gilroy. This assumption results in higher maximum supported fee levels than if the County's policy were to provide units in lower cost locations requiring workers to commute longer distances. The approach is consistent with the existing GUP condition and the County's track record of using affordable housing funds collected from Stanford to assist in the creation of affordable units within a six-mile radius of the Campus.

## **County Assisted Affordable Unit Prototypes**

For estimating the affordability gap, there is a need to match a household of each income level with a unit type and size according to governmental regulations and County practices and policies. The analysis assumes that the County will assist Moderate-Income households earning between 80% and 120% of Area Median Income with ownership units. The prototype affordable unit should reflect a modest unit consistent with what the County is likely to assist and appropriate for housing the average Moderate-Income worker household. The typical project assumed is a two-bedroom condominium unit at approximately 30 units per acre (averaging 1,100 square feet per unit).

For Low-, Very Low-, and Extremely Low-Income households, it is assumed that the County will assist in the development of multi-family rental units at a density of 40-60 units per acre. This represents the approximate density range of affordable housing projects the County would likely subsidize.

## Land Values

KMA reviewed residential multi-family land sales in Palo Alto, Mountain View and other neighboring communities to establish an estimate of the cost of land within a 6-mile radius of the Stanford Campus. There were a limited number of residential land sales. Land values ranged

widely from approximately \$50,000 to \$200,000 per unit and averaged approximately \$160 per square foot of land.

KMA also reviewed indicated land values for two affordable projects near the Stanford Campus built on donated sites, one in Palo Alto and one in Menlo Park. For the recently constructed Mayfield Place apartment project which is located on a Stanford-owned site, the land value was estimated for financing purposes at \$264,000 per unit or \$189 per square foot of land area (the project is built at 40 units to the acre)<sup>4</sup>. The Sequoia Belle Haven project on Willow Road in Menlo Park was built on a donated site with an estimated value of \$67,000 per unit or \$62 per square foot of land.

Based on the available data, KMA estimated the land value at \$175 per square foot. For the apartment units, this translates to \$152,000 per unit and for the condominiums, \$254,000 per unit, based on their densities.

## **Development Costs**

KMA prepared an estimate of the total development cost for the affordable housing prototypes described above (inclusive of land acquisition costs, direct construction costs, indirect costs of development, and financing) based on a review of development pro formas for recent affordable projects, recent residential land sale comps, and the affordability gap analysis conducted for the Countywide Nexus Study. Development cost estimates were informed by review of pro forma information for seven recent and proposed multi-family affordable housing projects listed below:

- Mayfield Place, Palo Alto
- Villas on the Park, San Jose
- Quetzal Gardens, San Jose
- Catalonia, San Jose

- Sequoia Belle Haven, Menlo Park
- Met South, San Jose
- Second Street Studios, San Jose
- Donner Lofts, San Jose

Direct construction costs from these projects were adjusted to account for such factors as time, unit size, housing type, and project density to appropriately reflect the multi-family prototypes assumed in the analysis. Other costs, such as land acquisition costs, are more site and area specific than direct construction costs and therefore the inputs for those costs were derived from other sources, as discussed above. Tables IV-4 and 6 provide further details.

Table IV-1			
Total Development Costs			
	Density	Unit Size	Development Cost
Affordable Rental Units	50 dua	800 sf	\$606,000
Affordable Ownership Units	30 dua	1,100 sf	\$791,000

AMI = Area Median Income

<sup>&</sup>lt;sup>4</sup> Per California Tax Credit Allocation Committee Staff Report for the project. <u>http://www.treasurer.ca.gov/ctcac/meeting/staff/2014/20141210/909.pdf</u>

## **Unit Values**

For affordable ownership units, unit values are based on an estimate of the restricted affordable purchase price for a qualifying Moderate Income household. Details of the calculations are presented in Table IV-5.

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

The unit values are summarized below. Details for these calculations are presented in Tables IV-5 and 6.

Table IV-2					
Unit Values for Affordable Units					
Income Group	Unit Tenure / Type	Unit Value			
Under 30% AMI	Rental	\$204,000			
30% to 50% AMI	Rental	\$285,000			
50% to 80% AMI	Rental	\$325,000			
80% to 120% AMI	Ownership	\$392,000			

## Affordability Gap

The affordability gap is the difference between the cost of developing the affordable units and the unit value based on the restricted affordable rent or sales price.

The resulting affordability gaps are as follows:

Table IV-3 Affordability Gap Calculation			
	Unit Value	Development Cost	Affordability Gap
Affordable Rental Units			
Extremely Low (Under 30% AMI)	\$204.000	\$606,000	(\$402,000)
Very Low (30% to 50% AMI)	\$285.000	\$606,000	(\$321,000)
Low (50% to 80% AMI)	\$325,000	\$606,000	(\$281,000)
Affordable Ownership Units			
Moderate (80% to 120% AMI)	\$392,000	\$791,000	(\$399,000)
AMI = Area Median Income			•

I.	Affordable Prototype	
	Tenure	For-Sale
	Density	30 du/acre
	Unit Size	1,100 SF
	Bedrooms	2.0-Bedrooms
	Construction Type	Condominiums (Type V)
II.	Development Costs	Per Unit
	Land Acquisition	\$254,000
	Directs	\$385,000 <sup>[1]</sup>
	Indirects	\$135,000
	Financing	\$17,000
	Total Costs	\$791,000
III.	Affordable Sales Price	Per Unit
	Household Size	3.0 person HH
	110% of Median Income <sup>[2]</sup>	\$112,145
	Maximum Affordable Sales Price	\$392,000 <sup>[3]</sup>
IV.	Affordability Gap	Per Unit
	Affordable Sales Price	\$392,000
	(Less) Development Costs	(\$791,000)
	Affordability Gap - Moderate Income	(\$399,000)

<sup>[1]</sup> Construction costs include prevailing wages.

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

<sup>[3]</sup> See Table IV-6 for Moderate Income home price estimate.



			Extremely Low	Very Low	Low Income
I.	Affordable Prototype				
	Tenure Average Unit Size Density			Rental 800 square feet 50 dua	
II.	Development Costs <sup>[1]</sup>		Per Unit	Per Unit	Per Unit
	Land Acquisition Directs Indirects Financing Total Development Costs		\$152,000 \$320,000 \$112,000 <u>\$22,000</u> \$606,000	\$152,000 \$320,000 \$112,000 \$22,000 \$606,000	\$152,000 \$320,000 \$112,000 <u>\$22,000</u> \$606,000
III.	Supported Financing		Per Unit	Per Unit	Per Unit
	<u>Affordable Rents</u> Average Number of Bedrooms Maximum TCAC Rent <sup>[2]</sup> (Less) Utility Allowance <sup>[3]</sup> Maximum Monthly Rent		2.0 Bedrooms \$806 (\$112) \$694	2.0 Bedrooms \$1,343 (\$112) \$1,231	2.0 Bedrooms \$1,612 (\$112) \$1,500
	Net Operating Income (NOI) Gross Potential Income Monthly Annual Other Income (Less) Vacancy Effective Gross Income (EGI) (Less) Operating Expenses (Less) Property Taxes <sup>[4]</sup> Net Operating Income (NOI)	5.0%	Per Unit \$694 \$8,328 \$250 (\$429) \$8,149 (\$7,000) \$0 \$1,149	Per Unit \$1,231 \$14,772 \$250 (\$751) \$14,271 (\$7,000) \$0 \$7,271	Per Unit \$1,500 \$18,000 \$250 (\$913) \$17,338 (\$7,000) \$0 \$10,338
	<u>Permanent Financing</u> Permanent Loan (tax exempt) Deferred Developer Fee 4% Tax Credit Equity Total Sources	5.2%	\$15,000 \$5,000 <u>\$184,000</u> \$204,000	\$96,000 \$5,000 <u>\$184,000</u> \$285,000	\$136,000 \$5,000 \$184,000 \$325,000
IV.	Affordability Gap		Per Unit	Per Unit	Per Unit
	Supported Permanent Financing		\$204,000	\$285,000	\$325,000
	(Less) Total Development Costs		(\$606,000)	(\$606,000)	(\$606,000)
	Affordability Gap		(\$402,000)	(\$321,000)	(\$281,000)

<sup>[1]</sup> Development costs estimated by KMA based on affordable project pro formas in Santa Clara County (includes prevailing wages) and residential land sale comps.

<sup>[2]</sup> Maximum rents per Tax Credit Allocation Committee (TCAC) for projects utilizing Low Income Housing Tax Credits.

<sup>[3]</sup> Utility allowances from Santa Clara County Housing Authority (2017).

<sup>[4]</sup> Assumes tax exemption for non-profit general partner.

Unit Size Household Size	1-Bedroom Unit 2-person HH	2-Bedroom Unit <u>3-person HH</u>	3-Bedroom Unit 4-person HH
100% AMI Santa Clara County 2017	\$90,650	\$101,950	\$113,300
Annual Income @ 110%	\$99,715	\$112,145	\$124,630
% for Housing Costs	35%	35%	35%
Available for Housing Costs	\$34,900	\$39,251	\$43,621
(Less) Property Taxes	(\$4,188)	(\$4,692)	(\$5,220)
(Less) HOA	(\$2,580)	(\$2,700)	(\$2,820)
(Less) Utilities	(\$1,068)	(\$1,344)	(\$1,716)
(Less) Insurance	(\$500)	(\$700)	(\$800)
(Less) Mortgage Insurance	(\$4,482)	(\$5,022)	(\$5,576)
Income Available for Mortgage	\$22,082	\$24,793	\$27,489
Mortgage Amount	\$331,000	\$372,000	\$413,000
Down Payment (homebuyer cash)	\$17,000	\$20,000	\$22,000
Supported Home Price	\$348,000	\$392,000	\$435,000
Key Assumptions			
- Mortgage Interest Rate <sup>(1)</sup>	5.30%	5.30%	5.30%
- Down Payment <sup>(2)</sup>	5.00%	5.00%	5.00%
- Property Taxes (% of sales price) <sup>(3)</sup>	1.20%	1.20%	1.20%
- HOA (per month) <sup>(4)</sup>	\$215	\$225	\$235
- Utilities (per month) <sup>(5)</sup>	\$89	\$112	\$143
- Mortgage Insurance (% of loan amount)	1.35%	1.35%	1.35%

<sup>(1)</sup> Mortgage interest rate based on 15-year Freddie Mac average; assumes 30-year fixed rate mortgage.

<sup>(2)</sup> Down payment amount is an estimate for Moderate Income homebuyers.

<sup>(3)</sup> Property tax rate is an estimated average for new projects.

<sup>(4)</sup> Homeowners Association (HOA) dues is an estimate for a new project.

<sup>(5)</sup> Utility allowances from Santa Clara County Housing Authority (2017).

APPENDIX A: WORKER OCCUPATIONS AND COMPENSATION LEVELS FACULTY AND STAFF HOUSING ANALYSIS

## RESIDENTIAL NEXUS APPENDIX A TABLE 1 WORKER OCCUPATION DISTRIBUTION, 2016 SERVICES TO HOUSEHOLDS EARNING \$100 - \$150K, RESIDENT SERVICES AFFORDABLE HOUSING NEXUS ANALYSIS - FACULTY/STAFF HOUSING COUNTY OF SANTA CLARA, CA

	Worker Occupation Distribution <sup>1</sup>
Major Occupations (2% or more)	Services to Households Earning \$100,000 to \$150,000
Management Occupations	4.2%
Business and Financial Operations Occupations	4.5%
Community and Social Service Occupations	2.4%
Education, Training, and Library Occupations	4.0%
Healthcare Practitioners and Technical Occupations	7.8%
Healthcare Support Occupations	4.3%
Food Preparation and Serving Related Occupations	14.6%
Building and Grounds Cleaning and Maintenance Occupation	5.2%
Personal Care and Service Occupations	7.2%
Sales and Related Occupations	12.6%
Office and Administrative Support Occupations	14.8%
Installation, Maintenance, and Repair Occupations	3.5%
Transportation and Material Moving Occupations	4.3%
All Other Worker Occupations - Services to Households Earning \$100,000 to \$150,000	<u>10.6%</u>
INDUSTRY TOTAL	100.0%

<sup>1</sup> Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.

		% of Total	% of Total
	2017 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 1 of 4			
Management Occupations			
General and Operations Managers	\$164,400	34.1%	1.4%
Sales Managers	\$161,700	4.1%	0.2%
Administrative Services Managers	\$131,000	3.4%	0.1%
Financial Managers	\$180,600	8.9%	0.4%
Food Service Managers	\$56,600	5.2%	0.2%
Medical and Health Services Managers	\$162,600	6.6%	0.3%
Property, Real Estate, and Community Association Managers	\$82,300	9.2%	0.4%
Social and Community Service Managers	\$79,300	3.9%	0.2%
Managers, All Other	\$169,800	3.2%	0.1%
All other Management Occupations (Avg. All Categories)	<u>\$143,800</u>	<u>21.3%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$143,800	100.0%	4.2%
Business and Financial Operations Occupations			
Human Resources Specialists	\$90,000	5.0%	0.2%
Management Analysts	\$125,400	5.0%	0.2%
Training and Development Specialists	\$88,200	3.4%	0.2%
Market Research Analysts and Marketing Specialists	\$113,700	6.5%	0.3%
Business Operations Specialists, All Other	\$102,600	8.9%	0.4%
Accountants and Auditors	\$103,100	18.7%	0.8%
Financial Analysts	\$122,100	8.9%	0.4%
Personal Financial Advisors	\$170,700	12.4%	0.6%
Loan Officers	\$103,600	4.6%	0.2%
All Other Business and Financial Operations Occupations (Avg. All Categories)	<u>\$117,700</u>	<u>26.7%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$117,700	100.0%	4.5%
Community and Social Service Occupations			
Substance Abuse and Behavioral Disorder Counselors	\$40,000	3.9%	0.1%
Educational, Guidance, School, and Vocational Counselors	\$76,500	5.5%	0.1%
Mental Health Counselors	\$43,400	7.5%	0.2%
Rehabilitation Counselors	\$42,600	4.5%	0.1%
Child, Family, and School Social Workers	\$51,100	12.0%	0.3%
Healthcare Social Workers	\$84,500	6.8%	0.2%
Mental Health and Substance Abuse Social Workers	\$55,200	5.0%	0.1%
Social and Human Service Assistants	\$45,500	18.5%	0.4%
Community and Social Service Specialists, All Other	\$43,100	3.6%	0.1%
Clergy	\$61,000	12.2%	0.3%
Directors, Religious Activities and Education	\$48,300	7.4%	0.2%
All Other Community and Social Service Occupations (Avg. All Categories)	<u>\$53,600</u>	<u>13.0%</u>	<u>0.3%</u>
Weighted Mean Annual Wage	\$53,600	100.0%	2.4%

		% of Total	% of Total
	2017 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 2 of 4			
Education, Training, and Library Occupations			
Vocational Education Teachers, Postsecondary	\$68,900	3.8%	0.2%
Preschool Teachers, Except Special Education	\$40,100	14.3%	0.6%
Elementary School Teachers, Except Special Education	\$75,400	6.9%	0.3%
Secondary School Teachers, Except Special and Career/Technical Education	\$80,600	4.5%	0.2%
Self-Enrichment Education Teachers	\$52,800	11.9%	0.5%
Teachers and Instructors, All Other, Except Substitute Teachers	\$48,900	7.5%	0.3%
Substitute Teachers	\$43,700	3.4%	0.1%
Teacher Assistants	\$34,800	13.9%	0.6%
All Other Education, Training, and Library Occupations (Avg. All Categories)	<u>\$50,600</u>	<u>33.7%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$50,600	100.0%	4.0%
Healthcare Practitioners and Technical Occupations			
Pharmacists	\$146,200	4.0%	0.3%
Physicians and Surgeons, All Other	\$255,600	4.0%	0.3%
Physical Therapists	\$103,400	3.4%	0.3%
Registered Nurses	\$122,200	31.1%	2.4%
Dental Hygienists	\$98,600	3.8%	0.3%
Pharmacy Technicians	\$46,200	5.5%	0.4%
Licensed Practical and Licensed Vocational Nurses	\$61,500	7.4%	0.6%
All Other Healthcare Practitioners and Technical Occupations (Avg. All Categories)	\$115,700	40.7%	3.2%
Weighted Mean Annual Wage	\$115,700	100.0%	7.8%
Healthcare Support Occupations			
Home Health Aides	\$30,100	21.9%	1.0%
Nursing Assistants	\$37,900	27.2%	1.0%
Massage Therapists	\$49,200	5.6%	0.2%
Dental Assistants	\$49.100	10.6%	0.5%
Medical Assistants	\$46,200	16.4%	0.7%
All Other Healthcare Support Occupations (Avg. All Categories)	\$39,700	18.2%	0.8%
Weighted Mean Annual Wage	\$39,700	100.0%	4.3%
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	\$41.200	6.9%	1.0%
Cooks, Fast Food	\$24,200	3.8%	0.6%
Cooks, Restaurant	\$30,400	8.8%	1.3%
Food Preparation Workers	\$27,200	6.5%	0.9%
Bartenders	\$35,300	7.0%	1.0%
Combined Food Preparation and Serving Workers, Including Fast Food	\$25,400	25.9%	3.8%
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	\$27,500	3.5%	0.5%
Waiters and Waitresses	\$33,200	19.2%	2.8%
Dishwashers	\$25,000	3.9%	0.6%
All Other Food Preparation and Serving Related Occupations (Avg. All Categories)	<u>\$29,900</u>	<u>14.5%</u>	<u>2.1%</u>
Weighted Mean Annual Wage	\$29,900	100.0%	14.6%



2017 Avg     Occupation     No. of Service       Occupation 3     Compensation 1     Compensation 1     Workers       Page 3 of 4     Securation 1     Securation 1     Securation 1     Securation 1       Building and Grounds Cleaning and Maintenance Occupations     Securation 2     Securation 2     Securation 2     Securation 2       Maids and Housekeeping Cleaners     SS2,000     3.5%     O.2%     Altonic 2       Analoscaping and Grounds Cleaning and Maintenance Occupations (Avg, All Cate;     SS3,400     1000*     5.2%       Weighted Mean Annual Wage     S33,400     1000*     5.2%       Personal Care and Service Occupations     Yeighted Mean Annual Wage     S33,400     100.3%     0.3%       Nonfam Annual Caretakers     S43,000     3.8%     0.3%     0.3%     0.3%       Maincurities and Pedicuritis     S30,600     10.3%     0.7%     1.3%       Maincurities and Pedicurities     S30,600     10.3%     0.7%       Personal Care and Service Occupations (Avg, All Categories)     S30,600     1.4%     0.3%       Childcare Workers     S30,600     1.4%     0.3%			% of Total	% of Total
Occupation <sup>3</sup> Compensation <sup>1</sup> Group <sup>2</sup> Workers       Page 3 of 4     Building and Grounds Cleaning and Maintenance Occupations     52,100     3.5%     0.2%       Janitors and Cleaners, Except Maids and Housekeeping Cleaners     \$30,900     45.7%     2.4%       Maids and Housekeeping Cleaners     \$32,200     10.6%     0.6%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Categ     \$33,400     8.7%     0.5%       Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$33,400     10.0%     6.3%     0.4%       Hairdressers, Hairstylists, and Cosmetologists     \$33,000     17.7%     1.3%       Maintenaste All Pedicursts     \$22,000     4.8%     0.3%       Childcare Workers     \$30,000     10.3%     0.7%       First-Line Supervisors of Real Service Occupations (Avg. All Categories)     \$30,900     14.0%     13%       Maintenasce     \$25,000     4.5%     0.3%     Config     100.5%     10%       Childcare Workers     \$30,600     17		2017 Avg.	Occupation	No. of Service
Page 3 of 4       Building and Grounds Cleaning and Maintenance Occupations     \$52,100     3.5%     0.2%       First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers     \$52,100     3.5%     0.2%       Janitors and Cleaners, Except Maids and Housekeeping Oleaners     \$30,000     45.7%     2.4%       Maids and Housekeeping Oleaners     \$33,000     10.6%     0.6%       Landscaping and Groundskeeping Workers     \$33,000     10.7%     1.6%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Categords)     827,200     6.0%     0.4%       First-Line Supervisors of Personal Service Workers     \$43,000     17.7%     1.3%       Maincurists and Pedicurists     \$25,000     4.5%     0.3%       Childcare Workers     \$30,000     10.3%     0.7%       Personal Care Aides     \$27,000     3.4%     0.4%       Childcare Workers     \$30,000     10.2%     1.0%       All Other Personal Care Aides     \$27,000     3.4%     0.4%       Childcare Workers     \$30,000     10.0%     1.2%       Childcare Aides     \$27,000     34	Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Building and Grounds Cleaning and Maintenance Occupations   First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers   \$52,100   3.5%   0.2%     Janitors and Cleaners, Except Maids and Housekeeping Cleaners   \$32,200   10.6%   0.6%     Landscaping and Groundskeeping Workers   \$32,200   10.6%   0.6%     All Other Building and Grounds Cleaning and Maintenance Occupations (Avg, All Categ   \$33,400   31.5%   16%     Personal Care and Service Occupations   First-Line Supervisors of Personal Service Workers   \$43,000   3.8%   0.3%     Nonfarm Animal Caretakers   \$32,700   6.0%   0.4%   14%     Hairdressers, Hairdylista, and Cosmetologists   \$30,600   17.7%   1.3%     Childcare Workers   \$33,000   17.7%   1.3%     Childcare Workers   \$30,600   10.3%   0.7%     Personal Care Aldes   \$27,000   6.2%   0.4%     Childcare Workers   \$30,600   10.3%   0.7%     Personal Care Aldes   \$27,000   5.2%   0.4%     Childcare Workers   \$30,600   1.2%   0.4%     Recreation Workers   \$30,600   1.2%   0.3% <t< th=""><th>Page 3 of 4</th><th></th><th></th><th></th></t<>	Page 3 of 4			
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers     \$52,100     3.5%     0.2%       Janifors and Cleaners, Except Malds and Housekeeping Cleaners     \$30,200     45.7%     2.4%       Malds and Housekeeping Cleaners     \$32,200     10.6%     0.6%       Landscaping and Groundskeeping Workers     \$35,400     31.5%     16%       All Other Building and Groundskeeping Workers     \$35,400     87.5%     0.5%       Verghted Mean Annual Wage     \$33,400     100.0%     5.2%       Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%     1.3%       Maincurists and Pedicurists     \$25,000     4.8%     0.3%     0.7%       Childcare Workers     \$30,600     1.7.7%     1.3%     Maincurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     5.2%     0.4%     0.3%     0.7%       First-Line Supervisors of Retail Sales Workers     \$36,100     4.1%     0.3%     0.3%       Coun	Building and Grounds Cleaning and Maintenance Occupations			
Janitors and Cleaners, Except Maids and Housekeeping Cleaners     \$30,900     45,7%     2.4%       Maids and Housekeeping Cleaners     \$32,200     10.6%     0.6%       Landscaping and Groundskeeping Workers     \$35,400     31.5%     1.6%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Categ     \$33,400     100.0%     52%       Personal Care and Service Occupations     #inite Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%     4.8%       Mainters and Personal Service Workers     \$32,700     3.8%     0.3%       Childcare Workers     \$32,700     3.4%     0.3%       Personal Care Aldes     \$27,000     3.41%     2.5%       Fitness Trainers and Aerobics Instructors     \$30,000     10.3%     0.7%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$39,900     140.%     1.4%       Cashiers     \$48,800     9.4%     12%     0.4%       Cashiers     \$30,900     3.7.%     4.4%     0.4%       Cashiers     \$30,900<	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	\$52,100	3.5%	0.2%
Maids and Housekeeping Cleaners     \$32,200     10.6%     0.6%       Landscaping and Groundskeeping Workers     \$33,400     31.5%     1.6%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Categores)     \$33,400     100.0%     \$2.7%       Personal Care and Service Occupations     #     #     #     #     #       First-Line Supervisors of Personal Service Workers     \$33,400     3.8%     0.3%     0.3%       Nonfarm Animal Caretakers     \$22,700     6.0%     0.4%     0.3%     0.3%       Maincurists and Pedicurists     \$25,000     4.8%     0.3%     0.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%     0.4%     0.3%       Fitness Trainers and Aerobics Instructors     \$30,000     10.3%     0.7%     0.3%     0.2%     0.4%     0.3%     0.1%     0.2%     0.4%     0.3%     0.3%     0.1%     0.2%     0.1%     0.2%     0.1%     0.2%     0.1%     0.2%     0.3%     0.1%     0.2%     0.3%     0.1%     0.2%     0.1%     0.2%	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$30,900	45.7%	2.4%
Landscaping and Groundskeeping Workers     \$35,400     31,5%     1.6%       All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Cateç     \$33,400     100.0%     52%       Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,000     10.7%     1.3%       Maintcrists and Pedicursts     \$32,000     10.7%     1.3%       Maintcrists and Pedicursts     \$32,000     10.7%     1.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aldes     \$27,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aldes     \$27,000     4.1%     0.3%       Recreation Workers     \$50,000     5.2%     0.4%       Recreation Workers     \$30,900     100.0%     7.2%       Sales and Related Occupations     First-Line Supervisors of Retail Sales Workers     \$48,800     9.4%     1.2%       Cashiers     \$26,400     27.1%     3.4%     0.6%     3.3%	Maids and Housekeeping Cleaners	\$32,200	10.6%	0.6%
All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Cate;     \$33,400     \$7%     0.5%       Personal Care and Service Occupations          5.2%       Personal Care and Service Occupations         5.2%       Personal Care and Service Occupations     \$33,400     3.8%     0.3%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%     0.3%     0.4%     0.2%     0.2%     0.2%	Landscaping and Groundskeeping Workers	\$35,400	31.5%	1.6%
Weighted Mean Annual Wage     \$33,400     10.0%     5.2%       Personal Care and Service Occupations     First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%       Hairdressers, Hairstyliks, and Cosmetologists     \$30,600     10.3%     0.3%       Manicurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aldes     \$27,000     4.1%     0.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$30,600     14.0%     1.0%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     1.2%       Cashiers     \$26,400     2.7.1%     3.4%     0.5%       Counter and Rental Clerks     \$35,700     4.4%     0.6%       Sales Representatives, Services, All Other     \$80,900     3.7%     0.5%       Sales Representatives, Services, All Other     \$80,900     3.7%     0.5%       Sa	All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Catec	\$33.400	8.7%	0.5%
Personal Care and Service Occupations       First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%       Hairdressers, Hairstylists, and Cosmetologists     \$30,400     17.7%     1.3%       Manicurists and Pedicurists     \$22,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     10%       Velighted Mean Annual Wage     \$30,900     14.0%     7.2%       Sales and Related Occupations     \$35,700     4.4%     0.6%       First-Line Supervisors of Retail Sales Workers     \$48,800     9.4%     1.2%       Cashiers     \$35,700     4.4%     0.6%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7% <t< td=""><td>Weighted Mean Annual Wage</td><td>\$33,400</td><td>100.0%</td><td>5.2%</td></t<>	Weighted Mean Annual Wage	\$33,400	100.0%	5.2%
First-Line Supervisors of Personal Service Workers     \$43,000     3.8%     0.3%       Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%       Hairdressers, Hairstylists, and Cosmetologists     \$30,400     17.7%     1.3%       Manicurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$30,900     14.0%     10%       Verighted Mean Annual Wage     \$30,900     140.0%     10%       Sales and Related Occupations     *     *     10%     0.3%       Counter and Rental Clerks     \$35,700     4.4%     0.6%     3%       Sales Representatives, Services, All Other     \$80,900     3.7%     0.4%     0.5%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations     \$33,300     101%     1.3%	Personal Care and Service Occupations			
Nonfarm Animal Caretakers     \$32,700     6.0%     0.4%       Hairdressers, Hairstylists, and Cosmetologists     \$30,400     17.7%     1.3%       Manicurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Recreation Workers     \$36,100     4.1%     0.3%       Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     100.0%     7.2%       Sales and Related Occupations     First-Line Supervisors of Retail Sales Workers     \$48,800     9.4%     1.2%       Cashiers     \$26,400     27.1%     3.4%     0.6%       Counter and Rental Clerks     \$35,700     4.4%     0.6%       Sales Representatives, Services, All Other     \$30,900     37.8%     4.8%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations     \$37,300     10.1%     1.3% <td< td=""><td>First-Line Supervisors of Personal Service Workers</td><td>\$43,000</td><td>3.8%</td><td>0.3%</td></td<>	First-Line Supervisors of Personal Service Workers	\$43,000	3.8%	0.3%
Hairdressers, Hairstylists, and Cosmetologists     \$30,400     17.7%     1.3%       Manicurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$30,900     14.0%     1.0%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     1.0%       Weighted Mean Annual Wage     \$30,900     100.0%     7.2%       Sales and Related Occupations       First-Line Supervisors of Retail Sales Workers     \$48,800     9.4%     1.2%       Cashiers     \$26,400     27.1%     3.4%       Counter and Rental Clerks     \$35,700     4.4%     0.6%       Retail Salespersons     \$30,900     37.8%     4.8%       Sales Representatives, Services, All Other     \$80,900     4.3%     0.5%       Sales Representatives, Services, All Other     \$37,300     10.1%     1.3%	Nonfarm Animal Caretakers	\$32,700	6.0%	0.4%
Manicurists and Pedicurists     \$25,000     4.8%     0.3%       Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     100.0%     7.2%       Sales and Related Occupations     \$30,900     100.0%     7.2%       Sales and Related Occupations     \$48,800     9.4%     1.2%       Cashiers     \$48,800     9.4%     1.2%       Cashiers     \$35,700     4.4%     0.6%       Retail Salespersons     \$30,900     37.8%     4.8%       Sales Representatives, Services, All Other     \$80,900     4.3%     0.5%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations     \$37,300     10.1%     1.3%       First-Line Supervisors of Office and Administrative Support Workers <t< td=""><td>Hairdressers, Hairstylists, and Cosmetologists</td><td>\$30,400</td><td>17.7%</td><td>1.3%</td></t<>	Hairdressers, Hairstylists, and Cosmetologists	\$30,400	17.7%	1.3%
Childcare Workers     \$30,600     10.3%     0.7%       Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     1.0%       Weighted Mean Annual Wage     \$30,900     100.0%     7.2%       Sales and Related Occupations     \$48,800     9.4%     1.2%       Cashiers     \$26,400     27.1%     3.4%       Counter and Rental Clerks     \$357,700     4.4%     0.6%       Retail Salespersons     \$30,900     37.8%     4.8%       Sales Representatives, Services, All Other     \$80,900     4.3%     0.5%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations (Avg. All Categories)     \$37,300     10.1%     1.3%       Weighted Mean Annual Wage     \$37,300     10.1%     1.3%       Coffice and Administrative Support Occupations </td <td>Manicurists and Pedicurists</td> <td>\$25,000</td> <td>4.8%</td> <td>0.3%</td>	Manicurists and Pedicurists	\$25,000	4.8%	0.3%
Personal Care Aides     \$27,000     34.1%     2.5%       Fitness Trainers and Aerobics Instructors     \$50,000     5.2%     0.4%       Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$20,900     14.0%     1.0%       Weighted Mean Annual Wage     \$30,900     100.0%     7.2%       Sales and Related Occupations     \$48,800     9.4%     1.2%       Cashiers     \$26,400     27.1%     3.4%       Counter and Rental Clerks     \$35,700     4.4%     0.6%       Retail Salespersons     \$30,900     37.8%     4.8%       Securities, Commodities, and Financial Services Sales Agents     \$67,700     3.3%     0.4%       Sales Representatives, Services, All Other     \$80,900     4.3%     0.5%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations     \$37,300     100.0%     12.6%       Office and Administrative Support Occupations     \$37,300     100.0%     12.6%       Offic	Childcare Workers	\$30,600	10.3%	0.7%
Fitness Trainers and Aerobics Instructors\$50,0005.2%0.4% Recreation WorkersRecreation Workers\$36,1004.1%0.3% All Other Personal Care and Service Occupations (Avg. All Categories)\$30,90014.0%1.0% 1.0%Weighted Mean Annual Wage\$30,900100.0%7.2%Sales and Related OccupationsFirst-Line Supervisors of Retail Sales Workers\$48,8009.4%1.2% 0.4%Cashiers\$26,40027.1%3.4% 0.6%Counter and Rental Clerks\$30,90037.8%4.8% 0.6%Retail Salespersons\$30,90037.8%4.8% 0.6%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3% 0.4%Sales Representatives, Services, All OtherSales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7% 0.5% 0.10%All Other Sales and Related OccupationsFirst-Line Supervisors of Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6% 1.0%Sales and Related OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6% 1.0%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6% 1.0%Sate Sate and Corder Fillers <td>Personal Care Aides</td> <td>\$27,000</td> <td>34.1%</td> <td>2.5%</td>	Personal Care Aides	\$27,000	34.1%	2.5%
Recreation Workers     \$36,100     4.1%     0.3%       All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     1.0%       Weighted Mean Annual Wage     \$30,900     14.0%     1.0%       Sales and Related Occupations     \$48,800     9.4%     1.2%       Cashiers     \$48,800     27.1%     3.4%       Counter and Rental Clerks     \$35,700     4.4%     0.6%       Retail Salespersons     \$30,900     37.8%     4.8%       Securities, Commodities, and Financial Services Sales Agents     \$67,700     3.3%     0.4%       Sales Representatives, Services, All Other     \$80,900     4.3%     0.5%       Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific     \$77,300     3.7%     0.5%       All Other Sales and Related Occupations     \$33,700     10.1%     1.3%     1.2%       Coffice and Administrative Support Occupations     \$33,7300     10.1%     1.3%       First-Line Supervisors of Office and Administrative Support Workers     \$73,800     6.6%     1.0%       Bookkeeping, Accounting, and Auditing Clerks     \$531,100 <t< td=""><td>Fitness Trainers and Aerobics Instructors</td><td>\$50,000</td><td>5.2%</td><td>0.4%</td></t<>	Fitness Trainers and Aerobics Instructors	\$50,000	5.2%	0.4%
All Other Personal Care and Service Occupations (Avg. All Categories)     \$30,900     14.0%     1.0%       Weighted Mean Annual Wage     \$30,900     14.0%     1.0%       Sales and Related Occupations     ************************************	Recreation Workers	\$36,100	4.1%	0.3%
Weighted Mean Annual Wage\$30,900100.0%7.2%Sales and Related OccupationsFirst-Line Supervisors of Retail Sales Workers\$48,8009.4%1.2%Cashiers\$26,40027.1%3.4%Counter and Rental Clerks\$35,7004.4%0.6%Retail Salespersons\$30,90037.8%4.8%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support Occupations\$51,1009.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%36%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	All Other Personal Care and Service Occupations (Avg. All Categories)	\$30,900	14.0%	1.0%
Sales and Related Occupations     First-Line Supervisors of Retail Sales Workers   \$48,800   9.4%   1.2%     Cashiers   \$26,400   27.1%   3.4%     Counter and Rental Clerks   \$35,700   4.4%   0.6%     Retail Salespersons   \$30,900   37.8%   4.8%     Securities, Commodities, and Financial Services Sales Agents   \$67,700   3.3%   0.4%     Sales Representatives, Services, All Other   \$80,900   4.3%   0.5%     Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific   \$77,300   3.7%   0.5%     All Other Sales and Related Occupations (Avg. All Categories)   \$37,300   10.1%   1.3%     Weighted Mean Annual Wage   \$37,300   10.0%   12.6%     Office and Administrative Support Occupations     First-Line Supervisors of Office and Administrative Support Workers   \$73,800   6.6%   1.0%     Bookkeeping, Accounting, and Auditing Clerks   \$50,100   7.7%   1.1%     Customer Service Representatives   \$51,100   9.9%   1.5%     Receptionists and Information Clerks   \$38,500   8.9%   1.3%     Stock Cl	Weighted Mean Annual Wage	\$30,900	100.0%	7.2%
First-Line Supervisors of Retail Sales Workers\$48,8009.4%1.2%Cashiers\$26,40027.1%3.4%Counter and Rental Clerks\$35,7004.4%0.6%Retail Salespersons\$30,90037.8%4.8%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	Sales and Related Occupations			
Cashiers\$26,40027.1%3.4%Counter and Rental Clerks\$35,7004.4%0.6%Retail Salespersons\$30,90037.8%4.8%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	First-Line Supervisors of Retail Sales Workers	\$48,800	9.4%	1.2%
Counter and Rental Clerks\$35,7004.4%0.6%Retail Salespersons\$30,90037.8%4.8%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support Occupations\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%240,90024.3%3.6%3.6%	Cashiers	\$26,400	27.1%	3.4%
Retail Salespersons\$30,90037.8%4.8%Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3% <i>Weighted Mean Annual Wage</i> \$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Support Occupations (Avg. All Categories)\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	Counter and Rental Clerks	\$35,700	4.4%	0.6%
Securities, Commodities, and Financial Services Sales Agents\$67,7003.3%0.4%Sales Representatives, Services, All Other\$80,9004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$52,0004.4%0.7%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Support Occupations (Avg. All Categories)\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	Retail Salespersons	\$30,900	37.8%	4.8%
Soldar Representatives, Services, All Other\$60,004.3%0.5%Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	Securities Commodities and Financial Services Sales Agents	\$67,700	3.3%	0.4%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific\$77,3003.7%0.5%All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,900100.0%14.8%	Sales Representatives Services All Other	\$80,900	4.3%	0.5%
All Other Sales and Related Occupations (Avg. All Categories)\$37,30010.1%1.3%Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support Occupations\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%	Sales Representatives, Wholesale and Manufacturing Except Technical and Scientific	\$77,300	3.7%	0.5%
Weighted Mean Annual Wage101102101102Weighted Mean Annual Wage\$37,300100.0%12.6%Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	All Other Sales and Related Occupations (Avg. All Categories)	\$37,300	10.1%	1.3%
Office and Administrative Support OccupationsFirst-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wace\$46,900100.0%14.8%	Weighted Mean Annual Wage	\$ <b>37,300</b>	100.0%	12.6%
First-Line Supervisors of Office and Administrative Support Workers\$73,8006.6%1.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	Office and Administrative Support Occupations			
Inscribe Opportsols of Office and Administrative Oupport Workers\$15,0000.0%Bookkeeping, Accounting, and Auditing Clerks\$50,1007.7%1.1%Customer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	First-Line Supervisors of Office and Administrative Support Workers	\$73,800	6.6%	1.0%
DecenterStock fillerStock fillerFillerFillerCustomer Service Representatives\$51,1009.9%1.5%Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	Bookkeening Accounting and Auditing Clerks	\$50,000	7.7%	1.0%
Receptionists and Information Clerks\$38,5008.9%1.3%Stock Clerks and Order Fillers\$38,5008.9%1.3%Medical Secretaries\$32,20010.9%1.6%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	Customer Service Representatives	\$51,100	9.9%	1.1%
Stock Clerks and Order Fillers\$00,0000.5 %1.5 %Medical Secretaries\$32,20010.9%1.6%Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	Recentionists and Information Clerks	\$38,500	8.9%	1.0%
Medical Secretaries\$52,0004.4%0.7%Secretaries and Administrative Assistants, Except Legal, Medical, and Executive\$47,10012.5%1.9%Office Clerks, General\$44,30014.8%2.2%All Other Office and Administrative Support Occupations (Avg. All Categories)\$46,90024.3%3.6%Weighted Mean Annual Wage\$46,900100.0%14.8%	Stock Clerks and Order Fillers	\$32,200	10.9%	1.5%
Modular Scoretaries   \$02,000   4.4.%   0.7.%     Secretaries and Administrative Assistants, Except Legal, Medical, and Executive   \$47,100   12.5%   1.9%     Office Clerks, General   \$44,300   14.8%   2.2%     All Other Office and Administrative Support Occupations (Avg. All Categories)   \$46,900   24.3%   3.6%     Weighted Mean Annual Wage   \$46,900   100.0%   14.8%	Medical Secretaries	\$52,200 \$52,000	A A%	0.7%
Office Clerks, General   \$44,300   14.8%   2.2%     All Other Office and Administrative Support Occupations (Avg. All Categories)   \$46,900   24.3%   3.6%     Weighted Mean Annual Wage   \$46,900   100.0%   14.8%	Secretaries and Administrative Assistants Excent Legal Medical and Evecutive	\$ <u>47</u> 100	4.4 <i>7</i> 0 12.5%	1.9%
All Other Office and Administrative Support Occupations (Avg. All Categories)   \$46,900   24.3%   3.6%     Weighted Mean Annual Wage   \$46,900   100.0%   14.8%	Office Clerks General	\$44.300	14.8%	2.2%
Weighted Mean Annual Wage     \$46.900     100.0%     14.8%	All Other Office and Administrative Support Occupations (Avg. All Categories)	\$46,900	24.3%	3.6%
	Weighted Mean Annual Wage	<u>\$46.900</u>	100.0%	<u></u>

		% of Total	% of Total
	2017 Avg.	Occupation	No. of Service
Occupation <sup>3</sup>	Compensation <sup>1</sup>	Group <sup>2</sup>	Workers
Page 4 of 4			
Installation, Maintenance, and Repair Occupations			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$84,900	7.8%	0.3%
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$61,900	3.2%	0.1%
Automotive Body and Related Repairers	\$51,000	6.9%	0.2%
Automotive Service Technicians and Mechanics	\$54,300	20.1%	0.7%
Bus and Truck Mechanics and Diesel Engine Specialists	\$68,200	3.3%	0.1%
Maintenance and Repair Workers, General	\$50,800	34.7%	1.2%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$56,500</u>	<u>24.0%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$56,500	100.0%	3.5%
Transportation and Material Moving Occupations			
Bus Drivers, School or Special Client	\$40,000	5.6%	0.2%
Driver/Sales Workers	\$33,900	7.7%	0.3%
Heavy and Tractor-Trailer Truck Drivers	\$47,100	11.9%	0.5%
Light Truck or Delivery Services Drivers	\$40,600	10.9%	0.5%
Taxi Drivers and Chauffeurs	\$32,000	3.5%	0.2%
Parking Lot Attendants	\$27,200	9.4%	0.4%
Automotive and Watercraft Service Attendants	\$32,900	3.1%	0.1%
Cleaners of Vehicles and Equipment	\$27,400	9.2%	0.4%
Laborers and Freight, Stock, and Material Movers, Hand	\$35,600	18.9%	0.8%
Packers and Packagers, Hand	\$26,900	6.7%	0.3%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$35,300</u>	<u>13.2%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$35,300	100.0%	4.3%

89.4%

<sup>1</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>2</sup> Occupation percentages are based on the 2014 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2016 Occupational Employment Survey data applicable to Santa Clara County updated by the California Employment Development Department to 2017 wage levels.

<sup>3</sup> Including occupations representing 3% or more of the major occupation group

APPENDIX B: SUPPORTING ANALYSIS TABLES CONTRACT AND JANITORIAL SERVICE WORKERS



#### APPENDIX B TABLE 1 ESTIMATED OCCUPATION DISTRIBUTION - JANITORIAL AND THIRD PARTY CONTRACT WORKERS AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

	Janitorial Contract	Third-Party Contract
et New Worker Households (Table III-2)	25.7	32.5
ccupation Distribution <sup>(1)</sup>		
Management Occupations	3.6%	2.1%
Business and Financial Operations	0.8%	0.1%
Computer and Mathematical	0.1%	0.0%
Architecture and Engineering	0.3%	0.0%
Life, Physical, and Social Science	0.0%	0.0%
Community and Social Services	0.0%	0.0%
Legal	0.0%	0.0%
Education, Training, and Library	0.0%	0.0%
Arts, Design, Entertainment, Sports, and Media	0.0%	0.0%
Healthcare Practitioners and Technical	0.0%	0.0%
Healthcare Support	0.0%	0.0%
Protective Service	0.0%	0.1%
Food Preparation and Serving Related	0.0%	90.5%
Building and Grounds Cleaning and Maint.	73.7%	0.4%
Personal Care and Service	0.0%	0.1%
Sales and Related	3.1%	3.2%
Office and Administrative Support	9.2%	0.6%
Farming, Fishing, and Forestry	0.4%	0.0%
Construction and Extraction	1.7%	0.0%
Installation, Maintenance, and Repair	3.5%	0.1%
Production	1.2%	0.5%
Transportation and Material Moving	2.5%	<u>2.2%</u>
Totals	100.0%	100.0%
Management Occupations	0.9	0.7
Business and Financial Operations	0.2	0.0
Computer and Mathematical	0.0	0.0
Architecture and Engineering	0.1	0.0
Life, Physical, and Social Science	0.0	0.0
Community and Social Services	0.0	0.0
	0.0	0.0
Education, Training, and Library	0.0	0.0
Arts Design Entertainment Sports and Media	0.0	0.0
Healthcare Practitioners and Technical	0.0	0.0
Healthcare Support	0.0	0.0
	0.0	0.0
Protective Service	0.0	0.0
Protective Service	0.0	0.0 29 4
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint	0.0 0.0 19.0	0.0 29.4 0.1
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint.	0.0 0.0 19.0	0.0 29.4 0.1
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related	0.0 0.0 19.0 0.0	0.0 29.4 0.1 0.0
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related	0.0 0.0 19.0 0.0 0.8 2.4	0.0 29.4 0.1 0.0 1.0
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related Office and Administrative Support	0.0 0.0 19.0 0.0 0.8 2.4	0.0 29.4 0.1 0.0 1.0 0.2
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related Office and Administrative Support Farming, Fishing, and Forestry	0.0 0.0 19.0 0.0 0.8 2.4 0.1	0.0 29.4 0.1 0.0 1.0 0.2 0.0
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related Office and Administrative Support Farming, Fishing, and Forestry Construction and Extraction	0.0 0.0 19.0 0.0 0.8 2.4 0.1 0.4	0.0 29.4 0.1 0.0 1.0 0.2 0.0 0.0 0.0
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related Office and Administrative Support Farming, Fishing, and Forestry Construction and Extraction Installation, Maintenance, and Repair	0.0 0.0 19.0 0.0 0.8 2.4 0.1 0.4 0.9	0.0 29.4 0.1 0.0 1.0 0.2 0.0 0.0 0.0 0.0
Protective Service Food Preparation and Serving Related Building and Grounds Cleaning and Maint. Personal Care and Service Sales and Related Office and Administrative Support Farming, Fishing, and Forestry Construction and Extraction Installation, Maintenance, and Repair Production	0.0 0.0 19.0 0.8 2.4 0.1 0.4 0.9 0.3 0.6	0.0 29.4 0.1 0.0 1.0 0.2 0.0 0.0 0.0 0.0 0.2 0.7

Notes:

(1) Appendix B Tables 4 through 7 contain additional information regarding worker occupation categories.



# APPENDIX B TABLE 2A JANITORIAL AND THIRD-PARTY CONTRACT WORKERS ESTIMATE OF QUALIFYING HOUSEHOLDS - EXTREMELY LOW INCOME AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

### Analysis for Households Earning up to 30% of Median

	Janitorial Contract	Third-Party Contract
Households Earning up to 30% of Median <sup>(1)</sup>		
Management	0.00	0.02
Business and Financial Operations	0.00	0.00
Computer and Mathematical	0.00	0.00
Architecture and Engineering	0.00	0.00
Life, Physical and Social Science	0.00	0.00
Community and Social Services	0.00	0.00
Legal	0.00	0.00
Education Training and Library	0.00	0.00
Arts, Design, Entertainment, Sports, and Media	0.00	0.00
Healthcare Practitioners and Technical	0.00	0.00
Healthcare Support	0.00	0.00
Protective Service	0.00	0.00
Food Preparation and Serving Related	0.00	10.04
Building Grounds and Maintenance	5.23	0.00
Personal Care and Service	0.00	0.00
Sales and Related	0.00	0.41
Office and Admin	0.15	0.00
Farm, Fishing, and Forestry	0.00	0.00
Construction and Extraction	0.00	0.00
Installation Maintenance and Repair	0.00	0.00
Production	0.00	0.00
Transportation and Material Moving	0.00	0.15
HH earning up to 30% of Median - major occupations	5.38	10.63
HH earning up to 30% of Median - all other occupations	1.11	0.21
Total Households Earning up to 30% of Median	6.5	10.8

Notes:

(1) Appendix B Tables 5 and 7 contain additional information regarding worker compensations by detailed occupation category used in combination with published income limits to estimated the number of qualifying households by occupation category.

# APPENDIX B TABLE 2B JANITORIAL AND THIRD-PARTY CONTRACT WORKERS ESTIMATE OF QUALIFYING HOUSEHOLDS - VERY LOW INCOME AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

### Analysis for Households Earning from 30% to 50% of Median

	Janitorial Contract	Third- Party Contract
Households Earning from 30% to 50% of Median <sup>(1)</sup>		
Management	0.00	0.09
Business and Financial Operations	0.00	0.00
Computer and Mathematical	0.00	0.00
Architecture and Engineering	0.00	0.00
Life, Physical and Social Science	0.00	0.00
Community and Social Services	0.00	0.00
Legal	0.00	0.00
Education Training and Library	0.00	0.00
Arts, Design, Entertainment, Sports, and Media	0.00	0.00
Healthcare Practitioners and Technical	0.00	0.00
Healthcare Support	0.00	0.00
Protective Service	0.00	0.00
Food Preparation and Serving Related	0.00	10.93
Building Grounds and Maintenance	7.17	0.00
Personal Care and Service	0.00	0.00
Sales and Related	0.00	0.39
Office and Admin	0.60	0.00
Farm, Fishing, and Forestry	0.00	0.00
Construction and Extraction	0.00	0.00
Installation Maintenance and Repair	0.00	0.00
Production	0.00	0.00
Transportation and Material Moving	0.00	0.26
HH earning from 30%-50% of Median - major occupations	7.77	11.67
HH earning from 30%-50% of Median - all other occupation:	1.61	0.23
Total Households Earning from 30%-50% of Median	9.4	11.9

#### Notes:

(1) Appendix B Tables 5 and 7 contain additional information regarding worker compensations by detailed occupation category used in combination with published income limits to estimated the number of qualifying households by occupation category.


## APPENDIX B TABLE 2C JANITORIAL AND THIRD-PARTY CONTRACT WORKERS ESTIMATE OF QUALIFYING HOUSEHOLDS - LOW INCOME AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

#### Analysis for Households Earning from 50% to 80% of Median

Janitorial	Third-Party	
Contract	Contract	

#### Step 5, 6, & 7 - Households Earning from 50% to 80% of Median<sup>(1)</sup>

Business and Financial Operations	0.00	0.00
Computer and Mathematical	0.00	0.00
Architecture and Engineering	0.00	0.00
Life, Physical and Social Science	0.00	0.00
Community and Social Services	0.00	0.00
Legal	0.00	0.00
Education Training and Library	0.00	0.00
Arts, Design, Entertainment, Sports, and Media	0.00	0.00
Healthcare Practitioners and Technical	0.00	0.00
Healthcare Support	0.00	0.00
Protective Service	0.00	0.00
Food Preparation and Serving Related	0.00	6.50
Building Grounds and Maintenance	3.81	0.00
Personal Care and Service	0.00	0.00
Sales and Related	0.00	0.20
Office and Admin	0.65	0.00
Farm, Fishing, and Forestry	0.00	0.00
Construction and Extraction	0.00	0.00
Installation Maintenance and Repair	0.00	0.00
Production	0.00	0.00
Transportation and Material Moving	0.00	0.16
HH earning from 50%-80% of Median - major occupations	4.46	6.98
HH earning from 50%-80% of Median - all other occupation	0.92	0.14
Total Households Earning from 50%-80% of Median	5.4	7.1

#### Notes:

(1) Appendix B Tables 5 and 7 contain additional information regarding worker compensations by detailed occupation category used in combination with published income limits to estimated the number of qualifying households by occupation category.

## APPENDIX B TABLE 2D JANITORIAL AND THIRD-PARTY CONTRACT WORKERS ESTIMATE OF QUALIFYING HOUSEHOLDS - MODERATE INCOME AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

#### Analysis for Households Earning from 80% to 120% of Median

-	Janitorial Contract	Third- Party Contract
Households Earning from 80% to 120% of Median <sup>(1)</sup>		
Management	0.00	0.17
Business and Financial Operations	0.00	0.00
Computer and Mathematical	0.00	0.00
Architecture and Engineering	0.00	0.00
Life, Physical and Social Science	0.00	0.00
Community and Social Services	0.00	0.00
Legal	0.00	0.00
Education Training and Library	0.00	0.00
Arts, Design, Entertainment, Sports, and Media	0.00	0.00
Healthcare Practitioners and Technical	0.00	0.00
Healthcare Support	0.00	0.00
Protective Service	0.00	0.00
Food Preparation and Serving Related	0.00	1.85
Building Grounds and Maintenance	2.48	0.00
Personal Care and Service	0.00	0.00
Sales and Related	0.00	0.03
Office and Admin	0.65	0.00
Farm, Fishing, and Forestry	0.00	0.00
Construction and Extraction	0.00	0.00
Installation Maintenance and Repair	0.00	0.00
Production	0.00	0.00
Transportation and Material Moving	0.00	0.13
HH earning from 80%-120% of Median - major occupations	3.13	2.18
HH earning from 80%-120% of Median - all other occupatio	0.65	0.04
Total Households Earning from 80%-120% of Median	3.8	2.2

Notes:

(1) Appendix B Tables 5 and 7 contain additional information regarding worker compensations by detailed occupation category used in combination with published income limits to estimated the number of qualifying households by occupation category.



### APPENDIX B TABLE 3 JANITOR AND CONTRACT WORKER HOUSEHOLDS BY AFFORDABILITY LEVEL AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

	Janitorial Contract	Third-Party Contract
NUMBER OF HOUSEHOLDS BY INCOME TIER <sup>(</sup>	1)	
Extremely Low (0% - 30% AMI)	6.5	10.8
Very Low Income (30% - 50% AMI)	9.4	11.9
Low Income (50% - 80% AMI)	5.4	7.1
Moderate (80% - 120%)	3.8	2.2
Subtotal through 120% AMI	25.0	32.1
Above 120% AMI	0.7	0.4
Total New Worker Households	25.7	32.5
PERCENTAGE OF HOUSEHOLDS BY INCOME 1	TIER	
Extremely Low (0% - 30% AMI)	25.2%	33.3%
Very Low Income (30% - 50% AMI)	36.4%	36.6%
Low Income (50% - 80% AMI)	20.9%	21.9%
Moderate (80% - 120%)	14.7%	6.8%
Subtotal through 120% AMI	97.3%	98.7%
Above 120% AMI	2.7%	1.3%
Total	100%	100%

Notes:

(1) Summarized from Appendix B Tables 2A to 2D.



#### APPENDIX B TABLE 4 2016 NATIONAL JANITORIAL CONTRACT WORKER DISTRIBUTION BY OCCUPATION AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

Major Occupations (4% or more)	2016 National Janitorial Contract Industry Occupation Distribution	
Building and Grounds Cleaning and Maintenance Occupations	904,750	73.7%
Office and Administrative Support Occupations	112,360	9.2%
All Other Janitorial Contract Occupations	<u>210,680</u>	<u>17.2%</u>
INDUSTRY TOTAL	1,227,790	100.0%



#### APPENDIX B TABLE 5 AVERAGE ANNUAL COMPENSATION, 2017 JANITORIAL CONTRACT WORKER OCCUPATIONS AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

		% of Total	% of Total
	2017 Avg.	Occupation ito	rial Contract
Occupation <sup>1</sup>	Compensation <sup>2</sup>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Building and Grounds Cleaning and Maintenance Occupations			
First-Line Supervisors of Housekeeping and Janitorial Workers	\$58,500	5.9%	4.3%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$30,900	94.1%	69.4%
All Other Building and Grounds Cleaning and Maintenance Occupations (Avg. All Ca	<u>\$34,100</u>	<u>0.0%</u>	<u>0.0%</u>
Weighted Mean Annual Wage	\$32,500	100.0%	73.7%
Office and Administrative Support Occupations			
First-Line Supervisors of Office and Administrative Support Workers	\$73,800	5.4%	0.5%
Bookkeeping, Accounting, and Auditing Clerks	\$50,100	13.0%	1.2%
Customer Service Representatives	\$51,100	7.6%	0.7%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$47,100	27.6%	2.5%
Office Clerks, General	\$44,300	34.4%	3.2%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>12.0%</u>	<u>1.1%</u>
Weighted Mean Annual Wage	\$48,600	100.0%	9.2%
Weighted Average Annual Wage - All Occupations	\$34,000	=	82.8%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2016 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2016 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2017 wage levels.

#### APPENDIX B TABLE 6 2016 NATIONAL THIRD PARTY FOOD SERVICE WORKER DISTRIBUTION BY OCCUPATION AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

Major Occupations (2% or more)	2016 Na Third Party Fo Occupation I	itional ood Service Distribution
Management Occupations	219,340	2.1%
Food Preparation and Serving Related Occupations	9,312,510	90.5%
Sales and Related Occupations	330,790	3.2%
Transportation and Material Moving Occupations	222,580	2.2%
All Other Third Party Food Service Occupations	<u>201,160</u>	<u>2.0%</u>
INDUSTRY TOTAL	10,286,380	100.0%



#### APPENDIX B TABLE 7 AVERAGE ANNUAL COMPENSATION, 2017 THIRD PARTY FOOD SERVICE WORKER OCCUPATIONS AFFORDABLE HOUSING NEXUS ANALYSIS - ACADEMIC SPACE COUNTY OF SANTA CLARA, CA

		% of Total	% of Total
	2017 Avg.	Occupation y	Food Service
Occupation <sup>1</sup>	<u>Compensation<sup>2</sup></u>	<u>Group <sup>3</sup></u>	<u>Workers</u>
Management Occupations			
General and Operations Managers	\$164,400	32.1%	0.7%
Food Service Managers	\$56,600	65.2%	1.4%
All Other Management Occupations (Avg. All Categories)	<u>\$170,000</u>	<u>2.7%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$94,200	100.0%	2.1%
Food Preparation and Serving Related Occupations			
First-Line Supervisors of Food Preparation and Serving Workers	\$41,200	7.2%	6.5%
Cooks, Fast Food	\$24,200	5.3%	4.8%
Cooks, Restaurant	\$30,400	11.2%	10.1%
Food Preparation Workers	\$27,200	4.6%	4.1%
Combined Food Preparation and Serving Workers, Including Fast Food	\$25,400	29.6%	26.8%
Waiters and Waitresses	\$33,200	22.6%	20.5%
Dishwashers	\$25,000	4.0%	3.7%
All Other Business and Financial Operations (Avg. All Categories)	<u>\$29,800</u>	<u>15.6%</u>	<u>14.1%</u>
Weighted Mean Annual Wage	\$29,500	100.0%	90.5%
Sales and Related Occupations			
Cashiers	\$26,400	94.9%	3.1%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$56,400</u>	<u>5.1%</u>	<u>0.2%</u>
Weighted Mean Annual Wage	\$27,900	100.0%	3.2%
Transportation and Material Moving Occupations			
Driver/Sales Workers	\$33,900	83.3%	1.8%
Light Truck or Delivery Services Drivers	\$40,600	13.6%	0.3%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$39,300</u>	<u>3.1%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$35,000	100.0%	2.2%
Weighted Average Annual Wage - All Occupations	\$31,000	=	98.0%

<sup>1</sup> Including occupations representing 4% or more of the major occupation group.

<sup>2</sup> The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

<sup>3</sup> Occupation percentages are based on the 2016 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2016 Occupational Employment Survey data applicable to Santa Clara County, updated by the California Employment Development Department to 2017 wage levels.



APPENDIX C: NON-DUPLICATION OF POTENTIAL FEES APPLICABLE TO STANFORD FACULTY AND STAFF HOUSING AND COMMERCIAL LINKAGE FEES IN ADJACENT CITIES



The County of Santa Clara is considering establishing a fee on new faculty and staff housing on the Stanford Campus to help mitigate the impacts on the demand for affordable housing. The nexus analysis supporting fees applicable to faculty and staff housing includes job-impacts of off-campus spending by residents of these new housing units. Adjacent cities, including Palo Alto, also have commercial linkage fees in place to mitigate affordable housing needs of workers in new non-residential buildings. This appendix evaluates the potential for double-counting of impacts or 'overlap' and demonstrates that combined requirements of the County and adjacent cities would not exceed the maximums supported by the nexus even in the event some double-counting does occur. The potential for overlap with requirements applicable to academic space on the Stanford Campus is addressed separately through the adjustment applied in Table II-8.

Affordable housing fees applicable to non-residential development in adjacent cities are supported by a similar analysis to the Non-Residential Nexus Analysis prepared for the County. The logic begins with jobs located in new workplace buildings including office buildings, retail spaces and hotels. The nexus analysis then identifies the compensation structure of the new jobs depending on the building type, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

In the faculty and staff housing nexus analysis incorporated into this Addendum, the logic begins with the households renting new units. The purchasing power of those households generates new jobs in the local economy. The nexus analysis quantifies the jobs created by the spending of the new households and then identifies the compensation structure of the new jobs, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

Since some of the jobs counted in the faculty and staff housing nexus analysis could be located within non-residential buildings in adjacent cities that are also subject to separate commercial linkage fees, there is a potential for some degree of overlap in mitigations applicable to faculty and staff housing and the commercial linkage fees in place in adjacent cities. The overlap potential exists primarily in retail uses where the jobs generated by faculty and staff housing expenditures on food, personal services, restaurant meals and entertainment would primarily be located.

The City of Palo Alto has the highest affordable housing fee in the County for retail uses. The following compares Palo Alto's fee to the maximum supported by the nexus for retail. Findings for the Countywide study are applied for this calculation because Palo Alto does not have an updated nexus study for retail and the Countywide findings represent a conservative estimate of the nexus cost for Palo Alto based on the higher cost of delivering affordable units in the City of Palo Alto relative to other locations in the County. As shown, Palo Alto's retail fee, which is the

highest in the County, represents approximately 10% of the nexus cost. So, at most, existing commercial linkage fees in the County would mitigate approximately 10% of the demand for affordable units generated by new retail space.

Building Type	Maximum Nexus Amount	Palo Alto Existing Retail Fee Level	Percent of Maximum
Retail	\$213.40	\$20.37	10%

Overlap would only occur to the extent new retail in adjacent cities is supported by spending of residents in the faculty and staff housing. The faculty and staff housing would be located near the El Camino, a major thoroughfare, and Downtown Palo Alto which has many other sources of demand for retail from existing residents of the City, the workplace population, students and visitors. Therefore, it is unlikely any new retail built in Palo Alto (or other cities) would derive more than a fraction of its customer base from the faculty and staff housing. Given Palo Alto's commercial fees represent only 10% of the maximum supported by the nexus, combined mitigation requirements would only exceed nexus maximums to the extent retail subject to Palo Alto's commercial linkage fees derived more than 90% of its business from customers residing in the faculty and staff housing. Based on the location of the faculty and staff housing near a major thoroughfare in a built out urban environment with many other sources of demand for retail space, it is extremely improbable that the faculty and staff housing would represent over 90% of the customer base for any off-campus retail establishment. Therefore, the potential for combined mitigation requirements to exceed the nexus is negligible even if fees applicable to faculty and staff housing were set at the \$69.10 nexus maximum.

NEWS

# Release of Draft Regional Housing Needs Allocation Methodology

December 18, 2020



Today's release of the Draft Regional Housing Needs Allocation (RHNA) Methodology is a major and important milestone in the RHNA process. The Draft RHNA Methodology and Final RHNA Subregional Shares release is the next step in the process.

The Draft RHNA Methodology determines the total number of new homes the Bay Area needs to build—and how affordable those homes need to be—in order to meet the housing needs of people at all income levels. The RHNA subregional shares is a parallel RHNA process, allowing an approved geographic area to allocate the defined subregion's housing need among its members. Both integrate Final Blueprint data via the 2050 Households baseline.

Visit the RHNA webpage for more information.

On Friday, December 18 at 12:00 p.m., staff from ABAG and the Metropolitan Transportation Commission will present updates on the Draft Regional Housing Needs Allocation (RHNA) Methodology and Final RHNA Subregional Shares, as well as the Plan Bay Area 2050 Final Blueprint, including its associated Outcomes and Growth Pattern.

Join via Zoom(link is external) 🗷 on Friday, December 18, 2020 at 12:00 p.m. Passcode: 464959

0443

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This webinar will be repeated on Tuesday, January 5, 2021, at 9:30 a.m. Join via Zoom with details at this link 🗷.

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# INTRODUCTION

Since 1969, the State of California has required each local government to plan for its share of the state's housing needs for people of all income levels. Through the Regional Housing Needs Allocation (RHNA) process, every local jurisdiction is assigned a number of housing units representing its share of the state's housing needs for an eightyear period. State Housing Element Law requires the Association of Bay Area Governments (ABAG) to develop a methodology for distributing the Bay Area's portion of the state housing needs to local governments within the ninecounty region, including reporting on the RHNA methodology. This report contains the data and assumptions involved in developing the final methodology, and it also explains how the final methodology takes into account key statutory factors and meets five key objectives as outlined in Housing Element Law.<sup>1</sup>



# ABOUT THE REGIONAL HOUSING NEEDS ALLOCATION

The RHNA process identifies the total number of housing units, separated into four affordability levels, that every local government in the Bay Area must plan to accommodate for the period from 2023 to 2031.<sup>2</sup> The primary role of the RHNA methodology is to encourage a pattern of housing growth for the Bay Area that meets the needs of all residents.

Once it receives its allocation, each local government must update the Housing Element of its General Plan and its zoning to show how it plans to accommodate its RHNA units and meet the housing needs in its community. It is in the community's Housing Element that local governments make decisions about where future housing units could be located and the policies and strategies for addressing specific housing needs within a given jurisdiction, such as addressing homelessness, meeting the needs of specific populations, affirmatively furthering fair housing, or minimizing displacement.<sup>3</sup>

## Who is Responsible for RHNA?

Responsibility for completing RHNA is shared among state, regional and local governments:

• The role of the State is to identify the total number of homes for which each region in California must plan in order to meet the housing needs of people across the full spectrum of income levels, from housing for





very low-income households all the way to marketrate housing. This was developed by the California Department of Housing and Community Development (HCD) in 2020 and is known as the Regional Housing Needs Determination (RHND).

- The role of the region is to allocate a share of the RHND to each local government in the region. As the Council of Governments (COG) for the nine-county Bay Area, ABAG is required to develop the methodology for sharing the RHND among all cities, towns and counties in the region. During 2019 and 2020, ABAG developed the RHNA methodology in conjunction with a committee of elected officials, city and county staff, and stakeholders called the Housing Methodology Committee (HMC).
- The role of local governments is to participate in the development of the allocation methodology and to update their Housing Elements to show how they will accommodate their share of the RHND, following the adoption of the final RHNA allocations at the end of 2021. The Housing Element must include an inventory of sites that have been zoned for sufficient capacity to accommodate the jurisdiction's RHNA allocation for each income category.

## **RHNA Public Engagement and Outreach**

ABAG has employed a variety of strategies to encourage public participation to ensure the perspectives and input of local governments, stakeholders, and members of the public are represented throughout the RHNA

# SCHEDULE AND PROCESS FOR DEVELOPING RHNA

## **Major Milestones in the RHNA Process**

- October 2019: ABAG convenes Housing Methodology Committee (HMC)
- June 9, 2020: HCD provided ABAG with its determination of total regional housing needs. HCD indicated that Bay Area jurisdictions must plan for 441,176 units between 2023-2031.
- October 15, 2020: ABAG Executive Board approved the proposed methodology and draft subregion shares.
- October 25 November 27, 2020: ABAG held a public comment period on the proposed methodology.
- January 2021: ABAG Executive Board approved the draft RHNA methodology and final subregional shares.
- February 11, 2021: ABAG sent the draft RHNA methodology to HCD for review.
- April 12, 2021: HCD sent letter confirming the draft RHNA methodology furthers the RHNA objectives.
- May 20, 2021: ABAG Executive Board approved final RHNA methodology and draft RHNA allocations.
- Summer 2021: Jurisdictions and HCD can appeal a jurisdiction's draft RHNA allocation.
- Fall 2021: ABAG conducts a public hearing to consider and make a final determination on appeals.
- December 2021: ABAG Executive Board conducts public hearing to adopt final RHNA plan.

## 2023 - 2031 RHNA Development Timeline

10/2019 to 9/2020	2019	10/2019
ABAG Housing Methodology Committee (HMC) Monthly Meetings	OCI. NOV.	Methodology Development Begins
	DEC.	
	2020	
2/2020	JAN.	
Subregions Form	TED.	
	ΔPR	
	MAY	(12020
	JUNE	0/2020
9/2020	JULY	Need Determination
Final HMC Meeting	AUG.	Need Determination
10/2020 to 11/2020	SEPT.	10/2020
Public Comment Methodology	OCI.	Proposed RHNA Methodology
	NUV.	+ Draft Subregion Shares
1/2021	2021	
Final Subragian Shares		
	FEB	
Draft PHNA Methodology to	MAR.	
HCD for Review	APR.	5/2021
4/2021	MAY	Final RHNA Methodology
HCD Approves Draft RHNA Methodology	JUNE	+ Draft Allocation
55	JULY	Summer/Fall 2021
	AUG.	RHNA Appeals
	SEPI.	
	NOV	
12/2021	DFC.	
Final RHNA Allocation and	2022	
ABAG Executive Board Approval		January 2022
	2023	Housing Flomont Duo Data
		nousing ciement due date

development process. ABAG provides opportunities to learn about RHNA and provide input through regular ABAG meetings that are open to the public, outreach to local government elected officials and staff, and electronic news blasts and postings to the ABAG website to notify interested parties at decision points throughout the process. ABAG's outreach and engagement activities are described in more detail below.

## ABAG Housing Methodology Committee

As it has for the past several RHNA cycles, ABAG convened a Housing Methodology Committee (HMC) to guide development of the methodology used to allocate a share of the region's total housing need to every local government in the Bay Area. The HMC was comprised of local elected officials, jurisdiction staff, and other stakeholders from throughout the Bay Area.

ABAG's HMC approach stands out compared to most other large Councils of Governments, going beyond the legal requirements to facilitate dialogue and informationsharing among local government representatives and stakeholders from across the Bay Area with crucial expertise to address the region's housing challenges. As ABAG strives to advance equity and affirmatively further fair housing, the agency sought to ensure a breadth of voices in the methodology process, and expanded the HMC to include additional members representing social equity, labor, and philanthropy. Additionally, HMC representatives were recruited via increased outreach. The HMC held 12 meetings starting in October 2019 to formulate a recommended RHNA methodology.



Information about the topics discussed at the meetings is available on the ABAG website.

# ABAG Regional Planning Committee and Executive Board

The ABAG Regional Planning Committee (RPC) received regular updates about the HMC's deliberations and made recommendations about RHNA to the ABAG Executive Board, which takes action at key points in the RHNA process. To support the RPC's role as a bridge between the HMC and the Executive Board, the HMC included 12 committee members from the RPC. Local Government Elected Officials and Staff In addition to updates provided to the RPC and Executive Board, ABAG conducts outreach to local elected officials and staff using different methods, including:

- Presentations to elected officials through existing meetings, such as Mayors and Councilmembers Conferences and League of California Cities meetings.
- Presentations to existing planning director meetings in each county and development of materials to assist local planning staff in communicating about RHNA to councils and boards.



- General Assemblies in February 2020 and June 2020 that provided information designed for elected officials about RHNA, Housing Elements, and Plan Bay Area 2050.
- Webinars in December 2020 and January 2021 about the Plan Bay Area 2050 Final Blueprint and Draft RHNA Methodology.

### **Public**

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All meetings of the HMC, RPC, and Executive Board are open to the public. Representatives of many housing and land use stakeholder groups actively participate in RHNA discussions. The public also has the opportunity to provide input during the public comment period at the meetings described above. Members of the public were also invited to participate in the two webinars ABAG held about the Draft RHNA Methodology.

ABAG also engaged Bay Area residents from traditionally under-represented groups through a series of seven focus groups organized in partnership with communitybased organizations throughout the region. In January and February 2020 focus groups were held with Acterra, Community Resources for Independent Living, Green Hive, Sacred Heart Community Service, Sound of Hope Radio Network, and West Oakland Environmental Indicators Project. Focus group participants were asked questions about regional housing issues in an interactive setting and encouraged to discuss thoughts freely with other participants. A summary of participants' comments

was shared with the HMC and RPC to inform development of the RHNA methodology.

## Public Comment Period and Developing the Final Methodology

The ABAG Executive Board approved release of the proposed RHNA methodology for public comment on October 15, 2020. As required by law, ABAG held a public comment period from October 25 to November 27 and conducted a public hearing at the November 12 meeting of the ABAG Regional Planning Committee. The comments received provided perspectives from over 200 local government staff and elected officials, advocacy organizations, and members of the public.

In response to feedback received during the public comment period, the RPC and Executive Board voted to incorporate the "equity adjustment" as part of the draft RHNA methodology approved in January 2021. As required by law, ABAG submitted the draft RHNA methodology to HCD for its review on February 11, 2021. On April 12, 2021, HCD sent ABAG a letter confirming the draft RHNA methodology furthers the RHNA objectives (see Appendix 1 for the letter ABAG received from HCD). The Executive Board approved the Final RHNA Methodology at its meeting on May 20, 2021.

## The Regional Housing Needs Determination<sup>4</sup>

In consultation with ABAG, HCD determined that the Bay Area must plan for 441,176 new housing units from 2023 to 2031. This determination is based on population projections produced by the California Department of Finance (see **Appendix 2** for the letter ABAG received from HCD). Details of the RHND by income category are shown in **Table 1**. This determination is based on population projections produced by the California Department of Finance and the application of specific adjustments to determine the total amount of housing needs for the region. The adjustments are a result of

recent legislation that sought to incorporate an estimate of existing housing need by requiring HCD to apply factors related to a target vacancy rate, the rate of overcrowding, and the share of cost-burdened households.<sup>5</sup> The new laws governing the methodology for how HCD calculates the RHND resulted in a significantly higher number of housing units for which the Bay Area must plan compared to previous RHNA cycles. Table 1: ABAG Regional Housing Needs Determination from HCD

<b>INCOME CATEGORY</b>	PERCENT	HOUSING UNIT NEED
Very Low*	<b>25.9%</b>	114,442
Low	14.9%	65,892
Moderate	16.5%	72,712
Above Moderate	42.6%	188,130
TOTAL	100%	441,176
* Extremely Low	15.5%	Included in "Very Low" Income Category



# THE FINAL RHNA METHODOLOGY

As noted previously, the purpose of the RHNA methodology is to divide the RHND among Bay Area jurisdictions. The methodology is a formula that calculates the number of housing units assigned to each city and county, and the formula also distributes each jurisdiction's housing unit allocation among four affordability levels.

## **RHNA Statutory Objectives and Factors**

Development of the RHNA methodology was guided by the statutory requirements that the RHNA meet five objectives<sup>6</sup> and be consistent with the forecasted development pattern from Plan Bay Area 2050.<sup>7</sup> The five statutory objectives of RHNA can be summarized as:

Objective 1: Increase housing supply and mix of housing types, tenure and affordability in all cities and counties in an equitable manner.

### Objective 2: Promote infill development and socio-

**economic equity**, protect environmental and agricultural resources, encourage efficient development patterns and achieve greenhouse gas emissions reduction targets.

**Objective 3: Promote improved intraregional jobshousing relationship**, including balance between lowwage jobs and affordable housing.

**Objective 4: Balance disproportionate household income distributions** (more high-income RHNA to lower-income areas and vice-versa).

Since the last RHNA cycle (2015 to 2023), the State has made several changes to the laws that govern the RHNA process, including modifications to the objectives that the RHNA allocation must meet. Changes include highlighting the importance of specifically addressing the balance between low-wage jobs and homes affordable to lowwage workers (known as jobs-housing fit) when looking at improving the jobs-housing relationship as part of Objective 3 as well as considering achievement of the region's greenhouse gas emissions reduction target when promoting infill development and socioeconomic equity as part of Objective 2. However, the most notable addition is Objective 5, the new requirement to "affirmatively further fair housing," which focuses on overcoming patterns of segregation and fostering inclusive communities.<sup>8</sup> This new requirement applies to RHNA as well as local government Housing Element updates. While RHNA has always focused on increasing access to housing for all, the new statutory requirements make this commitment to fair housing a more explicit aspect of the RHNA process and Housing Element updates.

In addition to meeting the objectives outlined above, State Housing Element Law requires ABAG to consider a specific set of factors in the development of the RHNA methodology. The law also requires ABAG to survey its member jurisdictions to gather information on the factors that must be considered for inclusion in the methodology.<sup>9</sup> As part of the new requirement related to affirmatively furthering fair housing, ABAG included questions in the survey about local governments' issues, strategies and actions related to achieving fair housing goals.

Objective 5: Affirmatively further fair housing.

As a complement to these survey questions, ABAG staff also reviewed the fair housing reports that jurisdictions submit to the federal government if they receive block grant funding from the U.S. Department of Housing and Urban Development. ABAG opened an online survey to all jurisdictions in the region from January-February 2020 and received 72 responses, a response rate of 66 percent.<sup>10</sup> ABAG staff reviewed the survey responses as well as other relevant data to inform the development of a methodology that achieves the objectives outlined in state statute.

Housing Element Law also identifies several criteria that *cannot* be used as the basis for a determination of a jurisdiction's share of the regional housing need. These include:

- Any ordinance, policy, voter-approved measure or standard of a city or county that directly or indirectly limits the number of residential building permits issued by a city or county.
- **2.** Prior underproduction of housing in a city or county from the previous regional housing need allocation.
- **3.** Stable population numbers in a city or county from the previous regional housing needs cycle.

More information about how the final RHNA methodology furthers the objectives and addresses the methodology factors in Housing Element Law is provided in the RHNA Statutory Objectives and Factors section.



# Final RHNA Methodology Performance Evaluation

As noted previously, Housing Element Law requires that the RHNA methodology meet five statutory objectives and that it be consistent with the forecasted development pattern from Plan Bay Area 2050. In January 2021, the Plan Bay Area 2050 Final Blueprint was approved by the ABAG Executive Board and Metropolitan Transportation Commission (MTC) as the Preferred Alternative for the Environmental Impact Report.



Working with the HMC, ABAG-MTC staff developed a set of performance evaluation metrics that provide feedback about how well methodology options addressed the five statutory objectives for RHNA and furthered regional planning goals. Each metric corresponds to one of the five RHNA statutory objectives and the metrics selected were primarily based on the analysis conducted by HCD in evaluating the RHNA methodologies completed by other regions in California.<sup>11</sup> **Appendix 3** describes the evaluation metrics in more detail and demonstrates that the final RHNA methodology performs well in advancing the five statutory objectives of RHNA.

ABAG-MTC staff also developed a framework for evaluating consistency between RHNA and Plan Bay Area 2050. This approach compares the 8-year RHNA allocations to the 35-year housing growth from the Plan Bay Area 2050 Final Blueprint at the county and subcounty geographies used in the plan. If the 8-year growth level from RHNA does not exceed the 35-year housing growth level at either of these geographic levels, then RHNA and Plan Bay Area 2050 will be determined to be consistent. Staff evaluated the final RHNA methodology using this approach and determined that the RHNA allocation is consistent with Plan Bay Area.<sup>12</sup>

## The Final RHNA Methodology

Figure 1 (below) provides an overview of the final RHNA methodology, which includes three primary components: the baseline allocation, factors and weights, and the equity adjustment.

1. Baseline allocation: 2050 Households (Final Blueprint)

The baseline allocation is used to assign each jurisdiction a beginning share of the RHND. The baseline allocation is based on each jurisdiction's share of the region's total households in the year 2050 from the Plan Bay Area 2050 Final Blueprint.<sup>13</sup> Using the 2050 Households (Final Blueprint) baseline takes into consideration the number of households that are currently living in a jurisdiction as well as the number of households expected to be added over the next several decades. The HMC preferred using 2050 Households as the baseline because it provides a middle ground between using a baseline based on the current number of households and a baseline based on forecasted housing growth from the Plan Bay Area 2050 Final Blueprint.



## Figure 1: Final Methodology Overview

2. Factors and weights for allocating units by income category

Table 2 below shows the factors and weights selected for the draft RHNA methodology. The methodology includes one set of factors and weights for allocating very low- and low-income units and a second set of factors and weights for allocating moderate- and above-moderate units. The number of units allocated to each jurisdiction using these two formulas are added together to determine that jurisdiction's total allocation.

## Table 2: Factors & Weights for Final RHNA Methodology

VERY LOW AND LOW UNITS		MODERATE AND ABOVE MODERATE UNITS		
70%	Access to High Opportunity Areas	40%	Access to High Opportunity Areas	
15%	Job Proximity – Auto	60%	Job Proximity - Auto	
15%	Job Proximity - Transit			

The weight assigned to each factor (i.e., the percentages shown in **Table 2**) represents the factor's relative importance in the overall allocation. The weight determines the share of the region's housing needs that will be assigned by that particular factor.

Each factor represents data related to the methodology's policy priorities: access to high opportunity areas and proximity to jobs. Determining a factor's impact starts with calculating the jurisdiction's raw score for a factor. For Access to High Opportunity Areas, the raw score is the share of households in a jurisdiction in High or Highest Resource census tracts. The raw score for job proximity is the share of the region's jobs that can be accessed from a jurisdiction in either a 30-minute auto or 45-minute transit commute. **Table 3** (pages 17-18) provides more detail about the data and assumptions for each factor.

A factor's effect on a jurisdiction's allocation depends on how the jurisdiction scores on the factor relative to



## ACCESS TO HIGH OPPORTUNITY AREAS

The Access to High Opportunity Areas factor received the the HMC throughout the methodology development pro- housing units to jurisdictions with a higher percentage of labelled High Resource or Highest Resource on the 2020 HCD and the California Tax Credit Allocation Committee stems from HCD's policy goals to avoid further segregatic and to encourage access to opportunity through affordat uses publicly available data sources to identify areas in the have been shown by research to support positive econom outcomes for low-income families and their children. The Areas factor directly addresses the RHNA objective to affi increasing access to opportunity and replacing segregate factor does not explicitly incorporate racial demographics housing opportunities for low-income households and pe where these communities have historically lacked access. this factor is that HCD has consistently used the Opportun- regions' RHNA methodologies meet the objective to affirm	e most consistent support from cess. This factor allocates more households living in areas Opportunity Map produced by (TCAC). <sup>14</sup> The Opportunity Map on and concentration of poverty ble housing programs. The map e state whose characteristics hic, educational, and health Access to High Opportunity irmatively further fair housing by ed living patterns. <sup>15</sup> Although this s, it has the potential to expand eople of color in more places Another practical strength of hity Map to assess whether other matively further fair housing.
More housing units allocated to jurisdictions with the mo	st access to opportunity.
The percentage of a jurisdiction's households living in ce Resource or Highest Resource based on opportunity inde	nsus tracts labelled High ex scores.
HCD/TCAC 2020 Opportunity Maps Note: The original Opportunity Map methodology requir designated as rural within each county are labelled as Hig However, all non-rural tracts in a region are compared to tracts in the same county, and the tracts with opportunity percent among all non-rural tracts are labelled High or H UC Berkeley's Othering and Belonging Institute, who pre data for TCAC and HCD, issued a recalculation of the opp staff for use in the RHNA methodology. In the recalculation are compared to each other, so rural areas are now comp region instead of solely to other rural tracts in the same of affected Solano and Sonoma Counties, which had fewer Highest Resource as a result.	red that 40 percent of tracts gh or Highest Resource. each other, not just to other y index scores in the top 40 ighest Resource. Staff from pared the opportunity index portunity index to ABAG/MTC on, all Bay Area census tracts pared to all other tracts in the county. This recalculation mostly tracts classified as High or Table 3 continued on pext page
	The Access to High Opportunity Areas factor received the the HMC throughout the methodology development prochousing units to jurisdictions with a higher percentage of labelled High Resource or Highest Resource on the 2020 HCD and the California Tax Credit Allocation Committee stems from HCD's policy goals to avoid further segregatic and to encourage access to opportunity through affordat uses publicly available data sources to identify areas in the have been shown by research to support positive econom outcomes for low-income families and their children. The Areas factor directly addresses the RHNA objective to affirincreasing access to opportunity and replacing segregate factor does not explicitly incorporate racial demographics housing opportunities for low-income households and pewhere these communities have historically lacked access. this factor is that HCD has consistently used the Opportunity regions' RHNA methodologies meet the objective to affir More housing units allocated to jurisdictions with the more the send of a jurisdiction's households living in ceresource or Highest Resource based on opportunity independent of the same county, and the tracts with opportunity percent among all non-rural tracts are labelled as High However, all non-rural tracts in a region are compared to tracts in the same county, and Belonging Institute, who predata for TCAC and HCD, issued a recalculation of the opportunity and sonoma Counties, which had fewer Highest Resource as a result.

Table 3: Allocation Factor Data and Assumptions (continued)

JOB PROXIMITY	
Overview	The two factors based on job proximity (Job Proximity - Auto and Job Proximity - Transit) consider the relationship between jobs and transportation. Job Proximity - Auto is based on jobs that can be accessed from a jurisdiction by a 30-minute auto commute, while Job Proximity - Transit is based on jobs that can be accessed from a jurisdiction within a 45-minute transit commute. These factors encourage more housing in jurisdictions with easier access to the region's job centers. Additionally, these factors use a commute shed to measure job access rather than solely considering the jobs present within a jurisdiction's boundaries. Using a commute shed intends to better capture the lived experience of accessing jobs irrespective of jurisdiction boundaries. Housing and job markets extend beyond jurisdiction boundaries—in most cities, a majority of workers work outside their jurisdiction of residence, and demand for housing in a particular jurisdiction is substantially influenced by its proximity and accessibility to jobs in another community.
Impact	More housing allocated to jurisdictions with easier access to region's job centers.
Definition	<ul> <li>Job Proximity - Auto: Share of region's total jobs that can be accessed from a jurisdiction by a 30-minute auto commute during the morning peak period. Assumes single-occupant vehicle drivers who decline the use of Express Lanes.</li> <li>Job Proximity - Transit: Share of region's total jobs that can be accessed from a jurisdiction by a 45-minute transit commute during the morning peak period. Assumes transit users can choose from all modes available to them to get between home and work.</li> </ul>
Data Source	MTC, Travel Model One, Model Run 2015_06_002 (Source: Plan Bay Area 2040, 2017)

other jurisdictions in the region. A jurisdiction with an above-average score on a factor would get an upwards adjustment, whereas a city with a below-average score on a factor would get a downwards adjustment relative to the baseline allocation.

By design, the factors are placed on the same scale so a factor can modify the baseline in the range from 50 percent to 150 percent: Jurisdictions scoring at the top for the region will get baseline share times 1.5, while jurisdictions scoring at the bottom for the region will get baseline share times 0.5. This scaling approach helps distribute RHNA units throughout the region by ensuring that even a jurisdiction with a low score gets an allocation from each factor and placing a limit on how many units can be assigned to a jurisdiction with a high score.



3. Equity Adjustment

The equity adjustment identifies 49 jurisdictions that exhibit racial and socioeconomic demographics that differ from the regional average using a composite score developed by several members of the HMC. The purpose of the equity adjustment is to ensure that each of these 49 jurisdictions receives an allocation of lower-income units that is at least proportional to its share of the region's total households in 2020. For example, if a jurisdiction had two percent of existing households, it would receive at least two percent of the very low- and low-income RHNA units.

The composite score is calculated by adding together the jurisdiction's divergence index score<sup>16</sup> (which measures segregation by looking at how much local racial demographics differ from the region) and the percent of the jurisdiction's households with household incomes

Appendix 4 shows the impact that each factor has on each jurisdiction's baseline allocation from the Plan Bay Area 2050 Final Blueprint. As noted previously, a jurisdiction's raw factor score is rescaled to a range of 0.5 to 1.5. Each jurisdiction's baseline allocation is then multiplied by the scaled factor score. The final step is to adjust the scaled factor scores for all jurisdictions to ensure they sum to 100 percent.

Appendix 5 shows the number of units, by income category, that each jurisdiction receives as a result of each factor in the methodology. This table also shows the impact of the equity adjustment (described in more detail below) on the very low- and low-income allocations for every jurisdiction.

above 120 percent of the area median income (AMI). Jurisdictions with a composite score greater than the median score for the region are included in the group of "exclusionary" jurisdictions. Accordingly, a jurisdiction does not necessarily need to have an extremely high divergence score or percent of households above 120 percent AMI to be considered "exclusionary," as a jurisdiction's composite score only needed to be in the top half for all Bay Area jurisdictions.

The equity adjustment excludes five jurisdictions who have composite scores above the region's median, but median

incomes in the bottom quartile for the region. These jurisdictions were excluded from the equity adjustment to avoid directing additional lower-income RHNA units to jurisdictions with racial demographics that are different than the rest of the region but that already have a high share of lower-income households.

The equity adjustment is the last step in the allocation methodology, and is applied after the methodology's factors and weights are used to determine a jurisdiction's allocation by income category. If the allocation of lowerincome RHNA units to one of the 49 jurisdictions identified



by the equity adjustment's composite score does not meet the equity adjustment's proportionality threshold, then lower-income units are redistributed from the remaining 60 jurisdictions in the region to increase that jurisdiction's lower-income allocation until it is proportional. Each jurisdiction in this group has its allocation of lower-income units reduced in proportion to its share of the total lowerincome units among the jurisdictions in the group of 60. The equity adjustment does not have any effect on moderate- and above moderate-income units.

Appendix 6 shows the calculations for the composite score used to identify the 49 jurisdictions that exhibit racial and socioeconomic demographics that differ from the regional average. It also shows the effects of the equity adjustment on each jurisdiction's allocation of lowerincome units. Of the 49 jurisdictions, 31 receive allocations that meet the equity adjustment's proportionality threshold based on the draft methodology's factors and weights that emphasize access to high opportunity areas. The allocations for these 31 jurisdictions do not change as a result of the equity adjustment. The other 60 jurisdictions in the region see reductions in their lowerincome allocations (and thus their total allocations) as units are shifted to the 18 jurisdictions whose allocations are increased as a result of the equity adjustment.

**Table 4** (on pages 22-27) shows each jurisdiction's draft RHNA allocation. **Figure 2** (on pages 28-29) is maps showing the draft RHNA allocations to Bay Area jurisdictions.



Jurisdictions and HCD have an opportunity to appeal a jurisdiction's draft RHNA allocation. Any appeals that are upheld could affect the allocations for all jurisdictions. Following the appeals process, ABAG will adopt final RHNA allocations by the end of 2021.

luridiction	VERY LOW INCOME (<50% of Area	LOW INCOME (50-80% of Area	MODERATE INCOME (80-120% of Area	ABOVE MODERATE INCOME (>120% of Area	TOTAL		
	Median income)	Median Income)	Median Income)	Median Income)	IUIAL		
ALAMEDA COUNTI					ſ		
Alameda	1,421	818	868	2,246	5,353		
Albany	308	178	175	453	1,114		
Berkeley	2,446	1,408	1,416	3,664	8,934		
Dublin	1,085	625	560	1,449	3,719		
Emeryville	451	259	308	797	1,815		
Fremont	3,640	2,096	1,996	5,165	12,897		
Hayward	1,075	617	817	2,115	4,624		
Livermore	1,317	758	696	1,799	4,570		
Newark	464	268	318	824	1,874		
Oakland	6,511	3,750	4,457	11,533	26,251		
Piedmont	163	94	92	238	587		
Pleasanton	1,750	1,008	894	2,313	5,965		
San Leandro	862	495	696	1,802	3,855		
Unincorporated Alameda County	1,251	721	763	1,976	4,711		
Union City	862	496	382	988	2,728		
Jurisdiction	VERY LOW INCOME (<50% of Area Median Income)	LOW INCOME (50-80% of Area Median Income)	MODERATE INCOME (80-120% of Area Median Income)	ABOVE MODERATE INCOME (>120% of Area Median Income)	TOTAL		
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CONTRA COSTA COUNTY							
Antioch	792	456	493	1,275	3,016		
Brentwood	402	232	247	641	1,522		
Clayton	170	97	84	219	570		
Concord	1,292	744	847	2,190	5,073		
Danville	652	376	338	875	2,241		
El Cerrito	334	192	241	624	1,391		
Hercules	344	198	126	327	995		
Lafayette	599	344	326	845	2,114		
Martinez	350	201	221	573	1,345		
Moraga	318	183	172	445	1,118		
Oakley	279	161	172	446	1,058		
Orinda	372	215	215	557	1,359		
Pinole	121	69	87	223	500		
Pittsburg	506	291	340	880	2,017		
Pleasant Hill	566	326	254	657	1,803		
Richmond	840	485	638	1,651	3,614		
San Pablo	173	100	132	341	746		
San Ramon	1,497	862	767	1,985	5,111		
Unincorporated Contra Costa	2,082	1,199	1,217	3,147	7,645		
Walnut Creek	1,657	954	890	2,304	5,805		

## Table 4: Draft RHNA Allocations

	VERY LOW INCOME (<50% of Area	LOW INCOME (50-80% of Area	MODERATE INCOME (80-120% of Area	ABOVE MODERATE INCOME (>120% of Area	TOTAL
	Median Income)	Median Income)	Median Income)	Median Income)	IOIAL
MARIN COUNTY					
Belvedere	49	28	23	60	160
Corte Madera	213	123	108	281	725
Fairfax	149	86	71	184	490
Larkspur	291	168	145	375	979
Mill Valley	262	151	126	326	865
Novato	570	328	332	860	2,090
Ross	34	20	16	41	111
San Anselmo	253	145	121	314	833
San Rafael	857	492	521	1,350	3,220
Sausalito	200	115	114	295	724
Tiburon	193	110	93	243	639
Unincorporated Marin	1,100	634	512	1,323	3,569
NAPA COUNTY	_				
American Canyon	112	65	75	194	446
Calistoga	31	19	19	50	119
Napa	504	291	319	825	1,939
St. Helena	103	59	26	66	254
Unincorporated Napa	369	213	120	312	1,014
Yountville	19	11	12	30	72
SAN FRANCISCO COUNTY					
San Francisco (city)	20,867	12,014	13,717	35,471	82,069

Jurisdiction	VERY LOW INCOME (<50% of Area Median Income)	LOW INCOME (50-80% of Area Median Income)	MODERATE INCOME (80-120% of Area Median Income)	ABOVE MODERATE INCOME (>120% of Area Median Income)	TOTAL		
SAN MATEO COUNTY							
Atherton	94	54	56	144	348		
Belmont	488	281	283	733	1,785		
Brisbane	317	183	303	785	1,588		
Burlingame	863	497	529	1,368	3,257		
Colma	44	25	37	96	202		
Daly City	1,336	769	762	1,971	4,838		
East Palo Alto	165	95	159	410	829		
Foster City	520	299	300	777	1,896		
Half Moon Bay	181	104	54	141	480		
Hillsborough	155	89	87	223	554		
Menlo Park	740	426	496	1,284	2,946		
Millbrae	575	331	361	932	2,199		
Pacifica	538	310	291	753	1,892		
Portola Valley	73	42	39	99	253		
Redwood City	1,115	643	789	2,041	4,588		
San Bruno	704	405	573	1,483	3,165		
San Carlos	739	425	438	1,133	2,735		
San Mateo	1,777	1,023	1,175	3,040	7,015		
South San Francisco	871	502	720	1,863	3,956		
Unincorporated San Mateo	811	468	433	1,121	2,833		
Woodside	90	52	52	134	328		

	VERY LOW INCOME (<50% of Area	LOW INCOME (50-80% of Area	MODERATE INCOME (80-120% of Area	ABOVE MODERATE INCOME (>120% of Area			
Jurisdiction	Median Income)	Median Income)	Median Income)	Median Income)	TOTAL		
SANTA CLARA COUNTY							
Campbell	752	434	499	1,292	2,977		
Cupertino	1,193	687	755	1,953	4,588		
Gilroy	669	385	200	519	1,773		
Los Altos	501	288	326	843	1,958		
Los Altos Hills	125	72	82	210	489		
Los Gatos	537	310	320	826	1,993		
Milpitas	1,685	970	1,131	2,927	6,713		
Monte Sereno	53	30	31	79	193		
Morgan Hill	262	151	174	450	1,037		
Mountain View	2,773	1,597	1,885	4,880	11,135		
Palo Alto	1,556	896	1,013	2,621	6,086		
San Jose	15,088	8,687	10,711	27,714	62,200		
Santa Clara	2,872	1,653	1,981	5,126	11,632		
Saratoga	454	261	278	719	1,712		
Sunnyvale	2,968	1,709	2,032	5,257	11,966		
Unincorporated Santa Clara	828	477	508	1,312	3,125		

	VERY LOW INCOME (<50% of Area	LOW INCOME (50-80% of Area	MODERATE INCOME (80-120% of Area	ABOVE MODERATE INCOME (>120% of Area			
Jurisdiction	Median Income)	Median Income)	Median Income)	Median Income)	TOTAL		
SOLANO COUNTY*							
Benicia*	203	117	135	351	806		
Dixon*	91	53	57	146	347		
Fair ield*	778	447	508	1,314	3,047		
Rio Vista*	127	73	76	197	473		
Suisun City*	156	90	101	264	611		
Unincorporated Solano*	237	137	149	385	908		
Vacaville*	487	279	305	791	1,862		
Vallejo*	724	416	501	1,297	2,938		
SONOMA COUNTY							
Cloverdale	74	43	45	116	278		
Cotati	60	34	39	101	234		
Healdsburg	190	109	49	128	476		
Petaluma	499	288	313	810	1,910		
Rohnert Park	399	230	265	686	1,580		
Santa Rosa	1,218	701	771	1,995	4,685		
Sebastopol	55	31	35	92	213		
Sonoma	83	48	50	130	311		
Unincorporated Sonoma	1,036	596	627	1,622	3,881		
Windsor	385	222	108	279	994		
TOTAL	114,442	65,892	72,712	188,130	441,176		

\* Jurisdictions in Solano County have formed a subregion and are developing their own methodology to allocate units among the members. The draft allocations shown here are what jurisdictions would receive from ABAG only in the event the subregion is unable to complete its allocation process. The final allocations identified by the Solano County subregion will be reflected in the Final RHNA Plan to be adopted by the end of 2021.

### Figure 2: Draft RHNA Allocations

Jurisdiction growth rate from 2020 households as a result of 2023-2031 RHNA



Jurisdictions and HCD have an opportunity to appeal a jurisdiction's draft RHNA allocation. Any appeals that are upheld could affect the allocations for all jurisdictions. Following the appeals process, ABAG will adopt final RHNA allocations by the end of 2021.

### Figure 2: Draft RHNA Allocations Jurisdiction total allocation of 2023-2031 RHNA



Jurisdictions and HCD have an opportunity to appeal a jurisdiction's draft RHNA allocation. Any appeals that are upheld could affect the allocations for all jurisdictions. Following the appeals process, ABAG will adopt final RHNA allocations by the end of 2021.

THE FINAL RHNA METHODOLOGY RHNA0478

# RHNA STATUTORY OBJECTIVES AND FACTORS

As noted previously, Housing Element Law requires the RHNA methodology to further five objectives that recognize the importance of comprehensively planning for housing in ways that also promote equity, strengthen the economy, improve connections between jobs and housing, and protect the environment. The statutory objectives, and the ways in which the Bay Area's final RHNA methodology meets them, are described below.

### **RHNA Objectives**

OBJECTIVE 1 – "increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in each jurisdiction receiving an allocation of units for low- and very low-income households."

The methodology furthers this objective by allocating a share of the region's housing need across all income categories to all jurisdictions in the Bay Area. As a result, all jurisdictions receive an allocation of very low- and low-income units. The methodology allocates these units equitably, as the methodology allocation factors direct very low- and low-income units based primarily on a jurisdiction's access to opportunity. Accordingly, jurisdictions with the most residents living in census tracts designated as High Resource or Highest Resource on the California Tax Credit Allocation Committee (TCAC) 2020 Opportunity Map receive a higher share of their allocation as lower-income units than other jurisdictions in the region (see **Appendix 3**).

As shown in **Appendix 3**, jurisdictions with the highest housing costs also receive a higher share of their allocation as lower-income units than other jurisdictions in the region. Because jurisdictions must zone at higher densities to accommodate their allocations of low- and very-lowincome units, the methodology will result in both greater affordability and a more diverse range of housing types throughout the region, particularly in the jurisdictions that currently lack affordable housing opportunities.

OBJECTIVE 2 – "Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reductions targets provided by the State Air Resourcess Board pursuant to Section 65080."

The intent of this objective is consistent with many of the strategies integrated into Plan Bay Area 2050. The final RHNA methodology incorporates the Plan Bay Area 2050 Final Blueprint as the data source for the baseline allocation used to assign each jurisdiction a beginning share of the RHND, using each jurisdiction's share of the region's households in the year 2050. In effect, this baseline allocation takes into consideration a jurisdiction's existing total number of households plus its household growth from the Final Blueprint.

The Plan Bay Area 2050 uses the Bay Area UrbanSim 2.0<sup>17</sup> model to analyze a wide variety of land use data, such as access to jobs, services, and other destinations as informed by Plan Bay Area 2050 transportation investments. Therefore, the Final Blueprint prioritizes housing growth in three types of growth geographies, Priority Development Areas nominated by local jurisdictions, Transit-Rich Areas with lower greenhouse gas emissions potential, and High-Resource Areas with excellent access to jobs, schools, and more. The growth geographies in the Final Blueprint also exclude areas with high wildfire risk and areas outside urban growth boundaries. Accordingly, the methodology's use of Plan Bay Area 2050 results in an allocation that promotes infill development, protects environmental and agricultural resources, and reduces the region's greenhouse gas emissions.

The inclusion of job proximity by both automobile and transit as factors in the RHNA methodology complements the use of Plan Bay Area 2050 as the baseline allocation to further this objective. These factors direct more housing to the jurisdictions with the most jobs that can be accessed with a 30-minute commute by automobile or a 45-minute commute by transit. The inclusion of the Job Proximity – Transit factor encourages growth that capitalizes on the Bay Area's existing transit infrastructure, while the Job Proximity – Auto factor recognizes that most people in the region commute by automobile. Encouraging shorter commutes for all modes of travel is an important strategy for reducing greenhouse gas emissions.

As shown in **Appendix 3**, the final RHNA methodology results in jurisdictions with the most access to jobs and



transit as well as jurisdictions with the lowest vehicle miles traveled per resident experiencing higher growth rates from their RHNA allocations than other jurisdictions in the region. Therefore, the methodology furthers the sustainability goals represented by this objective. The final RHNA methodology also promotes socioeconomic equity by expanding the range of housing choices available in all jurisdictions throughout the Bay Area with a particular emphasis on adding homes affordable to lower-income residents in jurisdictions with high resource areas to promote socioeconomic mobility.

OBJECTIVE 3 – "Promoting an improved intraregional relationship between jobs and housing, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low-wage workers in each jurisdiction."

The final RHNA methodology directly incorporates the forecasted development pattern from the Plan Bay Area 2050 Final Blueprint as the baseline allocation. The Final Blueprint emphasizes growth near job centers and in locations near transit, as well as in high-resource areas, with the intent of reducing greenhouse gas emissions. The strategies incorporated into the Final Blueprint help improve the region's jobs-housing balance, leading to shorter commutes–especially for low-income workers.

Moreover, the allocation factors in the final RHNA methodology focus entirely on job proximity and access to opportunity. Seventy percent of very low- and lowincome units are allocated based on jurisdictions' access to opportunity according to the TCAC 2020 Opportunity



Map methodology, which incorporates proximity to jobs filled by workers with less than a bachelor's degree. The remaining 30 percent of the lower-income units are allocated based on jurisdictions' proximity to jobs. Furthermore, 60 percent of the region's moderate- and above moderate-income units are allocated based on jurisdictions' proximity to jobs.

As a result of differences in how units are distributed across income categories in the RHND, the final RHNA methodology allocates 48 percent of all units based on the factors related to job proximity. Thus, the methodology promotes an improved relationship between jobs and housing. As noted previously, the final RHNA methodology results in jurisdictions with the most access to jobs experiencing higher growth rates from their RHNA allocations than other jurisdictions in the region.

Also, as shown in **Appendix 3**, the final RHNA methodology results in jurisdictions with the most

imbalanced jobs-housing fit (or, ratio between the number of low-wage jobs and the number of housing units affordable to low-wage workers) receiving a higher share of lower-income units than other jurisdictions.

OBJECTIVE 4 – "Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category, as compared to the countywide distribution of households in that category from the most recent American Community Survey."

The final RHNA methodology allocates 70 percent of very low- and low-income units based on a jurisdiction's access to opportunity according to the TCAC 2020 Opportunity Map methodology, which scores jurisdictions partially based on their poverty rates and median home values. Consequently, jurisdictions with the most households in High Resource or Highest Resource census tracts have disproportionately large shares of higher-income residents and relatively small shares of lower-income residents. The final RHNA methodology furthers Objective 4 by allocating lower-income units directly to these jurisdictions with the most access to resources. As a result, the jurisdictions with the largest percentage of households with incomes above 120 percent of the area median income receive a significantly higher share of their RHNA as lower-income units than the jurisdictions with the largest percentage of households with incomes below 80 percent of area median income (see Appendix 3).

OBJECTIVE 5 – "Affirmatively furthering fair housing, which means taking meaningful actions, in addition

to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws."

The final RHNA methodology affirmatively furthers fair housing by emphasizing access to opportunity based on the data from the TCAC 2020 Opportunity Map. The Access to High Opportunity Areas factor assigns 70 percent of the region's very low- and low-income units and 40 percent of the region's moderate- and above moderate-income units.

The equity adjustment included in the final RHNA methodology also helps affirmatively further fair housing. This adjustment ensures that the 49 jurisdictions identified as exhibiting racial and socioeconomic demographics that differ from the regional average receive a share of the region's lower-income RHNA units that is at least proportional to the jurisdiction's share of existing households. Most of these 49 jurisdictions receive allocations that meet this proportionality threshold based on the final RHNA methodology's emphasis on access to high opportunity areas. However, the equity adjustment ensures that the other 18 jurisdictions that might exhibit racial and economic exclusion but do not have significant shares of households living in high opportunity areas also receive proportional allocations.

Additionally, the final RHNA methodology's emphasis on affirmatively furthering fair housing is supported by the inclusion of High-Resource Areas as one of the growth geographies in the Plan Bay Area 2050 Final Blueprint. In the Final Blueprint, High-Resource Areas are defined as the Census tracts identified as High and Highest Resource in the State's Opportunity Map if they were inside a Priority Development Area (PDA) or if they were near transit in a jurisdiction that designated less than 50 percent of its PDA-eligible land as PDAs.<sup>18</sup>

As shown in Appendix 3, the allocations from the final RHNA methodology result in the jurisdictions with the highest percentage of residents living in High Resource or Highest Resource tracts in the TCAC 2020 Opportunity Map receiving a larger share of the region's lower-income units than other jurisdictions. With the equity adjustment, jurisdictions exhibiting above-average levels of racial and economic exclusion receive a share of the region's lowerincome units that is 19 percent greater than their share of the region's households, and, as noted above, all of the 49 jurisdictions achieve the proportionality threshold. Thus, the methodology will require jurisdictions with the most access to opportunity and those with a pattern of excluding people of color and lower-income households to zone for a broader range of housing types, particularly housing that is affordable to lower-income households.

## **RHNA Methodology Factors**

Housing Element Law also identifies factors that ABAG must consider in developing its RHNA methodology, to the extent sufficient data is available. The statutory factors, and the ways in which the Bay Area's final RHNA methodology meets them, are described below. Additionally, these factors were considered as part of the local jurisdiction survey conducted by ABAG. A summary of the results of the local jurisdiction survey, which helped provide local context on local conditions during the development of the methodology, is included as **Appendix 7**.

 Each member jurisdiction's existing and projected jobs and housing relationship. This shall include an estimate based on readily available data on the number of low-wage jobs within the jurisdiction and how many housing units within the jurisdiction are affordable to low-wage workers as well as an estimate based on readily available data, of projected job growth and projected household growth by income level within each member jurisdiction during the planning period.

The final RHNA methodology directly incorporates each jurisdiction's existing and projected jobs-housing relationship in both the baseline allocation and the allocation factors. Forecasts from Plan Bay Area 2050 inform the baseline allocation, and Plan Bay Area 2050 emphasizes growth near job centers and includes strategies related to increased housing densities and office development subsidies to address jobs-housing imbalances in the region. The strategies incorporated into the Final Blueprint help improve the region's jobs-housing balance, leading to shorter commutes–especially for low-income workers.

The final RHNA methodology amplifies the Plan Bay Area 2050 Final Blueprint's emphasis on improving jobshousing balance by using factors related to job proximity to allocate nearly half of the RHND. These factors direct housing units to those jurisdictions with the most jobs that can be accessed with a 30-minute commute by automobile and/or a 45-minute commute by transit. The combination of the Access to High Opportunity Areas factor and job proximity factors for allocating lowerincome RHNA units intends to enable more Bay Area workers to reside closer to their jobs, with an emphasis on providing more affordable housing in jurisdictions with the largest imbalance between low-wage jobs and housing affordable to low-wage workers.

The final RHNA methodology helps to create a more balanced relationship between housing and jobs by directing RHNA units to job-rich jurisdictions and jurisdictions with the most imbalanced jobs-housing fit. As shown in **Appendix 3**, jurisdictions with the largest share of the Bay Area's jobs receive allocations that result in the highest growth rates compared to the rest of the jurisdictions in the region. Additionally, the jurisdictions with the worst jobs-housing fit receive a larger share of their RHNA as affordable housing than other jurisdictions and receive a share of the RHND that is 22 percent greater than their share of the region's households. This outcome is supported by inclusion of the equity adjustment in the RHNA methodology, which directed additional lowerincome units to jurisdictions with an imbalanced jobshousing fit.

- 2. The opportunities and constraints to development of additional housing in each member jurisdiction, including all of the following:
  - a. Lack of capacity for sewer or water service due to federal or state laws, regulations or regulatory actions, or supply and distribution decisions made by a sewer or water service provider other than the local jurisdiction that preclude the jurisdiction from providing necessary infrastructure for additional development during the planning period.
  - b. The availability of land suitable for urban development or for conversion to residential use, the availability of underutilized land, and opportunities for infill development and increased residential densities. The council of governments may not limit its consideration of suitable housing sites or land suitable for urban development to existing zoning ordinances and land use restrictions of a locality, but shall consider the potential for increased residential development under alternative zoning ordinances and land use restrictions. The determination of available land suitable for urban development may exclude lands where the Federal **Emergency Management Agency (FEMA) or the** Department of Water Resources has determined that the flood management infrastructure designed to protect that land is not adequate to avoid the risk of flooding.

- c. Lands preserved or protected from urban development under existing federal or state programs, or both, designed to protect open space, farmland, environmental habitats, and natural resources on a long-term basis, including land zoned or designated for agricultural protection or preservation that is subject to a local ballot measure that was approved by the voters of that jurisdiction that prohibits or restricts conversion to nonagricultural uses.
- d. County policies to preserve prime agricultural land, as defined pursuant to Section 56064, within an unincorporated area and land within an unincorporated area zoned or designated for agricultural protection or preservation that is subject to a local ballot measure that was approved by the voters of that jurisdiction that prohibits or restricts its conversion to nonagricultural uses.

The opportunities and constraints to housing development are addressed through the incorporation of the Plan Bay Area 2050 Final Blueprint as the baseline allocation in the final RHNA methodology. In developing the Plan Bay Area 2050 Final Blueprint, ABAG-MTC staff worked with local governments to gather information about local plans, zoning, physical characteristics and potential development opportunities and constraints for each jurisdiction. This information is an input into the UrbanSim 2.0 model that uses a simulation of buyers and sellers in local real estate markets to estimate housing feasibility. In assessing feasibility, the UrbanSim 2.0 model also integrates the higher cost of building on parcels with physical development constraints, e.g., steep hillsides. Protected park land and open space are excluded from development in the model.

However, the Final Blueprint does not limit a jurisdiction's housing allocation based on local plans or zoning. The UrbanSim 2.0 model is used to forecast expanded growth potential in growth geographies identified in the Final Blueprint, such as Transit-Rich Areas and High Resource Areas. This allows additional feasible growth within the urban footprint by increasing allowable residential densities and expanding housing into areas currently zoned for commercial and industrial uses.

The Plan Bay Area 2050 Final Blueprint also excludes areas outside urban growth boundaries and areas with unmitigated high hazard risk from additional growth. Existing urban growth boundaries, which take a variety of forms across the region but are relatively common in the Bay Area, help not only to protect prime agricultural lands from development, but also parks and open space as well. Land outside urban growth boundaries also tends not to have urban services such as sewer and water. The Final Blueprint also incorporates strategies to protect highvalue conservation lands, including matching funds to help conserve high-priority natural and agricultural lands.

Including the Plan Bay Area 2050 Final Blueprint in the RHNA methodology addresses concerns about natural hazards, as the Final Blueprint excludes areas with unmitigated high hazard risk from Growth Geographies. The Final Blueprint Growth Geographies exclude CAL FIRE designated "Very High" fire severity areas as well as county-designated wildland-urban interfaces (WUIs) where applicable. The Final Blueprint strategies focus future growth away from the highest fire risk zones, support increased wildland management programs, and support residential building upgrades that reduce the likelihood for damage when fires occur in the wildland urban interface.

The Final Blueprint also incorporates strategies to mitigate the impacts of sea level rise, protecting nearly all communities at risk from two feet of permanent inundation. Riverine flooding is not yet integrated into the Final Blueprint because existing research does not provide guidance on how to model impacts of temporary riverine flooding to buildings and land value. Communities can choose to take these risks into consideration with where and how they site future development, either limiting growth in areas of higher hazard or by increasing building standards to cope with the hazard.

3. The distribution of household growth assumed for purposes of a comparable period of regional transportation plans and opportunities to maximize the use of public transportation and existing transportation infrastructure.

As noted above, the final RHNA methodology's baseline allocation directly incorporates the forecasted development pattern from Plan Bay Area 2050, the Bay Area's Regional Transportation Plan/Sustainable Communities Strategy. The growth geographies in Plan Bay Area 2050 emphasize access to transit, both in locally nominated Priority Development Areas and in regionally identified Transit-Rich Areas. This land use pattern is developed with complementary transportation investments in an effort to ensure past and future transportation investments are maximized.

The final RHNA methodology builds on the transitfocused development pattern from Plan Bay Area 2050 by also allocating 15 percent of the region's very low- and low-income units based on a jurisdiction's proximity to jobs that can be accessed by public transit. Thus, the methodology will encourage higher-density housing in jurisdictions with existing transit infrastructure, which can maximize the use of public transportation in these communities.

Similarly, the results in **Appendix 3** demonstrate that the jurisdictions with the largest share of the region's Transit Priority Area (TPA)<sup>19</sup> acres experience significantly higher growth rates from the final RHNA methodology than other jurisdictions. The 25 jurisdictions with the most TPA acreage grow by 18 percent on average as a result of allocations from the final RHNA methodology. All other jurisdictions grow by 12 percent on average. The jurisdictions with the most access to public transit receive the most growth from the final RHNA methodology, which will encourage the use of public transportation and existing transportation infrastructure.

4. Agreements between a county and cities in a county to direct growth toward incorporated areas of the county and land within an unincorporated area zoned or designated for agricultural protection or preservation that is subject to a local ballot measure that was approved by the voters of the jurisdiction that prohibits or restricts conversion to nonagricultural uses. Use of the Plan Bay Area 2050 Final Blueprint as the RHNA baseline integrates several key strategies related to agricultural preservation. First, the growth pattern in the Final Blueprint is significantly driven by the urban growth boundaries strategy which maintains all existing urban growth boundaries, without any expansion, over the lifespan of the long-range plan. Second, this strategy is supported by an agricultural land preservation strategy that helps to acquire land for permanent agricultural use.

At the same time, because urban growth boundaries often extend outside of existing city limits, there remains a limited amount of unincorporated county growth in the Plan Bay Area 2050 Final Blueprint. ABAG-MTC will continue discussions with local jurisdictions about opportunities to direct additional RHNA units to incorporated areas, including the use of the provisions in Housing Element Law that allow a county transfer a portion of its RHNA allocation to a city or town after it receives its RHNA allocation from ABAG.<sup>20</sup>

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5. The loss of units contained in assisted housing developments, as defined in paragraph (9) of subdivision (a) of Section 65583, that changed to non-low-income use through mortgage prepayment, subsidy contract expirations, or termination of use restrictions.

Comprehensive data about the loss of assisted housing units is not available for all Bay Area jurisdictions in a consistent format. Jurisdictions that provided information on this topic as part of the survey of local jurisdictions often relied on internal data sources. Twenty-seven percent of survey respondents stated their jurisdiction had lost subsidized affordable housing units in the past 10 years, and 32 percent noted they expected to lose units in the next 10 years. Given the lack of consistent data, this topic was not included as a specific factor in the final RHNA methodology. The loss of assisted housing units for lower-income households is an issue that would best be addressed by local jurisdictions when preparing their Housing Elements. ABAG included available data in its preapproved data package as a starting point for supporting local jurisdictions in addressing this issue.

6. The percentage of existing households at each of the income levels listed in subdivision (e) of Section 65584 that are paying more than 30 percent and more than 50 percent of their income in rent.

During the consultation process for the RHND, ABAG worked with HCD to compare the Bay Area's share of cost-burdened households to comparable regions throughout the United States. The comparison used data from the 2012-2016 Comprehensive Housing Affordability Strategy (CHAS) to evaluate cost burden for lower-income and higher-income households. The averages of these cost burdens by income group formed the basis for an adjustment that was included in the RHND.<sup>21</sup>

The data analysis prepared for the RHND indicated that approximately 66 percent of Bay Area households earning less than 80 percent of the Area Median Income (AMI) are cost-burdened, while 16 percent of households earning above 80 percent AMI are cost-burdened. The prevalence of cost burden as a concern for many Bay Area households was confirmed by the results of the survey sent to local jurisdictions, where 51 respondents (72 percent) indicated that high housing costs and high rates of cost burden affect housing needs in their jurisdictions.

The UrbanSim 2.0 model used to develop the Plan Bay Area 2050 Final Blueprint considers both housing costs and relative incomes when forecasting future growth. Moreover, Plan Bay Area 2050 incorporates multiple strategies to address housing unaffordability, including allowing a greater mix of housing types and densities in the plan's growth geographies, reducing barriers to housing near transit and in areas of high opportunity, transforming aging malls and office parks into mixedincome neighborhoods, raising additional funding for affordable housing, requiring 10 to 20 percent of new housing to be affordable, and strengthening renter protections beyond current state regulations.

The final RHNA methodology further addresses costburdened households in the Bay Area - particularly the high percentage of cost-burdened households earning less than 80 percent of AMI - by allocating lower-income units to all jurisdictions, particularly those with the most access to opportunity. The methodology allocates 70 percent of the region's lower-income units based on jurisdictions' access to opportunity according to the TCAC 2020 Opportunity Map.

As shown in **Appendix 3**, the jurisdictions with the highest housing costs receive a larger percentage of their RHNA as lower-income units than other jurisdictions in the region, and the jurisdictions with the most households in High or Highest Resource census tracts also receive a larger percentage of their allocations as lower-income units than other jurisdictions.

Local governments will have an opportunity to address jurisdiction-specific issues related to cost-burdened households when they update their housing elements. ABAG-MTC staff included data on jurisdiction-specific rates of housing cost burden as part of housing data packets being prepared to assist with housing element updates.

### 7. The rate of overcrowding.

During the consultation process for the RHND, ABAG worked with HCD to compare the Bay Area's rate of overcrowding to comparable regions throughout the United States. The comparison used data from the 2014-2018 American Community Survey (ACS) to evaluate overcrowding. The Bay Area's overcrowding rate of 6.73 percent is nearly double the rate of comparable regions. Consequently, ABAG's RHND includes an overcrowding adjustment.<sup>22</sup>

Overcrowding rates are inputs into the Plan Bay Area 2050 regional growth forecast, which is used as the baseline allocation in the final RHNA methodology. As noted earlier, Plan Bay Area 2050 also directly incorporates multiple strategies to address housing affordability, and these strategies also seek to reduce overcrowding.

Like housing cost burden, overcrowding indicates a lack of adequate housing supply, especially housing units affordable for lower-income households. The final RHNA methodology seeks to expand the housing supply, and especially the supply of affordable units, within the most expensive parts of the region, which can help reduce the rates of overcrowding experienced by Bay Area households. As shown in **Appendix 3**, the final RHNA methodology results in the jurisdictions with the highest housing costs receiving a larger percentage of their RHNA as lower-income units than other jurisdictions and a share of the region's total RHNA that is 8 percent larger than their share of the region's households.

Local governments will have an opportunity to address jurisdiction-specific issues related to overcrowded households when they update their housing elements. ABAG-MTC staff included data on jurisdiction-specific rates of overcrowding as part of housing data packets being prepared to assist with housing element updates.

### 8. The housing needs of farmworkers.

ABAG included questions about housing needs for the region's farmworkers in its survey of local jurisdictions, however consistent data is not available for all Bay Area jurisdictions. ABAG's final RHNA methodology incorporates this factor through its emphasis on proximity to jobs, which includes agricultural jobs. As shown in Appendix 3, the final RHNA methodology also results in jurisdictions with the most low-wage jobs per housing unit affordable to low-wage workers receiving higher percentages of affordable housing compared to other jurisdictions in the region. This outcome is supported by inclusion of the equity adjustment in the RHNA methodology, which directed additional lower-income units to jurisdictions with an imbalanced jobs-housing fit. As a result, jurisdictions with larger farmworker housing need will be expected to provide more very low- and lowincome units to meet this demand.

9. The housing needs generated by the presence of a private university or a campus of the California State University or the University of California within any member jurisdiction.

Responses to questions from ABAG's Local Jurisdiction Survey about housing demand created by postsecondary educational institutions indicate a need for better data collection on this issue. Despite the lack of precise data on this topic at the local level, the housing needs generated by postsecondary institutions are incorporated into Plan Bay Area 2050, which directly informs the baseline allocation of the final RHNA methodology. The Regional Growth Forecast projects the number of households and group quarters residents, some of whom are students. Additionally, the local growth patterns developed for the Plan Bay Area 2050 Final Blueprint using UrbanSim consider the presence of major universities as well as these institutions' residential and non-residential pipeline projects.

Moreover, the RHNA methodology allocates nearly half of all units based on proximity to jobs, and postsecondary education institutions tend to be significant job centers. Therefore, the methodology will allocate more housing to jurisdictions near community colleges or public and private universities, which will result in additional housing units that can enable these jurisdictions to address the housing needs of students, faculty, and staff at these institutions.



# 10. The housing needs of individuals and families experiencing homelessness.

Comprehensive jurisdiction-level data about individuals and families experiencing homelessness is not available for all Bay Area jurisdictions in a consistent format. As a result, this topic was not included as a specific factor in the final RHNA methodology. However, the methodology does consider the housing needs of individuals and families experiencing homelessness by allocating very low- and low-income units to all jurisdictions throughout the region. As the RHNA methodology focuses on access to opportunity and proximity to jobs, the methodology can help ensure that housing targeted toward people experiencing homelessness can enable them to access employment and other essential resources for stability and economic mobility. Furthermore, ABAG will encourage all local jurisdictions to adequately plan for the needs of those experiencing homelessness in their housing elements.

11. The loss of units during a state of emergency that was declared by the Governor pursuant to the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2), during the planning period immediately preceding the relevant revision pursuant to Section 65588 that have yet to be rebuilt or replaced at the time of the analysis.

ABAG received two responses in the survey of local jurisdictions that identified the number of units lost during declared states of emergency. The City of Santa Rosa indicated that 3,043 housing units were lost on October 8, 2017 and that, as of February 2020 when the survey was conducted, 2,323 units had been completed or were in the construction/permitting process. The County of Sonoma stated the unincorporated county lost 2,200 units in the 2017 Sonoma Complex Fires and 1,235 units had been rebuilt or were under construction as of February 2020. The County also lost 176 units in the 2019 Kincade fire and 4 were in the process of being rebuilt as of February 2020. Unincorporated Napa County also reported to the California Department of Finance (DOF) that it lost 587 housing units in during the wildfires that took place in 2017.

In developing the RHND, HCD analyzed Bay Area jurisdictions' annual reports to DOF and found that the ten-year annual average rate of demolitions for the Bay Area is 0.40 percent of the housing stock. The RHND included HCD's minimum replacement adjustment of 0.5 percent, which exceeds the region's demolition rate. This adjustment added 15,120 housing units to the RHND. Since the demolition adjustment in the RHND included significantly more units than were lost, it was not necessary to include a specific factor in the final RHNA methodology to address the loss of units.

### 12. The region's greenhouse gas emissions targets provided by the State Air Resources Board pursuant to Section 65080.

Plan Bay Area 2050, which is used as the baseline allocation in the final RHNA methodology, includes a diverse range of strategies to reduce greenhouse gas emissions, including:



- ABAG-MTC Photo Archive
  - Focusing more housing growth in areas near highquality public transit and in high-resource communities near job centers
  - Redeveloping aging malls and office parks in mixedincome communities
  - Vastly expanding the amount of funding for production and preservation of affordable housing
  - Focusing more job growth near high-quality public transit, especially in housing-rich communities to address jobs-housing imbalance

- Investing in new local and regional rail lines, express buses, local bus systems, and more to serve communities across the Bay Area
- Investing in world-class bicycle and pedestrian infrastructure in all communities to enable neighborhood trips to be completed without a car.

The greenhouse gas reduction forecasts in Plan Bay Area 2050 are subject to the review of the State Air Resources Board. The Final Blueprint meets and exceeds the 19 percent per-capita target set for this planning cycle.

Additionally, the final RHNA methodology's allocation factors focus on locating housing near jobs. As a result, as shown in **Appendix 3**, jurisdictions with the most access to jobs and transit as well as those with the lowest VMT per resident experience higher growth rates resulting from the final RHNA methodology's allocations.

13. Any other factors adopted by the council of governments, that further the objectives listed in subdivision (d) of Section 65584, provided that the council of governments specifies which of the objectives each additional factor is necessary to further.

No other planning factors were adopted by ABAG to review as a specific local planning factor.

# **RHNA SUBREGIONS**

Housing Element Law allows two or more jurisdictions to form a "subregion" to conduct a parallel RHNA process to allocate the subregion's housing need among its members. A subregion is responsible for conducting its own RHNA process that meets all of the statutory requirements related to process and outcomes, including developing its own RHNA methodology, allocating a share of need to each member jurisdiction, and conducting its own appeals process. The subregion's final allocation must meet the same requirements as the regional allocation: it must further the statutory objectives, have considered the statutory factors, and be consistent with the development pattern of Plan Bay Area 2050.

For the 2023 to 2031 RHNA, a subregion was formed in Solano County that includes City of Benicia, City of Dixon, City of Fairfield, City of Rio Vista, City of Suisun City, City of Vacaville, City of Vallejo, and County of Solano.<sup>23</sup>

ABAG must assign each subregion a share of the Bay Area's RHND, which represents the total number of units, by income category, the subregion must allocate to its member jurisdictions. Each subregion's portion of the RHND has been removed from the units allocated by ABAG's process for the rest of the region's jurisdictions.

The ABAG Executive Board approved the release of Draft Subregional Shares for public comment on October 15, 2020. ABAG received no comments on the Draft Subregional Shares during the public comment period. The Final Subregional Shares, as shown in Table 5 (below), were approved by the ABAG Executive Board on January 21, 2021.

Subregion	VERY LOW	LOW	MODERATE	ABOVE MODERATE	TOTAL
Solano County	2,803	1,612	1,832	4,745	10,992

Table 5: Final Subregional Shares, Total Units by Income Category

# **NEXT STEPS**

Following approval of the final RHNA methodology and release of the draft allocations, ABAG will conduct the required appeals process during summer/fall 2021. Housing Element Law allows a local government or HCD to appeal any Bay Area local government's draft allocation. Jurisdictions and HCD have 45 days following release of the draft allocations to submit a written appeal to ABAG. Jurisdictions and HCD then have 45 days to submit comments on the appeals filed.

ABAG will conduct a public hearing to consider the appeals and comments received. After ABAG makes a final determination on each appeal and redistributes units among jurisdictions in the region as necessary, it will adopt the final allocation plan, currently slated for the end of 2021. Once each jurisdiction receives its RHNA allocation, it must revise its housing element by January 2023 to show how it plans to accommodate its portion of the Bay Area's housing need.

As noted previously, ABAG-MTC will also continue discussions with local jurisdictions about opportunities to direct additional RHNA units from unincorporated counties to incorporated areas, including the use of the provisions in Housing Element Law that allow a county transfer a portion of its RHNA allocation to a city or town after it receives its RHNA allocation from ABAG.



# **ENDNOTES**

- 1 Government Code Section 65580 covers all facets of Housing Element Law. The RHNA process is covered in Section 65584. RHNA factors are covered in Section 65584.04; objectives are covered in 65584(d).
- 2 The four income categories included in the RHND are:
  - Very Low Income: 0-50% of Area Median Income
  - Low Income: 50-80% of Area Median Income
  - Moderate Income: 80-120% of Area Median Income
  - Above Moderate Income: 120% or more of Area Median Income
- 3 Read more on the HCD Regional Housing Needs Allocation and Housing Elements web page.
- 4 More details about the RHND is available on the ABAG RHNA website (scroll to bottom of page). At this time, the RHND has been finalized by the State for the Bay Area's RHNA process.
- 5 Government Code Section 65584.01.
- 6 Government Code Section 65584(d).
- 7 Government Code Section 65584.04(m)(1)
- 8 According to Government Code Section 65584(e), affirmatively furthering fair housing means "For purposes of this section, "affirmatively furthering fair housing" means taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws."
- 9 See State of California Government Code Section 65584.04(b)(1).
- 10 A summary of the Local Jurisdiction Survey responses is available on the ABAG website.
- 11 For letters HCD sent to other regions, see the January 2020 HMC meeting agenda packet.
- 12 The final RHNA methodology and Plan Bay Area 2050 are consistent for all nine counties and in 33 of 34 superdistricts (i.e., sub-county areas) using the methodology developed during the HMC process. In the one superdistrict flagged during the consistency check, the Final Blueprint reflects the loss of more than 1,000 homes in wildfires since 2015. Anticipated reconstruction of these units during the RHNA period does not yield significant net growth in housing units, making these allocations consistent with the Final Blueprint long-range projections.
- 13 Plan Bay Area 2050 is the long-range regional plan for the San Francisco Bay Area, serving as the 2021 Regional Transportation Plan/Sustainable Communities Strategy for the Bay Area
- 14 For more information on the Opportunity Map, see pages 10-13 of this document from the March 2020 HMC meeting's agenda packet.
- 15 See Government Code Section 65584(e).

- 16 Jurisdictions with above-average levels of racial and economic exclusion were identified based on their divergence index scores and their percentage of households above 120 percent Area Median Income. The divergence index score is a calculation of how different a jurisdiction's racial demographics are from the region's demographics. If a jurisdiction has the same racial distribution as the region, the jurisdiction's divergence index is scored at 0. The more a jurisdiction's demographics diverge from the regional distribution, the higher the divergence index score. A high score does not necessarily indicate that the jurisdiction is racially homogenous, only that its demographic profile differs markedly from the region's racial demographics. Given the multitude of racial and ethnic groups in the Bay Area, the Othering and Belonging Institute at UC Berkeley has identified the Divergence Index as the best measure of segregation in the region in part because this measure captures segregation for multiple racial groups simultaneously.
- 17 Bay Area UrbanSim 2.0 is a spatially explicit economic model that forecasts future business and household locations. It forecasts future land use change (e.g., development or redevelopment) starting from an integrated base year database containing information on the buildings, households, businesses and land use policies within the region. During the simulation, Bay Area UrbanSim 2.0 forecasts the choices real estate developers make on how much, what, and where to build, based upon future-focused public policy inputs (strategies & growth geographies adopted for use in Plan Bay Area 2050). This adds additional housing units and commercial space in profitable locations (i.e., land use policies at the site allow the construction of a building that is profitable under forecast demand). Additional documentation for Bay Area UrbanSim 2.0 is available at: https://github. com/UDST/bayarea\_urbansim
- 18 For purposes of designating High-Resource Areas in the Final Blueprint, "near transit" was defined as within 1/2 mile of a rail station, ferry terminal or bus stop with peak headways of 15 minutes or less, or within 1/4 mile of a bus stop with peak headways of 30 minutes or less.
- 19 Transit Priority Areas are defined in the California Public Resources Code, Section 21099 as areas within 1/2 mile of a Major Transit stop, which could be any of the following:
  - Existing rail stations
  - Planned rail stations in an adopted Regional Transportation Plan
  - Existing ferry terminals with bus or rail
  - Planned ferry terminals with bus or rail service in an adopted Regional Transportation Plan
  - Intersection of at least two existing or planned bus routes with headways of 15 minutes or better during both the morning and evening peak periods
- 20 Government Code Section 65584.07.
- 21 See the June 9, 2020 letter in which HCD provided the RHND for the Bay Area.
- 22 See the June 9, 2020 letter in which HCD provided the RHND for the Bay Area.
- 23 The jurisdictions that had decided to form a subregion in Napa County (City of American Canyon, City of Napa, Town of Yountville, and the County of Napa) decided in December 2020 to dissolve their subregion. As a result, these jurisdictions will participate in the RHNA process ABAG is conducting and will receive allocations based on the RHNA methodology adopted by ABAG.
- 24 Government Code Section 65584.05



# APPENDICES

Appendix 1: Letter from HCD Approving ABAG's Draft RHNA Methodology

Appendix 2: Bay Area Regional Housing Needs Determination Letter from HCD

Appendix 3: Evaluation Metrics

Appendix 4: Factor Scores by Jurisdiction

Appendix 5: Draft RHNA Allocation by Jurisdiction, with Factor Components

Appendix 6: Equity Adjustment

Appendix 7: Summary of Local Jurisdiction Survey Results

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY

### DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT DIVISION OF HOUSING POLICY DEVELOPMENT 2020 W. El Camino Avenue, Suite 500 Sacramento, CA 95833 (916) 263-2911 / FAX (916) 263-7453 www.hcd.ca.gov





April 12, 2021

Therese W. McMillan, Executive Director Association of Bay Area Governments 375 Beale Street, Suite 700 San Francisco, CA 94105

Dear Executive Director Therese W. McMillan:

### RE: Review of Draft Regional Housing Need Allocation (RHNA) Methodology

Thank you for submitting the draft Association of Bay Area Governments (ABAG) Sixth Cycle Regional Housing Need Allocation (RHNA) Methodology. Pursuant to Government Code Section 65584.04(i), the California Department of Housing and Community Development (HCD) is required to review draft RHNA methodologies to determine whether a methodology furthers the statutory objectives described in Government Code Section 65584(d).

In brief, the draft ABAG RHNA methodology begins with the total regional determination provided by HCD of 441,176 units and uses a baseline allocation to assign each jurisdiction a beginning share of the units. The baseline allocation is based on each jurisdiction's share of the region's total households in the year 2050 from the Plan Bay Area Final Blueprint. The methodology then applies one set of factors and weights to adjust the baseline allocation for the very low and low units, and another set for moderate and above moderate units to address the statutory objectives.

For the <u>low- and very low-income</u> allocations, the methodology uses three adjustments: access to high opportunity areas (70 percent), job proximity by auto (15 percent), and job proximity by transit (15 percent). For the <u>moderate and above moderate allocations</u>, the methodology uses two adjustments: access to high opportunity areas (40 percent) and job proximity by auto (60 percent).

Lastly, the methodology applies an equity adjustment that identifies 49 jurisdictions that exhibit higher racial segregation and higher median incomes than regional averages. The adjustment ensures each jurisdiction receives an allocation of lower income units that is proportional to its share of the region's total households in 2020.

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HCD has completed its review of the methodology and finds that the draft ABAG RHNA Methodology furthers the statutory objectives described in Government Code 65584(d).<sup>1</sup> HCD acknowledges the complex task of developing a methodology to allocate RHNA to 109 jurisdictions while furthering the five statutory objectives of RHNA. This methodology largely distributes more RHNA near jobs, transit and resources linked to long-term improvements of life outcomes. In particular, HCD applauds the use of objective factors specifically linked to the statutory objectives.

HCD commends ABAG for a robust methodology development process, with exceptional stakeholder engagement, through its Housing Methodology Committee (HMC). The HMC consisted of nine elected officials and 12 planning staff, with representation from all six ABAG counties. It also consisted of 16 diverse regional stakeholders. This combination of elected officials, local government staff, and regional stakeholders met 12 times over the course of a nearly one calendar year.

Below is a brief summary of findings related to each statutory objective described within Government Code Section 65584(d):

1. Increasing the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner, which shall result in each jurisdiction receiving an allocation of units for low- and very low-income households.

On a per capita basis, the methodology allocates larger shares of RHNA to higher income jurisdictions, resulting in an allocation larger than their existing share of households. Jurisdictions with more expensive housing units – an indicator of higher housing demand – receive larger allocations on a per capita basis. For example, Palo Alto and Menlo Park have some of the highest housing costs in the region, according to American Community Survey Data. Both jurisdictions receive a share of the regional RHNA that is larger than their share of the region's population, putting them in the top 15 per capita allocations. Additionally, jurisdictions with higher rates of home ownership and single-family homes receive slightly larger lower-income allocations as a percentage of their total RHNA (supporting a mix of housing types).

2. Promoting infill development and socioeconomic equity, the protection of environmental and agricultural resources, the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reductions targets provided by the State Air Resources Board pursuant to Section 65080.

The draft ABAG methodology encourages a more efficient development pattern by allocating nearly twice as many RHNA units to jurisdictions with higher jobs access, on a per capita basis. Jurisdictions with higher jobs access via transit also receive more RHNA on a per capita basis.

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# **APPENDIX 1**

<sup>&</sup>lt;sup>1</sup> While HCD finds this methodology compliant, applying this methodology to another region or cycle may not necessarily further the statutory objectives as housing conditions and circumstances may differ.

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Jurisdictions with the lowest vehicle miles traveled (VMT) per capita, relative to the region, receive more RHNA per capita than those with the highest per capita VMT. ABAG's largest individual allocations go to its major cities with low VMT per capita and better access to jobs. For example, San Francisco – which has the largest allocation – has the lowest per capita VMT and is observed as having the highest transit accessibility in the region. As a major employment center, San Jose receives a substantial RHNA allocation despite having a higher share of solo commuters and a lower share of transit use than San Francisco. However, to encourage lower VMT in job-rich areas that may not yet be seeing high transit ridership, ABAG's Plan Bay Area complements more housing in these employment centers (which will reduce commutes by allowing more people to afford to live near jobs centers) with strategies to reduce VMT by shifting mode share from driving to public transit.

3. Promoting an improved intraregional relationship between jobs and housing, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low-wage workers in each jurisdiction.

The draft ABAG methodology allocates more RHNA units to jurisdictions with more jobs. Jurisdictions with a higher jobs/housing imbalance receive higher RHNA allocations on a per capita basis. For example, jurisdictions within the healthy range of 1.0 to 1.5 jobs for every housing unit receive, on average, a RHNA allocation that is 61% of their current share of households. Jurisdictions with the highest imbalances – 6.2 and higher – receive an average allocation 1.21 times their current share of households. Lastly, higher income jurisdictions receive larger lower income allocations relative to their existing lower income job shares.

4. Allocating a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category, as compared to the countywide distribution of households in that category from the most recent American Community Survey.

On average, cities with a larger existing share of lower income units receive smaller allocations of low- and very-low income units as a percentage of their total RHNA. For example, East Palo Alto's current percentage of households that are lower income is the highest in the ABAG region and it receives the lowest lower income allocation as a percentage of its total RHNA. San Pablo's percentage of households that are lower income is the second highest in the region and its lower income allocation as a percentage of its total RHNA is lower than 92% of other jurisdictions. Cities with smaller shares of existing lower income units receive larger allocations of low- and very low-income units as a percentage of their total RHNA.

5. Affirmatively furthering fair housing, which means taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and foster inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access

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# **APPENDIX 1**

to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws.

HCD applauds the significant weighting of Access to High Opportunity Areas as an adjustment factor and including an equity adjustment in the draft methodology. ABAG's methodology allocates more RHNA to jurisdictions with higher access to resources on a per capita basis. Additionally, those higher-resourced jurisdictions receive even larger lower income RHNA on a per capita basis. For example, the high-resourced communities of Cupertino and Mountain View receive higher total allocations on a per capita basis. For lower resourced jurisdictions with high rates of segregation, such as East Palo Alto, their allocations – particularly lower income RHNA allocations – are much lower on a per capita basis.

HCD appreciates the active role of ABAG staff in providing data and input throughout the draft ABAG RHNA methodology development and review period. HCD especially thanks Gillian Adams, Dave Vautin, and Aksel Olsen for their significant efforts and assistance.

HCD looks forward to continuing our partnership with ABAG to assist its member jurisdictions to meet and exceed the planning and production of the region's housing need.

Support opportunities available for the ABAG region this cycle include, but are not limited to:

- SB 2 Planning Grants Technical Assistance: Ongoing regionally tailored technical assistance will also remain available throughout the housing element development timeline. Technical assistance information is available at <a href="https://www.hcd.ca.gov/community-development/planning-grants-ta.shtml">https://www.hcd.ca.gov/community-development/planning-grants-ta.shtml</a>.
- HCD also encourages all ABAG's local governments to consider the many other affordable housing and community development resources available to local governments, including the Permanent Local Housing Allocation. HCD's programs can be found at https://www.hcd.ca.gov/grants-funding/nofas.shtml.

If HCD can provide any additional assistance, or if you, or your staff, have any questions, please contact Tom Brinkhuis, Housing Policy Specialist at (916) 263-6651 or tom.brinkhuis@hcd.ca.gov.

Megan Kirkeby Deputy Director

APPENDICES RHNA0497

STATE OF CALIFORNIA - BUSINESS, CONSUMER SERVICES AND HOUSING AGENCY DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT GAVIN NEWSOM, Governor

June 9, 2020

2020 W. El Camino Avenue, Suite 500

(916) 263-2911 / FAX (916) 263-7453

Sacramento, CA 95833

www.hcd.ca.gov

Therese W. McMillan, Executive Director Association of Bay Area Governments 375 Beale Street. Suite 700 San Francisco, CA 94105

Dear Therese W. McMillan,

DIVISION OF HOUSING POLICY DEVELOPMENT

### **RE: Final Regional Housing Need Determination**

This letter provides the Association of Bay Area Governments (ABAG) its final Regional Housing Need Determination. Pursuant to state housing element law (Government Code section 65584, et seq.), the Department of Housing and Community Development (HCD) is required to provide the determination of ABAG's existing and projected housing need.

In assessing ABAG's regional housing need, HCD and ABAG staff completed an extensive consultation process from March 2019 through May 2020 covering the methodology, data sources, and timeline for HCD's determination of the Regional Housing Need. HCD also consulted with Walter Schwarm with the California Department of Finance (DOF) Demographic Research Unit.

Attachment 1 displays the minimum regional housing need determination of **441,176** total units among four income categories for ABAG to distribute among its local governments. Attachment 2 explains the methodology applied pursuant to Gov. Code section 65584.01. In determining ABAG's housing need, HCD considered all the information specified in state housing law (Gov. Code section 65584.01(c)).

As you know, ABAG is responsible for adopting a methodology for RHNA allocation and RHNA Plan for the projection period beginning June 30, 2022 and ending December 31, 2030. Pursuant to Gov. Code section 65584(d), the methodology to prepare ABAG's RHNA plan must further the following objectives:

- (1) Increasing the housing supply and mix of housing types, tenure, and affordability
- (2) Promoting infill development and socioeconomic equity, protecting environmental and agricultural resources, and encouraging efficient development patters
- (3) Promoting an improved intraregional relationship between jobs and housing
- (4) Balancing disproportionate household income distributions
- (5) Affirmatively furthering fair housing

Pursuant to Gov. Code section 65584.04(d), to the extent data is available, ABAG shall include the factors listed in Gov. Code section 65584.04(d)(1-13) to develop its RHNA

Therese W. McMillan Director Page 2

# **APPENDIX 2**

plan, and pursuant to Gov. Code section 65584.04(f), ABAG must explain in writing how each of these factors was incorporated into the RHNA plan methodology and how the methodology furthers the statutory objectives described above. Pursuant to Gov. Code section 65584.04(h), ABAG must submit its draft methodology to HCD for review.

Increasing the availability of affordable homes, ending homelessness, and meeting other housing goals continues to be a priority for the State of California. To support these goals the 2019-20 Budget Act allocated \$250 million for all regions and jurisdictions for planning activities through the Regional Early Action Planning (REAP) and Local Early Action Planning (LEAP) Grant programs. ABAG has \$23,966,861 available through the REAP program and HCD applauds ABAG's efforts to engage early on how best to utilize these funds and HCD looks forward to continuing this collaboration. All ABAG jurisdictions are also eligible for LEAP grants and are encouraged to apply to support meeting and exceeding sixth cycle housing element goals. While the SB 2 Planning Grant deadline has passed, ongoing regionally tailored technical assistance is still available through that program.

In addition to these planning resources HCD encourages local governments to consider the many other affordable housing and community development resources available to local governments that can be found at <u>https://www.hcd.ca.gov/grants-</u>funding/nofas.shtml

HCD commends ABAG and its leadership in fulfilling its important role in advancing the state's housing, transportation, and environmental goals. ABAG is also recognized for its actions in proactively educating and engaging its board and committees on the RHNA process and the regional housing need, as well as creating tools to aid the public understanding in the process. HCD especially thanks Paul Fassinger, Gillian Adams, Aksel Olsen, Dave Vautin, Bobby Lu, Matt Maloney, and Elizabeth Bulgarin for their significant efforts and assistance. HCD looks forward to its continued partnership with ABAG and its member jurisdictions and assisting ABAG in its planning efforts to accommodate the region's share of housing need.

If HCD can provide any additional assistance, or if you, or your staff, have any questions, please contact Megan Kirkeby, Acting Deputy Director, at *megan.kirkeby@hcd.ca.gov* or Tom Brinkhuis, Housing Policy Specialist at (916) 263-6651 or *tom.brinkhuis@hcd.ca.gov*.

Sincerely,

Megan Kirkeby Acting Deputy Director

Enclosures

APPENDICES RHNA0499

### **ATTACHMENT 1**

### HCD REGIONAL HOUSING NEED DETERMINATION ABAG: June 30, 2022 through December 31, 2030

Income Category	<u>Percent</u>	Housing Unit Need
Very-Low*	25.9%	114,442
Low	14.9%	65,892
Moderate	16.5%	72,712
Above-Moderate	42.6%	188,131
Total	100.0%	441,176
* Extremely-Low	15.5%	Included in Very-Low Category

Notes:

Income Distribution:

Income categories are prescribed by California Health and Safety Code (Section 50093, et. seq.). Percents are derived based on Census/ACS reported household income brackets and county median income, then adjusted based on the percent of cost-burdened households in the region compared with the percent of cost burdened households nationally.

### **ATTACHMENT 2**

# **APPENDIX 2**

### HCD REGIONAL HOUSING NEED DETERMINATION: ABAG June 30, 2021 through December 31, 2030

### **Methodology**

	ABAG: PROJECTION PERIOD (8.5 years) HCD Determined Population, Households, & Housing Unit Need					
Reference	Step Taken to Calculate Regional Housing Need	Amount				
No.						
1	Population: December 31 2030 (DOF June 30 2030	8,273,975				
1.	projection adjusted + 6 months to December 31 2030)					
2	- Group Quarters Population: December 31 2030 (DOF June	-169,755				
۷.	30 2030 projection adjusted + 6 months to December 31 2030)					
3.	Household (HH) Population	233,655				
4.	Projected Households	3,023,735				
5.	+ Vacancy Adjustment (3.27%)	+98,799				
6.	+ Overcrowding Adjustment (3.13%)	+94,605				
7.	+ Replacement Adjustment (.50%)	+15,120				
8.	- Occupied Units (HHs) estimated June 30, 2022	-2,800,185				
9.	+ Cost-burden Adjustment	+9,102				
Total	6 <sup>th</sup> Cycle Regional Housing Need Assessment (RHNA)	441,176				

Detailed background data for this chart is available upon request.

### **Explanation and Data Sources**

- 1-4. Population, Group Quarters, Household Population, & Projected Households: Pursuant to Gov. Code Section 65584.01, projections were extrapolated from DOF projections. <u>Population</u> reflects total persons. <u>Group Quarter Population</u> reflects persons in a dormitory, group home, institute, military, etc. that do not require residential housing. <u>Household Population</u> reflects persons requiring residential housing. <u>Projected</u> <u>Households</u> reflect the propensity of persons within the Household Population to form households at different rates based on American Community Survey (ACS) trends.
- 5. Vacancy Adjustment: HCD applies a vacancy adjustment (standard 5% maximum to total projected housing stock) and adjusts the percentage based on the region's current vacancy percentage to provide healthy market vacancies to facilitate housing availability and resident mobility. The adjustment is the difference between standard 5% vacancy rate and regions current vacancy rate based (1.73%) on the 2014-2018 ACS data. For ABAG that difference is 3.27%.
- 6. Overcrowding Adjustment: In regions where overcrowding is greater than the comparable region's overcrowding rate, or in the absence of comparable region the national overcrowding rate. HCD applies an adjustment based on the amount the regions overcrowding rate (6.73%) exceeds the comparable region's rate (3.60%). For ABAG that difference is 3.13%. Data is from the 2014-2018 ACS.

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### **ATTACHMENT 2**

### HCD REGIONAL HOUSING NEED DETERMINATION: ABAG June 30, 2021 through December 31, 2030

(Continued)

- Replacement Adjustment: HCD applies a replacement adjustment between .5% and 5% to the total housing stock based on the current 10-year annual average percent of demolitions the region's local government annual reports to Department of Finance (DOF). For ABAG the 10-year annual average multiplied by the length of the projection period is .40%, and the minimum .50% adjustment is applied.
- 8. Occupied Units: This figure reflects DOF's estimate of occupied units at the start of the projection period (June 30, 2022).
- 9. Cost Burden Adjustment: HCD applies an adjustment to the projected need by comparing the difference in cost-burden by income group for the region to the cost-burden by income group for the comparable regions, as determined by ABAG. The very-low and low income RHNA is increased by the percent difference (66.64%-66.00%=.64%) between the region and the comparable region cost burden rate for households earning 80% of area median income and below, then this difference is applied to very low- and low-income RHNA proportionate to the share of the population these groups currently represent. The moderate and above-moderate income RHNA is increased by the percent difference (16.25%-13.10%=3.15%) between the region and the comparable region cost burden rate for households earning above 80% Area Median Income, then this difference is applied to moderate and above moderate income RHNA proportionate to the share of the population these groups currently represent. The share of the population set to moderate and above moderate income RHNA is increased by the percent difference is applied to moderate and above moderate income RHNA is increased by the percent difference is applied to moderate and above moderate income RHNA proportionate to the share of the population these groups currently represent. Data is from 2012-2016 CHAS.

## **Overview of Performance Evaluation Metrics**

The RHNA allocation methodology must meet five objectives identified in Housing Element Law.<sup>1</sup> To help ensure that any proposed methodology would meet the statutory RHNA objectives and receive approval from the California Department of Housing and Community Development (HCD), ABAG-MTC staff developed a set of evaluation metrics to assess different methodology options. These metrics are based largely on the analytical framework used by HCD in evaluating the draft methodologies completed by other regions in California, as evidenced by the approval letters HCD provided to the Sacramento Area Council of Governments (SACOG), San Diego Association of Governments (SANDAG), and Southern California Association of Governments (SCAG).<sup>2</sup> Other metrics reflect input from members of the Housing Methodology Committee (HMC).

In the evaluation metrics, each statutory objective has been reframed as a question that reflects the language Housing Element Law uses to define the objectives. Each statutory objective is accompanied by quantitative metrics for evaluating the allocation produced by a methodology. The metrics are generally structured as a comparison between the allocations to the top jurisdictions in the region for a particular characteristic – such as jurisdictions with the most expensive housing costs – and the allocations to the rest of the jurisdictions in the region. Metrics Based on Lower-Income Unit Percentage vs. **Metrics Based on Total Allocation** Several of the metrics focus on whether jurisdictions with certain characteristics receive a significant share of their RHNA as lower-income units. These metrics reflect HCD's analysis in its letters evaluating RHNA methodologies from other regions. However, HMC members advocated for metrics that also examine the total number of units assigned to a jurisdiction. These HMC members asserted that it is ultimately less impactful if a jurisdiction receives a high share of its RHNA as lower-income units if that same jurisdiction receives few units overall. Accordingly, each metric that focuses on the share of lower-income units assigned to jurisdictions with certain characteristics is paired with a complementary metric that examines whether those jurisdictions also receive a share of the regional housing need that is at least proportional to their share of the region's households. A value of 1.0 for these complementary metrics means that the group of jurisdictions' overall share of RHNA is proportional relative to its overall share of households in 2020, while a value below 1.0 is less than proportional.

### **Evaluation of Final RHNA Methodology**

The graphs below show how well the final RHNA methodology performs in achieving the five statutory RHNA objectives based on the evaluation metrics.

<sup>1</sup> See California Government Code Section 65584(d).

<sup>2</sup> For copies of letters HCD sent to other regions, see this document from the January 2020 HMC meeting agenda packet.

OBJECTIVE 1: Does the allocation increase the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner?



Metric 1a.1: Do jurisdictions with the most expensive housing costs

Metric 1a.2: Do jurisdictions with the most expensive housing costs receive a share of the region's housing need that is at least proportional to their share of the region's households?



OBJECTIVE 2: Does the allocation promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, the encouragement of efficient development patterns, and the achievement of the region's greenhouse gas reductions targets?

Metric 2b: Do jurisdictions with the largest share

of the region's Transit Priority Area acres have the

Metr ic 2a: Do jurisdictions with the largest share of the region's jobs have the highest grow th rates resulting from RHNA? 18% 20%

with largest share

of the region's jobs

Average growth rate resulting

from RHNA

15%

10%

5%

0%



Metric 2c: Do jurisdictions with the lowest vehicle miles traveled (VMT) per resident have the highest growth rates resulting from RHNA?



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OBJECTIVE 3: Does the allocation promote an improved intraregional relationship between jobs and housing, including an improved balance between the number of low-wage jobs and the number of housing units affordable to low wage workers in each jurisdiction?

Metric 3a.1: Do jurisdictions with the most low-wage workers per housing unit affordable to low-wage workers receive a significant percentage of their RHNA as lower-income units?



OBJECTIVE 4: Does the allocation direct a lower proportion of housing need to an income category when a jurisdiction already has a disproportionately high share of households in that income category? Metric 3a.2: Do jurisdictions with the most low-wage workers per housing unit affordable to low-wage workers receive a share of the region's housing need that is at least proportional to their share of the region's households?



Metric 4: Do jurisdictions with the largest percentage of high-income residents receive a larger share of their RHNA as lower-income units than jurisdictions with the largest percentage of low-income residents?



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OBJECTIVE 5: Does the allocation affirmatively further fair housing?

Metric 5a.1: Do jurisdictions with the largest percentage of households living in High or Highest Resource census tracts receive a significant percentage of their RHNA as lower-income units?



Metric 5b: Do jurisdictions exhibiting racial and economic exclusion receive a share of the region's housing need that is at least proportional to their share of the region's households?



Metric 5a.2: Do jurisdictions with the largest percentage of households living in High or Highest Resource census tracts receive a share of the region's housing need that is at least proportional to their share of the region's households?



Metric 5c: Do jurisdictions with the largest percentage of high-income residents receive a share of the region's housing need that is at least proportional to their share of the region's households?



Metric 5d.1: Do jurisdictions exhibiting racial and economic exclusion above the regional average receive a total share of the region's very low and low-income housing need that is at least proportional to their total share of the region's households? Metric 5d.2: Do most jurisdictions exhibiting racial and economic exclusion above the regional average receive a share of the region's very low- and low-income housing need that is at least proportional to the jurisdiction's share of the region's households?



Note: These metrics use a composite score to identify jurisdictions that exhibit racial and economic exclusion that is above the regional average based on the jurisdiction's divergence index score and the percent of the jurisdiction's households above 120 percent of Area Median Income (AMI).

Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)					
Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%		
Alameda	1.1%	65.8%	1.2	1.3%	1.4%		
Albany	0.2%	84.5%	1.3	0.3%	0.3%		
American Canyon	0.2%	0.0%	0.5	0.1%	0.1%		
Antioch	1.3%	0.0%	0.5	0.6%	0.7%		
Atherton	0.1%	41.4%	0.9	0.1%	0.1%		
Belmont	0.3%	100.0%	1.5	0.5%	0.5%		
Belvedere	0.0%	100.0%	1.5	0.0%	0.1%		
Benicia	0.3%	11.8%	0.6	0.2%	0.2%		
Berkeley	1.7%	73.0%	1.2	2.1%	2.3%		
Brentwood	0.6%	0.0%	0.5	0.3%	0.3%		
Brisbane	0.4%	0.0%	0.5	0.2%	0.2%		
Burlingame	0.5%	100.0%	1.5	0.8%	0.9%		
Calistoga	0.1%	0.0%	0.5	0.0%	0.0%		
Campbell	0.6%	65.7%	1.2	0.7%	0.7%		
Clayton	0.1%	100.0%	1.5	0.2%	0.2%		
Cloverdale	0.1%	0.0%	0.5	0.1%	0.1%		
Colma	0.1%	0.0%	0.5	0.0%	0.0%		
Concord	1.7%	11.2%	0.6	1.1%	1.1%		
Corte Madera	0.1%	100.0%	1.5	0.2%	0.2%		

RAW JPA FACTOR SCORE 16.46 16.53 4.49 1.67 21.08 19.02 3.21 7.35 18.03 1.29 26.70 21.88 0.50 23.85 6.18 0.40 25.76 6.80 7.99

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### **APPENDIX 4**

FACTOR: JOB PR	OXIMITY - AUTO (JPA)		FACTOR: JOB PROXIMITY - TRANSIT (JPT)			)
FACTOR PREPARATIO	DN			FACTOR PREPARATION		
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%
1.0	1.1%	1.1%	2.57	0.7	0.7%	1.0%
1.0	0.2%	0.2%	5.33	0.9	0.2%	0.2%
0.6	0.1%	0.1%	-	0.5	0.1%	0.1%
0.5	0.7%	0.7%	0.05	0.5	0.6%	0.9%
1.2	0.1%	0.1%	1.83	0.6	0.0%	0.1%
1.1	0.3%	0.3%	0.75	0.6	0.2%	0.2%
0.6	0.0%	0.0%	-	0.5	0.0%	0.0%
0.7	0.2%	0.2%	0.02	0.5	0.1%	0.2%
1.1	1.8%	1.7%	7.62	1.0	1.7%	2.3%
0.5	0.3%	0.3%	-	0.5	0.3%	0.4%
1.3	0.6%	0.5%	0.11	0.5	0.2%	0.3%
1.2	0.6%	0.6%	0.77	0.6	0.3%	0.4%
0.5	0.0%	0.0%	-	0.5	0.0%	0.0%
1.2	0.7%	0.7%	3.07	0.7	0.4%	0.5%
0.7	0.1%	0.1%	0.02	0.5	0.1%	0.1%
0.5	0.1%	0.1%	-	0.5	0.1%	0.1%
1.3	0.1%	0.1%	5.50	0.9	0.0%	0.1%
0.7	1.2%	1.2%	0.38	0.5	0.9%	1.2%
0.7	0.1%	0.1%	0.73	0.6	0.1%	0.1%

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Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)				
Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	
Cotati	0.1%	0.0%	0.5	0.0%	0.0%	
Cupertino	0.7%	100.0%	1.5	1.1%	1.2%	
Daly City	0.9%	27.3%	0.8	0.7%	0.8%	
Danville	0.4%	100.0%	1.5	0.6%	0.7%	
Dixon	0.1%	0.0%	0.5	0.1%	0.1%	
Dublin	0.7%	100.0%	1.5	1.1%	1.1%	
East Palo Alto	0.2%	0.0%	0.5	0.1%	0.1%	
El Cerrito	0.4%	11.0%	0.6	0.2%	0.3%	
Emeryville	0.5%	0.0%	0.5	0.2%	0.3%	
Fairfax	0.1%	100.0%	1.5	0.1%	0.2%	
Fairfield	1.2%	0.0%	0.5	0.6%	0.7%	
Foster City	0.3%	100.0%	1.5	0.5%	0.5%	
Fremont	2.4%	92.0%	1.4	3.5%	3.7%	
Gilroy	0.5%	16.6%	0.7	0.3%	0.3%	
Half Moon Bay	0.1%	0.0%	0.5	0.1%	0.1%	
Hayward	1.6%	0.0%	0.5	0.8%	0.8%	
Healdsburg	0.1%	0.0%	0.5	0.1%	0.1%	
Hercules	0.3%	0.0%	0.5	0.1%	0.1%	
Hillsborough	0.1%	100.0%	1.5	0.1%	0.2%	

RAW JPA FACTOR SCORE 4.45 27.57 26.87 9.02 1.70 8.73 30.67 14.76 19.60 3.30 3.66 18.05 12.60 1.29 0.20 11.69 3.13 8.49 15.67

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### **APPENDIX 4**

FACTOR: JOB PR	OXIMITY - AUTO (JPA)		FACTOR: JOB PROXIMITY - TRANSIT (JPT)			)
FACTOR PREPARATIO	DN .			FACTOR PREPARATION		
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%
0.6	0.1%	0.1%	0.00	0.5	0.0%	0.1%
1.4	1.0%	1.0%	0.87	0.6	0.4%	0.5%
1.3	1.3%	1.2%	6.05	0.9	0.9%	1.2%
0.8	0.3%	0.3%	0.03	0.5	0.2%	0.3%
0.6	0.1%	0.1%	-	0.5	0.1%	0.1%
0.8	0.5%	0.5%	0.22	0.5	0.4%	0.5%
1.5	0.3%	0.3%	1.90	0.6	0.1%	0.2%
1.0	0.4%	0.4%	2.91	0.7	0.3%	0.4%
1.1	0.5%	0.5%	13.12	1.4	0.7%	0.9%
0.6	0.1%	0.1%	0.29	0.5	0.1%	0.1%
0.6	0.7%	0.7%	0.11	0.5	0.6%	0.8%
1.1	0.3%	0.3%	0.23	0.5	0.2%	0.2%
0.9	2.2%	2.1%	0.52	0.5	1.3%	1.7%
0.5	0.2%	0.2%	0.04	0.5	0.2%	0.3%
0.5	0.1%	0.1%	-	0.5	0.1%	0.1%
0.9	1.4%	1.3%	0.66	0.5	0.9%	1.1%
0.6	0.1%	0.1%	0.02	0.5	0.1%	0.1%
0.8	0.2%	0.2%	0.45	0.5	0.1%	0.2%
1.0	0.1%	0.1%	0.02	0.5	0.0%	0.1%

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Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)					
Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%		
Lafayette	0.4%	100.0%	1.5	0.6%	0.6%		
Larkspur	0.2%	100.0%	1.5	0.3%	0.3%		
Livermore	1.3%	37.3%	0.9	1.1%	1.2%		
Los Altos	0.3%	100.0%	1.5	0.5%	0.5%		
Los Altos Hills	0.1%	100.0%	1.5	0.1%	0.1%		
Los Gatos	0.3%	100.0%	1.5	0.5%	0.5%		
Martinez	0.4%	29.8%	0.8	0.3%	0.3%		
Menlo Park	0.5%	84.8%	1.3	0.6%	0.7%		
Mill Valley	0.2%	100.0%	1.5	0.2%	0.3%		
Millbrae	0.4%	100.0%	1.5	0.5%	0.6%		
Milpitas	1.3%	62.3%	1.1	1.4%	1.5%		
Monte Sereno	0.0%	100.0%	1.5	0.0%	0.1%		
Moraga	0.2%	100.0%	1.5	0.3%	0.3%		
Morgan Hill	0.4%	0.0%	0.5	0.2%	0.2%		
Mountain View	1.8%	92.5%	1.4	2.5%	2.7%		
Napa	0.8%	2.8%	0.5	0.4%	0.4%		
Newark	0.6%	11.4%	0.6	0.4%	0.4%		
Novato	0.7%	25.2%	0.8	0.5%	0.5%		
Oakland	6.3%	24.3%	0.7	4.7%	5.1%		

RAW JPA FACTOR SCORE 13.39 6.56 4.97 30.66 29.82 20.66 8.95 30.39 6.63 26.43 25.69 21.40 12.40 4.42 31.81 3.02 9.20 3.81 19.81

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FACTOR: JOB PR	OXIMITY - AUTO (JPA)		FACTOR: JOB PROXIMITY - TRANSIT (JPT)			)
FACTOR PREPARATIO	DN			FACTOR PREPARATION		
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%
0.9	0.3%	0.3%	0.58	0.5	0.2%	0.3%
0.7	0.1%	0.1%	0.66	0.5	0.1%	0.1%
0.7	0.8%	0.8%	0.10	0.5	0.6%	0.9%
1.5	0.4%	0.4%	0.86	0.6	0.2%	0.2%
1.4	0.1%	0.1%	0.00	0.5	0.0%	0.1%
1.1	0.4%	0.4%	0.12	0.5	0.2%	0.2%
0.8	0.3%	0.3%	0.15	0.5	0.2%	0.3%
1.4	0.7%	0.7%	1.43	0.6	0.3%	0.4%
0.7	0.1%	0.1%	0.27	0.5	0.1%	0.1%
1.3	0.5%	0.4%	0.81	0.6	0.2%	0.3%
1.3	1.6%	1.6%	2.59	0.7	0.9%	1.1%
1.2	0.0%	0.0%	0.01	0.5	0.0%	0.0%
0.9	0.2%	0.2%	0.27	0.5	0.1%	0.1%
0.6	0.3%	0.3%	0.15	0.5	0.2%	0.3%
1.5	2.6%	2.5%	1.74	0.6	1.1%	1.5%
0.6	0.5%	0.4%	0.24	0.5	0.4%	0.5%
0.8	0.5%	0.5%	0.39	0.5	0.3%	0.4%
0.6	0.4%	0.4%	0.06	0.5	0.3%	0.5%
1.1	7.1%	6.8%	7.04	1.0	6.2%	8.3%

Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)					
Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%		
Oakley	0.5%	0.0%	0.5	0.2%	0.2%		
Orinda	0.2%	100.0%	1.5	0.4%	0.4%		
Pacifica	0.4%	100.0%	1.5	0.5%	0.6%		
Palo Alto	0.9%	100.0%	1.5	1.4%	1.5%		
Petaluma	0.7%	7.7%	0.6	0.4%	0.4%		
Piedmont	0.1%	100.0%	1.5	0.1%	0.2%		
Pinole	0.2%	0.0%	0.5	0.1%	0.1%		
Pittsburg	0.8%	0.0%	0.5	0.4%	0.4%		
Pleasant Hill	0.4%	63.6%	1.1	0.4%	0.4%		
Pleasanton	1.1%	100.0%	1.5	1.7%	1.8%		
Portola Valley	0.0%	100.0%	1.5	0.1%	0.1%		
Redwood City	1.0%	47.3%	1.0	1.0%	1.0%		
Richmond	1.2%	0.0%	0.5	0.6%	0.7%		
Rio Vista	0.2%	0.0%	0.5	0.1%	0.1%		
Rohnert Park	0.6%	0.0%	0.5	0.3%	0.3%		
Ross	0.0%	100.0%	1.5	0.0%	0.0%		
San Anselmo	0.2%	100.0%	1.5	0.3%	0.3%		
San Bruno	0.7%	24.4%	0.7	0.5%	0.6%		
San Carlos	0.5%	100.0%	1.5	0.7%	0.7%		
San Francisco	14.3%	54.4%	1.0	14.9%	16.1%		

RAW JPA FACTOR SCORE 1.36 18.14 10.51 30.66 3.58 19.88 8.07 5.05 9.50 8.21 13.91 21.78 11.67 0.10 4.45 4.21 3.55 25.95 21.43 31.99

FACTOR: JOB PR	OXIMITY - AUTO (JPA)		FACTOR: JOB PROXIMITY - TRANSIT (JPT)			)
FACTOR PREPARATIO	DN			FACTOR PREPARATION		
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%
0.5	0.2%	0.2%	0.00	0.5	0.2%	0.3%
1.1	0.3%	0.2%	0.07	0.5	0.1%	0.2%
0.8	0.3%	0.3%	0.11	0.5	0.2%	0.2%
1.5	1.4%	1.3%	0.94	0.6	0.5%	0.7%
0.6	0.4%	0.4%	0.05	0.5	0.4%	0.5%
1.1	0.1%	0.1%	4.84	0.8	0.1%	0.1%
0.7	0.1%	0.1%	0.41	0.5	0.1%	0.1%
0.7	0.5%	0.5%	0.33	0.5	0.4%	0.5%
0.8	0.3%	0.3%	0.19	0.5	0.2%	0.3%
0.8	0.9%	0.8%	0.51	0.5	0.6%	0.8%
0.9	0.0%	0.0%	-	0.5	0.0%	0.0%
1.2	1.2%	1.1%	0.67	0.5	0.5%	0.7%
0.9	1.1%	1.0%	0.76	0.6	0.7%	0.9%
0.5	0.1%	0.1%	-	0.5	0.1%	0.1%
0.6	0.4%	0.4%	0.07	0.5	0.3%	0.4%
0.6	0.0%	0.0%	0.59	0.5	0.0%	0.0%
0.6	0.1%	0.1%	0.23	0.5	0.1%	0.1%
1.3	1.0%	0.9%	0.80	0.6	0.4%	0.5%
1.2	0.5%	0.5%	1.31	0.6	0.3%	0.4%
1.5	21.5%	20.7%	14.56	1.5	21.5%	28.7%

Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)				
_Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	
San Jose	14.4%	34.7%	0.8	12.2%	13.1%	
San Leandro	1.1%	0.0%	0.5	0.6%	0.6%	
San Mateo	1.4%	61.1%	1.1	1.6%	1.7%	
San Pablo	0.2%	0.0%	0.5	0.1%	0.1%	
San Rafael	1.0%	21.1%	0.7	0.7%	0.8%	
San Ramon	1.0%	100.0%	1.5	1.5%	1.6%	
Santa Clara	2.1%	63.9%	1.1	2.4%	2.6%	
Santa Rosa	1.7%	6.7%	0.6	1.0%	1.1%	
Saratoga	0.3%	100.0%	1.5	0.4%	0.5%	
Sausalito	0.1%	100.0%	1.5	0.2%	0.2%	
Sebastopol	0.1%	0.0%	0.5	0.0%	0.0%	
Sonoma	0.1%	0.0%	0.5	0.1%	0.1%	
South San Francisco	0.9%	20.8%	0.7	0.7%	0.7%	
St. Helena	0.1%	0.0%	0.5	0.0%	0.0%	
Suisun City	0.2%	0.0%	0.5	0.1%	0.1%	
Sunnyvale	2.1%	70.2%	1.2	2.5%	2.7%	
Tiburon	0.1%	100.0%	1.5	0.2%	0.2%	
Unincorporated Alameda	1.4%	27.9%	0.8	1.1%	1.2%	
Unincorporated Contra Costa	2.2%	35.9%	0.9	1.9%	2.0%	
Unincorporated Marin	0.8%	76.1%	1.3	1.0%	1.1%	

**RAW JPA** FACTOR SCORE 20.32 18.69 20.53 12.43 4.97 8.18 27.44 4.17 23.69 17.73 3.67 0.84 26.06 1.08 3.69 29.36 4.76 6.43 5.60 1.39

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FACTOR: JOB PR	OXIMITY - AUTO (JPA)			FACTOR: JOB PRO	OXIMITY - TRANSIT (JPT)		
FACTOR PREPARATIO	ON			FACTOR PREPARATION			
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	
1.1	16.4%	15.8%	2.40	0.7	9.6%	12.8%	
1.1	1.2%	1.2%	3.22	0.7	0.8%	1.1%	
1.1	1.6%	1.6%	1.25	0.6	0.8%	1.1%	
0.9	0.2%	0.2%	1.30	0.6	0.1%	0.2%	
0.7	0.7%	0.7%	0.02	0.5	0.5%	0.7%	
0.8	0.7%	0.7%	0.16	0.5	0.5%	0.7%	
1.4	2.9%	2.8%	3.49	0.7	1.6%	2.1%	
0.6	1.1%	1.1%	0.42	0.5	0.9%	1.2%	
1.2	0.3%	0.3%	0.19	0.5	0.1%	0.2%	
1.1	0.1%	0.1%	0.68	0.5	0.1%	0.1%	
0.6	0.1%	0.1%	0.00	0.5	0.0%	0.1%	
0.5	0.1%	0.1%	-	0.5	0.1%	0.1%	
1.3	1.2%	1.2%	1.08	0.6	0.5%	0.7%	
0.5	0.0%	0.0%	-	0.5	0.0%	0.0%	
0.6	0.2%	0.1%	0.22	0.5	0.1%	0.2%	
1.4	3.0%	2.9%	2.22	0.7	1.4%	1.8%	
0.6	0.1%	0.1%	0.03	0.5	0.1%	0.1%	
0.7	1.0%	1.0%	0.02	0.5	0.7%	1.0%	
0.7	1.5%	1.4%	0.01	0.5	1.1%	1.5%	
0.5	0.4%	0.4%	0.02	0.5	0.4%	0.6%	

Factor Scores by Jurisdiction

		FACTOR: ACCESS TO HIGH OPPORTUNITY AREAS (AHOA)				
			N			
Jurisdiction	BASELINE ALLOCATION: Share of Bay Area Households in Year 2050 (A)	RAW AHOA FACTOR SCORE	AHOA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY AHOA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	
Unincorporated Napa	0.3%	13.2%	0.6	0.2%	0.2%	
Unincorporated San Mateo	0.8%	44.7%	0.9	0.8%	0.8%	
Unincorporated Santa Clara	0.8%	42.0%	0.9	0.7%	0.8%	
Unincorporated Solano	0.4%	0.0%	0.5	0.2%	0.2%	
Unincorporated Sonoma	1.5%	5.9%	0.6	0.9%	0.9%	
Union City	0.7%	12.6%	0.6	0.5%	0.5%	
Vacaville	0.8%	0.0%	0.5	0.4%	0.4%	
Vallejo	1.1%	0.0%	0.5	0.6%	0.6%	
Walnut Creek	1.1%	92.2%	1.4	1.6%	1.8%	
Windsor	0.3%	0.0%	0.5	0.1%	0.1%	
Woodside	0.1%	98.1%	1.5	0.1%	0.1%	
Yountville	0.0%	0.0%	0.5	0.0%	0.0%	
REGION TOTAL				92.87%	100%	

FACTOR SCOR
1.88
2.24
9.50
1.94
1.75
9.14
2.18
6.28
9.19
3.76
17.35
1.82

FACTOR: JOB PR	OXIMITY - AUTO (JPA)			FACTOR: JOB PRO	XIMITY - TRANSIT (JPT)	)
FACTOR PREPARATIO	DN			FACTOR PREPARATIO	DN	
JPA FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPA FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%	RAW JPT FACTOR SCORE	JPT FACTOR SCORE RESCALED TO 0.5-1.5 RANGE (B)	BASELINE ADJUSTED BY JPT FACTOR (A * B)	FACTOR DISTRIBUTION: ADJUSTED BASELINE RESCALED TO 100%
0.6	0.2%	0.1%	0.00	0.5	0.1%	0.2%
0.6	0.5%	0.4%	0.04	0.5	0.4%	0.5%
0.8	0.6%	0.6%	0.07	0.5	0.4%	0.5%
0.6	0.2%	0.2%	0.02	0.5	0.2%	0.3%
0.6	0.8%	0.8%	0.01	0.5	0.8%	1.0%
0.8	0.6%	0.5%	1.09	0.6	0.4%	0.6%
0.6	0.4%	0.4%	0.15	0.5	0.4%	0.5%
0.7	0.8%	0.7%	0.15	0.5	0.6%	0.8%
0.8	0.9%	0.9%	0.39	0.5	0.6%	0.8%
0.6	0.2%	0.2%	-	0.5	0.1%	0.2%
1.0	0.1%	0.1%	0.04	0.5	0.0%	0.0%
0.6	0.0%	0.0%	0.08	0.5	0.0%	0.0%
	103.62%	100%			74.79%	100%

#### Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTOF	R DISTRIBUTION	IS				(Weights de	etermine the share	of each income g	ALLO roup's units that	CATION BUILI	DING BLOCKS	d the factor is	used to geo	ographically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER						LC	OW INCOME			MODE	RATE INCOM	1E	ABOVE	MODERATE IN	СОМЕ	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT		ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%			70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442			46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
Alameda	1.4%	1.1%	1.0%	1,099	185	171	1,455	-34		633	106	98	837	-19	399	469	868	1,032	1,214	2,246	5,353
Albany	0.3%	0.2%	0.2%	239	35	41	315	-7		138	20	24	182	-4	87	88	175	225	228	453	1,114
American Canyon	0.1%	0.1%	0.1%	76	19	20	115	-3		44	11	12	67	-2	28	47	75	71	123	194	446
Antioch	0.7%	0.7%	0.9%	548	116	147	811	-19		315	67	85	467	-11	199	294	493	515	760	1,275	3,016
Atherton	0.1%	0.1%	0.1%	57	14	10	81	13		33	8	6	47	7	21	35	56	53	91	144	348
Belmont	0.5%	0.3%	0.2%	394	55	39	488	0		227	32	22	281	0	143	140	283	370	363	733	1,785
Belvedere	0.1%	0.0%	0.0%	42	3	4	49	0		24	2	2	28	0	15	8	23	39	21	60	160
Benicia	0.2%	0.2%	0.2%	144	33	31	208	-5		83	19	18	120	-3	52	83	135	136	215	351	806
Berkeley	2.3%	1.7%	2.3%	1,805	299	400	2,504	-58		1,039	172	230	1,441	-33	655	761	1,416	1,696	1,968	3,664	8,934
Brentwood	0.3%	0.3%	0.4%	279	58	74	411	-9		161	33	43	237	-5	101	146	247	262	379	641	1,522
Brisbane	0.2%	0.5%	0.3%	182	93	49	324	-7		105	54	28	187	-4	66	237	303	171	614	785	1,588
Burlingame	0.9%	0.6%	0.4%	707	107	69	883	-20		407	62	40	509	-12	257	272	529	664	704	1,368	3,257
Calistoga	0.0%	0.0%	0.0%	22	4	6	32	-1		13	3	3	19	0	8	11	19	21	29	50	119
Campbell	0.7%	0.7%	0.5%	562	116	92	770	-18		324	67	53	444	-10	204	295	499	528	764	1,292	2,977
Clayton	0.2%	0.1%	0.1%	144	13	13	170	0		83	7	7	97	0	52	32	84	135	84	219	570
Cloverdale	0.1%	0.1%	0.1%	52	10	14	76	-2		30	6	8	44	-1	19	26	45	49	67	116	278
Colma	0.0%	0.1%	0.1%	23	11	11	45	-1		13	7	6	26	-1	8	29	37	21	75	96	202
Concord	1.1%	1.2%	1.2%	911	203	208	1,322	-30		525	117	120	762	-18	331	516	847	856	1,334	2,190	5,073
Corte Madera	0.2%	0.1%	0.1%	179	17	17	213	0		103	10	10	123	0	65	43	108	168	113	281	725

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APPENDICES RHN 0544

#### Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTOR	R DISTRIBUTION	S				(Weights de	etermine the share	of each income gro	ALLO oup's units tha	CATION BUILI t is assigned t	<b>DING BLOCKS</b> o a factor, and	the factor is	used to geo	graphically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER	Y LOW INCOME				·	LC	W INCOME			MODE	RATE INCOM	IE	ABOVE	MODERATE IN	СОМЕ	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT		ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%			70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442			46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
Cotati	0.0%	0.1%	0.1%	40	10	11	61	-1	_	23	6	6	35	-1	14	25	39	37	64	101	234
Cupertino	1.2%	1.0%	0.5%	937	163	93	1,193	0	_	539	94	54	687	0	340	415	755	880	1,073	1,953	4,588
Daly City	0.8%	1.2%	1.2%	630	210	199	1,039	297		363	121	114	598	171	229	533	762	592	1,379	1,971	4,838
Danville	0.7%	0.3%	0.3%	548	55	49	652	0		316	32	28	376	0	199	139	338	515	360	875	2,241
Dixon	0.1%	0.1%	0.1%	63	13	17	93	-2	_	36	8	10	54	-1	23	34	57	59	87	146	347
Dublin	1.1%	0.5%	0.5%	912	90	83	1,085	0	_	525	52	48	625	0	331	229	560	857	592	1,449	3,719
East Palo Alto	0.1%	0.3%	0.2%	89	50	30	169	-4	_	51	29	17	97	-2	32	127	159	83	327	410	829
El Cerrito	0.3%	0.4%	0.4%	213	64	65	342	-8	_	123	37	37	197	-5	77	164	241	200	424	624	1,391
Emeryville	0.3%	0.5%	0.9%	213	91	158	462	-11		122	52	91	265	-6	77	231	308	200	597	797	1,815
Fairfax	0.2%	0.1%	0.1%	127	10	12	149	0	_	73	6	7	86	0	46	25	71	120	64	184	490
Fairfield	0.7%	0.7%	0.8%	529	124	143	796	-18	_	304	72	82	458	-11	192	316	508	497	817	1,314	3,047
Foster City	0.5%	0.3%	0.2%	423	58	39	520	0		244	33	22	299	0	154	146	300	398	379	777	1,896
Fremont	3.7%	2.1%	1.7%	2,981	360	299	3,640	0	_	1,717	207	172	2,096	0	1,082	914	1,996	2,801	2,364	5,165	12,897
Gilroy	0.3%	0.2%	0.3%	265	41	53	359	310		152	24	31	207	178	96	104	200	249	270	519	1,773
Half Moon Bay	0.1%	0.1%	0.1%	64	12	17	93	88	_	37	7	10	54	50	23	31	54	60	81	141	480
Hayward	0.8%	1.3%	1.1%	678	225	197	1,100	-25		390	129	113	632	-15	246	571	817	637	1,478	2,115	4,624
Healdsburg	0.1%	0.1%	0.1%	52	12	14	78	112		30	7	8	45	64	19	30	49	49	79	128	476
Hercules	0.1%	0.2%	0.2%	114	33	32	179	165		66	19	19	104	94	41	85	126	107	220	327	995
Hillsborough	0.2%	0.1%	0.1%	126	16	11	153	2		73	9	6	88	1	46	41	87	118	105	223	554

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#### Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTOF	R DISTRIBUTION	S				(Weights de	etermine the share	of each income gr	ALLOC oup's units tha	CATION BUILI	DING BLOCKS	l the factor is	used to geo	ographically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER	Y LOW INCOME					L	OW INCOME			MODE	RATE INCOM	E	ABOVE I	MODERATE IN	ICOME	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT		ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%			70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442		-	46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
Lafayette	0.6%	0.3%	0.3%	494	58	47	599	0		284	33	27	344	0	179	147	326	464	381	845	2,114
Larkspur	0.3%	0.1%	0.1%	245	22	24	291	0	-	141	13	14	168	0	89	56	145	230	145	375	979
Livermore	1.2%	0.8%	0.9%	955	137	148	1,240	77		550	79	85	714	44	347	349	696	897	902	1,799	4,570
Los Altos	0.5%	0.4%	0.2%	389	73	39	501	0		224	42	22	288	0	141	185	326	365	478	843	1,958
Los Altos Hills	0.1%	0.1%	0.1%	98	18	9	125	0	-	57	10	5	72	0	36	46	82	92	118	210	489
Los Gatos	0.5%	0.4%	0.2%	434	64	39	537	0		250	37	23	310	0	158	162	320	408	418	826	1,993
Martinez	0.3%	0.3%	0.3%	264	49	45	358	-8		152	28	26	206	-5	96	125	221	248	325	573	1,345
Menlo Park	0.7%	0.7%	0.4%	559	115	66	740	0	-	322	66	38	426	0	203	293	496	525	759	1,284	2,946
Mill Valley	0.3%	0.1%	0.1%	213	19	20	252	10	-	122	11	11	144	7	77	49	126	200	126	326	865
Millbrae	0.6%	0.4%	0.3%	453	77	45	575	0		261	44	26	331	0	165	196	361	426	506	932	2,199
Milpitas	1.5%	1.6%	1.1%	1,218	271	196	1,685	0	-	701	156	113	970	0	442	689	1,131	1,144	1,783	2,927	6,713
Monte Sereno	0.1%	0.0%	0.0%	41	6	4	51	2		24	4	2	30	0	15	16	31	39	40	79	193
Moraga	0.3%	0.2%	0.1%	264	30	24	318	0		152	17	14	183	0	96	76	172	248	197	445	1,118
Morgan Hill	0.2%	0.3%	0.3%	177	43	48	268	-6	-	102	25	28	155	-4	64	110	174	166	284	450	1,037
Mountain View	2.7%	2.5%	1.5%	2,155	434	249	2,838	-65	-	1,241	250	144	1,635	-38	782	1,103	1,885	2,025	2,855	4,880	11,135
Napa	0.4%	0.4%	0.5%	350	75	91	516	-12		202	43	53	298	-7	127	192	319	329	496	825	1,939
Newark	0.4%	0.5%	0.4%	322	79	74	475	-11	-	186	46	42	274	-6	117	201	318	303	521	824	1,874
Novato	0.5%	0.4%	0.5%	436	69	78	583	-13		251	40	45	336	-8	158	174	332	409	451	860	2,090
Oakland	5.1%	6.8%	8.3%	4,061	1,174	1,430	6,665	-154		2,338	676	824	3,838	-88	1,474	2,983	4,457	3,814	7,719	11,533	26,251

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## Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTOF	R DISTRIBUTION	IS				(Weights de	etermine the share	e of each income g	ALLO roup's units tha	CATION BUIL	DING BLOCKS to a factor, and	l the factor is	used to geo	ographically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER		E				L	OW INCOME			MOD	RATE INCOM	IE	ABOVE	MODERATE IN	ICOME	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT		ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%			70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442			46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
Oakley	0.2%	0.2%	0.3%	194	40	52	286	-7		112	23	30	165	-4	70	102	172	182	264	446	1,058
Orinda	0.4%	0.2%	0.2%	304	41	27	372	0		175	24	16	215	0	110	105	215	285	272	557	1,359
Pacifica	0.6%	0.3%	0.2%	461	49	41	551	-13		265	28	24	317	-7	167	124	291	433	320	753	1,892
Palo Alto	1.5%	1.3%	0.7%	1,209	226	121	1,556	0		696	130	70	896	0	439	574	1,013	1,136	1,485	2,621	6,086
Petaluma	0.4%	0.4%	0.5%	356	72	83	511	-12		205	42	48	295	-7	129	184	313	335	475	810	1,910
Piedmont	0.2%	0.1%	0.1%	126	18	19	163	0		73	10	11	94	0	46	46	92	119	119	238	587
Pinole	0.1%	0.1%	0.1%	79	23	22	124	-3		45	13	13	71	-2	29	58	87	74	149	223	500
Pittsburg	0.4%	0.5%	0.5%	339	85	94	518	-12		195	49	54	298	-7	123	217	340	319	561	880	2,017
Pleasant Hill	0.4%	0.3%	0.3%	360	48	43	451	115		208	28	25	261	65	131	123	254	339	318	657	1,803
Pleasanton	1.8%	0.8%	0.8%	1,469	142	139	1,750	0		846	82	80	1,008	0	533	361	894	1,380	933	2,313	5,965
Portola Valley	0.1%	0.0%	0.0%	58	7	5	70	3		33	4	3	40	2	21	18	39	54	45	99	253
Redwood City	1.0%	1.1%	0.7%	826	192	123	1,141	-26		476	111	71	658	-15	300	489	789	776	1,265	2,041	4,588
Richmond	0.7%	1.0%	0.9%	529	175	156	860	-20		305	101	90	496	-11	192	446	638	497	1,154	1,651	3,614
Rio Vista	0.1%	0.1%	0.1%	89	17	24	130	-3		51	10	14	75	-2	32	44	76	84	113	197	473
Rohnert Park	0.3%	0.4%	0.4%	270	66	72	408	-9		155	38	42	235	-5	98	167	265	253	433	686	1,580
Ross	0.0%	0.0%	0.0%	28	2	3	33	1		16	1	2	19	1	10	6	16	26	15	41	111
San Anselmo	0.3%	0.1%	0.1%	216	17	20	253	0		124	10	11	145	0	78	43	121	203	111	314	833
San Bruno	0.6%	0.9%	0.5%	469	159	93	721	-17		270	91	54	415	-10	170	403	573	440	1,043	1,483	3,165
San Carlos	0.7%	0.5%	0.4%	589	88	62	739	0		339	51	35	425	0	214	224	438	553	580	1,133	2,735

A34 ABAG DRAFT REGIONAL HOUSING NEEDS ALLOCATION (RHNA) PLAN: SAN FRANCISCO BAY AREA, 2023-2031

APPENDICES RHNA0547

#### Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTO	R DISTRIBUTION	IS				(Weights de	etermine the share	e of each income g	ALLO roup's units tha	CATION BUILI t is assigned t	DING BLOCKS to a factor, and	d the factor is	used to geo	ographically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER	Y LOW INCOME					LC	OW INCOME			MODE	RATE INCOM	IE	ABOVE	MODERATE IN	ICOME	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT		ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%			70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442			46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
San Francisco	16.1%	20.7%	28.7%	12,883	3,554	4,925	21,359	-492		7,418	2,046	2,836	12,294	-280	4,677	9,033	13,717	12,102	23,371	35,471	82,069
San Jose	13.1%	15.8%	12.8%	10,533	2,710	2,201	15,444	-356		6,065	1,560	1,267	8,892	-205	3,824	6,887	10,711	9,895	17,819	27,714	62,200
San Leandro	0.6%	1.2%	1.1%	490	204	188	882	-20		282	117	108	507	-12	178	518	696	461	1,341	1,802	3,855
San Mateo	1.7%	1.6%	1.1%	1,360	268	191	1,819	-42		783	154	110	1,047	-24	494	681	1,175	1,277	1,763	3,040	7,015
San Pablo	0.1%	0.2%	0.2%	107	36	34	177	-4		62	21	19	102	-2	39	93	132	101	240	341	746
San Rafael	0.8%	0.7%	0.7%	643	113	121	877	-20		370	65	69	504	-12	233	288	521	604	746	1,350	3,220
San Ramon	1.6%	0.7%	0.7%	1,261	122	114	1,497	0		726	70	66	862	0	458	309	767	1,185	800	1,985	5,111
Santa Clara	2.6%	2.8%	2.1%	2,097	480	363	2,940	-68		1,207	276	209	1,692	-39	761	1,220	1,981	1,970	3,156	5,126	11,632
Santa Rosa	1.1%	1.1%	1.2%	854	181	212	1,247	-29		492	104	122	718	-17	310	461	771	802	1,193	1,995	4,685
Saratoga	0.5%	0.3%	0.2%	363	58	33	454	0		209	33	19	261	0	132	146	278	341	378	719	1,712
Sausalito	0.2%	0.1%	0.1%	162	22	16	200	0		93	13	9	115	0	59	55	114	152	143	295	724
Sebastopol	0.0%	0.1%	0.1%	37	9	10	56	-1		21	5	6	32	-1	13	22	35	35	57	92	213
Sonoma	0.1%	0.1%	0.1%	58	12	15	85	-2		33	7	9	49	-1	21	29	50	54	76	130	311
South San Francisco	0.7%	1.2%	0.7%	568	202	122	892	-21		327	116	71	514	-12	206	514	720	533	1,330	1,863	3,956
St. Helena	0.0%	0.0%	0.0%	29	6	8	43	60		17	3	4	24	35	11	15	26	27	39	66	254
Suisun City	0.1%	0.1%	0.2%	106	25	29	160	-4		61	14	17	92	-2	38	63	101	100	164	264	611
Sunnyvale	2.7%	2.9%	1.8%	2,165	490	313	2,968	0		1,247	282	180	1,709	0	786	1,246	2,032	2,034	3,223	5,257	11,966
Tiburon	0.2%	0.1%	0.1%	164	14	15	193	0		94	8	8	110	0	59	34	93	154	89	243	639
Unincorporated Alameda	1.2%	1.0%	1.0%	954	164	163	1,281	-30		549	95	94	738	-17	346	417	763	896	1,080	1,976	4,711

A36 ABAG DRAFT REGIONAL HOUSING NEEDS ALLOCATION (RHNA) PLAN: SAN FRANCISCO BAY AREA, 2023-2031

#### Draft RHNA Allocation by Jurisdiction, with Factor Components

	FACTO	R DISTRIBUTION	S				(Weights de	etermine the share	ALLC e of each income group's units th	CATION BUIL	DING BLOCKS to a factor, and	l the factor is	used to geo	ographically alloc	ate those uni	ts)				
	(Each	sums to 100%)			VER'	Y LOW INCOME				L	OW INCOME			MODE	RATE INCOM	IE	ABOVE	MODERATE IN	СОМЕ	
Factor	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUSTMENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	JOB PROXIMITY – TRANSIT	SUBTOTAL	EQUITY ADJUST- MENT	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	ACCESS TO HIGH OPPORTUNITY AREAS	JOB PROXIMITY – AUTO	SUBTOTAL	
Factor Weight				70%	15%	15%	100%		70%	15%	15%	100%		40%	60%	100%	40%	60%	100%	TOTAL
Jurisdiction	100%	100%	100%	80,109	17,166	17,166	114,442		46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176
Unincorporated Contra Costa	2.0%	1.4%	1.5%	1,633	245	253	2,131	-49	940	141	146	1,227	-28	593	624	1,217	1,534	1,613	3,147	7,645
Unincorporated Marin	1.1%	0.4%	0.6%	894	74	95	1,063	37	515	42	54	611	23	325	187	512	840	484	1,323	3,569
Unincorporated Napa	0.2%	0.1%	0.2%	152	26	32	210	159	88	15	18	121	92	55	65	120	143	169	312	1,014
Unincorporated San Mateo	0.8%	0.4%	0.5%	661	76	93	830	-19	381	44	54	479	-11	240	193	433	621	500	1,121	2,833
Unincorporated Santa Clara	0.8%	0.6%	0.5%	647	107	94	848	-20	372	62	54	488	-11	235	273	508	607	705	1,312	3,125
Unincorporated Solano	0.2%	0.2%	0.3%	164	35	44	243	-6	95	20	25	140	-3	60	89	149	154	231	385	908
Unincorporated Sonoma	0.9%	0.8%	1.0%	742	141	177	1,060	-24	427	81	102	610	-14	269	358	627	697	925	1,622	3,881
Union City	0.5%	0.5%	0.6%	392	94	96	582	280	226	54	55	335	161	142	240	382	368	620	988	2,728
Vacaville	0.4%	0.4%	0.5%	334	73	91	498	-11	192	42	52	286	-7	121	184	305	314	477	791	1,862
Vallejo	0.6%	0.7%	0.8%	482	128	131	741	-17	277	74	75	426	-10	175	326	501	453	844	1,297	2,938
Walnut Creek	1.8%	0.9%	0.8%	1,408	149	139	1,696	-39	810	86	80	976	-22	511	379	890	1,322	982	2,304	5,805
Windsor	0.1%	0.2%	0.2%	112	26	30	168	217	65	15	17	97	125	41	67	108	105	174	279	994
Woodside	0.1%	0.1%	0.0%	73	10	7	90	0	42	6	4	52	0	27	25	52	69	65	134	328
Yountville	0.0%	0.0%	0.0%	13	3	3	19	0	7	2	2	11	0	5	7	12	12	18	30	72
Region				80,109	17,166	17,166	114,442		46,124	9,884	9,884	65,892		29,085	43,627	72,712	75,252	112,878	188,130	441,176

Jurisdictions and HCD have an opportunity to appeal a jurisdiction's draft RHNA allocation. Any appeals that are upheld could affect the allocations for all jurisdictions. Following the appeals process, ABAG will adopt final RHNA allocations by the end of 2021.

Unit numbers for each factor may not add up to the total due to rounding.

The allocation is done with floating point precision internally, but rounding is done to get whole unit counts for each income group in a jurisdiction. The rounded unit counts were adjusted in the Subtotal column to ensure they add up to the total units by income category from the regional housing needs determination (RHND). The equity adjustment was applied after this step, and the same check was performed again to ensure the resulting allocations match the RHND.

Equity Adjustment	STEP 1: IDENT RACIAL A	IFY JURISDICTIO	NS EXHIBITING XCLUSION	STEP 2: COM Factors, Proport	MPARE JURISE (WEIGHTS TO ) (IONAL TO JUP	DICTION'S LO LOWER-INCO RISDICTION'S	OWER-INCOM OME ALLOCA S SHARE OF 2	IE ALLOCATI TION NEEDE 2020 HOUSI	ON FROM D TO BE HOLDS
				2020 HOL	JSEHOLDS	UNM	IODIFIED ALI FACTORS/	LOCATION FI WEIGHTS	ROM
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE
More Exclusionary - Subje	ect to Adjustme	ent (the more e	xclusionary juris	dictions wh	ose allocatio	ns based o	n factors/w	veights nee	d to
Atherton	0.246	0.821	1.066	2,273	0.1%	81	47	0.1%	0.1%
Daly City	0.273	0.445	0.718	32,167	1.2%	1,039	598	0.9%	0.9%
Gilroy	0.310	0.479	0.790	16,116	0.6%	359	207	0.3%	0.3%
Half Moon Bay	0.207	0.562	0.768	4,363	0.2%	93	54	0.1%	0.1%
Healdsburg	0.346	0.454	0.800	4,576	0.2%	78	45	0.1%	0.1%
Hercules	0.208	0.571	0.779	8,278	0.3%	179	104	0.2%	0.2%
Hillsborough	0.198	0.847	1.045	3,733	0.1%	153	88	0.1%	0.1%
Livermore	0.133	0.579	0.712	31,696	1.2%	1,240	714	1.1%	1.1%
Mill Valley	0.455	0.659	1.115	6,298	0.2%	252	144	0.2%	0.2%
Monte Sereno	0.278	0.811	1.090	1,265	0.0%	51	30	0.0%	0.0%
Pleasant Hill	0.149	0.550	0.699	13,626	0.5%	451	261	0.4%	0.4%
Portola Valley	0.387	0.735	1.122	1,768	0.1%	70	40	0.1%	0.1%
Ross	0.607	0.765	1.372	826	0.0%	33	19	0.0%	0.0%
St. Helena	0.338	0.401	0.739	2,477	0.1%	43	24	0.0%	0.0%
Unincorporated Marin	0.292	0.577	0.869	26,491	1.0%	1,063	611	0.9%	0.9%
Unincorporated Napa	0.256	0.521	0.777	8,889	0.3%	210	121	0.2%	0.2%
Union City	0.233	0.525	0.758	20,751	0.8%	582	335	0.5%	0.5%
Windsor	0.264	0.500	0.763	9,272	0.3%	168	97	0.1%	0.1%

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STEP 2	(CONTINUED):	STEP 3: IDE IN	NTIFY CHANGE IN U COME CATEGORY <sup>3</sup>	JNITS BY	STEP 4: FINAL VERY LO ALLOC	W- AND LOW-INCOME ATIONS
THETICAL				LOW-	BEGINNING ALLOCA ADJUS	ATION PLUS EQUITY TMENT
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS
eased to me	et the equity adjustment's p	proportionality t	hreshold)			
94	54	20	13	7	94	54
1,336	769	468	297	171	1,336	769
669	385	488	310	178	669	385
181	104	138	88	50	181	104
190	109	176	112	64	190	109
344	198	259	165	94	344	198
155	89	3	2	1	155	89
1,317	758	121	77	44	1,317	758
262	151	17	10	7	262	151
53	30	2	2	0	53	30
566	326	180	115	65	566	326
73	42	5	3	2	73	42
34	20	2	1	1	34	20
103	59	95	60	35	103	59
1,100	634	60	37	23	1,100	634
369	213	251	159	92	369	213
862	496	441	280	161	862	496
385	222	342	217	125	385	222

Equity Adjustment	STEP 1: IDENT RACIAL A	TIFY JURISDICTIO	ONS EXHIBITING EXCLUSION	STEP 2: CON FACTORS PROPORT	MPARE JURISI /WEIGHTS TO FIONAL TO JUI	DICTION'S LO LOWER-INCO RISDICTION'S	WER-INCOM OME ALLOCA S SHARE OF	/IE ALLOCATI TION NEEDE 2020 HOUSE	ON FROM D TO BE HOLDS
				2020 HOL	JSEHOLDS	UNM	IODIFIED ALI FACTORS/	LOCATION FI	ROM
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE
More Exclusionary - Not S	Subject to Adju	stment (the mo	ore exclusionary	jurisdictions	s whose allo	cations bas	ed on facto	ors/weights	
Belmont	0.104	0.627	0.731	10,516	0.4%	488	281	0.4%	0.4%
Belvedere	0.611	0.709	1.320	933	0.0%	49	28	0.0%	0.0%
Clayton	0.287	0.691	0.978	4,005	0.1%	170	97	0.1%	0.1%
Corte Madera	0.360	0.665	1.026	4,066	0.1%	213	123	0.2%	0.2%
Cupertino	0.432	0.700	1.132	19,998	0.7%	1,193	687	1.0%	1.0%
Danville	0.298	0.694	0.992	15,474	0.6%	652	376	0.6%	0.6%
Dublin	0.110	0.705	0.815	22,021	0.8%	1,085	625	0.9%	0.9%
Fairfax	0.409	0.536	0.946	3,294	0.1%	149	86	0.1%	0.1%
Foster City	0.150	0.702	0.852	12,449	0.5%	520	299	0.5%	0.5%
Fremont	0.243	0.627	0.871	74,488	2.7%	3,640	2,096	3.2%	3.2%
Lafayette	0.274	0.661	0.936	9,503	0.3%	599	344	0.5%	0.5%
Larkspur	0.399	0.514	0.913	5,954	0.2%	291	168	0.3%	0.3%
Los Altos	0.213	0.767	0.980	11,114	0.4%	501	288	0.4%	0.4%
Los Altos Hills	0.215	0.837	1.053	2,915	0.1%	125	72	0.1%	0.1%
Los Gatos	0.225	0.617	0.842	12,821	0.5%	537	310	0.5%	0.5%
Menlo Park	0.093	0.625	0.718	13,076	0.5%	740	426	0.6%	0.6%
Millbrae	0.148	0.577	0.725	8,124	0.3%	575	331	0.5%	0.5%
Milpitas	0.397	0.600	0.997	21,814	0.8%	1,685	970	1.5%	1.5%

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STEP 2	(CONTINUED):	STEP 3: IDEI IN	NTIFY CHANGE IN U COME CATEGORY <sup>3</sup>	JNITS BY	STEP 4: FINAL VERY LO ALLOC/	W- AND LOW-INCOME ATIONS
THETICAL				LOW.	BEGINNING ALLOCA ADJUS	ATION PLUS EQUITY TMENT
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS
meet the e	quity adjustment's proporti	onality threshold	d)			
437	252	-	-	-	488	281
39	22	-	-	-	49	28
166	96	-	-	-	170	97
169	97	-	-	-	213	123
831	478	-	-	-	1,193	687
643	370	-	-	-	652	376
915	527	-	-	-	1,085	625
137	79	-	-	-	149	86
517	298	-	-	-	520	299
3,094	1,782	-	-	-	3,640	2,096
395	227	-	-	-	599	344
247	142	-	-	-	291	168
462	266	-	-	-	501	288
121	70	-	-	-	125	72
533	307	-	-	-	537	310
543	313	-	-	-	740	426
337	194	-	-		575	331
906	522	-	-	-	1,685	970

Equity Adjustment	STEP 1: IDENTIFY JURISDICTIONS EXHIBITING RACIAL AND ECONOMIC EXCLUSION		STEP 2: COMPARE JURISDICTION'S LOWER-INCOME ALLOCATION FROM FACTORS/WEIGHTS TO LOWER-INCOME ALLOCATION NEEDED TO BE PROPORTIONAL TO JURISDICTION'S SHARE OF 2020 HOUSEHOLDS							
				2020 HOUSEHOLDS			UNMODIFIED ALLOCATION FROM FACTORS/WEIGHTS			
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE	
Moraga	0.220	0.667	0.887	5,703	0.2%	318	183	0.3%	0.3%	
Orinda	0.260	0.761	1.021	6,789	0.2%	372	215	0.3%	0.3%	
Palo Alto	0.154	0.649	0.804	27,667	1.0%	1,556	896	1.4%	1.4%	
Piedmont	0.275	0.799	1.074	3,910	0.1%	163	94	0.1%	0.1%	
Pleasanton	0.098	0.674	0.773	27,283	1.0%	1,750	1,008	1.5%	1.5%	
San Anselmo	0.501	0.610	1.110	5,318	0.2%	253	145	0.2%	0.2%	
San Carlos	0.212	0.686	0.898	11,702	0.4%	739	425	0.6%	0.6%	
San Ramon	0.151	0.696	0.847	28,004	1.0%	1,497	862	1.3%	1.3%	
Saratoga	0.267	0.710	0.977	10,800	0.4%	454	261	0.4%	0.4%	
Sausalito	0.494	0.570	1.064	4,142	0.2%	200	115	0.2%	0.2%	
Sunnyvale	0.101	0.618	0.719	57,888	2.1%	2,968	1,709	2.6%	2.6%	
Tiburon	0.447	0.675	1.122	3,893	0.1%	193	110	0.2%	0.2%	
Woodside	0.382	0.754	1.136	2,034	0.1%	90	52	0.1%	0.1%	
Other Jurisdictions (the j	urisdictions not	identified as e	xclusionary who	ose lower-ind	come allocat	ions are sh	ifted to the	group of n	nore	
Alameda	0.047	0.490	0.537	31,829	1.2%	1,455	837	1.3%	1.3%	
Albany	0.065	0.444	0.509	6,434	0.2%	315	182	0.3%	0.3%	
American Canyon	0.065	0.489	0.553	5,967	0.2%	115	67	0.1%	0.1%	
Antioch	0.193	0.347	0.540	34,096	1.2%	811	467	0.7%	0.7%	
Benicia	0.145	0.491	0.636	10,821	0.4%	208	120	0.2%	0.2%	

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STEP 2 (CONTINUED):		STEP 3: IDE IN	NTIFY CHANGE IN U COME CATEGORY <sup>3</sup>	JNITS BY	STEP 4: FINAL VERY LOW- AND LOW-INCOME ALLOCATIONS			
THETICAL				LOW	BEGINNING ALLOC ADJUS	ATION PLUS EQUITY TMENT		
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS		
237	136	-	-	-	318	183		
282	162	-	-	-	372	215		
1,149	662	-	-	-	1,556	896		
162	94	-	-	-	163	94		
1,133	653	-	-	-	1,750	1,008		
221	127	-	-	-	253	145		
486	280	-	-	-	739	425		
1,163	670	-	-	-	1,497	862		
449	258	-	-	-	454	261		
172	99	-	-	-	200	115		
2,405	1,385	-	-	-	2,968	1,709		
162	93	-	-	-	193	110		
84	49	-	-	-	90	52		
onary jurisdi	ctions whose allocations ne	ed to be increa	sed)					
1,322	761	-53	-34	-19	1,421	818		
267	154	-11	-7	-4	308	178		
248	143	-5	-3	-2	112	65		
1,416	815	-30	-19	-11	792	456		
450	259	-8	-5	-3	203	117		

Equity Adjustment	STEP 1: IDENTIFY JURISDICTIONS EXHIBITING RACIAL AND ECONOMIC EXCLUSION		STEP 2: COMPARE JURISDICTION'S LOWER-INCOME ALLOCATION FROM FACTORS/WEIGHTS TO LOWER-INCOME ALLOCATION NEEDED TO BE PROPORTIONAL TO JURISDICTION'S SHARE OF 2020 HOUSEHOLDS						
				2020 HOL	JSEHOLDS	UNMODIFIED ALLOCATION FROM FACTORS/WEIGHTS			
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE
Berkeley	0.075	0.439	0.514	47,718	1.7%	2,504	1,441	2.2%	2.2%
Brentwood	0.084	0.522	0.606	20,067	0.7%	411	237	0.4%	0.4%
Brisbane	0.009	0.536	0.545	1,890	0.1%	324	187	0.3%	0.3%
Burlingame	0.082	0.595	0.677	12,386	0.4%	883	509	0.8%	0.8%
Calistoga	0.280	0.322	0.602	2,067	0.1%	32	19	0.0%	0.0%
Campbell	0.041	0.572	0.613	16,855	0.6%	770	444	0.7%	0.7%
Cloverdale	0.228	0.336	0.564	3,328	0.1%	76	44	0.1%	0.1%
Colma	0.090	0.470	0.560	499	0.0%	45	26	0.0%	0.0%
Concord	0.074	0.397	0.471	45,297	1.6%	1,322	762	1.2%	1.2%
Cotati	0.295	0.341	0.636	3,002	0.1%	61	35	0.1%	0.1%
Dixon	0.213	0.335	0.548	6,412	0.2%	93	54	0.1%	0.1%
East Palo Alto*	0.452	0.337	0.789	7,274	0.3%	169	97	0.1%	0.1%
El Cerrito	0.059	0.501	0.561	10,332	0.4%	342	197	0.3%	0.3%
Emeryville	0.084	0.505	0.589	6,667	0.2%	462	265	0.4%	0.4%
Fairfield	0.074	0.391	0.465	38,288	1.4%	796	458	0.7%	0.7%
Hayward	0.147	0.383	0.530	48,286	1.8%	1,100	632	1.0%	1.0%
Martinez	0.161	0.516	0.677	14,339	0.5%	358	206	0.3%	0.3%
Morgan Hill	0.097	0.560	0.657	14,688	0.5%	268	155	0.2%	0.2%
Mountain View	0.038	0.609	0.647	34,445	1.3%	2,838	1,635	2.5%	2.5%

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STEP 2	(CONTINUED):	STEP 3: IDEI IN	TEP 3: IDENTIFY CHANGE IN UNITS BY STEP 4: FINAL VERY INCOME CATEGORY <sup>3</sup>		STEP 4: FINAL VERY LO ALLOC/	OW- AND LOW-INCOME CATIONS	
THETICAL				LOW-	BEGINNING ALLOCA ADJUS	ATION PLUS EQUITY TMENT	
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS	
1,982	1,141	-91	-58	-33	2,446	1,408	
834	480	-14	-9	-5	402	232	
79	45	-11	-7	-4	317	183	
515	296	-32	-20	-12	863	497	
86	49	-1	-1	0	31	19	
700	403	-28	-18	-10	752	434	
138	80	-3	-2	-1	74	43	
21	12	-2	-1	-1	44	25	
1,882	1,083	-48	-30	-18	1,292	744	
125	72	-2	-1	-1	60	34	
266	153	-3	-2	-1	91	53	
302	174	-6	-4	-2	165	95	
429	247	-13	-8	-5	334	192	
277	159	-17	-11	-6	451	259	
1,591	916	-29	-18	-11	778	447	
2,006	1,155	-40	-25	-15	1,075	617	
596	343	-13	-8	-5	350	201	
610	351	-10	-6	-4	262	151	
1,431	824	-103	-65	-38	2,773	1,597	

Equity Adjustment	STEP 1: IDENTIFY JURISDICTIONS EXHIBITING RACIAL AND ECONOMIC EXCLUSION		STEP 2: COMPARE JURISDICTION'S LOWER-INCOME ALLOCATION FROM FACTORS/WEIGHTS TO LOWER-INCOME ALLOCATION NEEDED TO BE PROPORTIONAL TO JURISDICTION'S SHARE OF 2020 HOUSEHOLDS							
				2020 HOL	2020 HOUSEHOLDS		UNMODIFIED ALLOCATION FROM FACTORS/WEIGHTS			
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE	
Napa	0.271	0.393	0.664	28,655	1.0%	516	298	0.5%	0.5%	
Newark	0.061	0.547	0.608	14,304	0.5%	475	274	0.4%	0.4%	
Novato	0.184	0.482	0.666	20,606	0.7%	583	336	0.5%	0.5%	
Oakland	0.189	0.352	0.541	164,296	6.0%	6,665	3,838	5.8%	5.8%	
Oakley	0.143	0.483	0.626	12,363	0.4%	286	165	0.2%	0.3%	
Pacifica	0.049	0.573	0.622	13,774	0.5%	551	317	0.5%	0.5%	
Petaluma	0.259	0.435	0.694	23,027	0.8%	511	295	0.4%	0.4%	
Pinole	0.029	0.457	0.486	6,907	0.3%	124	71	0.1%	0.1%	
Pittsburg	0.216	0.325	0.540	22,067	0.8%	518	298	0.5%	0.5%	
Redwood City	0.084	0.543	0.628	30,346	1.1%	1,141	658	1.0%	1.0%	
Richmond	0.248	0.287	0.535	37,271	1.4%	860	496	0.8%	0.8%	
Rio Vista	0.307	0.301	0.608	4,715	0.2%	130	75	0.1%	0.1%	
Rohnert Park	0.180	0.277	0.457	16,722	0.6%	408	235	0.4%	0.4%	
San Bruno	0.046	0.511	0.556	15,573	0.6%	721	415	0.6%	0.6%	
San Francisco	0.029	0.517	0.546	373,404	13.6%	21,359	12,294	18.7%	18.7%	
San Jose	0.066	0.519	0.585	324,692	11.8%	15,444	8,892	13.5%	13.5%	
San Leandro	0.070	0.361	0.431	30,476	1.1%	882	507	0.8%	0.8%	
San Mateo	0.021	0.559	0.580	38,872	1.4%	1,819	1,047	1.6%	1.6%	
San Pablo	0.434	0.161	0.595	9,088	0.3%	177	102	0.2%	0.2%	

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## **APPENDIX 6**

STEP 2	(CONTINUED):	STEP 3: IDENTIFY CHANGE IN UNITS BY INCOME CATEGORY <sup>3</sup>		STEP 4: FINAL VERY LOW- AND LOW-INCOME ALLOCATIONS		
THETICAL				LOW-	BEGINNING ALLOCA ADJUS	ATION PLUS EQUITY TMENT
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS
1,190	685	-19	-12	-7	504	291
594	342	-17	-11	-6	464	268
856	493	-21	-13	-8	570	328
6,825	3,930	-242	-154	-88	6,511	3,750
514	296	-11	-7	-4	279	161
572	329	-20	-13	-7	538	310
957	551	-19	-12	-7	499	288
287	165	-5	-3	-2	121	69
917	528	-19	-12	-7	506	291
1,261	726	-41	-26	-15	1,115	643
1,548	891	-31	-20	-11	840	485
196	113	-5	-3	-2	127	73
695	400	-14	-9	-5	399	230
647	372	-27	-17	-10	704	405
15,511	8,931	-772	-492	-280	20,867	12,014
13,488	7,766	-561	-356	-205	15,088	8,687
1,266	729	-32	-20	-12	862	495
1,615	930	-66	-42	-24	1,777	1,023
378	217	-6	-4	-2	173	100

APPENDICES RHNA0524

Equity Adjustment STEP 1: IDENTIFY JURISDICTIONS EXHIBITING RACIAL AND ECONOMIC EXCLUSION		STEP 2: COMPARE JURISDICTION'S LOWER-INCOME ALLOCATION FROM FACTORS/WEIGHTS TO LOWER-INCOME ALLOCATION NEEDED TO BE PROPORTIONAL TO JURISDICTION'S SHARE OF 2020 HOUSEHOLDS							
				2020 HOL	JSEHOLDS	UNMODIFIED ALLOCATION FROM FACTORS/WEIGHTS			
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE
San Rafael	0.175	0.462	0.637	23,154	0.8%	877	504	0.8%	0.8%
Santa Clara	0.060	0.570	0.631	46,387	1.7%	2,940	1,692	2.6%	2.6%
Santa Rosa	0.173	0.327	0.500	66,051	2.4%	1,247	718	1.1%	1.1%
Sebastopol*	0.372	0.367	0.738	3,372	0.1%	56	32	0.0%	0.0%
Sonoma*	0.378	0.390	0.768	5,030	0.2%	85	49	0.1%	0.1%
South San Francisco	0.132	0.484	0.616	21,409	0.8%	892	514	0.8%	0.8%
Suisun City	0.134	0.367	0.501	9,274	0.3%	160	92	0.1%	0.1%
Unincorporated Alameda	0.034	0.431	0.465	48,899	1.8%	1,281	738	1.1%	1.1%
Unincorporated Contra Costa	0.056	0.484	0.540	60,527	2.2%	2,131	1,227	1.9%	1.9%
Unincorporated San Mateo	0.101	0.585	0.686	21,461	0.8%	830	479	0.7%	0.7%
Unincorporated Santa Clara	0.063	0.542	0.604	26,299	1.0%	848	488	0.7%	0.7%
Unincorporated Solano	0.177	0.445	0.623	6,843	0.2%	243	140	0.2%	0.2%
Unincorporated Sonoma*	0.328	0.387	0.715	54,387	2.0%	1,060	610	0.9%	0.9%
Vacaville	0.114	0.393	0.507	33,985	1.2%	498	286	0.4%	0.4%

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STEP 2	STEP 2 (CONTINUED):		NTIFY CHANGE IN U COME CATEGORY <sup>3</sup>	JNITS BY	STEP 4: FINAL VERY LOW- AND LOW-INCOME ALLOCATIONS			
THETICAL				LOW-	BEGINNING ALLOCA ADJUS	ATION PLUS EQUITY TMENT		
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS		
962	554	-32	-20	-12	857	492		
1,927	1,109	-107	-68	-39	2,872	1,653		
2,744	1,580	-46	-29	-17	1,218	701		
140	81	-2	-1	-1	55	31		
209	120	-3	-2	-1	83	48		
889	512	-33	-21	-12	871	502		
385	222	-6	-4	-2	156	90		
2,031	1,170	-47	-30	-17	1,251	721		
2,514	1,448	-77	-49	-28	2,082	1,199		
892	513	-30	-19	-11	811	468		
1,092	629	-31	-20	-11	828	477		
284	164	-9	-6	-3	237	137		
2,259	1,301	-38	-24	-14	1,036	596		
1,412	813	-18	-11	-7	487	279		

Equity Adjustment	ment STEP 1: IDENTIFY JURISDICTIONS EXHIBITING RACIAL AND ECONOMIC EXCLUSION			STEP 2: COMPARE JURISDICTION'S LOWER-INCOME ALLOCATION FROM         FACTORS/WEIGHTS TO LOWER-INCOME ALLOCATION NEEDED TO BE         PROPORTIONAL TO JURISDICTION'S SHARE OF 2020 HOUSEHOLDS         UNMODIFIED ALLOCATION FROM         2020 HOUSEHOLDS					ON FROM D TO BE HOLDS
	DIVERGENCE INDEX SCORE	SHARE OF HOUSEHOLDS ABOVE 120% AMI <sup>1</sup>	EQUITY ADJUSTMENT COMPOSITE SCORE <sup>2</sup>	TOTAL	SHARE OF REGION	VERY LOW- INCOME UNITS	LOW- INCOME UNITS	VERY LOW- INCOME SHARE	LOW- INCOME SHARE
Vallejo	0.148	0.298	0.446	41,764	1.5%	741	426	0.6%	0.6%
Walnut Creek	0.191	0.490	0.681	32,363	1.2%	1,696	976	1.5%	1.5%
Yountville*4	0.396	0.328	0.724	1,030	0.0%	19	11	0.0%	0.0%

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\* These jurisdictions were excluded from being subject to the equity adjustment because they had average incomes in the bottom quartile for the region.

<sup>1</sup> According to American Community Survey (ACS 2014-2018 PUMS) data, 120% of the area median income (AMI) for Bay Area households was \$120,840. Due to the way the income categories are structured in the ACS summary files needed for jurisdiction tabulations, the information reported here includes households with incomes greater than \$100,000.

<sup>3</sup> Total units to shift from 60 least exclusive jurisdictions to 18 jurisdictions subject to equity adjustment: 3,068 units

<sup>4</sup> The proportional reduction in Yountville's allocation of lower-income units was less than a unit, so the equity adjustment did not affect its final allocation.

#### **APPENDIX 6**

STEP 2 (CONTINUED):		STEP 3: IDE IN	NTIFY CHANGE IN COME CATEGORY <sup>3</sup>	JNITS BY	STEP 4: FINAL VERY LOW- AND LOW-INCOME ALLOCATIONS			
ΤΗΕΤΙΟΔΙ				LOW.	BEGINNING ALLOC/ ADJUS	ATION PLUS EQUITY TMENT		
OW-INCOME ORTIONAL	HYPOTHETICAL LOW- INCOME PROPORTIONAL	TOTAL	VERY LOW- INCOME UNITS	INCOME UNITS	VERY LOW-INCOME UNITS	LOW-INCOME UNITS		
1,735	999	-27	-17	-10	724	416		
1,344	774	-61	-39	-22	1,657	954		
43	25	0	0	0	19	11		

Sources: U.S. Census Bureau, American Community Survey 5-Year Data (2014-2018), Table B19013 for median household income; Table B19001 for households by income group; Table B03002 for population by race / ethnicity. State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State – January 1, 2011-2020. Sacramento, California, May

<sup>2</sup> Bay Area Median Composite Score: 0.694

#### **Summary of Local Jurisdiction Survey Results**

This appendix provides information from reports presented to the Housing Methodology Committee (HMC) in March and April 2020. These reports summarized responses to the Local Jurisdiction Survey, and these summaries intended to inform the HMC's development of the RHNA methodology. Though the HMC has concluded its work, this appendix makes reference to factors that the HMC could consider for the methodology, as the HMC was beginning to develop the RHNA methodology when the Local Jurisdiction Survey summary reports were completed.

#### OVERVIEW OF SURVEY PROCESS

Housing Element Law requires each Council of Government (COG) to survey its member jurisdictions during the Regional Housing Needs Allocation (RHNA) process to gather information on factors that must be considered for inclusion in the methodology.<sup>1</sup> Recent legislation also requires ABAG to collect information on jurisdictions' fair housing issues and strategies for achieving fair housing goals.<sup>2</sup> ABAG staff presented the Housing Methodology Committee with a draft of the survey in November 2019. Staff revised the survey to incorporate feedback from HMC members, local jurisdiction staff, and other stakeholders, and the ABAG Regional Planning Committee approved the survey in December 2019. The survey became available online on January 8, 2020. A survey link was emailed to city managers, county administrators, community development and planning directors, and housing staff in all 109 ABAG jurisdictions. The deadline for completing the survey was February 5, 2020, at

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COUNTY	RESPONSES	<b>RESPONSE RATE</b>
Alameda	9	60%
Contra Costa	14	70%
Marin	8	73%
Napa	3	50%
San Francisco	1	100%
San Mateo	14	67%
Santa Clara	13	81%
Solano	4	50%
Sonoma	7	70%

#### Table 1. Local jurisdiction survey response rate by county.

which point ABAG received 72 responses, a response rate of 66%. Table 1 shows the response rates for each of the nine Bay Area counties.

#### SURVEY ORGANIZATION

The survey consisted of 53 questions in two sections. Section 1 included 36 questions related to the statutory housing and land use factors. These questions were divided into four topics: Relationship Between Jobs and Housing, Housing Opportunities and Constraints, Housing Affordability and Overcrowding, and Housing Demand. Section 2 included 14 questions that collected information on local jurisdictions' fair housing issues as well as strategies and actions for achieving fair housing goals. These questions were divided into three topics: Fair Housing Planning and Data Sources; Diversity/ Segregation, Access to Opportunity, and Housing Needs; and Fair Housing Goals and Actions.

<sup>1</sup> See State of California Government Code Section 65584.04(b)(1).

<sup>2</sup> See State of California Government Code Section 65584.04(b)(2).

In addition to surveying local jurisdictions on these topics, ABAG staff reviewed the fair housing reports that jurisdictions submit to the federal government if they receive block grant funding from the Department of Housing and Urban Development (HUD). Section 3 discusses common themes from Bay Area jurisdictions' fair housing reports.

# SECTION 1: SUMMARY OF RESPONSES TO HOUSING AND LAND USE QUESTIONS

Topic 1: Relationship Between Jobs and Housing The six questions in this topic area centered on jurisdictions' issues related to jobs-housing fit, which measures the relationship between a jurisdiction's low-wage jobs and homes affordable to low-wage workers. The first question presented each jurisdiction's jobs-housing fit ratio and included a data visualization comparing a jurisdiction's jobshousing fit ratio to other jurisdictions throughout the region. Respondents were asked to reflect on the jobs-housing fit in their community using both their own perceptions and the data provided. Additionally, respondents had the opportunity to consider the impacts of this balance or imbalance, and they could comment on what strategies might be helpful for addressing issues related to an imbalance between low-wage workers and affordable housing.

#### Key Takeaways from Respondents' Comments Suggestions for measuring jobs-housing fit: Several jurisdictions commented the rent threshold the survey used for units affordable to low-wage workers excludes many of the deed-restricted affordable units that currently exist in their

Figure 1. How would you rate the balance between low-wage jobs and the number of homes affordable to low-wage workers in your jurisdiction? (Question 2)



communities or are in the development pipeline. Multiple respondents provided data on the number of deed-restricted affordable units in their jurisdictions. It is worth noting that, for the jobs-housing fit factor presented to the HMC for the March 2020 meeting, the thresholds for low-wage jobs and low-cost rental units were set higher than the values used for the survey.<sup>3</sup> However, staff and the HMC will take these survey comments into account when deciding how to define the jobs-housing fit ratio and what data sources to use if this factor is selected for the RHNA methodology.

#### Imbalance between low-wage jobs and affordable housing

**in the region:** 60 jurisdictions (85%) stated the ratio between low-wage jobs and affordable homes in their jurisdiction is imbalanced or very imbalanced, while only 10 (14%) indicated their jurisdiction is balanced (see Figure 1). Responses varied by county, as no jurisdictions in Marin, San Mateo, or Santa Clara Counties reported a balance in their jobs-housing fit ratios. These same counties also contained all of the

<sup>3</sup> For the proposed jobs-housing fit factor, the threshold for a low-wage job is set at \$3,333 per month and low-cost rental units are defined as those renting for less than \$1,500 per month.

Figure 2. Which of the following impacts does the balance or imbalance of low-wage workers to homes affordable to low-wage workers have on your jurisdiction? (Question 4)



jurisdictions who stated their jobs-housing fit ratio is very imbalanced.

#### Reasons for imbalance in local jobs-housing fit ratio:

Respondents mentioned a lack of rental housing, state policy limiting deed restrictions for ADUs, high land prices, a lack of land available for development, and limited resources for producing affordable housing due to the end of redevelopment agencies as reasons for the jobs-housing fit imbalance. Multiple jurisdictions noted that, while their jobshousing fit ratio suggested an imbalance, it was comparable to many other jurisdictions in the region, suggesting a broader regional problem. Lastly, some respondents noted potential for future improvements in their jobs-housing fit ratio based on recent rent stabilization policies, ongoing ADU production, or affordable housing units in the development pipeline.

Impacts of imbalance in local jobs-housing fit ratio: Jurisdictions indicated that the most common impact of an imbalance between low-wage workers and affordable housing is high housing cost burden for residents (see Figure 2). The majority of respondents also noted impacts on employers and workers in their jurisdictions, with 38 respondents (53%) stating that the imbalance between low-wage workers and affordable housing results in long commutes into the jurisdiction and hinders employers' ability to hire or retain workers. Beyond the options listed on the survey, respondents wrote that displacement and overcrowding are also local issues related to an imbalance in jobs-housing fit.

**Usefulness of jobs-housing fit data:** 51% of respondents indicated their jurisdiction uses jobs-housing fit data to inform policy decisions, including:

- Updating Housing Elements, General Plans, and other long-range plans
- Revising land use policies, such as industrial zoning
- Approving development projects
- Recruiting new businesses
- Designing affordable housing policies such as inclusionary zoning, commercial linkage fees, and rent stabilization

Jurisdictions that do not use jobs-housing fit data explained why this data is not as relevant to their communities. Some noted a jobs-housing balance metric is more useful, particularly in communities where there is more housing relative to jobs. Others noted that more data collection is needed to examine jobs-housing fit issues in their jurisdiction. Lastly, some felt other data are more relevant for housing affordability issues, such as comparing overall housing cost

Figure 3. If your jurisdiction experiences an imbalance in the jobshousing fit for low-wage workers, which of the following policies, programs, or strategies would be most helpful for your jurisdiction to implement to help address this imbalance? (Question 6)



and wage data. The HMC can take these comments into account when considering jobs-housing fit as a factor in the RHNA methodology. The survey results indicate using jobshousing fit as a RHNA factor would align with policymaking in many jurisdictions, but there are also other data sources that could potentially be a factor for the relationship between jobs, housing, and affordability.

#### Strategies for addressing jobs-housing fit imbalance:

Jurisdictions focused on policies to produce and preserve affordable housing to address a jobs-housing fit imbalance (see Figure 3). Increased funding for affordable housing received the most support from respondents (76%) followed



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by inclusionary zoning (41%) and community land trusts (23%). Beyond the options listed on the survey, jurisdictions commented that they support the following strategies:

 Policies to encourage production of ADUs and allow for rent-restrictions in ADUs

- Increased housing density
- Policies to incentivize affordable housing production, such as density bonuses
- Funding to acquire and preserve affordable housing that currently exists on the market without subsidy

**Topic 2: Relationship Between Jobs and Housing** The seven questions within this topic area focused on factors within jurisdictions that create opportunities or constraints for developing more housing. These questions also focus specifically on opportunities and constraints for encouraging jobs and housing near transit, developing housing near job centers, and minimizing greenhouse gas emissions.

#### Key Takeaways from Respondents' Comments Opportunities and constraints for developing housing:

Jurisdictions' constraints for developing new housing centered on issues related to costs and land. Nearly all respondents (87%) cited construction costs as a constraint (see Figure 4 on page A57). Other constraints reported by more than 50% of jurisdictions were the availability of vacant land, funding for affordable housing, availability of construction workforce, land suitability, and availability of surplus public land. There was less of a regional consensus around opportunities for developing housing, with no single factor being cited as an opportunity by most respondents. Factors considered to be opportunities related largely to infrastructure and community amenities, with the most common opportunities being the availability of schools, availability of parks, water capacity, and sewer capacity. These four factors were also the only factors listed more commonly as opportunities than as constraints.

Opportunities and constraints for encouraging housing near transit and jobs: 57 jurisdictions (80%) stated they encounter opportunities or constraints in encouraging jobs and housing near existing transportation infrastructure, while 50 (70%) reported having opportunities or constraints for encouraging housing near job centers. In their responses to these questions, jurisdictions reported a mix of both opportunities and constraints for developing housing near jobs and transit, with some respondents noting that both opportunities and constraints exist simultaneously in their jurisdictions. Jurisdictions in Alameda, Contra Costa, Marin, Napa, and San Mateo counties noted that specific plans for areas around bus and rail transit centers provide opportunities for greater density and mixed-use development near transportation infrastructure, which can encourage housing near jobs and transit. Similarly, jurisdictions in Santa Clara County discussed how rezoning efforts near job centers can create opportunities for more housing near jobs.

Some of the obstacles listed by jurisdictions echo what was mentioned in the previous questions related to opportunities and constraints for developing housing in general: limited vacant land, high construction costs, and construction labor shortage. Additionally, jurisdictions throughout the region stated that a lack of existing transit service prevents them from encouraging jobs and housing near public transportation infrastructure. Likewise, respondents across the region also noted that their jurisdictions lack job centers, which prevents them from locating housing near jobs. Lastly, some jurisdictions noted that while they do have job centers, the land near these jobs is not zoned to allow for residential construction.



Figure 5. What land use policies or strategies has your jurisdiction implemented to minimize greenhouse gas emissions? (Question 13)

#### Strategies for reducing greenhouse gas (GHG) emissions:

Seven of the policies listed in this question have been adopted by a majority of respondents. The most widespread strategy (94% of respondents) is investing in active transportation infrastructure to support biking and walking (see Figure 5 on page A59). Other popular strategies for reducing GHG emissions include encouraging mixed-use development and density near transit, adopting energy efficiency standards for new construction, designating Priority Development Areas, and changing parking requirements. This information could potentially assist staff and the HMC in designing a RHNA methodology that satisfies the statutory objective to encourage efficient development patterns and achieve GHG reduction targets.

**Topic 3: Housing Affordability and Overcrowding** The eight questions within this topic area discussed issues jurisdictions face related to high housing costs, data jurisdictions use to assess these issues, and barriers that jurisdictions face in meeting their RHNA targets for lowerincome households.

Key Takeaways from Respondents' Comments Policymaking related to housing costs and overcrowding: 51 respondents (72%) have considered impacts of housing costs and high rates of rent burden<sup>4</sup> on residents. However, only 33 respondents (46%) stated they have considered the impacts of overcrowding on residents. Specifically, jurisdictions noted they examine issues related to housing costs and overcrowding when updating their Housing Elements, completing Consolidated Planning processes required by HUD, and creating affordable housing policies such as inclusionary zoning and rent stabilization.

#### Data collection on housing costs and homelessness:

Jurisdictions largely rely on Census Bureau data (65 respondents, 92%) and online real estate databases, such as Zillow or Trulia (51 respondents, 72%), to examine housing costs (see Figure 6). 30% of jurisdictions reported



Figure 6. What data sources does your jurisdiction use to examine local trends in housing costs? (Question 16)

using publicly available data sources in addition to Census Bureau data, which included the county assessor's database, California Department of Finance data, HUD's CHAS dataset, and data provided by ABAG. Approximately 30% of respondents also reported using locally collected data such as building permit records, local rental registries, and local surveys of landlords, apartment communities, and firsttime homebuyers. Lastly, about 15% of respondents use

<sup>4</sup> HUD defines households as rent-burdened if they spend more than 30% of their income on rent. For more information on this measure, see <a href="https://www.huduser.gov/portal/pdredge/pdr\_edge\_featd\_article\_092214.html">https://www.huduser.gov/portal/pdredge/pdr\_edge\_featd\_article\_092214.html</a>.

proprietary data sources to examine housing costs, which include products like CoStar, RealQuest, DataQuick, and Axiometrics.

The vast majority of respondents noted that housing costs in their jurisdiction are increasing. However, a few jurisdictions stated that prices have been stabilizing in the past year after increasing sharply in recent years, while two jurisdictions reported that rental prices declined in the past year. Also, a few jurisdictions stated that prices of for-sale homes have leveled off while rents continue to rise. In terms of data collection on homelessness, 40 respondents (56%) indicated Figure 7. What are the primary barriers or gaps your jurisdiction faces in meeting its RHNA goals for producing housing affordable to very lowand low-income households? (Question 19)



their jurisdictions collect data on the occurrence of homelessness within their boundaries. Nearly all these jurisdictions noted their data collection on homelessness is a part of bi-annual countywide efforts related to the Point-in-Time counts required by HUD.

Barriers to meeting lowerincome RHNA goals: The most common barriers to affordable housing production identified by survey respondents were gap financing and land availability. Both of these obstacles were selected by 50 respondents (70%), while no other barrier was selected by the majority of respondents Figure 8. What types of support would your jurisdiction like to see the Bay Area Housing Finance Authority (BAHFA) provide to help your jurisdiction meet its RHNA goals and comply with the requirement to affirmatively further fair housing? (Question 21)



(see Figure 7 on page A61). Other barriers identified by respondents were similar to factors mentioned in earlier questions related to obstacles to housing development generally, such as construction costs and high prices for land, materials, and labor. Respondents also mentioned a lack of funding and staff resources for the implementation of affordable housing programs, particularly due to the dissolution of redevelopment agencies.

Additionally, 20 respondents provided an estimate for how many affordable units could be built in their jurisdictions if ample gap financing was available. In total, these 20 jurisdictions estimated that 12,000 units of housing affordable to low- and very low-income households could be built if they had the necessary funding. Similarly, multiple jurisdictions stated that they would be able to accommodate their entire low- and very low-income RHNA if given the gap financing to enable construction of these affordable units. Jurisdictions' estimates for the funding needed to build these units ranged from \$200,000 to \$500,000 per unit.

Similarly, jurisdictions indicated financing for constructing new affordable housing was the support they would most desire from the Bay Area Housing Finance Authority, with 65 jurisdictions (92%) selecting this option (see Figure 8 on page A61). Financing for preservation of both subsidized affordable housing and affordable housing that exists on the market without subsidy were the next most popular options for financial support from BAHFA. Most jurisdictions also noted they would like technical assistance with complying with HCD's pro-housing designation and other state regulations, as well technical assistance for Housing Element outreach. ABAG staff may be able use the information provided from local





jurisdictions for designing the technical assistance programs that will be provided as part of the Regional Early Action Planning grants program.

#### **Topic 4: Housing Demand**

The 15 questions within this topic area focused on demand for housing created in jurisdictions by farmworkers, nearby postsecondary educational institutions, the loss of subsidized housing units due to expiring affordability contracts, and state-declared emergencies.

Key Takeaways from Respondents' Comments Housing needs for the region's farmworkers: Only 16 respondents (23%) identified a need for farmworker housing in a typical year. Of those, six provided an estimate of local housing need for farmworkers, which totaled approximately 5,000 units. Data sources for estimates included interviews with farmworkers and farm owners, the USDA Census of Agriculture, Napa County Farmworker Housing Needs

Assessment, Santa Clara County Planning Department survey, and the California Employment Development Department. The most common barriers to meeting demand for farmworker housing are similar to barriers to developing affordable housing generally. Among the 16 respondents with a need for farmworker housing, the most common barriers are a lack of financing and limited availability of land (see Figure 9 on page A62).

Housing demand created by postsecondary educational institutions: Responses to questions about housing demand created by postsecondary educational institutions indicate a need for better data collection on this issue. Only 8 respondents (11%) were able to provide an estimate for this housing need. Several more jurisdictions indicated there is significant housing demand created by nearby postsecondary educational institutions, but the number of housing units needed to meet this demand is unknown. The eight jurisdictions that were able to estimate the housing demand created by postsecondary educational institutions stated that the data for their estimates came from surveys conducted by these institutions, but several more jurisdictions indicated they have not been able to obtain this information from local colleges and universities.

Loss of subsidized affordable housing: 19 respondents (27%) stated their jurisdictions had lost subsidized affordable housing units in the past 10 years due to expiring affordability contracts or other issues facing at-risk affordable housing units. Most of the data for these responses came from internal sources. Jurisdictions noted their awareness of affordable housing built with redevelopment funds that converted to market-rate due to expiring regulatory agreements, and respondents also stated they were aware of below-market-rate units built through inclusionary housing programs that had lapsing affordability requirements.

A larger number of respondents expected to lose affordable housing units in the next 10 years, with 23 respondents (32%) noting that they anticipated these future losses. These respondents also referred to internal city records that indicated the pending expiration of regulatory agreements. Notably, one jurisdiction stated that 68% of existing belowmarket-rate rental units in its Below Market Rate Housing Program are set to expire in 10 years. Additionally, another respondent commented that the number of affordable units owned by for-profit owners in their jurisdiction is high according to research by the California Housing Partnership, which indicates a high risk for losing these affordable units in the future.<sup>5</sup>

These survey responses indicate that helping cities prevent the loss of affordable housing because of expiring affordability requirements could be a potential focus of ABAG's Regional Early Action Planning grants program. Additionally, the variety of data on at-risk affordable units collected by both individual jurisdictions and the California Housing Partnership points to a need to compile this data if the HMC were to consider using the loss of affordable units as a RHNA methodology factor.

Loss of housing units due to state-declared emergencies:

Only six respondents (8%) stated their jurisdiction had lost housing units during a state-declared emergency (such as a fire or other natural disaster) that have not been rebuilt. These

<sup>5</sup> For more information on the California Housing Partnership's research on at-risk affordable housing in California, see <a href="https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/02/2020-Affordable-Homes-at-Risk\_CHPC-Final.pdf">https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/wp-content/uploads/2020/02/2020-Affordable-Homes-at-Risk\_CHPC-Final.pdf</a>

jurisdictions are in Napa, San Mateo, Santa Clara, Solano, and Sonoma counties. Two jurisdictions in Sonoma County were able to provide precise data on the number of units lost in recent fires. Another Sonoma County jurisdiction noted that they did not lose any housing in the fire but have experienced increased demand in housing because of lost units in surrounding communities. Additionally, two jurisdictions in Marin County noted that, while they have not lost units recently, they expect that units lost in the future due to sea level rise and increased flooding may not be replaced.

# SECTION 2: SUMMARY OF RESPONSES TO FAIR HOUSING QUESTIONS

The data and information collected in the Local Jurisdiction Survey can help Bay Area jurisdictions understand the framework needed for assessing fair housing issues, which state law now requires for the next Housing Element update in 2022. Notably, several jurisdictions reported in the survey that they lack data on segregation patterns and have not previously set goals in their Housing Elements related to removing barriers to housing choice. However, this type of analysis will likely be needed for the upcoming Housing Element update.

Accordingly, the survey results can help ABAG staff identify assistance that they can offer through the Regional Early Action Planning (REAP) grants program to help local jurisdictions comply with new Housing Element requirements. Additionally, both the Local Jurisdiction Survey and the review of Bay Area jurisdictions' fair housing reports to HUD identified regional themes regarding both barriers to fair housing choice and strategies to further fair housing. This knowledge can inform how ABAG designs technical assistance and grant programs in the future to help local jurisdictions implement successful fair housing strategies.

**Topic 1: Fair Housing Planning and Data Sources** The eight questions in this topic area centered on jurisdictions' processes for assessing fair housing issues in their communities. Federal law obligates jurisdictions receiving block grant funding from HUD to submit a Consolidated Plan to HUD every five years, and this process requires jurisdictions to assess local fair housing issues (see Section 3 for more details on federally mandated fair housing reporting). While the Local Jurisdiction Survey did ask whether jurisdictions currently submit fair housing reports to HUD, all questions on the survey could be applicable to jurisdictions regardless of whether they participate in federal fair housing reporting. This portion of the survey also asked about the data jurisdictions use for fair housing planning and the efforts they have made to elicit public participation in their fair housing planning processes.

Key Takeaways from Respondents' Comments Fair housing reporting to HUD: According to the results of the local jurisdiction survey, 37 respondents (51%) have submitted a fair housing report to HUD. Because these reports are submitted as part of five-year planning cycles, most of these jurisdictions recently submitted a report for the years 2020-2025 or are currently working on a report for this cycle, though a few jurisdictions' Consolidated Plans are on a different timeline. While some reports are submitted to HUD by individual jurisdictions, this reporting can also be completed as a collaborative effort between a county government and local jurisdictions within the county.

#### Data sources for fair housing planning processes:

Jurisdictions primarily rely on publicly available datasets (e.g. data from the Census Bureau) to assess fair housing issues, with 74% of respondents indicating they use this data source. The other data source that a majority of respondents reported using was data provided by HUD (see Figure 10). In addition to the options listed on the survey, respondents noted that they collect and maintain various data sources to inform fair housing planning, including rental vacancy surveys, inventories of affordable housing, landlord registries, code enforcement complaints, surveys of residents, and data from community outreach. Beyond the data collected by jurisdictions themselves, respondents also discussed using data collected by local nonprofits providing fair housing services as well as analyses prepared by county governments and Public Housing Agencies.

#### Community participation in fair housing processes:

Jurisdictions were most likely to use public forums to incorporate community participation in their fair housing planning, with open house community meetings (54%) and public hearings (49%) being the most common outreach activities reported by respondents. Respondents were also likely to solicit information directly from residents, with 46% using resident surveys and 39% using resident focus groups. Additionally, 40% of respondents reported consulting with stakeholder groups during fair housing planning processes (see Figure 11 on page A66). Based on information respondents shared in their surveys, jurisdictions most often worked with the following types of stakeholder groups:





- School districts
- Faith-based groups
- Community-based organizations and neighborhood associations
- Advocacy organizations representing the following constituencies:
  - o People of color
  - o People with disabilities
  - o Immigrants and people with limited English proficiency
  - o Seniors
  - o Youth
- Affordable housing providers and residents
- Homelessness services providers
- Housing Choice Voucher applicants
- Nonprofits providing fair housing services
- Legal aid organizations
- Healthcare and social services providers

15 respondents noted that they collected demographic information for community members who participated in the fair housing planning process. This demographic data typically included data on participants' racial/ethnic background, English language proficiency, age, income, household size, and housing situation.

The survey also provided respondents with an opportunity to discuss their goals for the community outreach process and their success with achieving these goals. According to the survey responses, jurisdictions' goals for community outreach during fair housing planning can be summarized as the following:

- Gather input from a broad and diverse range of residents and community groups.
- Encourage participation from those most impacted by fair housing issues.
- Engage community members who may face barriers to participation, such as those with limited English proficiency.
- Build trust with community members and encourage future participation in planning processes.
- Ensure that federal fair housing reports and other housing planning processes reflect community conditions.
- Obtain data to effectively assess fair housing barriers.
- Develop targeted and feasible fair housing goals and strategies for achieving them.

Respondents indicated that they were largely successful in achieving their goals for community outreach during fair housing planning (see Figure 12 on page A67). Notably, onethird of respondents did not answer this question, which could

# Figure 11. Which of the following outreach activities has your jurisdiction used to encourage community participation in planning processes related to fair housing? (Question 40)



indicate a hesitancy to comment on the success of community outreach efforts. It is also possible that jurisdictions who do not engage in planning processes explicitly focused on fair housing skipped this question rather than selecting "N/A." Respondents who did answer also described the reasons their jurisdictions were able to achieve their goals for the community outreach process as well as the factors that inhibited success with these goals. Table 2 on page A67 provides a summary of these reasons.

# Topic 2: Diversity/Segregation, Access to Opportunity, and Housing Needs

The two questions within this topic area focused on the conditions that restrict fair housing choice and access to opportunity in Bay Area jurisdictions. These questions focused on four fair housing issues: limited access to housing in a jurisdiction, segregated housing patterns and concentrated areas of poverty, disparities in access to opportunity, and disparities in housing cost burdens and overcrowding. The survey sought to contextualize respondents' answers by providing each respondent with data specific to their jurisdiction on geographic concentrations of

A66 ABAG DRAFT REGIONAL HOUSING NEEDS ALLOCATION (RHNA) PLAN: SAN FRANCISCO BAY AREA, 2023-2031

poverty and race-based disparities in access to opportunity, housing cost burden, overcrowding, and segregated housing patterns. For more information on the impediments to fair housing that Bay Area jurisdictions have described in their fair housing reports to HUD, see Section 3.

#### Key Takeaways from Respondents' Comments Factors contributing to fair housing issues: Respondents





most commonly reported that fair housing issues in their jurisdictions stem from factors related to displacement, affordable housing, and barriers to development (see Table 3 on page A69, which shows how many respondents indicated whether a factor contributes to each of the four fair housing issues). When the factors are ranked in terms of which were selected by the most jurisdictions for each fair housing issue, there are three factors among the five most selected across all four fair housing issues: community opposition to development, displacement due to increased rents, and displacement of low-income and/or person-of-color (POC) Table 2. Describe the reasons for the success or lack of success of your jurisdiction's community engagement efforts. (Question 44)

FACTORS ENABLING SUCCESS IN ACHIEVING COMMUNITY OUTREACH GOALS:	FACTORS PREVENTING SUCCESS IN ACHIEVING COMMUNITY OUTREACH GOALS:
<ul> <li>Reaching out to a diverse group of community stakeholders</li> <li>Effective marketing efforts that broadly distributed information throughout the community</li> <li>Dedicated staff and resources for the outreach and engagement process</li> <li>Multiple opportunities to participate throughout engagement process</li> <li>Variety of ways to participate in multiple settings (online surveys, community meetings, small group discussions, etc.)</li> <li>Partnerships with nonprofit organizations providing fair housing services</li> </ul>	<ul> <li>Event attendees disproportionately from certain segments of the community, such as long-term homeowners</li> <li>Difficulty engaging populations with less housing stability, such as renters or people experiencing homelessness</li> <li>Outreach does not reflect opinions of those who have been excluded from the community due to high cost of housing</li> <li>Lack of housing staff and resources</li> <li>Need for a variety of participation formats as well as more outreach online and using social media</li> <li>Limited time for completing a robust outreach process</li> <li>Residents lacking time and resources to participate in community meetings</li> <li>Lack of childcare provided at meetings</li> <li>Confusion about the fair housing</li> </ul>
residents. Two other factors ranked in the top five for three out of four of the fair housing issues: availability of larger affordable units and land use/zoning laws. These five factors are highlighted in Table 3 on following pages.

The survey results show the most consensus around factors contributing to limited access to housing in jurisdictions as well as disparities in housing cost burdens and overcrowding. 32 respondents (44%) indicated that the availability of larger affordable units contributes to a lack of access to housing in their jurisdiction. Additionally, displacement due to increased rents, displacement of low-income residents and/or residents of color, and community opposition to development were all listed by more than one-third of jurisdictions as contributing to limited housing access. These same four factors were also the most commonly indicated causes of disparities in housing cost burdens and overcrowding, with 42% of respondents stating that displacement due to increased rents contributes to these disparities.

For the issues of segregated housing patterns/concentrated areas of poverty and disparities in access to opportunity areas, no contributing factor was selected by more than 12 respondents (17%). However, respondents did report similar causes for these fair housing issues: displacement due to increased rents, displacement of low-income residents and/ or residents of color, community opposition to development, location of affordable housing, and availability of larger affordable units. Respondents were also asked to select the top three factors contributing to fair housing issues in their jurisdiction and to describe the reason for these selections. Below are the factors most commonly listed by jurisdictions as the main contributors to fair housing issues as well as a summary of why respondents selected these factors. The factors appear in order of how frequently they were cited by respondents as top contributors to fair housing issues, with the most frequently listed factors first.

- Displacement: Respondents noted that displacement disproportionately affects low-income residents and residents of color, which can result in disproportionate overcrowding for these populations. Additionally, the rising housing costs in communities affected by displacement limit opportunities for racial and socioeconomic diversity and integration.
- Community opposition to development: Respondents reported that residents commonly oppose denser housing, affordable housing, or housing with supportive services for formerly homeless residents. This opposition can significantly increase the time to approve new development and drives up costs for both affordable and market-rate projects.
- Lack of affordable housing, especially larger units: Respondents described how rising housing costs and a limited supply of affordable housing cause the displacement of low-income residents and prevent lowincome households from moving into communities.
- Land use and zoning laws: Some respondents noted

Table 3. Which of the following factors contribute to fair	housing issues	in your jurisdiction?	Check all that apply. (Question 45)
5	J	, ,	

	FAIR HOUSING ISSUES				
	Disparities in access to opportunity areas	Segregated housing patterns or concentrated areas of	Disparities in access to opportunity areas	Disparities in housing cost burdens and	
Factors Contributing to Fair Housing Issues		poverty		overcrowding	
Access to financial services	5	1	1	1	
Access to grocery stores and healthy food options	3	4	7	2	
Access to healthcare facilities and medical services	3	2	2	2	
**Availability of larger affordable units	32	9	9	18	
Availability, frequency, and reliability of public transit	20	5	8	6	
CEQA and the land use entitlement process	14	4	6	6	
**Community opposition to development	24	10	9	15	
Creation and retention of high-quality jobs	8	0	5	7	
Deteriorated/abandoned properties	2	2	0	3	
**Displacement due to increased rents	30	11	9	30	
Displacement due to natural hazards	3	1	1	4	
**Displacement of low-income/POC residents	25	12	11	24	
Foreclosure patterns	2	3	2	4	
Impacts of natural hazards	8	1	2	3	
Lack of community revitalization strategies	2	3	2	3	
Lack of private investments in low-income/POC communities	6	6	6	5	
Lack of public investments in low-income/POC communities	4	3	4	2	

Continued next page

\* Factors highlighted in bold with asterisks (\*\*) are among the five most commonly selected across fair housing issues.



	FAIR HOUSING ISSUES				
Factors Contributing to Fair Housing Issues	Disparities in access to opportunity areas	Segregated housing patterns or concentrated areas of poverty	Disparities in access to opportunity areas	Disparities in housing cost burdens and overcrowding	
Lack of regional cooperation	7	2	6	6	
**Land use and zoning laws	20	10	7	9	
Lending discrimination	2	2	2	4	
Location of affordable housing	16	11	8	7	
Location of employers	8	2	3	8	
Location of environmental health hazards	2	2	0	2	
Location of proficient schools and school assign- ment policies	3	5	6	4	
Occupancy standards limiting number of people per unit	4	0	0	3	
Private discrimination	4	2	2	3	
Range of job opportunities available	7	0	5	5	
Other	2	0	1	1	

Table 3. Which of the following factors contribute to fair housing issues in your jurisdiction? Check all that apply. (Question 45)

that their jurisdictions are zoned primarily or entirely for single-family housing, and respondents also mentioned restrictions on multi-family development created by minimum lot sizes, density caps, height limits, and/or minimum parking requirements. These respondents reported that low-density zones cannot accommodate affordable housing, and current land use restrictions result in limited sites for multi-family projects. Consequently, affordable development is nearly impossible in some jurisdictions, while in other jurisdictions affordable developments are concentrated in the few areas with denser zoning. As a result, current land use and zoning codes perpetuate the segregation created by decisions of the past.

• Barriers to development: In addition to community opposition and land use laws, respondents described other barriers to development such as the availability of land suitable for development, the California Environmental Quality Act (CEQA) and the land use entitlement process, and the high cost of construction. Respondents discussed how their jurisdictions' approval processes for development and CEQA inhibit housing production. These respondents noted that CEQA slows down the entitlement

process and enables groups opposed to development to threaten litigation and create additional delays. The project costs created by CEQA and lengthy entitlement processes can make housing development financially infeasible, particularly for affordable projects. Survey responses indicated that these barriers to development inhibit access to these communities generally and especially for lowerincome populations.

- Location of employers: Respondents discussed how limited job options within their jurisdictions and lack of access to job centers increase the costs of living there, as residents need to travel farther for work. Additionally, some mentioned that a lack of high-quality jobs within the jurisdiction prevents local jobholders from affording the high cost of housing.
- Public transit availability: Respondents suggested that a lack of public transit options inhibits those living in their jurisdiction from accessing jobs and services if they do not own a car, which makes the jurisdiction less accessible to a diverse range of households.

#### **Topic 3: Fair Housing Goals and Actions**

The four questions within this topic area discussed the actions jurisdictions have taken to remove barriers to equal housing opportunity and prevent the displacement of low-income households. Respondents were also asked to reflect on their goals for fair housing policies and whether the strategies they have implemented achieve these goals. For more information on the strategies to further fair housing that Bay Area jurisdictions have detailed in their fair housing reports to HUD, see Section 3. Key Takeaways from Respondents' Comments Policies and initiatives to further fair housing: The survey results indicate that there are eight actions that a majority of respondents have taken to address existing segregation and enable equal housing choice (see Figure 13 on page A72). Most of these actions center on increasing the number of affordable housing units. For example, 69% of respondents have supported the development of affordable housing for special needs populations such as seniors, people with disabilities, people experiencing homelessness, and/or those with mental health issues. The survey responses also indicate that most respondents have sought to increase the supply of affordable housing through inclusionary zoning, land use changes, developing affordable housing near transit, encouraging the construction of larger affordable units, using publicly owned land for affordable development, and establishing local funding sources for affordable housing construction. Other common strategies to advance fair housing focus on low-income homeownership, with 53% of respondents funding home rehabilitation and improvements for low-income homeowners and 49% of respondents providing resources to support low-income homebuyers.

Goals for fair housing policies: Many of the jurisdictions' survey responses noted that a goal of their fair housing policies is facilitating equal housing opportunities by removing barriers to affordable housing. Specifically, respondents discussed the following objectives for their fair housing policies related to increasing the affordable housing supply:

Figure 13. What actions has your jurisdiction taken to overcome historical patterns of segregation or remove barriers to equal housing opportunity? (Question 47)

Supporting affordable housing for special needs populations Inclusionary zoning Land use changes to allow variety of housing types Supporting affordable housing near transit Supporting development of larger affordable units Funding rehabilitation/improvements for low-income homeowners Supporting for affordable housing on publicly-owned land Dedicated local funding for affordable housing. Providing financial support/resources for low-income homebuyers Streamlining entitlements and/or removing fees for affordable housing. Ensuring affirmative marketing of affordable housing. Funding outreach services for those at risk of losing their homes Programs/resources for preservation of existing affordable housing Exploring funding partnerships for affordable housing development/preservation Implementing anti-displacement policies/programs for low-income/POC residents Incentivizing landlord participation in Housing Choice Voucher program Implementing a rent stabilization policy and staffing a rent stabilization board Improving access to high-quality education for vulnerable students Other



- Financing affordable housing development through linkage fees and dedicated funding sources.
- Creating new affordable units and mixed-income development using inclusionary requirements for market-rate development.
- Providing support for nonprofit affordable housing developers.

• Preserving the existing affordable housing stock.

Additionally, respondents mentioned the following goals related to overcoming historic patterns of segregation and eliminating barriers to equal housing choice:

• Expanding affordable housing and homeownership

opportunities for those who have been directly affected by the historic legacies of housing inequities and discrimination.

- Ensuring that affordable housing is spread throughout all communities.
- Creating affordable housing options in high opportunity neighborhoods.
- Increasing the diversity of housing types throughout all neighborhoods through land use changes.
- Reducing barriers to mobility for low-income households and residents of publicly-supported housing.
- Making fair housing resources more readily available online and coordinating with fair housing services nonprofits to disseminate information and reduce discrimination.

Respondents reported that their jurisdictions' policies and actions were mostly successful for achieving goals related to furthering fair housing (see Figure 14). Notably, one-third of respondents did not answer this question, which could indicate a hesitancy to comment on the success of efforts to further fair housing. It is also possible that jurisdictions who do not engage in planning processes explicitly focused on fair housing skipped this question rather than selecting "N/A." Respondents who did answer also discussed the reasons their jurisdictions were able to achieve fair housing goals as well as the factors that hindered the success of these efforts. Table 4 on page A74 provides a summary of these reasons.

Anti-displacement policies and initiatives in local jurisdictions: Jurisdictions throughout the region have adopted a variety of policies to prevent or mitigate the displacement of their lowincome residents. The most common strategies focus on the production of affordable units as well as policies and programs to help low-income tenants remain in their current housing (see Figure 15 on page A75). 78% of respondents indicated that their jurisdictions promote streamlined processing for ADU construction. Other policies enacted by the majority of respondents include inclusionary zoning and condominium conversion regulations. Additionally, more than 40% of respondents assess affordable housing fees on residential and/or commercial development, while a comparable number of respondents provide support for fair housing legal services and/or housing counseling. It is worth noting that efforts to preserve subsidized and unsubsidized affordable units have been made by few jurisdictions, but these two strategies were selected by the most respondents as being of potential interest to the councils/

Figure 14. How successful were your jurisdiction's past actions in achieving goals for overcoming historical patterns of segregation or removing barriers to equal housing opportunity? (Question 49)



boards in their jurisdictions. In addition to the options listed on the survey, respondents reported that the following anti-displacement policies and programs have been implemented by their jurisdictions:

• Relocation assistance for tenants displaced due to code enforcement actions, condo conversion, and demolition of housing units for redevelopment

Table 4. Describe the reasons for the success or lack of success of your jurisdiction's actions to overcome historical patterns of segregation or remove barriers to equal housing opportunity. (Question 49)

- Programs and land use regulations to preserve affordable housing in mobile home parks
- Just cause eviction protections
- Downpayment assistance programs for residents
- Partnering with land trusts to acquire foreclosed homes and other for-sale properties to make them available for low- and moderate-income homebuyers
- Assisting landlords with low-cost loans and grants for property improvements in return for keeping long-time residents in place

## SECTION 3: SUMMARY OF BAY AREA LOCAL FAIR HOUSING REPORTS

**Federally Mandated Fair Housing Reports** Federal law obligates state and local jurisdictions receiving block grant funding from the HUD to submit a Consolidated Plan every five years, and this process requires conducting an Analysis of Impediments to Fair Housing Choice (AI).<sup>1</sup> In 2015, HUD released a final rule on affirmatively furthering fair housing (AFFH), which provided updated guidelines for assessing fair housing issues and created a new Assessment of Fair Housing (AFH) tool to replace the AI process. HUD's intent for this new process was to improve community planning around fair housing issues, as this new tool required public participation and increased data analysis.<sup>2</sup> In 2018, however, HUD suspended the AFH tool and reinstated the previous

<sup>6</sup> See <u>https://www.hudexchange.info/programs/consolidated-plan/consolidatedplan-process-grant-programs-and-related-hud-programs</u>/ for more information on the Consolidated Plan process.

<sup>7</sup> See <a href="https://files.hudexchange.info/resources/documents/AFFH-Fact-Sheet.pdf">https://files.hudexchange.info/resources/documents/AFFH-Fact-Sheet.pdf</a> and <a href="https://www.hudexchange.info/programs/affh/overview/">https://www.hudexchange.info/programs/affh/overview/</a> for more information on the 2015 AFFH rule and AFH tool.

Figure 15. Which of the following policies, programs, or actions does your jurisdiction use to prevent or mitigate the displacement of low-income households? (Question 50)



requirement to complete an AI report.<sup>3</sup> In response to HUD's decision, the California legislature passed Assembly Bill 686 in 2018, which states that AFFH obligations must be interpreted in a manner consistent with HUD's 2015 AFFH rule, regardless of subsequent amendments to or suspensions of the rule.<sup>4</sup> As a result, some reports submitted by Bay Area jurisdictions for the 2020-2025 cycle are labeled AFH reports, while others are AI reports, but the content and format of reports submitted since the passage of Assembly Bill 686 are likely to be similar, regardless of whether the report is labeled an AI or AFH.

### **Bay Area Reports**

Currently, 41 Bay Area cities and counties participate in the Consolidated Plan process and have submitted AI or AFH reports to HUD. Because these reports are submitted as part of five-year planning cycles, most of these jurisdictions recently submitted a report for the years 2020-2025 or are currently working on a report for this cycle, though reporting in some jurisdictions occurs on a different timeline. While some reports are submitted to HUD by individual jurisdictions, this reporting can also be completed as a collaborative effort between a county government and local jurisdictions within the county.

Below is a summary of the 16 AI and AFH reports, which are the most recently submitted fair housing documents from Bay Area jurisdictions available to the public. These reports cover the following jurisdictions:

- Programs and land use regulations to preserve affordable housing in mobile home parks
- Just cause eviction protections
- Downpayment assistance programs for residents
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<sup>8</sup> See <u>https://files.hudexchange.info/resources/documents/FR-Notice-AFFH-AI-Notice.pdf</u> for the 2018 HUD notice.

<sup>9</sup> See https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201720180AB686 for text of Assembly Bill 686.

<sup>10</sup> See https://www.hudexchange.info/programs/consolidated-plan/consolidated-plan-process-grant-programs-and-related-hud-programs/ or more information on the Consolidated Plan process.

<sup>11</sup> See <a href="https://files.hudexchange.info/resources/documents/AFFH-Fact-Sheet.pdf">https://www.hudexchange.info/programs/affh/overview/</a> for more information on the 2015 AFFH rule and AFH tool.

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Below is a summary of the 16 AI and AFH reports, which are the most recently submitted fair housing documents from Bay Area jurisdictions available to the public. These reports cover the following jurisdictions:

- Alameda County collaborative report: the cities of Alameda, Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, and Union City as well as Alameda County
- Contra Costa County collaborative report: the cities of Antioch, Concord, Pittsburg, and Walnut Creek as well as Contra Costa County
- Marin County
- City and County of San Francisco
- San Mateo County collaborative report: the cities of Daly City, San Mateo, South San Francisco, Redwood City, as well as San Mateo County
- Santa Clara County
- Sonoma County collaborative report: cities of Santa Rosa and Petaluma as well as Sonoma County
- City of Cupertino
- City of Fairfield
- City of Milpitas
- City of Mountain View
- City of Napa
- City of San Jose
- City of Sunnyvale
- City of Vacaville
- City of Vallejo

12 See https://files.hudexchange.info/resources/documents/FR-Notice-AFFH-AI-Notice.pdf for the 2018 HUD notice.

<sup>13</sup> See https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201720180AB686 for text of Assembly Bill 686.

# Reported Fair Housing Impediments, Strategies, and Actions

This summary focuses on common impediments to fair housing experienced by Bay Area jurisdictions, and it also lists specific strategies proposed and actions taken in response to these obstacles. While each AI or AFH report contains extensive city/county demographic information, housing equity history, and details on how the report was produced, including community engagement efforts, this summary does not focus on the individual circumstances of each jurisdiction. Rather, it collates these jurisdictions' most significant barriers to affirmatively furthering fair housing, as self-reported, and lists the strategies they have taken to overcome them, in an attempt to draw out common themes at the regional level.

The top themes to emerge at the regional level are:

- 1. There is a severe lack of affordable housing amidst alreadyhigh housing costs regionwide.
- 2. The lack of affordable housing leads to displacement and gentrification, impacting access to employment, transportation, and education for low-income people.
- 3. Communities often oppose new housing construction, especially when it is dense, affordable housing. While framed as an issue of "local control," in some circumstances this opposition to housing may be rooted in implicit discrimination based on race and class/income.
- 4. Jurisdictional zoning and approval policies and practices reflect this community opposition and contribute to the lack of affordable housing supply.

- 5. Lack of investment in specific neighborhoods is the result of longstanding explicit housing segregation, leading to racially-concentrated areas of poverty that persist today.
- 6. Outreach, education, and enforcement of fair housing activities are contracted out to nonprofits with insufficient resources.
- There are significant accessibility barriers to housing for disabled, non-English-speaking, formerly incarcerated, formerly homeless, and other specific populations.
- 8. Discrimination in the private housing market is prevalent, both in the rental market and in lending policies and practices that impede home ownership.
- 9. There is much room for improvement in coordination and cooperation regionwide, both between jurisdictions and among different housing advocacy groups.

Below are more details on these highly interrelated obstacles to fair housing in the Bay Area, as well as actions and strategies that may offer solutions. Nearly all of the reports considered each of the following nine impediments, but they were inconsistent in clarifying whether the strategies noted have actually been implemented or are simply being considered. This high-level summary includes all strategies that local fair housing reports listed as potential solutions to these nine impediments. However, ABAG staff could not determine from these reports how many jurisdictions had implemented each strategy versus how many were considering the strategy but had not yet adopted it. The following list orders both the impediments and the strategies by approximate frequency and importance to the collective jurisdictions (i.e., the most frequently reported, most important ideas across reports are listed first), as interpreted by ABAG staff who compiled the summary after reviewing the reports.

#### **IMPEDIMENT 1: Lack of Affordable Housing**

A lack of affordable housing means a lack of racially and ethnically integrated and balanced communities. Every Bay Area jurisdiction examined in this summary reports a shortage of affordable housing for those who need it, in both rental and ownership markets. The inadequate supply of affordable housing creates a severe housing shortage for communities of color, which are disproportionately economically disadvantaged.<sup>9</sup>

#### Strategies and Actions for Overcoming this Impediment

- 1. Seek funding for new affordable housing construction
- Pursue dedicated sources of funding for affordable housing (citywide, countywide, or regionwide), including:
  - o Affordable housing bonds
  - o Local sales tax, transit occupancy tax, or vacant home tax
  - o Housing trust funds for affordable housing development
- Explore state and national funding, such as CA Senate Bill 2
- Increase in-lieu fees<sup>10</sup> to reflect actual cost of affordable

housing development

- Pool in-lieu fees among cities
- Adopt inclusionary housing policies to bolster funds to support affordable housing
- 2. Identify new sites for affordable housing
- Prepare and publicize available and easily obtainable maps of all incorporated and unincorporated vacant and underutilized parcels
- Create a public database of potential sites that can be updated regularly
- 3. Incentivize developers to build new affordable units
- Prioritize the production of affordable housing units in sizes appropriate for the population and based on family size
- Reduce developer fees for affordable housing
- Encourage market rate housing to include affordable units, such as by promoting use of density bonuses
- Identify underutilized parcels to acquire, convert and develop into affordable housing
- Award higher points in housing developer applications to projects that offer units of 3+ bedrooms
- Support Project-Based Voucher (PBV) developments<sup>11</sup>

<sup>16</sup> Under the Project-Based Voucher program, a Public Housing Agency enters into anassistance contract with a development owner. This assistance subsidizes the rents for up to 25% of the units in the development for a specified term. Households living in units subsidized by PBVs pay 30% of their income toward rent, and the Public Housing Agency pays the development owner the difference between the rent the household pays and the gross rent for the unit. PBVs can enable an affordable housing development to charge more deeply affordable rents and better serve extremely low-income households.



<sup>14</sup> For more information on economic disparities across racial/ethnic groups in the Bay Area, see An Equity Profile of the Nine-County San Francisco Bay Area Region, by PolicyLink and PERE, the Program for Environmental and Regional Equity at the University of Southern California. Read at: https://nationalequityatlas.org/sites/default/files/ Final\_9\_County\_BayAreaProfile.pdf.

<sup>15</sup> In-lieu fees are fees paid by developers of market rate housing to satisfy affordable housing requirements in jurisdictions with inclusionary housing ordinances. The fee is paid in-lieu of providing on-site affordable housing, and jurisdictions typically use the fee to finance affordable housing development at a different site.

- Promote objective development and design standards for housing development projects that qualify for streamlined permit review
- Provide assistance to developers to secure entitlements and county funding for extremely low-income/special needs units
- Coordinate use of housing subsidies to build affordable housing in high-opportunity areas in order to increase low-income households' access to designated opportunity areas with low poverty rates, healthy neighborhoods, and high-performing schools
- Explore the production of units that are affordable by design, such as Accessory Dwelling Units (ADUs) and micro-units

4. Consider existing units: Protect currently affordable housing from becoming market-rate, and/or convert currently market-rate housing to affordable housing

- Provide technical assistance and funding application assistance to retain affordable units at risk of converting to market rate
- Develop and implement a small site acquisition and rehabilitation program that effectively channels fees paid to the city, leveraged with other public and private resources, to the preservation of small buildings serving low-income tenants
- Leverage financial resources from state and federal

programs to rehabilitate existing affordable housing projects nearing the end of their affordability restrictions and extend their subsidy into the future

• Donate municipally-owned, tax-foreclosed properties to nonprofit community land trusts to be rehabilitated, as needed, and preserved for long-term affordable housing

#### **IMPEDIMENT 2: Displacement and Gentrification**

As defined by the Urban Displacement Project at UC Berkeley, gentrification is a process of neighborhood change in a historically disinvested neighborhood that includes both economic and demographic change. These changes occur as a result of both real estate investment and new higherincome residents moving in, which results in corresponding changes in the education level or racial makeup of residents.<sup>12</sup> Gentrification often causes displacement, which prevents long-term residents from benefitting from new investments in their neighborhood. Moreover, when low-income families are displaced from their homes, they typically move to lowerincome neighborhoods, which generally lack options for highquality employment, transportation, and schools.<sup>13</sup>

- 1. Adopt tenant protections
- Adopt tenant protections, such as relocation costs, increased noticing, just cause for eviction, and rent control ordinances
- Promote new fair housing laws, including AB 1482,<sup>14</sup>

<sup>17</sup> For more information on gentrification, see <u>https://www.urbandisplacement.org/gentrification-explained</u>.

<sup>18</sup> For more information on the impacts of displacement, see <u>https://www.urbandisplacement.org/pushedout</u>.

<sup>19</sup> For more information on the statewide rent caps and just cause for eviction protections instituted by AB 1482, see <a href="https://sfrb.org/article/summary-ab-1482-california-tenant-protection-act-2019">https://sfrb.org/article/summary-ab-1482-california-tenant-protection-act-2019</a>.

including posting information on jurisdiction websites

- Collaborate with regional efforts such as established countywide homeless action plans/goals/programs that may provide one-time rent assistance to low-income people in jeopardy of being evicted due to life emergency or hardship
- Commission market-based rent surveys to seek adjustments to the fair market rents (FMRs) for the federal Housing Choice Voucher program
- Use eminent domain to block home foreclosures
- Fund and support multi-agency collaborative efforts for legal services, including organizations that do not receive Legal Services Corporation funding (federal funds) and are able to represent undocumented residents
- 2. Prioritize existing and new affordable housing, specifically in gentrifying areas
- Develop displacement mitigation or replacement requirements for any rezoning activities that could displace existing residents
- In tandem with investments in affordable housing development in low-poverty areas, provide funds for the preservation of affordable housing in areas that are undergoing gentrification or are at risk of gentrification, in particular in areas of high environmental health
- Donate municipally-owned, tax-foreclosed properties to nonprofit community land trusts to be rehabilitated, as needed, and preserved for long-term affordable housing
- Explore the development of policy that will allow a setaside in affordable housing developments that prioritizes

residents who are being displaced from low-income neighborhoods undergoing displacement and/or gentrification

• Offer minor home repair grants to help homeowners remain in their homes

# IMPEDIMENT 3: Community Opposition to New Housing

Communities often prefer single-family homes in their neighborhoods, which residents typically describe as based on fear of lowered property values, overcrowding, or changes in the character of the neighborhood. When communities resist new housing, it often results in the exclusion of people of color and low-income households.

- Develop growth management programs intended to concentrate urban development and preserve agriculture and open space
- Provide ongoing community engagement to educate, include and inform residents about the challenges with housing, and to highlight the jurisdiction's prior achievements in developing affordable housing and addressing racial disparities in housing choice
- Develop strategies and talking points to address topics cited in opposition to housing development, including the impact on schools, water, transportation and traffic
- Include and expand the number of participants who engage in discussions about barriers to fair housing and disparities in access and opportunities, and provide

opportunities to advance recommendations to address housing challenges

# IMPEDIMENT 4: Zoning Practices and Building Approvals

Local land use controls, zoning regulations, and impact fees are major impediments to constructing and preserving affordable housing. Unlike many other impediments to fair housing, jurisdictions have the authority to directly address these issues.

- 1. Evaluate and update zoning
- Evaluate and update existing zoning to ensure compliance with state-mandated streamlining requirements
- Rezone and repurpose underdeveloped areas
- Modify current zoning and other local policies regulating housing development that pose a direct or indirect constraint on the production of affordable housing
- Update zoning and programs to incentivize accessory dwelling units (ADUs)
- Explore revisions to building codes or processes to reduce the costs of ADU construction and/or allow a greater number of ADUs
- Encourage mixed-use transit-oriented development for affordable housing sites that are located near transportation facilities and employment centers by appropriately zoning for higher density residential and mixed-use developments, maximizing the linkages between employers and affordable housing

- Consider rezoning sites for affordable housing outside of racially segregated areas that are predominantly residents of color
- Consider reduced development standards, specifically parking requirements, to incentivize the development of specific housing types, including units with affordability covenants, units for special needs individuals, higher density residential development, and developments near public transit
- 2. Evaluate and update fees, processing times, ordinances
- Review existing inclusionary housing in-lieu fees, housing impact fees, and jobs-housing linkage fee programs to maximize number of units, as consistent with current housing market conditions and applicable law
- Evaluate options for streamlined processing of affordable housing developments
- Discourage or eliminate live/work preferences in inclusionary ordinances

## IMPEDIMENT 5: Segregation, Lack of Investment in Specific Areas, Racially/Ethnically Concentrated Areas of Poverty (R/ECAPs)

Public and private disinvestment in certain areas has resulted in racially/ethnically concentrated areas of poverty (R/ECAPs). In these neighborhoods, lack of tax revenue and funds for services has led to deteriorated and abandoned properties and areas where communities of color cannot access amenities needed for a healthy life.

#### Strategies and Actions for Overcoming this Impediment

1. Target economic investment opportunities in R/ECAPS while protecting against displacement

- Fund home-based childcare projects and microenterprise projects with Community Development Block Grant (CDBG) funds
- Provide Family Self-Sufficiency program participants with job training referrals and career networking<sup>15</sup>
- Explore financially supporting economic development activities and initiatives in and around R/ECAPs
- Prioritize economic development expenditures in and around R/ECAPs
- Prioritize funding for job training programs in and around R/ECAPs, including industrial jobs
- Prioritize infrastructure and streetscaping improvements in R/ECAPs in order to facilitate local retail development
- Engage with small business incubators to expand to R/ ECAPs or to provide technical assistance to start-up

incubators

• Explore methods for providing low-interest loans and below-market leases for tax-foreclosed commercial properties to low-income residents seeking to start businesses within R/ECAPs

2. Improve access to home renting and buying for residents in R/ECAPS

- Work with communities to develop a community land trust for low-income residents that creates opportunities for affordable housing and home ownership, with specific inclusion for residents of color with historic connections to the area
- Build affordable housing projects in middle- and upperincome neighborhoods to the maximum degree possible
- Create more standardized screening policies and procedures for city-sponsored affordable housing
- First-time homebuyer down payment assistance programs

## **IMPEDIMENT 6: Outreach, Education, Enforcement**

Nearly all jurisdictions report contracting with nonprofit organizations (partly funded by city and county grants) to provide local fair housing services and education, including counseling, language services, and handling of fair housing complaints. Despite these efforts, the region lacks sufficient housing search assistance, voucher payment standards, landlord outreach, mobility counseling, and education about fair housing rights. Inadequate funding and organizational capacity of the nonprofits providing services plays a role.

<sup>20</sup> Family Self-Sufficiency is a program that enables HUD-assisted families to increase their earned income and reduce their need for welfare assistance and rental subsidies.

- 1. Better fund all fair housing services
- Allocate more federal, state, and local funding for nonprofit organizations providing fair housing services
- Fund and support multi-agency collaborative efforts for legal services, including organizations that do not receive Legal Services Corporation funding (federal funds) and are able to represent undocumented residents
- 2. Promote better fair housing outreach and education services
- Continue to contract with fair housing service providers to educate home seekers, landlords, property managers, real estate agents, and lenders regarding fair housing law and recommended practices, including the importance of reasonable accommodation under the Americans with Disabilities Act; to mediate conflicts between home seekers, landlords, property managers, real estate agents, and lenders; and to continue fair housing testing and audits
- Implement annual training programs for property managers and residents
- Seek ways to increase resident access to fair housing services, such as improved marketing of services, improved landlord education, and improved tenant screening services to avoid owner bias
- Educate tenants and landlords on new fair housing laws
- Provide financial literacy and homebuyer education classes
- Continue to fund housing placement services for people with disabilities to assist them in finding accessible housing

- Develop and distribute informational brochure on inclusionary leasing practices, including with licenses where applicable
- Continue and increase outreach and education activities for all protected classes
- Include education on new requirements of Assembly Bill 2413 (Chiu), the Right to a Safe Home Act, in outreach activities to both landlords and the public<sup>19</sup>
- Explore alternative formats for fair housing education workshops such as pre-taped videos and/or recordings, which could serve persons with more than one job, families with young children and others who find it difficult to attend meetings in person
- 3. Better advertise affordable housing opportunities
- Create a database of all restricted housing units citywide/ countywide/regionwide that could be posted online to provide user-friendly information about the location and application process for each development
- Advertise the availability of subsidized rental units via the jurisdictions' websites and or apps, the 2-1-1 information and referral phone service, and other media outlets

## IMPEDIMENT 7: Accessibility for Specific Populations

Many jurisdictions report a lack of accessible housing for persons with disabilities, non-Englishspeaking people, formerly incarcerated people, formerly homeless people, seniors, and other specific populations—all direct fair housing issues.

# Strategies and Actions for Overcoming this Impediment

- Fund housing placement services for people with disabilities to assist them in finding accessible housing
- Offer landlord incentives, such as leasing bonuses, for specific populations
- Conduct a research effort in collaboration with an academic institution to better understand the landlord population and create more evidencebased policy initiatives
- Increase marketing efforts of affordable housing units to people that typically face barriers and discrimination in fair housing choice, such as persons with disabilities, people of color, lowincome families, seniors, new immigrants, and people experiencing homelessness
- To the extent practicable, use affordable housing funds for the construction of permanent supportive housing in developments in which 10-25% of units are set aside for persons with disabilities.
  Affirmatively market units to individuals with intellectual and developmental disabilities, their

families, and service providers

- Explore methods for nonprofit partners to assist in purchasing or master leasing affordable units within inclusionary market-rate developments, and set a portion of those units aside for persons with disabilities
- Develop and disseminate a best practices guide to credit screening in the rental housing context in order to discourage the use of strict credit score cut-offs and overreliance on eviction records
- For publicly-supported housing, develop protocols to ensure responsiveness to reasonable accommodation requests

## IMPEDIMENT 8: Discrimination in Home Ownership and Rental Markets

Over time explicit, legal discrimination has given way to implicit, unwritten biases in mortgage access and lending policies and practices for people of color– specifically in high rates of denial of mortgages for African American and Hispanic households. In the rental housing market, discrimination against low-income people, minorities, immigrants, and LGBTQ people is also prevalent. People using Housing Choice Vouchers also face discrimination for their source of income.

# Strategies and Actions for Overcoming this Impediment

• Work with communities to develop a community land trust for low-income residents that creates opportunities for affordable housing and home

ownership, with specific inclusion for residents of color with historic connections to the area

- Explore creating incentives for landlords to rent to Housing Choice Voucher holders, such as a leasing bonus, damage claim reimbursement, security deposit and utility assistance
- Streamline Housing Choice Voucher administration so participation is easy for landlords
- Increase outreach to LGBTQ and immigrant stakeholder groups to provide "know your rights" materials regarding housing discrimination
- Emphasize bilingual fair housing services and activities to ensure all members know their housing rights and the benefits
- Proactively enforce source of income discrimination laws<sup>16</sup>
- Contract with local service providers to conduct fair housing testing in local apartment complexes
- Modify and standardize screening criteria to ensure access to housing for otherwise qualified applicants with credit challenges or criminal histories
- Educate landlords on criminal background screening in rental housing (using HUD fair housing guidance) and explore the feasibility of adopting ordinances

#### **IMPEDIMENT 9: Coordination and Cooperation**

There is fragmentation among jurisdictions and among fair housing advocacy groups. More regional cooperation is needed to address disproportionate housing needs and the jobs-housing balance across the region.

- Expand ongoing interagency connections to support weatherization, energy efficiency, and climate adaptation for low-income residents
- Create a shared list of lenders countywide/regionwide that can help buyers access below-market-rate loans and sponsor down payment and mortgage assistance programs
- Collaborate on cross-jurisdictional informational databases or other resources for all aspects of housing
- Consider a sub-regional approach to share resources and possibly units to increase collaboration and production

<sup>21</sup> Senate Bill 329, enacted in 2019, prohibits landlords from disriminating against tenants who use Housing Choice Vouchers or other government assistance to pay their rent.

## Images compiled by NPH Northern California

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## BAY AREA METRO CENTER

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#### DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT DIVISION OF HOUSING POLICY DEVELOPMENT 2020 W. El Camino Avenue, Suite 500

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June 10, 2020

**MEMORANDUM FOR:** 

Planning Directors and Interested Parties

FROM:

Megan Kirkeby, Acting Deputy Director Division of Housing Policy Development

SUBJECT: Housing Element Site Inventory Guidebook Government Code Section 65583.2

The housing element of the general plan must include an inventory of land suitable and available for residential development to meet the locality's regional housing need by income level. The purpose of this Guidebook is to assist jurisdictions and interested parties with the development of the site inventory analysis for the 6<sup>th</sup> Housing Element Planning Cycle and identify changes to the law as a result of Chapter 375, Statutes of 2017 (AB 1397), Chapter 958, Statutes of 2018 (AB 686), Chapter 664, Statutes of 2019 (AB 1486), and Chapter 667, Statutes of 2019 (SB 6). The Guidebook should be used in conjunction with the site inventory form developed by the California Department of Housing and Community Development (HCD). These laws introduced changes to the following components of the site inventory:

- Design and development of the site inventory (SB 6, 2019)
- Requirements in the site inventory table (AB 1397, 2017 AB 1486, 2019)
- Capacity calculation (AB 1397, 2017)
- Infrastructure requirements (AB 1397, 2017)
- Suitability of nonvacant sites (AB 1397, 2017)
- Size of site requirements (AB 1397, 2017)
- Locational requirements of identified sites (AB 686, 2018)
- Sites identified in previous housing elements (AB 1397, 2017)
- Nonvacant site replacement unit requirements (AB 1397, 2017)
- Rezone program requirements (AB 1397, 2017)

The workbook is divided into five components: (Part A) identification of sites; (Part B) sites to accommodate the lower income RHNA; (Part C) capacity analysis; (Part D) non-vacant sites; and (Part E) determination of adequate sites.

If you have any questions, or would like additional information or technical assistance, please contact the Division of Housing Policy Development at (916) 263-2911.

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#### **BACKGROUND AND PURPOSE**

#### **Housing Element Site Inventory Requirements**

Scarcity of land with adequately zoned capacity is a significant contributor to increased land prices and housing development costs. A lack of adequately zoned sites exacerbates the already significant deficit of housing affordable to lower income households. An effective housing element provides the necessary conditions for conserving, preserving and producing an adequate supply of housing affordable at a variety of income levels and provides a vehicle for establishing and updating housing and land-use strategies to reflect changing needs, resources, and conditions. Among other things, the housing element establishes a jurisdiction's strategy to plan for and facilitate the development of housing over the five-to-eight year planning period by providing an inventory of land adequately zoned or planned to be zoned for housing and programs to implement the strategy.

The purpose of the housing element's site inventory is to identify and analyze specific land (sites) that is available and suitable for residential development in order to determine the jurisdiction's capacity to accommodate residential development and reconcile that capacity with the jurisdiction's Regional Housing Need Allocation (RHNA). The available and suitable sites are referred to as "adequate sites" throughout this Guidebook. The site inventory enables the jurisdiction to determine whether there are sufficient adequate sites to accommodate the RHNA by income category. A site inventory and analysis will determine whether program actions must be adopted to "make sites available" with appropriate zoning, development standards, and infrastructure capacity to accommodate the new development need.

Sites are suitable for residential development if zoned appropriately and available for residential use during the planning period. If the inventory demonstrates that there are insufficient sites to accommodate the RHNA for each income category, the inventory must identify sites for rezoning to be included in a housing element program to identify and make available additional sites to accommodate those housing needs early within the planning period.

Other characteristics to consider when evaluating the appropriateness of sites include physical features (e.g., size and shape of the site, improvements currently on the site, slope instability or erosion, or environmental and pollution considerations), location (e.g., proximity to and access to infrastructure, transit, job centers, and public or community services), competitiveness for affordable housing funding (e.g., Low Income Housing Tax Credit scoring criteria), and likelihood or interest in development due to access to opportunities such as jobs and high performing schools<sup>1</sup>. When determining sites to include in the inventory to meet the lower income housing need, HCD recommends that a local government first identify development potential in high opportunity neighborhoods. This will assist the local government in meeting its requirements to affirmatively further fair housing and ensure developments are more competitive for development financing.



<sup>&</sup>lt;sup>1</sup> Please Note: Significant increases in the housing capacity of the residential land inventory of the housing element could also warrant planning for updating of other elements, including the land use, safety, circulation elements and inclusion of an environmental justice element or environmental justice policies. The housing element must include a program describing the means by which consistency will be achieved with other general plan elements and community goals (GC 65583(c)(8)).

## SITE INVENTORY GUIDEBOOK FRAMEWORK

The following is a Guidebook designed to assist a jurisdiction through the site inventory analysis required by Housing Element Law. Use of the Guidebook is not required for a determination of compliance by HCD. The Guidebook is intended to facilitate the jurisdiction in determining if adequate sites are available by income category to accommodate the jurisdiction's share of the RHNA or if rezoning or other program actions are needed. Areas of the law that are newly added since the beginning of the 5<sup>th</sup> housing element cycle are marked with the designation \***NEW**\*.

#### **Guidebook Structure**



Site Inventory Guidebook

is a shortfall requiring a program to rezone additional sites.

May 2020

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#### Step 1: Identification of Developable Sites

Government Code section 65583.2(a)

Generally, a site is a parcel or a group of parcels that can accommodate a portion of the jurisdictions RHNA. A jurisdiction must identify, as part of an inventory, sites within its boundaries (i.e., city limits or a county's unincorporated area)<sup>2</sup> that could have the potential for new residential development within the eight- or five-year timeframe of the housing element planning period.

Types of sites include:

- Vacant sites zoned for residential use.
- Vacant sites zoned for nonresidential use that allow residential development.
- Residentially zoned sites that are capable of being developed at a higher density (nonvacant sites, including underutilized sites).
- Sites owned or leased by a city, county, or city and county.
- Sites zoned for nonresidential use that can be redeveloped for residential use and a program is included to rezone the site to permit residential use.

#### Pending, approved, or permitted development:

Projects that have been approved, permitted, or received a certificate of occupancy since the beginning of the RHNA projected period may be credited toward meeting the RHNA allocation based on the affordability and unit count of the development. For these projects, affordability is based on the actual or projected sale prices, rent levels, or other mechanisms establishing affordability in the planning period of the units within the project (See Part E). For projects yet to receive their certificate of occupancy or final permit, the element must demonstrate that the project is expected to be built within the planning period.

**Definition of Planning Period:** The "Planning period" is the time period between the due date for one housing element and the due date for the next housing element (Government Code section 65588(f)(1).) For example, the San Diego Association of Governments' 6<sup>th</sup> Cycle Planning Period is April 15, 2021 to April 15, 2029.

**Definition of Projection Period:** "Projection period" is the time period for which the regional housing need is calculated (Government Code section 65588(f)(2).). For example, the San Diego Association of Governments' 6<sup>th</sup> Cycle Projection Period is June 30, 2020 to April 15, 2029.

Please note, sites with development projects where completed entitlements have been issued are no longer available for prospective development and must be credited towards the RHNA based on the affordability and unit count of the development. "Completed entitlements" means a housing development or project which has received all the required land use approvals or entitlements necessary for the issuance of a building permit. This



<sup>&</sup>lt;sup>2</sup> In some cases, jurisdictions may want to include sites anticipated to be annexed in the planning period. Annexation is considered a rezoning effort to accommodate a shortfall of sites. For more information on annexation please see Part E, Step 3.

means that there is no additional action required to be eligible to apply and obtain a building permit.

Jurisdictions may choose to credit sites with pending projects since the beginning of the RHNA projection period towards their RHNA based on affordability and unit count within the proposed project but must demonstrate the units can be built within the remaining planning period. Affordability must be based on the projected sales prices, rent levels, or other mechanisms establishing affordability in the planning period of the units within the project.

**Census definition of a unit:** A housing unit is a house, an apartment, a group of rooms, or a single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants do not live and eat with other persons in the structure and which have direct access from the outside of the building or through a common hall. Living quarters of the following types are excluded from the housing unit definition: dormitories, bunkhouses, and barracks; quarters in predominantly transient hotels, motels, and the like, except those occupied by persons who consider the hotel their usual place of residence; quarters in institutions, general hospitals, and military installations, except those occupied by staff members or resident employees who have separate living arrangements.

**Student/University Housing:** Please be aware, college and university student housing may be considered noninstitutional group quarters and not a housing unit for purposes of meeting the RHNA. According to the census, college/university student housing includes residence halls and other buildings, including apartment-style student housing, designed primarily to house college and university students in group living arrangements either on or off campus. These facilities are owned, leased, or managed by a college, university, or seminary or can be owned, leased, or managed by a private company or agency. Residents typically enter into "by the bed" leases (i.e., single-liability leases). Another distinguishing factor is that the unit is not available for rent to non-students. For further information on whether university housing meets the definition of a housing unit, please contact the Department of Finance at (916) 323-4086.

#### Exempt entity-controlled sites (state excess sites, military, university, and tribal land)

HCD recognizes that the development of new housing on exempt entity sites (land controlled by exempt federal, state, or tribal entities) can meet a portion of a jurisdiction's RHNA. However, sites located on land controlled by exempt entities are analyzed differently because the jurisdiction may not have control over the planning, permitting, and decision-making processes of land owned by another public entity.

Sites controlled by exempt entities can be used to accommodate RHNA when documentation can be provided that demonstrates the likelihood that the planned housing will be developed within the current RHNA/housing element cycle. Adequate documentation can vary due to differences in the planning processes on land controlled by exempt federal, state, or tribal entities. The following are examples of documentation that demonstrates the likelihood of housing being developed on sites outside the control of a local government. In each of these examples, the units would have to meet the U.S. Census Bureau (Census) definition of a housing unit:

- Agreement with the entity controlling the land that grants the jurisdiction authority regarding approving, permitting, certifying occupancy, and/or reporting new units to the California Department of Finance.
- Documentation from the entity controlling the land that demonstrates planned housing has been approved to be built within the current RHNA cycle.
- Data pertaining to the timing of project construction and unit affordability by household income category.
- If the site is listed on the Department of General Services Real Estate Excess State Property map located <u>EO N-06-19 Affordable Housing Development webpage</u>.

## Step 2: Inventory of Sites

Government Code section 65583.2(b)

Provide a parcel specific inventory of sites that includes the following information for each site:

- \*NEW\* Assessor parcel number(s).
- Size of each parcel (in acres).
- General plan land use designation.
- Zoning designation.
- For nonvacant sites, a description of the existing use of each parcel (See Part D)
- \*NEW\* Whether the site is publicly owned or leased.
- Number of dwelling units that the site can realistically accommodate (See Part C)
- **\*NEW**\* Whether the parcel has available or planned and accessible infrastructure (Part A: Step 3).
- **\*NEW**\* The RHNA income category the parcel is anticipated to accommodate (See Part A: Step 5).
- **\*NEW**\* If the parcel was identified in a previous planning period site inventory (Part B: Step 1).

**\*NEW\*** Please note pursuant to Chapter 667, Statutes of 2019 (SB 6), the site inventory must be prepared using the standards, form, and definitions adopted by HCD. HCD has prepared a form and instructions for this purpose that includes space for the information above and commonly provided optional fields. Starting January 1, 2021, local governments will need to submit an electronic version of the site inventory to HCD on this form along with its adopted housing element.

\***NEW**\* Pursuant to Chapter 664, Statutes of 2019 (AB 1486), at Government Code section 65583.2(b)(3), if a site included in the inventory is owned by the city or county, the housing element must include a description of whether there are any plans to sell the property during the planning period and how the jurisdiction will comply with the Surplus Land Act Article 8 (commencing with Section 54220) of Chapter 5 of Part 1 of Division 2 of Title 5.

## Step 3: Infrastructure Availability

Government Code section 65583.2(b)(5)(B)

Determine if parcels included in the inventory, including any parcels identified for rezoning, have sufficient water, sewer, and dry utilities available and accessible to support housing development or whether they are included in an existing general plan program or other mandatory program or plan, including a program or plan of a public or private entity to secure sufficient water, sewer, and dry utilities supply to support housing development on the site in time to make housing development realistic during the planning period. Dry utilities include, at minimum, a reliable energy source that supports full functionality of the



home and could also include access to natural gas, telephone and/or cellular service, cable or satellite television systems, and internet or Wi-Fi service.

If Yes: Provide an analysis in the housing element describing existing or planned water, sewer, and other dry utilities supply, including the availability and access to parcels on the site inventory, distribution facilities, general plan programs or other mandatory program or plan (including a program or plan of a public or private entity to secure water or sewer service) to support housing development on the site. The housing element must include sufficient detail to determine whether the service levels of water delivery/treatment systems and sewer treatment facilities are sufficient and have the capacity to accommodate development on all identified sites in order to accommodate the RHNA. For example, the water supply should be a reliable supply that meets federal and state drinking water standards.

Please note sites identified as available for housing for above moderate-income households can still be in areas not served by public sewer systems.

If No: Include a program in the housing element that ensures access and availability to infrastructure to accommodate development within the planning period. If this is not possible, the site is not suitable for inclusion in the site inventory or in a program of action identifying a site for rezoning.

#### Step 4: Map of Sites

Government Code section 65583.2(b)(7)

Provide a map that shows the location of the sites included in the inventory. While the map may be on a larger scale, such as the land use map of the general plan, the more detailed the map, the easier it will be to demonstrate the sites meet new requirements pursuant to Chapter 958, Statutes of 2018 (AB 686) as stated below.

# **Step 5: Determination of Consistency with Affirmatively Furthering Fair Housing** *Government Code section 65583.2(a)*

**\*NEW\*** Pursuant to AB 686, for housing elements due on or after January 1, 2021, sites must be identified throughout the community in a manner that affirmatively furthers fair housing opportunities (Government Code Section 65583(c)(10)).

Affirmatively Furthering Fair Housing means "taking meaningful actions, in addition to combating discrimination, that overcome patterns of segregation and fosters inclusive communities free from barriers that restrict access to opportunity based on protected characteristics. Specifically, affirmatively furthering fair housing means taking meaningful actions that, taken together, address significant disparities in housing needs and in access to opportunity, replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity, and fostering and maintaining compliance with civil rights and fair housing laws. The duty to affirmatively further fair housing extends to all of a public agency's<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> Public Agencies include the state, including every state office, officer, department, division, bureau, board, and commission, including the California State University, a city, including a charter city, county, including a charter county, city and county, and a redevelopment successor agency, a public housing authority created pursuant to the Housing Authorities Law, a public housing agency, and any other political subdivision of the state that is a grantee or subgrantee receiving funds provided by the United States Department of Housing and Urban Development (Government Code section 8899.5(a)(2).

activities and programs relating to housing and community development." (Government Code section 8899.50(a)(1)).

For purposes of the housing element site inventory, this means that sites identified to accommodate the lower-income need are not concentrated in low-resourced areas (lack of access to high performing schools, proximity to jobs, location disproportionately exposed to pollution or other health impacts) or areas of segregation and concentrations of poverty. Instead, sites identified to accommodate the lower income RHNA must be distributed throughout the community in a manner that affirmatively furthers fair housing. One resource the jurisdiction could use when completing this analysis is the California Tax Credit Allocation/California Department of Housing and Community Development Opportunity Maps, which can be accessed at <a href="https://www.treasurer.ca.gov/ctcac/opportunity.asp">https://www.treasurer.ca.gov/ctcac/opportunity.asp</a>. Particularly, the jurisdiction should consider the barriers and opportunities identified in its assessment of fair housing pursuant to Government Code section 65583(c)(10). HCD plans to release a technical assistance memo to assist jurisdictions in addressing AB 686 requirements in their housing element in the Summer of 2020.

Jurisdictions should also consider integrating this analysis with the requirements of Government Code 65302(h), as added by SB 1000 (Statutes of 2016), which requires the preparation and adoption of an Environmental Justice element or equivalent environmental justice-related policies, objectives, and goals throughout other elements of their general plan, to address the needs of disadvantaged communities. More information on Environmental Justice elements can be found on the <u>Governor's Office of Planning and Research Website</u>.

## Step 6: Sites by RHNA Income Category

Government Code section 65583.2(c)

\*NEW\* Identify which RHNA income category that each site in the inventory is anticipated to accommodate. On the site inventory, specify whether the site or a portion of the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing. Sites can accommodate units for more than one income category. However, the inventory should indicate the number of units of each income category, and together the total of units attributed to each income category may not exceed total units attributed to the site, so that no unit is designated for more than one income category. This requirement is particularly important because the No Net Loss Law (Government Code section 65863) requires adequate sites be maintained throughout the planning period to accommodate the remaining RHNA by income category. For more information, please consult the HCD's memo on <u>No Net Loss Law</u>.

<u>HCD Best Practices for selecting sites to accommodate the lower income RHNA:</u> When determining which sites are best suited to accommodate the RHNA for lower income households, the jurisdiction should consider factors such as:

- Proximity to transit.
- Access to high performing schools and jobs.
- Access to amenities, such as parks and services.
- Access to health care facilities and grocery stores.
- Locational scoring criteria for Low-income Housing Tax Credit (TCAC) Program funding.
- Proximity to available infrastructure and utilities.

- Sites that do not require environmental mitigation.
- Presence of development streamlining processes, environmental exemptions, and other development incentives.

## Step 7: Environmental Constraints

Government Code section 65583.2(b)(4)

Provide in the analysis a general description of any known environmental or other features (e.g., presence of floodplains, protected wetlands, oak tree preserves, very high fire hazard severity zones) that have the potential to impact the development viability of the identified sites. The housing element need only describe those environmental constraints where documentation of such conditions is available to the local government. This analysis must demonstrate that the existence of these features will not preclude development of the sites identified in the planning period at the projected residential densities/capacities. This information need not be identified on a site-specific basis. However, local governments will find it beneficial to describe site specific environmental conditions when demonstrating site suitability and realistic buildout capacity of each site, as these types of impediments to building must be considered when determining how many residential units can be developed on the site.

#### NEXT STEP:

- If the site is selected to accommodate its low or very-low income RHNA, move to Part B: Sites to Accommodate Low and Very-Low Income RHNA.
- If the site accommodates moderate or above-moderate RHNA, move to Part C: Capacity Analysis.

#### PART B: SITES TO ACCOMMODATE LOW AND VERY LOW- INCOME RHNA

#### **Step 1: \*NEW\* Sites Used in Previous Planning Periods Housing Elements** *Government Code section 65583.2(c)*

Determine if the site identified to accommodate the low- and very low-income RHNA pursuant to Part A, Step 6 was used in the previous planning period<sup>4</sup>. Generally, previously identified sites refer to parcels that were identified in a previous housing element's site inventory to accommodate any portion of any income category of the jurisdiction's RHNA, as follows:

*For a nonvacant site*: Included in a prior planning period's housing element (e.g., 5<sup>th</sup> cycle housing element)

*For a vacant site* (see definition of vacant site on page 21): Included in two or more consecutive planning periods (e.g., 5<sup>th</sup> cycle and 4<sup>th</sup> cycle housing element)

If Yes: move to Step 1A

If No: move to Step 2

#### **Unusual Circumstances**

<u>Sites rezoned or identified for rezoning to accommodate a RHNA shortfall</u> Previously identified sites can also include sites that were subject to a previous housing element's rezone program but that were ultimately not rezoned. For example: a previous housing element's rezone program to address a shortfall of sites for lower income households committed to rezone four acres to R-4 zoning, and identified five candidate sites for rezoning, A through E, and each site was two acres in size. If the program was completed in the prior planning period and four acres were rezoned, only those sites rezoned are considered "previously identified." However, if none or fewer than four acres were rezoned, all the non-rezoned sites identified as candidate sites would be considered as "previously identified."

Sites rezoned to a higher density as part of a general plan update (not needed to accommodate a shortfall)

Due to updates in the prior planning period to the general plan or other planning activities, such as the creation of a specific plan, some sites previously identified in the housing element may have been rezoned allowing a higher density, and therefore increasing the potential housing capacity of the site. Because the zoning characteristics of this site have changed, it can be considered a new site for the purposes of the housing element inventory. This is only the case if it was not utilized to accommodate a shortfall of sites to accommodate the RHNA.

<sup>&</sup>lt;sup>4</sup> Sites in unincorporated areas in a nonmetropolitan county without a micropolitan area are exempt from this step. This includes the unin<u>corporated parts of Alpine, Amador, Calaveras, Colusa, Glenn, Mariposa, Modoc, Mono, Plumas, Sierra, Siskiyou</u>, Trinity.

#### Step 1A:

Indicate in the housing element site inventory that this parcel was used in a prior housing element planning period.

#### Step 1B:

Include a program in the housing element requiring rezoning within three years of the beginning of the planning period to allow residential use by right at specified densities (see Step 2) for housing developments in which at least 20 percent of the units are affordable to lower income households. This program can be an overlay on these specific sites. Please be aware that the intent of this requirement is to further incentivize the development of housing on sites that have been available over one or more planning periods. The application of the requirement should not be used to further constrain the development of housing. As such, housing developments that do not contain the requisite 20 percent would still be allowed to be developed according to the underlying (base) zoning but would not be eligible for "by right" processing. However, the jurisdiction would have to make findings on the approval of that project pursuant to No Net Loss Law (Government Code section 65863) and proceed to identify an alternative site or sites pursuant to that law. Sites where zoning already permits residential "use by right" as set forth in Government Code section 65583.2 (i) at the beginning of the planning period would be considered to meet this requirement.

## Definition of Use By Right (Government Code section 65583.2 (i))

By right means the jurisdiction shall not require:

- A conditional use permit.
- A planned unit development permit.
- Other discretionary, local-government review or approval that would constitute a "project" as defined in Section 21100 of the Public Resources Code (California Environmental Quality Act "CEQA").

However, if the project requires a subdivision, it is subject to all laws, including CEQA.

This does not preclude a jurisdiction from imposing objective design review standards. However, the review and approval process must remain non discretionary and the design review must not constitute a "project" as defined in Section 21100 of the Public Resources Code. For example, a hearing officer (e.g., zoning administrator) or other hearing body (e.g., planning commission) can review the design merits of a project and call for a project proponent to make design-related modifications, but cannot exercise judgment to reject, deny, or modify the "residential use" itself. (See *McCorkle Eastside Neighborhood Group v. City of St. Helena* (2019) 31 Cal.App.5th 80.)

For reference, CEQA applies when a governmental agency can exercise judgment in deciding whether and how to carry out or approve a project. This makes the project "discretionary" (CEQA Guidelines, §15357.) Where the law requires a governmental agency to act on a project using fixed standards and the agency does not have authority to use its own judgment, the project is called "ministerial," and CEQA does not apply. (CEQA Guidelines, §§ 15268(a), 15369.)

#### Sample Program:

Provide Adequate Sites for Lower Income Households on Nonvacant and Vacant Sites Previously Identified

The City of X will rezone to allow developments by right pursuant to Government Code section 65583.2(i) when 20 percent or more of the units are affordable to lower income households on sites identified in Table A to accommodate the lower income RHNA that was previously identified in past housing elements. Specifically, the City will rezone the nonvacant sites identified on Table A previously identified in the 5<sup>th</sup> cycle housing element, and the vacant sites identified on Table A as previously identified for both the 5<sup>th</sup> and 4<sup>th</sup> cycle housing elements.

*Objective*: Create opportunity for at least X units of rental housing for lower income households

Responsible Agency: Community Development Department

*Timeline*: Sites rezoned by (a specific date, no more than three years from the beginning of the planning period)

*Funding Source(s)*: General fund

#### **Step 2: Zoning Appropriate to Accommodate Low- and Very Low- Income RHNA** *Government Code section 65583.2(c)(3)*

Determine if the zoning on the site is appropriate to accommodate low- and very lowincome (termed together as "lower") housing.

The statute allows jurisdictions to use higher density as a proxy for lower income affordability, as long as certain statutory requirements are met. Parcels must be zoned to allow sufficient density to accommodate the economies of scale needed to produce affordable housing. To make this determination, the statute allows the jurisdiction to either demonstrate that the zoning allows a specific density set forth in the statute (default density)<sup>5</sup> or to provide an analysis demonstrating the appropriateness of the zoned densities of the site identified to accommodate the lower RHNA.

Step 2A: Does the parcel's zoning allow for "at least" the following densities?

- For an incorporated city within a nonmetropolitan county and for a nonmetropolitan county that has a micropolitan area: sites allowing at least 15 units per acre.
- For an unincorporated area in a nonmetropolitan county not included in the first bullet: sites allowing at least 10 units per acre.
- For a suburban jurisdiction: sites allowing at least 20 units per acre.
- For a jurisdiction in a metropolitan county: sites allowing at least 30 units per acre.

"At least" means the density range allowed on the parcel by the zone has to include the default density. For example, if a jurisdiction has a default density of 30 units per acre and the zone allows for range of 24 - 35 units per acre, the zoning is considered appropriate to accommodate the RHNA for lower income households. This is different than the program standard outlined in Part E which requires a <u>minimum</u> of a specific density in the allowed

<sup>&</sup>lt;sup>5</sup> Sometimes called "Mullin densities" after the author of AB 2348, Statutes of 2004, which originated these requirements.

density range in the zone. To determine the default density for jurisdictions, please refer to <u>HCD Memorandum: Default Density Standard Option (2010 Census Update)</u>.

If Yes: Move to Step 3

If No: Move to Step 2B

Step 2B: Can the analysis demonstrate the appropriateness of the zoning to accommodate housing?

Provide an analysis demonstrating how the allowed densities facilitate the development of housing to accommodate the lower income RHNA. The analysis shall include, but is not limited to, factors such as market demand, financial feasibility, and information based on development project experience within a zone or zones, or at densities that accommodate housing for lower income households.

Information gathered from local developers on densities ideal for housing development in the community and examples of recent residential projects that provide housing for lower income households is helpful in establishing the appropriateness of the zone. Other information could include land costs, market demand for various types of affordable housing, and the gap between typical market rents and subsidized rents. It is recognized that housing affordable to lower income households requires significant subsidies and financial assistance. However, for this analysis, identifying examples of subsidized housing projects alone is not sufficient to demonstrate the adequacy of a zone and/or density to accommodate the housing affordable to lower income households. In particular, identification of older project(s) or one-off projects that cannot be easily duplicated is not sufficient to demonstrate a development trend.

The analysis of "appropriate zoning" should not include residential buildout projections resulting from the implementation of a jurisdiction's inclusionary program or potential increase in density due to a density bonus, because these tools are not a substitute for addressing whether the underlining (base) zoning densities are appropriate to accommodate the RHNA for lower income households. Additionally, inclusionary housing ordinances applied to rental housing must include options for the developer to meet the inclusionary requirements other than exclusively requiring building affordable units on site. While an inclusionary requirement may be a development criterion, it is not a substitute for zoning. The availability of density bonuses is also not a substitute for an analysis, since they are not a development requirement, but are development options over the existing density, and generally require waivers or concessions in development standards to achieve densities and financial feasibility.

#### If Yes: Move to Step 3

If No: Site is not appropriate to accommodate lower income. Reclassify pursuant to Part A, Step 5.

## **Housing Overlays**

Affordable housing or zoning overlays are a zoning tool that allows jurisdictions to modify existing zoning to allow for or require certain types of residential development, or development at certain densities, on a parcel without modifying the standards of the underlying zoning district. Usually, they have specific requirements and conditions (e.g., a percentage of the development must be deed-restricted as affordable to lower income households for a specific number of years) that must be met in order for a developer to take advantage of the overlay. These are often combined with incentives to encourage developers to utilize the overlay. Jurisdictions use overlays to help promote a specific type of development, and to increase densities without having to go through a rezoning procedure on the actual parcel and can be more useful when issues such as density and affordable housing become contentious. To ensure the overlay is considered zoning and not just a development incentive, the overlay must demonstrate the following:

- There is no additional discretionary action needed above what is required in the base zone (i.e., a conditional use permit or other review) for a developer to take advantage of overlay.
- Development standards are consistent with those needed to allow for the density allowed under the overlay. Development standards for use exclusively in the overlay may be needed in order to ensure maximum allowable densities can be achieved.
- The developer can access State Density Bonus Law in addition to using the densities allowed in the overlay. For example, if the underlying zoning allows a maximum density of 15 units per acre, but the overlay allows a maximum density of 25 units per acre, and if the developer is using the overlay and wants to use State Density Bonus Law, the density bonus is calculated assuming the base density is 25 units per acre.

If the overlay has conditions such as an affordability requirement, incentives should be sufficient and available to make development feasible and more profitable than the underlying zoning.

For an affordable housing overlay, the element should describe affordability threshold requirements to utilize the overlay (i.e., percentage of units and levels of affordability which must be met to develop at the increased densities). Please note, the jurisdiction should talk with for-profit and nonprofit developers to determine an appropriate mix of incomes that make development feasible in their community. For example, a 100 percent affordability requirement may act as a constraint to using the overlay depending on the level of subsidy required per unit and the availability of funding to support the level of affordability or available incentives.

## Step 3: Size of Sites

Government Code section 65583.2(c)(2)(A), (B), and (C)

**\*NEW\*** Is the size of the site appropriate to accommodate housing for lower income households?

To achieve financial feasibility, many assisted housing developments using state or federal resources are between 50 to 150 units. Parcels that are too small may not support the number of units necessary to be competitive and to access scarce funding resources. Parcels that are large may require very large projects, which may lead to an over concentration of affordable housing in one location, or may add cost to a project by
requiring a developer to purchase more land than is needed, or render a project ineligible for funding. If the size of the site is smaller than one half acre or larger than 10 acres, the following analysis is required.

# If the parcel is more than 0.5 acres or less than 10 acres, is the size of the site automatically considered appropriate to accommodate lower income RHNA?

Not necessarily. If the size of the parcel in combination with the allowable density and accompanying development standards cannot support a housing development affordable to lower income households, further analysis and programs may be needed to demonstrate the suitability of that site to accommodate the portion of the RHNA for lower income households.

Is the size of the parcel under 0.5 acres? If Yes: Move to Step 3A

Is the size of the parcel over 10 acres? If Yes: Move to Step 3B

If No to Both: Move to Part C: Capacity Analysis

#### Step 3A: Sites smaller than 0.5 acres

A parcel smaller than one half acre is considered inadequate to accommodate housing affordable to lower income households, unless the housing element demonstrates development of housing affordable to lower income households on these sites is realistic or feasible. While it may be possible to build housing on a small parcel, the nature and conditions (i.e., development standards) necessary to construct the units often render the provision of affordable housing infeasible. The housing element must consider and address the impact of constraints associated with small lot development on the ability of a developer to produce housing affordable to lower income households. To demonstrate the feasibility of development on this type of site, the analysis must include at least one of the following:

- An analysis demonstrating that sites of equivalent size were successfully developed during the prior planning period with an equivalent number of lower income housing units as projected for the site.
- Evidence that the site is adequate to accommodate lower income housing. Evidence could include developer interest, potential for lot consolidation, densities that allow sufficient capacity for a typical affordable housing project, and other information that can demonstrate to HCD the feasibility of the site for development. For parcels anticipated to be consolidated, the housing element must include analysis describing the jurisdiction's role or track record in facilitating small lot consolidation, policies or incentives offered or proposed to encourage and facilitate lot consolidation, conditions rendering parcels suitable and ready for consolidation such as common ownership, and recent trends of lot consolidation. The housing element should include programs promoting, incentivizing, and supporting lot consolidations and/or small lot development.
- A site may be presumed to be realistic for development to accommodate lower income housing need if, at the time of the adoption of the housing element, a development affordable to lower income households has been proposed and approved for development on the site.

The housing element must also describe existing and proposed policies or incentives the jurisdiction will offer to facilitate development of small sites. Examples of program incentives for lot consolidation include deferring fees specifically for consolidation, expediting permit processing, providing flexible development standards such as setback requirements, reduced parking or increased heights, committing resources for development of affordable housing on small sites, or increasing allowable density, lot coverage or floor area ratio.

## Step 3B: Sites larger than 10 acres

Parcels larger than 10 acres are considered inadequate to accommodate housing affordable to lower income households, unless the housing element demonstrates development of housing affordable to lower income households on such sites was successful during the prior planning period, or there is other evidence that the site is realistic and feasible for lower income housing.

# Definition of a Large Site

For purposes of this requirement, "site" means that portion of the parcel designated to accommodate lower income housing needs. For example, a parcel greater than 10 acres in size could have to be split zoned, have an overlay zone with identified boundaries, or be identified in a specific plan that provides for subdivision of the parcel. If the specified boundaries of the site identified to accommodate the RHNA for lower income is less than 10 acres in size, then the large site analysis would not be required. However, the analysis must describe how the development will work on the site, including opportunities and timing for specific-plan development, further subdivision, or other methods to facilitate the development of housing affordable to lower income households on the identified site within the planning period.

To demonstrate the feasibility of development on this type of site, the analysis must include at least one of the following:

- An analysis demonstrating that sites of equivalent size were successfully developed during the prior planning period with an equivalent number of lower income housing units as projected for the site.
- Evidence that the site is adequate to accommodate lower income housing. Evidence may include developer interest, proposed specific-plan development, potential for subdivision, the jurisdiction's role or track record in facilitating lot splits, or other information that can demonstrate to HCD the feasibility of the site for development. The housing element should include programs promoting, incentivizing, and supporting lot splits and/or large lot development.
- A site may be presumed to be realistic for development to accommodate lower income housing need if, at the time of the adoption of the housing element, a development affordable to lower income households has been proposed and approved for development on the site.

# Specific Plans, Master Plan, and other Subdivisions

To utilize residential capacity in Specific Plan areas, areas under a Master Plan, or a similar multi-phased development plan, the housing element must identify specific sites by parcel number and demonstrate that the sites are available and suitable for development within the planning period. The analysis should include the following information:

- Identify the date of approval of the plans and expiration date.
- Identify approved or pending projects within these plans that are anticipated in the planning period, including anticipated affordability based on the actual or projected sale prices, rent levels, or other mechanisms establishing affordability in the planning period of the units within the project.
- Describe necessary approvals or steps for entitlements for new development (e.g., design review, site plan review, etc.).
  Describe any development agreements, and conditions or requirements such as phasing or timing requirements, that impact development in the planning period.

The housing element must also describe existing and proposed policies or incentives the jurisdiction will offer to facilitate development of large sites. Examples of facilitation include expedited or automatic approval of lot splits or creation of new parcels, waivers of fees associated with subdivision, or expedited processing or financial assistance with the development of infrastructure required to develop the site.

# NEXT STEP:

• Move to Part C: Capacity Analysis

#### PART C: CAPACITY ANALYSIS

Government Code Section 65583.2(c) requires, as part of the analysis of available sites, a local government to calculate the projected residential development capacity of the sites identified in the housing element that can be realistically be achieved. The housing element must describe the methodology used to make this calculation. Jurisdictions have two options to make this calculation.

- Utilize minimum densities (Step 1)
- Utilize adjustment factors (Step 2)

#### **Step1: Utilizing minimum densities to calculate realistic capacity of sites** *Government Code section 65583.2(c)(1)*

If the jurisdiction has adopted a law, policy, procedure, or other regulation that requires the development of a site to contain at least a certain minimum residential density, the jurisdiction can utilize that minimum density to determine the capacity of a site. For purposes of this analysis, the use of either gross or net acreage is acceptable but should be consistent with the standard the jurisdiction typically uses for determining allowable units for a residential development project. For example:

Site Description	Value
Size of site (Gross acreage)	3 acres
Zoning	Residential Multifamily
Allowable density	20 (required minimum) – 30 dwelling units
	per acre
Realistic capacity utilizing minimum	3 X 20 = 60 units

Please note, to meet this standard on a zone that allows for multiple uses, the general plan or zoning must require the specified minimum number of residential units on the identified sites regardless of overlay zones, zoning allowing nonresidential uses, or other factors potentially impacting the minimum density. Otherwise, the capacity of the site must be calculated using the factors outlined in Step 2.

## Step 2: Utilizing factors to calculate realistic capacity of sites

Government Code section 65583.2(c)(2)

The housing element must describe the methodology used to determine the number of units calculated based on the following factors:

- Land use controls and site improvements requirements,
- \*NEW\* The realistic development capacity for the site,
- \*NEW\* Typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction,
- **\*NEW\*** The current or planned availability and accessibility of sufficient water, sewer, and dry utilities.

## Applicable land-use controls and site improvement requirements

The analysis must consider the imposition of any development standards that impact the residential development capacity of the sites identified in the inventory. When establishing realistic unit capacity calculations, the jurisdiction must consider the cumulative impact of standards such as maximum lot coverage, height, open space, parking, on-site improvements such as sidewalks or easements, and floor area ratios. The analysis should consider any development standards or the cumulative effect of development standards that would limit the achievable density on a site. For example, if a mixed-use zone requires commercial on the ground floor and has a height limit of three stories along with lot coverage and other development standards, the density that can actually be achieved on that site might be less than the maximum allowable density.

The capacity of a site should also be adjusted for areas that cannot be developed due to environmental factors such as hazards, wetlands, or topography that cannot be mitigated. The capacity of sites subject to specific plans, overlays or other modifications of the base zoning should be adjusted to reflect those factors. For purposes of this analysis, it is recommended that the jurisdiction start with the gross acreage and adjust the buildable acreage accordingly to reach net buildable acreage.

# Form Based Codes

To estimate capacity for sites in jurisdictions that have adopted form-based codes, the element should describe the relationship between general plan land-use designation and the form-based code and density assumptions used to determine capacity. Specifically, describe where residential development is allowed, how density requirements found within the general plan are incorporated, how the zoning designations under the form-based code relate to the land-use designations of the general plan, identify potential densities, and consider development standards such as bulk, height, and build-to requirements, buildings types, and use requirements. The element could include examples of recently built projects and densities to support the analysis.

<u>Realistic development capacity for nonresidential, nonvacant, or overlay zoned sites</u> The capacity calculation must be adjusted to reflect the realistic potential for residential development capacity on the sites in the inventory. Specifically, when the site has the potential to be developed with nonresidential uses, requires redevelopment, or has an overlay zone allowing the underlying zoning to be utilized for residential units, these capacity limits must be reflected in the housing element. Factors used to make this adjustment may include the following:

- Performance standards mandating a specified portion of residential development in mixed use or nonresidential zones (e.g., residential allowed only above first floor commercial).
- The likelihood for residential development such as incentives for residential use, market demand, efforts to attract and assist developers, or allowance of 100 percent residential development.
- Local or regional residential development trends in the same nonresidential zoning districts.
- Local or regional track records, past production trends, or net unit increases/yields for redeveloping sites or site intensification. This estimate may be based on the rate at which similar parcels were developed during the previous planning period, with

adjustments as appropriate to reflect new market conditions or changes in the regulatory environment. If no information about the rate of development of similar parcels is available, report the proportion of parcels in the previous housing element's site inventory that were developed during the previous planning period. For example, if past production trends indicate that two out of three similar sites were developed for residential use, and one out of three similar sites was developed for commercial use, an initial estimate of the proportion of new development which is expected to be residential would be two-thirds, i.e., 0.67.

• Local or regional track records, trends, or build out yields for redeveloping sites or site intensification.

In addition, the housing element should include monitoring programs with next-step actions to ensure sites are achieving the anticipated development patterns. The programs should identify modifications to incentives, sites, programs, or rezoning the jurisdiction will take should these strategies not yield the expected housing potential.

# Typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction

While using typically built densities to determine realistic capacity has long been an option to be used as an adjustment factor, the statute now requires this factor to be adjusted based on approved project by affordability level. For example, if a site is identified to accommodate the lower income RHNA, it should use project densities for housing affordable to lower income households developed either locally or regionally to determine typical densities<sup>6</sup>. Using this adjustment factor may result in utilizing different capacity methodologies for above moderate-, moderate-, and lower income sites.

<u>Current or planned availability and accessibility of sufficient water, sewer, and dry utilities</u> The capacity methodology must be adjusted to account for any limitation as a result of availability and accessibility of sufficient water, sewer, and dry utilities (i.e., if the capacity of the site could be limited because a development would have to use a septic system, if there are any septic tank requirements or restrictions that constrain capacity, or limitations on water hook-ups). See Part A, Step 3 for more information on infrastructure requirements.

## Example Capacity Calculation

Here is <u>an example</u> of the actual capacity calculation for a particular site in the inventory. The methodology analysis <u>must describe</u> how each of these adjustments was generated per the analysis requirements above. The factors used below are based on the factors outlined in the statute. The percentages and how the factors are applied will vary depending on the unique circumstance in each jurisdiction.



<sup>&</sup>lt;sup>6</sup> In using this adjustment factor, because of the use of density bonus, it may be possible that trends demonstrate typical densities higher than the maximum allowable densities, especially for housing affordable to lower income households. On a case-by-case basis, it may be appropriate to utilize increased densities due to density bonuses when determining the adjustment factor in the capacity methodology.

Site Description			
Size of site	2.5 acres		
Zoning	Residential Mixed-Use		
Allowable density	20 – 45 dwelling units per acre		
RHNA affordability	Lower income		
Existing Use	Nonvacant, single storefront		
Infrastructure availability	Yes, no constraints		
Environmental constraints	None known		

Capacity Factors	Adjustment	Reasoning
Land Use Controls and Site Improvements	95%	For net acreage due to on-site improvements including sidewalks, utility easement
Realistic capacity of the site	55%	55% adjustment based on past development trends for residential redevelopment in the residential mixed-use zones, and programs to incentivize development in this zone.
Typical densities	95%	Affordable housing projects are built out to almost maximum density
Infrastructure availability	No adjustment	Not applicable, no constraint
Environmental constraints	No adjustment	No known site constraint

Realistic capacity utilizing factors =  $(2.5 \times 45)(.95)(.95) = 56$  units

Realistic Capacity = 56 Units

# No Net Loss Law

In estimating realistic capacity on sites in the sites inventory, jurisdictions may want to consider No Net Loss Law. This law was amended by Chapter 367, Statutes of 2017 (Senate Bill 166), which requires sufficient adequate sites to be available <u>at all times</u> throughout the RHNA planning period to meet a jurisdiction's remaining unmet housing needs for each income category. To comply with the No Net Loss Law, as jurisdictions make decisions regarding zoning and land use, or development occurs, jurisdictions must assess their ability to accommodate new housing in each income category on the remaining sites in their housing element site inventories. A jurisdiction must add additional sites to its inventory if land use decisions or development results in a shortfall of sufficient sites to accommodate its remaining housing need for each income category. In particular, a jurisdiction may be required to identify additional sites according to the No Net Loss Law if a jurisdiction rezones a site or if the jurisdiction approves a project at a different income level than shown in the sites inventory. Lower density means fewer units than the capacity assumed in the site inventory.

To ensure that sufficient capacity exists in the housing element to accommodate the RHNA throughout the planning period, it is recommended the jurisdiction create a buffer in the housing element inventory of at least 15 to 30 percent more capacity than required, especially for capacity to accommodate the lower income RHNA. Jurisdictions can also create a buffer by projecting site capacity at less than the maximum density to allow for some reductions in density at a project level.

# NEXT STEP:

- If the parcel is nonvacant, including underutilized sites (see definition of vacant site on page 22), move to Part D: Nonvacant Sites Analysis
- If not, move to Part E: Determination of Adequate Sites

## PART D: NONVACANT SITES

Local governments with limited vacant land resources or with infill and reuse goals may rely on the potential for new residential development on nonvacant sites, including underutilized sites, to accommodate their RHNA. Examples include:

- Sites with obsolete uses that have the potential for redevelopment, such as a vacant restaurant.
- Nonvacant publicly owned surplus or excess land; portions of blighted areas with abandoned or vacant buildings.
- Existing high opportunity developed areas with mixed-used potential.
- Nonvacant substandard or irregular lots that could be consolidated.
- Any other suitable underutilized land.

Local governments can meet other important community objectives to preserve open space or agricultural resources, as well as assist in meeting greenhouse gas emission-reduction goals, by adopting policies to maximize existing land resources and by promoting more compact development patterns or reuse of existing buildings.

## Definition of a Vacant Site

A vacant site is a site without any houses, offices, buildings, or other significant improvements on it. Improvements are generally defined as development of the land (such as a paved parking lot, or income production improvements such as crops, high voltage power lines, oil-wells, etc.) or structures on a property that are permanent and add significantly to the value of the property.

Examples of Vacant Sites:

- No improvement on the site (other than being a finished lot).
- No existing uses, including parking lots.
- Underutilized sites are <u>not</u> vacant sites.
- Sites with blighted improvements are not vacant sites.
- Sites with abandoned or unoccupied uses are <u>not</u> vacant sites.

If the inventory identifies nonvacant sites to address a portion of the RHNA, the housing element must describe the realistic development potential of each site within the planning period. Specifically, the analysis must consider the extent that the nonvacant site's existing use impedes additional residential development, the jurisdiction's past experience converting existing uses to higher density residential development, market trends and conditions, and regulatory or other incentives or standards that encourage additional housing development on the nonvacant sites.

# Step 1: Description of the nonvacant site

Government Code Section 65583.2(b)

As stated in Part A, the site inventory must describe the specific existing use on the site, such as a surplus school site, auto shop, restaurant, single family residence, nursery, etc. Additional details, such as whether the use is discontinued, land to value information, age and condition of the structure, known leases, developer or owner interest, whether the property is currently being marketed, degree of underutilization, etc., are useful for demonstrating the potential for the site to be redeveloped within the planning period (See Step 2).

#### Step 2: Nonvacant site analysis methodology

Government Code section 65583.2(g)(1)

Provide an explanation of the methodology used to determine the development potential. This methodology can be done on a site-specific basis by utilizing factors (e.g., common ownership, valuation, age, etc.) in common that demonstrate the potential for residential development within the planning period, or a combination of both approaches. The methodology shall consider factors including:

#### Existing Uses:

Include an analysis that demonstrates the extent to which existing uses may constitute an impediment to additional residential development. Among other things, this analysis includes considerations for the current market demand for the existing use, **\*NEW\*** an analysis of any known existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development, and could include other market conditions that would encourage redevelopment of the property. For example, an analysis might describe an identified site as being developed with a 1960's strip commercial center with few tenants and expiring leases and, therefore, a good candidate for redevelopment, versus a site containing a newly opened retail center, an active Home Depot, the only grocery store in the city, etc. that is unlikely to be available for residential development within the planning period.

## **Development Trends:**

The inventory analysis should describe development and/or redevelopment trends in the community as it relates to nonvacant sites, i.e., the rate at which similar sites have been redeveloped. This could include a description of the local government's track record and specific role in encouraging and facilitating redevelopment, adaptive reuse, or recycling to residential or more intensive residential uses. If the local government does not have any examples of recent recycling or redevelopment, the housing element should describe current or planned efforts (via new programs) to encourage and facilitate this type of development (e.g., providing incentives to encourage lot consolidation or assemblage to facilitate increased residential-development capacity). The results of the analysis should be reflected in the capacity calculation described in Part C, above.

#### Market Conditions:

Housing market conditions also play a vital role in determining the feasibility or realistic potential of nonvacant sites for residential development. The nonvacant sites analysis should include an evaluation of the impact of local market conditions on redevelopment or reuse strategies. For example, high land and construction costs, combined with a limited supply of available and developable land, may indicate conditions "ripe" for more intensive, compact and infill development or redevelopment and reuse.



Availability of Regulatory and/or other Incentives:

The analysis should describe existing or planned financial assistance, incentives or regulatory concessions to encourage residential development on nonvacant sites. Many local governments develop partnerships with prospective developers to assist in making redevelopment/reuse economically feasible. Examples of these incentives include:

- Organizing special marketing events geared towards the development community.
- Identifying and targeting specific financial resources.
- Allowing streamlined or by right development application processing for infill sites.
- Reducing appropriate development standards.

Absent a track record or development trends to demonstrate the feasibility of a recycling or redevelopment strategy, the housing element should describe existing or planned financial assistance or regulatory relief from development standards that will be provided sufficient to encourage and facilitate more intensive residential development on the identified nonvacant sites.

# Step 3: \*NEW\* Reliance on nonvacant sites to accommodate more than 50 percent of the RHNA for lower income households

Government Code Section 65583.2(g)(2)

Determine if more than 50 percent of the lower income RHNA is on nonvacant sites.

- Calculate the sum of lower income RHNA capacity on vacant sites and other alternatives not related to capacity on nonvacant sites (e.g., accessory dwelling units, vacant sites to be rezoned (see Part E)).
- Subtract that sum from the total lower income RHNA to get the amount of RHNA needed to be accommodated on nonvacant sites.
- Determine if this number is greater than 50 percent of the RHNA.

Example calculation for a jurisdiction with a lower income RHNA of 500:

Adjustment Factor	Number of units
Proposed Lower Income Project	50
Accessory Dwelling Unit Capacity (affordable to lower)	15
Capacity on Vacant Sites	100
Total Capacity (not related to non-vacant sites)	165
RHNA on Nonvacant sites	500 - 165 = 335
Percentage of Lower Income RHNA accommodated on Nonvacant sites	335/500 = 77%

If Yes: Move to Step 3A

If No: Move to Step 4

#### Step 3A:

If a housing element relies on nonvacant sites to accommodate 50 percent or more of its RHNA for lower income households, the nonvacant site's existing use is presumed to impede additional residential development, unless the housing element describes findings based on substantial evidence that the use will likely be discontinued during the planning period. The housing element must include the following:

• As part of the resolution adopting the housing elements, findings stating the uses on nonvacant sites identified in the inventory to accommodate the RHNA for lower income is likely to be discontinued during the planning period and the factors used to make that determination. This can be included in the body or in the recital section of the resolution.

Example: WHEREAS, based on <name factors here (e.g., expiring leases, dilapidated building conditions, etc.)>, the existing uses on the sites identified in the site inventory to accommodate the lower income RHNA are likely to be discontinued during the planning period, and therefore do not constitute an impediment to additional residential development during the period covered by the housing element.

• The housing element should describe the findings and include a description of the substantial evidence they are based on.

In general, substantial evidence includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts. An example of substantial evidence would be a nonvacant site with a grocery store and with a building lease expiring in a year, and evidence that the store has entered into a lease to relocate to another site subsequent to the lease expiring.

Examples of substantial evidence that an existing use will likely be discontinued in the current planning period include, but are not limited to:

- The lease for the existing use expires early within the planning period,
- The building is dilapidated, and the structure is likely to be removed, or a demolition permit has been issued for the existing uses,
- There is a development agreement that exists to develop the site within the planning period,
- The entity operating the existing use has agreed to move to another location early enough within the planning period to allow residential development within the planning period.
- The property owner provides a letter stating its intention to develop the property with residences during the planning period.

If multiple sites make up a common existing use and the same factors affect each of the sites, the same findings can be used for each of the sites (e.g., an abandoned shopping mall with sites under common ownership that will not be restored to commercial use located in an area where there is recent residential development). The "substantial evidence" would indicate the existing use will not impede further residential development or that the existing use will be discontinued during the planning period. In this type of situation, use of the same findings for each of the multiple sites would be appropriate.



However, the same finding for multiple sites in a specific area may not be appropriate if their characteristics widely vary. For example, nonvacant sites with differing existing uses and lacking in common ownership, whether contiguous or located in the same general area, may not rely on a generalized analysis. While the sites may be located in an area with common economic issues, individual owners may not wish to sell their property or redevelop their site with residential uses. In addition, each site's existing use, e.g., grocery store, retail shop, parking lot, and offices, may have lease agreements of different lengths of time or the owner may not wish to relocate or redevelop the site with a more intensive residential use. In this type of situation, use of the same findings for the multiple sites would not be appropriate.

# **Step 4: \*NEW\* Program and policy requiring replacement of existing affordable units** *Government Code Section 65583.2(g)(3)*

The housing element must include a program in the housing element and policy independent of the housing element requiring the replacement of units affordable to the same or lower income level as a condition of any development on a nonvacant site consistent with those requirements set forth in Density Bonus Law (Government Code section 65915(c)(3).) Replacement requirements shall be required for sites identified in the inventory that currently have residential uses, or within the past five years have had residential uses that have been vacated or demolished, and:

- Were subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of low or very low-income, or
- Subject to any other form of rent or price control through a public entity's valid exercise of its police power, or
- Occupied by low or very low-income households

For the purpose of this program "previous five years" is based on the date the application for development was submitted.

Please note, until 2025, pursuant to Government Code section 66300(d) (Chapter 654, Statutes of 2019 (SB 330)), an affected city or county shall not approve a housing development project that will require the demolition of residential dwelling units regardless of whether the parcel was listed in the inventory unless a) the project will create at least as many residential dwelling units as will be demolished, and b) certain affordability criteria are met. A listing of affected cities and counties can be found at

https://www.hcd.ca.gov/community-development/accountability-enforcement/statutorydeterminations.shtml.

# SAMPLE PROGRAM

# Program X: Replacement Unit Program

XXXX will adopt a policy and will require replacement housing units subject to the requirements of Government Code section 65915, subdivision (c)(3) on sites identified in the site inventory when any new development (residential, mixed-use or nonresidential) occurs on a site that is identified in the inventory meeting the following conditions:

- currently has residential uses or within the past five years has had residential uses that have been vacated or demolished, and
- was subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of low or very low-income, or
- subject to any other form of rent or price control through a public entity's valid exercise of its police power, or
- occupied by low or very low-income households

## Funding: General Funds

Responsible Parties: Planning and Community Development Department

Objectives: In order to mitigate the loss of affordable housing units, require new housing developments to replace all affordable housing units lost due to new development.

Timeframes: The replacement requirement will be implemented immediately and applied as applications on identified sites are received and processed, and local policy shall be adopted by <DATE>. End of Sample Program

# NEXT STEP:

• Move to Part E: Determination of Adequate Sites

## PART E: DETERMINATION OF ADEQUATE SITES

The last step in this process is a determination of whether the housing element demonstrates sufficient land suitable and available for residential development to meet the locality's housing need for each designated income level or if further program actions are required to accommodate a shortfall.

## Step 1: Consider any alternative means of meeting the RHNA

Government Code section 65583.1

The housing element may satisfy its RHNA requirement though a variety of methods other than identifying sites. The following is a description of those alternative methods.

- Units permitted, built, entitled or pending: (See Part A, Step 1)
- Potential for accessory dwelling units (ADU) or junior accessory dwelling units (JADU): The jurisdiction can count the potential for the development of ADUs within the planning period. The analysis is based on the following factors:
  - the number of ADUs or JADUs developed in the prior planning period
  - community need and demand for these types of housing units
  - the resources and/or incentives available that will encourage the development of ADUs
  - the availability of ADUs and JADUs for occupancy, rather than used as offices or guest houses
  - the unit must meet the Census definition of a housing unit, which can be found on the U.S. Census Bureau website, and be reported to the Department of Finance as part of the annual City and County Housing Unit Change Survey
  - the anticipated affordability of these units. The purpose of this analysis is to determine the appropriate RHNA income category to be accommodated through ADU and JADU development.

Affordability can be determined in a number of ways. As an example, a community could survey existing ADUs and JADUs for their current market rents and consider other factors such as square footage, number of bedrooms, amenities, age of the structure and general location, including proximity to public transportation. Another method could examine current market rents for reasonably comparable rental properties to determine an average price per square foot in the community. This price can be applied to anticipated sizes of these units to estimate the anticipated affordability of ADUs and JADUs. Available regional studies and methodology on ADU affordability can also be a resource to determine the likely affordability mix for ADUs and JADUs.

- other relevant factors as determined by HCD.

In addition, the housing element must describe and analyze any currently adopted ordinance and other factors that could affect ADU and JADU development within the planning period. At a minimum, the housing element should analyze whether the ordinance conforms with state ADU and JADU requirements and any additional development standards (i.e., setbacks, maximum unit sizes, lot coverage, etc.) adopted by the local government, zones allowing ADUs, fees and exactions, and any other potential constraints impacting the development of ADUs and JADUs.

# Impact of New Accessory Dwelling Unit Laws

Since 2017, the Legislature has passed a series of new laws that significantly increase the potential for development of new ADUs and JADUs by removing development barriers, allowing ADUs through ministerial permits, and requiring jurisdictions to include programs in their housing element that incentivize their development. As a result, using trend analysis when estimating the potential for development may not accurately reflect the increased potential for these units. To account for this increased potential, HCD recommends the following options when performing this analysis:

- Use the trends in ADU construction since January 2018 to estimate new production. This is a conservative option to only account for the effect of the new laws without local promotional efforts or incentives (safe harbor option).
- Where no other data is available, assume an average increase of five times the previous planning period construction trends prior to 2018. This option is a conservative estimate based upon statewide data on ADU development since the implementation of the new laws (safe harbor option).
- Use trends from regional production of ADUs.
- Include programs that aggressively promote and incentivize ADU and JADU construction.
- Other analysis (reviewed on a case-by-case basis).

Potential affordability of these units must still be calculated per the analysis outlined on the previous page. In addition to the above options, the element should also include a monitoring program that a) tracks ADU and JADU creation and affordability levels, and b) commits to a review at the planning cycle mid-point to evaluate if production estimates are being achieved. Depending on the finding of that review, amendments to the housing element may be necessary, including rezoning pursuant to Government Code 65583.2 (h)and (i).

- Alternative Adequate sites: Under limited circumstances, a local government may credit up to 25 percent of their adequate sites requirement per income category through existing units that will be:
  - substantially rehabilitated
  - in a multifamily rental or ownership housing complex of three or more units that are converted from non affordable to affordable rental
  - preserved at levels affordable to low- or very low-income households, where the local government has provided those units with committed assistance

For more information on this option, please refer to HCD's Building Blocks Webpage

 Manufactured housing, manufactured housing park hook-ups, floating homes/live aboard berths: In certain circumstances a jurisdiction can utilize the potential for new manufactured housing either in a manufactured housing park or on large properties in rural areas, or new floating home/liveaboard berths with sewer and water hook ups. In cases of a manufactured home park or in floating home/liveaboard berth marinas, the jurisdiction may count new spaces with infrastructure hook-ups intended for permanent residential occupancy and reported to the Department of Finance. Potential for manufactured homes in rural areas should be analyzed using the same factors as those for potential ADUs, including establishing the market rate affordability of the units and crediting them to the appropriate RHNA category. In addition, the analysis should indicate if appropriate water and sewer infrastructure is available to support the development.

- Former military housing: Sites that contain permanent housing units located on a military base undergoing closure or conversion as a result of action pursuant to the Defense Authorization Amendments and Base Closure and Realignment Act (Public Law 100-526), the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), or any subsequent act requiring the closure or conversion of a military base may be identified as an adequate site if the housing element demonstrates that the housing units will be available for occupancy by households within the planning period of the housing element. No sites containing housing units scheduled or planned for demolition or conversion to nonresidential uses shall qualify as an adequate site.
- In consultation with HCD, other alternatives may be considered, such as motel conversions, adaptive reuse of existing buildings, or legalization of units not previously reported to the Department of Finance.

# Step 2: Determine whether there is sufficient capacity to accommodate the RHNA for the jurisdiction by income.

Government Code Section 65583(a)(3)

Adjustment Factor	Very Low	Low	Moderate	Above Moderate
RHNA	300	200	165	465
Entitled, Permitted, or Constructed Project Projects	50	50	0	200
Accessory Dwelling Unit Potential	10	15	15	10
Adequate Sites Alternative Preservation	20	16		
Multifamily Residential R-3 (Vacant)	75	50		
Mixed Use MU (Nonvacant)	75	50	50	
Multifamily Residential (Vacant) R-2			75	
Single-Family (Vacant) R-1				200
Spring Valley Specific Plan			150	250
Total	230	181	290	660
Shortfall/Surplus	-70	-19	+125	+195

The following table is an example of that calculation:

While the jurisdiction has sufficient sites to accommodate its RHNA for moderate- and above moderate-income units, it has a shortfall of 89 units to accommodate its lower income need. The jurisdiction would be required to include a program in the housing element to accommodate that shortfall.

If Yes: Congratulations, the site inventory analysis is complete

# If No: Move to Step 3

# Step 3: Adequate Sites Program

# Government Code section 65583(f) and Government Code section 65583.2(h)

Where the inventory of sites does not identify adequate sites to accommodate the RHNA for lower income households, a program must be included to identify sites that can be developed for housing within the planning period. The housing element should include an inventory of potential sites for rezoning. Those sites must meet the adequate sites requirements in terms of the suitability and availability outlined above.

## General Program Requirements

A jurisdiction's adequate sites program must accommodate 100 percent of the shortfall of sites necessary to accommodate the remaining housing need for housing for very low- and low-income households during the planning period and include the following components:

- Permit owner-occupied and rental multifamily uses by right for developments in which 20 percent or more of the units are affordable to lower income households. By right means local government review must not require a conditional use permit, planned unit development permit, or other discretionary review or approval.
- Permit the development of at least 16 units per site.
- Ensure sites within suburban and metropolitan jurisdictions as defined by Government Code Section 65583.2(c)(3)(B)(iii) and (iv) — permit a minimum of 16 dwelling units per acre for incorporated cities within nonmetropolitan/rural counties and nonmetropolitan counties with micropolitan areas or 20 dwelling units per acre for suburban and metropolitan jurisdictions.
- Ensure a) at least 50 percent of the shortfall of low- and very low-income regional housing need can be accommodated on sites designated for exclusively residential uses, or b) if accommodating more than 50 percent of the low- and very low-income regional housing need on sites designated for mixed-uses, all sites designated for mixed-uses must allow 100 percent residential use and require residential use to occupy at least 50 percent of the floor area in a mixed-use project.

#### <u>Timing</u>

## Rezones due to a shortfall from the current planning period:

A locality's ability to accommodate needed housing during the planning period requires designating appropriate zoning as early as possible. Generally, however, a rezoning should occur no later than three years and 120 days from the beginning of the planning period. A one-year extension to the deadline to complete required rezoning may be allowed if a local government has completed rezoning at sufficient densities to accommodate at least 75 percent of the units for very-low and low-income households. Also, the jurisdiction must determine after a public meeting that substantial evidence supports findings and adoption of a resolution that the rezone deadline was not met due to one of the following reasons:

- Action or inaction beyond the control of the local government of any other state, federal, or local agency.
- Infrastructure deficiencies due to fiscal or regulatory constraints.

• The local government must undertake a major revision to its general plan in order to accommodate the housing-related policies of a sustainable communities strategy or an alternative planning strategy adopted pursuant to Section 65080.

The jurisdiction must provide HCD a copy of the resolution and findings along with: - a detailed budget and schedule for preparation and adoption of required rezoning within one year of the adoption of the resolution, - plans for citizen participation, and - expected interim actions to complete the rezoning, and any revisions to the general plan (Government Code section 65583(f).

# Consequences for Failing to Complete Rezoning Deadline:

If a local government fails to complete all rezoning's by the prescribed deadline, a local government may not disapprove a housing development project<sup>7</sup>, nor require a conditional use permit, planned unit development permit, or other locally imposed discretionary permit, or impose a condition that would render the project infeasible, if the housing development project:

- Is proposed to be located on a site included in a housing element program to be rezoned.
- Complies with applicable objective general plan and zoning standards and criteria, including design review standards, described in the rezone program action.

However, any subdivision of the site is subject to the Subdivision Map Act.

A jurisdiction may disapprove a housing development or approve it upon the condition that the project be developed at a lower density only if it makes written findings supported by substantial evidence on the record that both of the following conditions exist:

- The housing development project would have a specific, adverse impact upon the public health or safety<sup>8</sup>.
- There is no feasible method to satisfactorily mitigate or avoid the adverse impact.

The local government may also be subject to enforcement actions by HCD, including a determination that the housing element no longer complies with the requirements of state law and referral to the Attorney General pursuant to Government Code section 65585(i) and (j).

<sup>&</sup>lt;sup>7</sup> "Housing development project" is defined a project to construct residential units for which the project developer provides sufficient legal commitments to the appropriate legal agency to ensure the continued availability and use of at least 49 percent of the housing units for very-low, low-, and moderate-income households with an affordable housing cost or affordable rent.

<sup>&</sup>lt;sup>8</sup> "Specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

# Housing Accountability Act and the Housing Element

The Housing Accountability Act (Government Code section 65589.5) establishes state overarching policy that a local government not deny, reduce the density of, or make infeasible housing development projects, emergency shelters, or farmworker housing that are consistent with objective local development standards and contribute to meeting housing need. Jurisdictions without a housing element in compliance with State Housing Element Law or without a complete site inventory are further limited in the ability to deny a housing development application.

Among other requirements (including those related to housing development regardless of affordability levels), the Housing Accountability Act states that a local agency shall not disapprove or condition approval in a manner that renders the housing development project infeasible, including through the use of design review standards, for development of an emergency shelter or a housing development project for very low, low-, or moderate-income households unless it makes written findings, based upon a preponderance of the evidence in the record, as to one of the following:

- The jurisdiction has adopted a housing element in substantial compliance with Housing Element Law and the jurisdiction has met or exceeded its share of the RHNA for the planning period for the income category proposed for the housing development project.
- The project would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to low- and moderate-income households or rendering the development of the emergency shelter financially infeasible.
- The denial of the project or imposition of conditions is required in order to comply with specific state or federal law, and there is no feasible method to comply without rendering the development unaffordable or rendering the development of the emergency shelter financially infeasible.
- The project is proposed on land zoned for agriculture or resource preservation, or which does not have adequate water or wastewater facilities to serve the project.
- The project is inconsistent with both the jurisdiction's zoning ordinance and general plan land use designation, unless the housing development project is proposed on a site that is identified as suitable or available for very low, low-, or moderate-income households in the jurisdiction's housing element, or if the local agency has failed to identify in the inventory of land in its housing element sites that can be developed for housing within the planning period and are sufficient to provide for the jurisdiction's share of the regional housing need for all income levels pursuant to Section 65584.

"Housing for very low, low-, or moderate-income households" means where at least 20 percent of the total units are or will be sold or rented to lower income households or 100 percent of the units will be sold or rented to persons and families of moderate income, or persons and families of middle income.

<u>Rezoned due to an unaccommodated need from previous planning period<sup>9</sup></u>: Pursuant to Government Code section 65584.09, if the jurisdiction failed to make adequate sites available to accommodate the regional housing need in the prior planning period, the jurisdiction must zone or rezone sites to accommodate any unaccommodated need within the first year of the planning period. If more than one year has lapsed since the beginning of the planning period, the housing element cannot be found in compliance with Housing Element Law until the required zoning or rezoning is complete and the housing element is amended to reflect the necessary rezoning.

# Annexation

If the jurisdiction must rely on annexation to accommodate its RHNA, the housing element must include a program committing to completing the annexation within three years of the planning period. In addition, the housing element must also include an evaluation of the suitability of the annexed sites, including the following information:

- Consistency with Local Agency Formation Commission (LAFCO) policies
- Actions to pre-zone prior to annexation
- Descriptions of the zone, density, development standards and design requirements
- The anticipated housing capacity allowed by each site
- Timeline to complete annexation which is early enough in the planning period to facilitate development of annexed sites (e.g., within the first three years of the planning period)
- Analysis of the suitability and availability of sites, including identification of any sites currently under Williamson Act contracts
- Demonstrated compliance with the requirements of the adequate sites program requirements of Government Code section 65583.2, subdivisions (h) and (i)

Please note, if the potential for annexation was not included in the RHNA allocation methodology, a portion of the county's allocation may be transferred to the city pursuant to Government Code section 65584.07(d). This transfer of RHNA would require an amendment to the housing element to ensure that any additional RHNA can be accommodated on sites within the inventory.

<sup>&</sup>lt;sup>9</sup> Sometimes called the AB 1233 consequence.

## Sample Rezone Program:

To accommodate the remaining lower-income RHNA of 89 units, the City of X will identify and rezone a minimum of 4.5 acres of vacant land to the R3 zoning district, allowing exclusively residential uses and a minimum of 20 units per acre to a maximum of 30 units per acre by June 30, 2024. Rezoned sites will permit owner-occupied and rental multifamily uses by right pursuant to Government Code section 65583.2(i) for developments in which 20 percent or more of the units are affordable to lower income households and will be selected from sites 20 through 30 in the parcel listing (Appendix A). As reflected in Appendix A, each site has the capacity to accommodate at least 16 units and will be available for development in the planning period where water, sewer, and dry utilities can be provided.

*Objective*: Create opportunity for at least 89 units of multifamily housing for lower income households

Responsible Agency: Community Development Department

*Timeline*: Sites rezoned by June 30, 2024

# Funding Source(s): General fund

# Other program ideas for increasing capacity or facilitating development on identified sites:

- Up-zone existing neighborhoods in areas of opportunity or in high quality neighborhood transit areas at appropriate densities to facilitate development of housing.
- Increase maximum allowable residential densities in existing residential, commercial, and mixed-use zones and modify development standards, such as height limitations to ensure maximum density can be achieved.
- Establish minimum densities Designate minimum densities of development to ensure that existing available land is not underutilized.
- Allow and encourage mixed-use zoning Permit housing in certain nonresidential zones either as part of a mixed-use project or as a standalone residential use.
- Rezone underutilized land from nonresidential to residential to expand the supply of available residential land.
- Institute flexible zoning Allow various residential uses within existing nonresidential zones without requiring rezoning or conditional approvals.
- Redevelop and/or recycle underutilized existing land to more intensive uses.
- Convert obsolete, older public/institutional/commercial/industrial buildings to residential use through adaptive reuse and/or historic preservation.
- Over-zone Create a surplus of land for residential development during the current planning period of at least 20 percent more than the locality's share of the regional housing need. Over-zoning compensates for urban land left vacant due to ownership and development constraints and creates a real surplus. A sufficient supply of land beyond the time frame of the housing element helps prevent land shortages from bidding up land costs.
- Allow and promote small and irregular-size lot development.

- Consolidate lots Facilitate combining small residential lots into larger lots to accommodate higher-density development.
- Increase height limitations At a minimum, allow three stories in multifamily zones.
- Increase Floor Area Ratios Allow for larger buildings on smaller lots and/or more units per lot by reducing the floor area ratio (total lot area divided by the total building area).
- Identify publicly owned land suitable for affordable housing development and sell parcels for \$1 (with consideration of the Surplus Land Act as amended by AB 1486, Statutes of 2019).
- Facilitate development by encouraging staff outreach to owners of potential sites and affordable housing developers to discuss needs and constraints in the jurisdiction.
- Adopt incentives such as a super density bonus or by right approval for housing that meets community objectives, such as housing near transit, affordability, housing that meets the needs of special populations, etc.
- Adopt a specific plan that streamlines CEQA compliance.

# Common Program Questions and Answers for Shortfall Zoning:

Q: How do I establish the density range for a rezone site?

A: The density range is set at the minimum density (either 16 or 20 dwelling units per acre, depending on the jurisdiction). While there is no specific maximum density requirement, the range must include the density that was identified as appropriate to accommodate housing affordable to lower-income households (Part B, Step 2).

However, jurisdictions should not set the minimum and maximum density range at the same density (e.g., 20 units per acre minimum as both a minimum and maximum density). If identifying a narrow density range, the housing element must analyze the range as a potential governmental constraint on housing development, including potential impacts resulting from site constraints, financial considerations, and other development factors.

Q: If a development is proposed with less than 20 percent affordability to lower income, can the jurisdiction approve it?

A: Yes, however, the project would not qualify for the by right provisions of this law unless the underlining zone already permitted housing by right. This, and all housing development projects, is subject to the Housing Accountability Act. In addition, the jurisdiction may be subject to No Net Loss Law provisions.

Q: How is the 20 percent calculated when State Density Bonus Law is added? A: This 20 percent calculation is based upon the total number of units in the development including additional units provided by a density bonus. This calculation methodology is consistent with several other pieces of housing laws, including the Streamlined Ministerial Approval Process (Government Code section 65913.4) and the Housing Accountability Act.

## ATTACHMENT 1: SUMMARY OF NEW LAWS REFERENCED IN THE GUIDEBOOK

<u>AB 1397, Low (Chapter 375, Statutes of 2017)</u>: The law made a number of revisions to the site inventory analysis requirements of Housing Element Law. In particular, it requires stronger justification when nonvacant sites are used to meet housing needs, particularly for lower income housing, requires by right housing when sites are included in more than one housing element, and adds conditions around size of sites, among others.

<u>AB 686, Santiago (Chapter 958, Statutes of 2018)</u>: The law ensures that public entities, including local governments, administer their programs relating to housing and urban development in a manner affirmatively to further the purposes of the federal Fair Housing Act and do not take any action that is materially inconsistent with its obligation to affirmatively further fair housing. It also requires that housing elements of each city and county promote and affirmatively further fair housing opportunities throughout the community for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability, and other characteristics protected by the California Fair Employment and Housing Act, Government Code Section 65008, and any other state and federal fair housing in the housing element, prepare the housing element site inventory through the lens of affirmatively furthering fair housing, and include program(s) to affirmatively further fair housing.

<u>SB 6, Beall (Chapter 667, Statutes of 2019)</u>: Jurisdictions are required to prepare the site inventory on forms developed by HCD and send an electronic version with their adopted housing element to HCD. HCD will then send those inventories to the Department of General Services by December 31 each year. The law (?) authorizes HCD to review, adopt, amend, and repeal the standards, forms, or definitions to implement this subdivision and subdivision (a) of Section 65583.

<u>AB 1486, Ting (Chapter 644, Statutes of 2019)</u>: The law expanded the definition of surplus land and added additional requirements on the disposal of surplus land. In addition, local agencies must send notices of availability to interested entities on a list maintained by HCD. This list and notices of availability are maintained on HCD's website. Local agencies must also send a description of the notice and subsequent negotiations for the sale of the land, which HCD must review, and within 30 days submit written finding of violations of law. Violations of the Surplus Land Act can be referred to the Attorney General. Finally, it adds a requirement in Housing Element Law for the jurisdiction to identify which of the sites included in the inventory are surplus property.



# ATTACHMENT 2: GOVERNMENT CODE SECTION 65583.2

# As of January 1, 2020

(a) A city's or county's inventory of land suitable for residential development pursuant to paragraph (3) of subdivision (a) of Section 65583 shall be used to identify sites throughout the community, consistent with paragraph (9) of subdivision (c) of Section 65583, that can be developed for housing within the planning period and that are sufficient to provide for the jurisdiction's share of the regional housing need for all income levels pursuant to Section 65584. As used in this section, "land suitable for residential development" includes all of the sites that meet the following standards set forth in subdivisions (c) and (g):

(1) Vacant sites zoned for residential use.

(2) Vacant sites zoned for nonresidential use that allows residential development.

(3) Residentially zoned sites that are capable of being developed at a higher density, including sites owned or leased by a city, county, or city and county.

(4) Sites zoned for nonresidential use that can be redeveloped for residential use, and for which the housing element includes a program to rezone the site, as necessary, rezoned for, to permit residential use, including sites owned or leased by a city, county, or city and county.

(b) The inventory of land shall include all of the following:

(1) A listing of properties by assessor parcel number.

(2) The size of each property listed pursuant to paragraph (1), and the general plan designation and zoning of each property.

(3) For nonvacant sites, a description of the existing use of each property. If a site subject to this paragraph is owned by the city or county, the description shall also include whether there are any plans to dispose of the property during the planning period and how the city or county will comply with Article 8 (commencing with Section 54220) of Chapter 5 of Part 1 of Division 2 of Title 5.

(4) A general description of any environmental constraints to the development of housing within the jurisdiction, the documentation for which has been made available to the jurisdiction. This information need not be identified on a site-specific basis.

(5) (A) A description of existing or planned water, sewer, and other dry utilities supply, including the availability and access to distribution facilities.

(B) Parcels included in the inventory must have sufficient water, sewer, and dry utilities supply available and accessible to support housing development or be included in an existing general plan program or other mandatory program or plan, including a program or plan of a public or private entity providing water or sewer service, to secure sufficient water, sewer, and dry utilities supply to support housing development. This paragraph does not impose any additional duty on the city or county to construct, finance, or otherwise provide water, sewer, or dry utilities to parcels included in the inventory.

(6) Sites identified as available for housing for above moderate-income households in areas not served by public sewer systems. This information need not be identified on a site-specific basis.

(7) A map that shows the location of the sites included in the inventory, such as the land use map from the jurisdiction's general plan, for reference purposes only.

(c) Based on the information provided in subdivision (b), a city or county shall determine whether each site in the inventory can accommodate the development of some portion of its share of the regional housing need by income level during the planning period, as determined pursuant to Section 65584. The inventory shall specify for each site the number of units that can realistically be accommodated on that site and whether the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing. A nonvacant site identified pursuant to paragraph (3) or (4) of subdivision (a) in a prior housing element and a vacant site that has been included in two or more consecutive planning periods that was not approved to develop a portion of the locality's housing need shall not be deemed adequate to accommodate a portion of the housing need for lower income households that must be accommodated in the current housing element planning period unless the site is zoned at residential densities consistent with paragraph (3) of this subdivision and the site is subject to a program in the housing element requiring rezoning within three years of the beginning of the planning period to allow residential use by right for housing developments in which at least 20 percent of the units are affordable to lower income households. An unincorporated area in a nonmetropolitan county pursuant to clause (ii) of subparagraph (B) of paragraph (3) shall not be subject to the requirements of this subdivision to allow residential use by right. The analysis shall determine whether the inventory can provide for a variety of types of housing, including multifamily rental housing, factory-built housing, mobilehomes, housing for agricultural employees, supportive housing, single-room occupancy units, emergency shelters, and transitional housing. The city or county shall determine the number of housing units that can be accommodated on each site as follows:

(1) If local law or regulations require the development of a site at a minimum density, the department shall accept the planning agency's calculation of the total housing unit capacity on that site based on the established minimum density. If the city or county does not adopt a law or regulation requiring the development of a site at a minimum density, then it shall demonstrate how the number of units determined for that site pursuant to this subdivision will be accommodated.

(2) The number of units calculated pursuant to paragraph (1) shall be adjusted as necessary, based on the land use controls and site improvements requirement identified in paragraph (5) of subdivision (a) of Section 65583, the realistic development capacity for the site, typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction, and on the current or planned availability and accessibility of sufficient water, sewer, and dry utilities.

(A) A site smaller than half an acre shall not be deemed adequate to accommodate lower income housing need unless the locality can demonstrate that sites of equivalent size were successfully developed during the prior planning period for an equivalent number of lower income housing units as projected for the site or unless the locality provides other evidence to the department that the site is adequate to accommodate lower income housing.

(B) A site larger than 10 acres shall not be deemed adequate to accommodate lower income housing need unless the locality can demonstrate that sites of equivalent size were successfully developed during the prior planning period for an equivalent number of lower income housing units as projected for the site or unless the locality provides other evidence to the department that the site can be developed as lower income housing. For purposes of this subparagraph, "site" means that portion of a parcel or parcels designated to accommodate lower income housing needs pursuant to this subdivision.

(C) A site may be presumed to be realistic for development to accommodate lower income housing need if, at the time of the adoption of the housing element, a development affordable to lower income households has been proposed and approved for development on the site.

(3) For the number of units calculated to accommodate its share of the regional housing need for lower income households pursuant to paragraph (2), a city or county shall do either of the following:

(A) Provide an analysis demonstrating how the adopted densities accommodate this need. The analysis shall include, but is not limited to, factors such as market demand, financial feasibility, or information based on development project experience within a zone or zones that provide housing for lower income households.

(B) The following densities shall be deemed appropriate to accommodate housing for lower income households:

(i) For an incorporated city within a nonmetropolitan county and for a nonmetropolitan county that has a micropolitan area: sites allowing at least 15 units per acre.

(ii) For an unincorporated area in a nonmetropolitan county not included in clause (i): sites allowing at least 10 units per acre.

(iii) For a suburban jurisdiction: sites allowing at least 20 units per acre.

(iv) For a jurisdiction in a metropolitan county: sites allowing at least 30 units per acre.

(d) For purposes of this section, a metropolitan county, nonmetropolitan county, and nonmetropolitan county with a micropolitan area shall be as determined by the United States Census Bureau. A nonmetropolitan county with a micropolitan area includes the following counties: Del Norte, Humboldt, Lake, Mendocino, Nevada, Tehama, and Tuolumne and other counties as may be determined by the United States Census Bureau to be nonmetropolitan counties with micropolitan areas in the future.

(e) (1) Except as provided in paragraph (2), a jurisdiction shall be considered suburban if the jurisdiction does not meet the requirements of clauses (i) and (ii) of subparagraph (B) of paragraph (3) of subdivision (c) and is located in a Metropolitan Statistical Area (MSA) of less than 2,000,000 in population, unless that jurisdiction's population is greater than 100,000, in which case it shall be considered metropolitan. A county, not including the City and County of San Francisco, shall be considered suburban unless the county is in an MSA of 2,000,000 or greater in population in which case the county shall be considered metropolitan.

(2) (A) (i) Notwithstanding paragraph (1), if a county that is in the San Francisco-Oakland-Fremont California MSA has a population of less than 400,000, that county shall be considered suburban. If this county includes an incorporated city that has a population of less than 100,000, this city shall also be considered suburban. This paragraph shall apply to a housing element revision cycle, as described in subparagraph (A) of paragraph (3) of subdivision (e) of Section 65588, that is in effect from July 1, 2014, to December 31, 2028, inclusive.

(ii) A county subject to this subparagraph shall utilize the sum existing in the county's housing trust fund as of June 30, 2013, for the development and preservation of housing affordable to low- and very low-income households.

(B) A jurisdiction that is classified as suburban pursuant to this paragraph shall report to the Assembly Committee on Housing and Community Development, the Senate Committee on

Housing, and the Department of Housing and Community Development regarding its progress in developing low- and very low income housing consistent with the requirements of Section 65400. The report shall be provided three times: once, on or before December 31, 2019, which report shall address the initial four years of the housing element cycle, a second time, on or before December 31, 2023, which report shall address the subsequent four years of the housing element cycle, and a third time, on or before December 31, 2027, which report shall address the subsequent four years of the housing element cycle and the cycle as a whole. The reports shall be provided consistent with the requirements of Section 9795.

(f) A jurisdiction shall be considered metropolitan if the jurisdiction does not meet the requirements for "suburban area" above and is located in an MSA of 2,000,000 or greater in population, unless that jurisdiction's population is less than 25,000 in which case it shall be considered suburban.

(g) (1) For sites described in paragraph (3) of subdivision (b), the city or county shall specify the additional development potential for each site within the planning period and shall provide an explanation of the methodology used to determine the development potential. The methodology shall consider factors including the extent to which existing uses may constitute an impediment to additional residential development, the city's or county's past experience with converting existing uses to higher density residential development, the current market demand for the existing use, an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development, development trends, market conditions, and regulatory or other incentives or standards to encourage additional residential development on these sites.

(2) In addition to the analysis required in paragraph (1), when a city or county is relying on nonvacant sites described in paragraph (3) of subdivision (b) to accommodate 50 percent or more of its housing need for lower income households, the methodology used to determine additional development potential shall demonstrate that the existing use identified pursuant to paragraph (3) of subdivision (b) does not constitute an impediment to additional residential development during the period covered by the housing element. An existing use shall be presumed to impede additional residential development, absent findings based on substantial evidence that the use is likely to be discontinued during the planning period.

(3) Notwithstanding any other law, and in addition to the requirements in paragraphs (1) and (2), sites that currently have residential uses, or within the past five years have had residential uses that have been vacated or demolished, that are or were subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of low or very low income, subject to any other form of rent or price control through a public entity's valid exercise of its police power, or occupied by low or very low income households, shall be subject to a policy requiring the replacement of all those units affordable to the same or lower income level as a condition of any development on the site. Replacement requirements shall be consistent with those set forth in paragraph (3) of subdivision (c) of Section 65915.

(h) The program required by subparagraph (A) of paragraph (1) of subdivision (c) of Section 65583 shall accommodate 100 percent of the need for housing for very low and low-income households allocated pursuant to Section 65584 for which site capacity has not been identified in the inventory of sites pursuant to paragraph (3) of subdivision (a) on sites that shall be zoned to permit owner-occupied and rental multifamily residential use by right



for developments in which at least 20 percent of the units are affordable to lower income households during the planning period. These sites shall be zoned with minimum density and development standards that permit at least 16 units per site at a density of at least 16 units per acre in jurisdictions described in clause (i) of subparagraph (B) of paragraph (3) of subdivision (c), shall be at least 20 units per acre in jurisdictions described in clauses (iii) and (iv) of subparagraph (B) of paragraph (3) of subdivision (c) and shall meet the standards set forth in subparagraph (B) of paragraph (5) of subdivision (b). At least 50 percent of the very low and low-income housing need shall be accommodated on sites designated for residential use and for which nonresidential uses or mixed uses are not permitted, except that a city or county may accommodate all of the very low and lowincome housing need on sites designated for mixed uses if those sites allow 100 percent residential use and require that residential use occupy 50 percent of the total floor area of a mixed-use project.

(i) For purposes of this section and Section 65583, the phrase "use by right" shall mean that the local government's review of the owner-occupied or multifamily residential use may not require a conditional use permit, planned unit development permit, or other discretionary local government review or approval that would constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Any subdivision of the sites shall be subject to all laws, including, but not limited to, the local government ordinance implementing the Subdivision Map Act. A local ordinance may provide that "use by right" does not exempt the use from design review. However, that design review shall not constitute a "project" for purposes of Division 13 (commencing with Section 21000) of the Public Resources Code. Use by right for all rental multifamily residential housing shall be provided in accordance with subdivision (f) of Section 65589.5.

(j) Notwithstanding any other provision of this section, within one-half mile of a Sonoma-Marin Area Rail Transit station, housing density requirements in place on June 30, 2014, shall apply.

(k) For purposes of subdivisions (a) and (b), the department shall provide guidance to local governments to properly survey, detail, and account for sites listed pursuant to Section 65585.

(I) This section shall remain in effect only until December 31, 2028, and as of that date is repealed.

(Amended (as amended by Stats. 2018, Ch. 958, Sec. 3) by Stats. 2019, Ch. 664, Sec. 15.5. (AB 1486) Effective January 1, 2020. Repealed as of December 31, 2028, by its own provisions. See later operative version amended by Sec. 16.5 of Stats. 2019, Ch. 664.)

# Rising Housing Costs and Re-Segregation in Alameda County







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# **EXECUTIVE SUMMARY**

This report finds that increases in housing prices in Alameda County were correlated with shifts in where low-income people of color lived between 2000 and 2015. It also provides evidence that these shifts contributed to new concentrations of poverty and racial segregation in the County and perpetuating racial disparities in access to high-resource neighborhoods. By focusing explicitly on the racial and economic dimensions of neighborhood change in relationship to increases in housing prices, this report builds upon existing research on displacement, segregation, and the persistent legacies of urban disinvestment and exclusion.

This report concludes that Alameda County and the region need policies and investments that support housing affordability and stability for low-income people of color, while also increasing their access to high-resource neighborhoods. To be successful, these policies and investments must account for both the legacies of racial segregation and recent patterns of re-segregation.

# Key Findings -

- Between 2000 and 2015, as housing prices rose, some flatland areas of Oakland and Berkeley lost thousands of low-income Black households, while experiencing modest increases in low-income Latinx and Asian households (and in some cases, high-income White households). Meanwhile, low-income Black, Asian and Latinx populations grew significantly in southern Alameda County cities such as San Leandro, Hayward, and the unincorporated communities of Ashland and Cherryland.
- Many Alameda County neighborhoods saw substantial increases in median rents; one in five neighborhoods saw an increase of over 30% in median rent paid (inflation-adjusted dollars). In the Bay Area, a 30% tract-level increase in median rent paid (inflation-adjusted) was associated with a 21% decrease in low-income households of color. There was no significant relationship between rent increases and losses of low-income White households, indicating that communities of color were particularly vulnerable to the impact of rapid rent increases.
- ▶ Upon moving, a substantial share of low-income people of all races left not only Alameda County but the region altogether; nearly 40% of low-income Black and White Alameda County residents who moved in 2015 left the Bay Area.
- Low-income households who made any kind of move in 2015—whether they stayed within the county or left it—ended up paying a higher share of their income on rent than those who did not move.
- Large increases in the number of low-income people of color living in areas that became newly segregated and high-poverty between 2000 and 2015 suggest that rising housing costs and migration patterns contributed to new concentrations of segregation and poverty in the county.
- As housing prices rose between 2000 and 2015, the share of low-income Black households in Alameda County living in high-poverty, segregated areas rose from 50% to 58%—a much higher percentage than lowincome households of other racial groups. Families in these types of neighborhoods typically face greater barriers to economic mobility and are more likely to suffer adverse health outcomes.
- At the end of the 2000-2015 period, disparities in access to higher resource neighborhoods were more pronounced between racial groups than between income groups of the same race. For example, low-income White households were seven times more likely to live in higher resource neighborhoods than moderate and high-income Black households.

# INTRODUCTION

Between 2000 and 2015, thanks in part to rising housing prices, Alameda County experienced significant and uneven shifts in the neighborhoods where its low-income residents of color lived.<sup>1</sup> Some of these shifts were involuntary moves that result from eviction, foreclosure, large rent increases, uninhabitable housing conditions or other reasons that are beyond a household's control, otherwise known as "displacement."<sup>2</sup> Research has shown that involuntary moves have adverse and destabilizing effects across many aspects of everyday life.<sup>3</sup>

Shifts in where low-income people of color live also have broader consequences for racial and economic inequality because where we live matters. Neighborhood-level factors such as poverty rates, schools, social capital, and exposure to environmental pollution have powerful and independent effects on child development, economic mobility, and health outcomes.<sup>4</sup> Life expectancy can vary substantially between neighborhoods in the same county; for example, life expectancy in Piedmont is approximately 10 years longer than in Cherryland (an unincorporated area north of Hayward).  ${}^{\scriptscriptstyle 5}$ 

Focusing on housing price and demographic changes between 2000 and 2015, this report documents which neighborhoods in Alameda County saw increases and decreases among lowincome people of color, and describes how these patterns related to concurrent changes in local rental housing prices.<sup>6</sup> Examining how countylevel trends played out at the neighborhood scale also provides a basis for understanding how these trends may be reproducing patterns of segregation and unequal access to high-resource neighborhoods that have defined the county's racial and economic geography for decades. Finally, documenting neighborhood-level trends is meaningful because people are physically and emotionally tied to places through social networks, community organizations, and local commercial and cultural institutions.<sup>7</sup> The neighborhood is also the scale at which people experience displacement pressures and demographic change.<sup>8</sup>

# **Definition of Terms**

- **Income categories** are defined relative to the regional Area Median Income (AMI) for the nine-county Bay Area. "Low-Income" is defined as less than 80% of AMI, unless noted otherwise.
- > This report combines U.S. Census *definitions for race and ethnicity* in the following way:
  - White: Non-Hispanic White
  - Latinx: Hispanic or Latino of any race
  - Black: Non-Hispanic Black or African American
  - Asian: Non-Hispanic Asian
  - People of Color (POC): All who are not non-Hispanic White (including people
  - who identify as "some other race" or "two or more races")

\*Given the uncertainty in tract-level estimates for racial and ethnic groups not included in the Black, Asian or Latinx categories, this report only analyzes these racial groups in the aggregate POC category. For household-level data, race refers to that of the householder (the person who answered the census).

This report uses *census tracts as proxies for neighborhoods*. Tracts in Alameda County typically contain between 3,000 and 5,500 people

\*See the appendix for more detail on definitions and methodology

# **DEMOGRAPHIC TRANSFORMATION**

Between 2000 and 2015, Alameda County saw growth among its lowest and highest-income households, while losing significant numbers of moderate-income households (Table 1). The racial composition of the county's low-income population also changed. The county gained over 29,000 low-income Latinx and Asian households, while low-income White households decreased by nearly 15,000 and low-income Black households by over 1,900. As shown in Table 2, these county-specific trends largely mirror regional ones. However, in comparison to Alameda County, the Bay Area overall saw even larger increases in its low-income Latinx and Asian populations and a small increase of low-income Black households, as opposed to a decrease.9

However, households from different income and racial groups were not evenly distributed across the county in 2000, nor did they increase or decrease

uniformly across all neighborhoods by 2015. County-level changes were often concentrated in just a few neighborhoods, and in some cases local demographic changes were the opposite of countylevel trends.

The following maps show how demographic changes played out at the neighborhood level between 2000 and 2015. Map 1 shows tract-level changes in the number of low-income Black households during this period.

While the county as a whole lost more than 1,900 low-income Black households between 2000 and 2015 (a 4% decrease), these losses were concentrated in the flatlands of Oakland and Berkeley. Disinvestment in these neighborhoods during the 20<sup>th</sup> century paved the way for today's processes of gentrification and displacement. Beginning in the 1930s, many of these areas were

# Table 1. Demographic Changes in Alameda County, 2000-2015

	Extremely Low	Very Low	Low (50-80% AMI)	Moderate	High (>120% AMI)
Black	10%	-9%	-18%	-19%	-7%
Latinx	66%	51%	33%	12%	22%
Asian	41%	34%	32%	24%	84%
White	-4%	-12%	-25%	-25%	-2%
All POC	29%	18%	12%	4%	46%
All Races	17%	5%	-5%	-10%	18%

Source: U.S. Census 2000 (Table P151), ACS 2011-2015 (Table B19001)

## Table 2. Change in Low-Income Households (<80% AMI) by Race in Alameda County, 2000-2015<sup>10</sup>

	Change (estimated)	Pct. Change	Pct Change (Bay Area-wide)
Black	-1,900	-4%	4%
Latinx	16,200	48%	60%
Asian	13,000	36%	44%
White	-14,800	-15%	-9%
All POC	26,900	20%	36%
All Races	12,100	5%	11%

Source: U.S. Census 2000 (Table P151), ACS 2011-2015 (Table B19001)

Map 1. Change in Low-Income (<80% AMI) Black Households (2000-2015)



Source: U.S. Census 2000 (Table P151B), ACS 2011-2015 (Table B19001B)

subject to redlining-the federal government's "racialized system of investment" that guided banks on whether to make home loans based on a neighborhood's perceived riskiness—which resulted in denial of financial services and other forms of investment in majority-Black and immigrant communities.<sup>11</sup> This practice, combined with White suburbanization and urban renewal in the postwar era, exacerbated segregation and inequality in Alameda County and contributed to depressed property values and rents in predominantly Black neighborhoods.<sup>12</sup> More recently, predatory lending and the subsequent foreclosure crisis of the mid-2000s eliminated many of the homeownership gains that Black households had made in the Oakland flatlands.13

This history is apparent in the Longfellow

neighborhood in North Oakland, which lost more low-income Black households than any other in Alameda County: 400 households, or a 30% decrease between 2000 and 2015.14 Many neighborhoods in North Oakland and Berkeley that lost low-income Black residents also saw increases in high-income White households—one indicator of the process of residential gentrification. East Oakland also lost hundreds of low-income Black households while San Leandro, Hayward, and unincorporated Ashland saw large increases. The suburban cities in the southern and eastern ends of the county—such as Fremont, Pleasanton, Dublin, and Livermore—have long been home to only a small number of Black households due to their history of exclusion and discrimination,<sup>15</sup> and their numbers in these areas remained too small in 2015 to generate reliable estimates.

Similarly, Map 2 and Map 3 show changes in lowincome Latinx and Asian households, respectively, between 2000 and 2015.

Alameda County saw an overall increase of approximately 16,000 low-income Latinx households between 2000 and 2015, representing a 47% increase.<sup>16</sup> This growth was concentrated in Fruitvale—a long-established center of Latinx and immigrant life in Oakland—and further east in Oakland, extending towards San Leandro, unincorporated Ashland and Cherryland, Hayward and parts of Fremont and Newark (Map 2). One tract in the unincorporated area of Ashland gained 450 low-income Latinx households.<sup>17</sup> Despite this overall increase, portions of Fremont, Union City, and Oakland saw decreases in low-income Latinx households.

Research has also shown that residents in many of the places where the low-income Latinx population grew have poor health outcomes and few tenant protections. Three East Oakland ZIP codes where the low-income Latinx population grew led Alameda County in child lead poisoning cases. Lead poisoning is linked to older and substandard housing and disproportionately affects Black and Latinx children. Households with high rent burden are more likely to live in substandard, older housing and are often less willing to complain about substandard conditions.<sup>18</sup> In addition, the low-income Latinx population grew in many





Source: U.S. Census 2000 (Table P151H), ACS 2011-2015 (Table B19001H)
unincorporated areas, which do not have tenant protections such as rent stabilization or just cause eviction laws.<sup>19</sup> Latinx renters, particularly undocumented or mixed-status families, are often more vulnerable to displacement through harassment and inadequate maintenance, due to fear of retaliation for reporting violations.<sup>20</sup>

Finally, Alameda County's low-income Asian population grew by 13,000 households between 2000 and 2015, representing a 46% increase. Increases were concentrated in Downtown Oakland and Chinatown, the western edge of Alameda, and the county's southern suburbs of San Leandro, Hayward, Union City, and Fremont. Despite growth in these areas, Downtown Oakland and Chinatown have experienced strong gentrification and displacement pressures in recent years; monolingual senior renters in Chinatown, who rely most on the benefits of a walkable cultural enclave, are especially vulnerable to these pressures.<sup>21</sup> The increases shown in the southern part of Alameda County resemble those of the low-income Latinx population, although they were smaller and less geographically-concentrated. At the same time, pockets of Oakland, Hayward, and Berkeley saw losses in low-income Asian population. Many census tracts in East Oakland had small Asian populations in 2015, leading to unreliable estimates of demographic change.

An interactive version of these maps, with customizable combinations of household race and income and tract-level data, is available online at <u>http://www.urbandisplacement.org/</u> <u>rentchangemap</u>.



Map 3. Change in Low-Income (<80% AMI) Asian Households (2000-2015)

Source: : U.S. Census 2000 (Table P151D), ACS 2011-2015 (Table B19001D)

Understanding where low-income people in Alameda County are moving to provides a fuller picture of ongoing displacement and migration patterns.<sup>22</sup> Figure 1 shows destinations for the approximately 70,000 low-income people (both renters and owners) who originated in Alameda County and moved in 2015. Low-income people of all races were more likely to remain in the county than not, but a significant share left Alameda County, the Bay Area, or California.<sup>23</sup> For example, nearly 40% of low-income Black residents from Alameda County who moved in 2015 left the Bay Area for other parts of the state and country. Meanwhile, low-income Latinx and Asian-Pacific Islander<sup>24</sup> movers were more likely than their Black and White counterparts to stay within the county and the Bay Area.

Destinations within the Bay Area varied among different racial groups, with low-income Black movers going primarily to Stockton and parts of Contra Costa County, low-income Latinx movers going to Tracy, San Jose, and cities in San Mateo County, and low-income Asian movers going primarily to parts of Santa Clara and Solano counties. These patterns reflect the out-migration of low-income people of color from the inner to the outer part of the region, contributing to new areas of racial segregation.<sup>25</sup> In general, the rate at which low-income Alameda County movers left the region for other parts of the state or country was similar to their counterparts across the rest of the Bay Area.

As shown in Table 3, low-income renters who moved in 2015 experienced higher rent burdens than those who did not move. For example, extremely low-income renter households paid 68% of their income on rent if they did not move, but 85% if they moved out of the county to another part of the Bay Area, and 80% if they left the region. In other words, any kind of move was associated with incurring higher and more burdensome rents. This increase in rent burden could have been a result of moving out of rent-controlled (or



Figure 1. Destination of Low-Income Movers by Race (2015)

Source: IPUMS-USA, University of Minnesota, 2015

	Did Not Move	Moved Within County	Moved Within Region	Left Region
Extremely Low (0-30% AMI)	68%	75%	85%	80%
Very Low (30-50% AMI)	42%	46%	57%	49%
Low (50-80% AMI)	29%	33%	38%	34%

Table 3. Average Rent-to-Income Ratio by Move Status and Households Income (2015)

Source: IPUMS-USA, University of Minnesota, 2015

otherwise affordable) homes and into market-rate apartments, as well as loss of income that may have precipitated the move.

Figure 2 shows that destinations for moderate and high-income movers originating in Alameda County in 2015 were mostly similar to their low-income counterparts, with some notable differences. For example, a higher share of moderate and highincome movers left the county for other parts of the Bay Area, but a smaller share of them left the region than did low-income movers. Among Black and Latinx movers, those with low incomes were two to three times more likely to leave the Bay Area than those with moderate and high incomes.

An interactive map providing a more detailed picture of destinations for Alameda County movers in 2015, with customizable combinations of income and race, is available online at <u>http://www.</u> <u>urbandisplacement.org/migrationmap</u>.



Figure 2. Destination of Moderate and High Income Movers by Race (2015)

Source: IPUMS-USA, University of Minnesota, 2015

# RISING RENTS AND DEMOGRAPHIC CHANGE

Rents rose in almost every neighborhood in Alameda County between 2000 and 2015, as shown in Map 4.<sup>26</sup> Many tracts in the flatlands of Oakland and Berkeley saw increases of well over 30% in median rent paid (inflation-adjusted dollars). West Berkeley, Downtown Oakland, and the neighborhoods around the Coliseum and Mills College in East Oakland saw increases of over 50% (due to data limitations, these figures are likely underestimates).<sup>27</sup> In tracts where there were increases of at least 30%,<sup>28</sup> the average median rent paid across tracts was \$850 in 2000 (in unadjusted 2000 dollars) and \$1,771 in 2015. By 2018, the median asking rent for a two-bedroom unit in Alameda County was \$2,553. A person would need to earn \$49 per hour—over \$100,000 annually—to afford this rent.<sup>29</sup>

Many of the neighborhoods that experienced the largest increases in rental housing costs also saw significant losses of low-income households of color, as described earlier in this report. In the nine-county Bay Area, a 30% tract-level increase in median rent paid (in inflation-adjusted dollars) was associated with a 21% decrease in low-income households of color. There was no significant



Map 4. Percent Change in Median Rent Paid (2000-2015, Inflation-Adjusted \$)

Source: U.S. Census 2000 (Table H063), ACS 2011-2015 (Table B25064)

relationship between rent increases and losses of low-income White households.<sup>30</sup> These findings highlight the particular vulnerability of low-income communities of color to rent increases in the Bay Area.

An interactive map showing tract-level median rents in 2000 and 2015 is available online at <u>http://</u> <u>www.urbandisplacement.org/rentchangemap</u>.

#### **Rising Rent Burdens**

Across the county, low-income renters' incomes did not keep up with rising housing costs between 2000 and 2015, leading to increasing rent burdens. Households are considered rent-burdened when they pay over 30% of their income on rent, and severely rent-burdened if this ratio exceeds 50%. Research has shown that severely rentburdened low-income households spend much less on essentials such as food, health care, and transportation than their low-income counterparts who are not rent-burdened.<sup>31</sup> High rent burden is also associated with greater displacement risk.<sup>32</sup>

Figure 3 shows how rent burden changed for households of different income groups in Alameda

County between 2000 and 2015.

Although rent burden increased across all income groups, it rose most substantially for low- and very low-income households. In both 2000 and 2015, extremely low-income renters were by far the most likely to experience severe rent burden, with nearly three quarters spending more than half their income on rent. Meanwhile, severe rent burden was low in both 2000 and 2015 for moderate- and highincome households.

Table 4 shows the average rent-to-income ratio in Alameda County in 2015 for different race and household income categories. This table shows that



Figure 3. Rising Rent Burdens by Household Income Category (2000-2015)

Source: IPUMS-USA, University of Minnesota, 2015

households of similar incomes experience similar rent burdens across racial groups. However, the average rent burden for racial groups as a whole varied due to different income distributions within these racial groups. For example, Black households are overrepresented in lower income categories, so the overall rent burden for Black households is much higher than the county average. Across all races and income categories, renter households in Alameda County spent an average of 40% of their incomes on housing in 2015.

	Asian-Pacific Islander	Black	Latinx	White	All Races
Extremely Low	66%	68%	72%	75%	70%
Very Low	42%	40%	40%	46%	43%
Low	30%	29%	28%	32%	30%
Moderate	22%	22%	22%	24%	23%
High	15%	16%	21%	17%	17%
All Incomes	38%	47%	42%	37%	40%

#### Table 4. Average Rent-to-Income Ratio by Race and Income (2015)

Source: IPUMS-USA, University of Minnesota, 2015

# IMPLICATIONS FOR SEGREGATION AND ACCESS TO OPPORTUNITY

The first sections of this report establish that the racial and economic geography of the county changed between 2000 and 2015 and that some neighborhoods in Alameda County experienced substantial losses of low-income households of color during this period, while others saw large increases.

But what do we know about the neighborhoods where these changes were happening? Are shifts in where low-income people of color live in the county affecting their access to resource-rich neighborhoods that give them a better chance at educational success, good health, and upward mobility? Or are old patterns of segregation and neighborhood disadvantage simply being reproduced in new areas?

The analysis below describes how the geography of racially-segregated, high-poverty neighborhoods expanded into new parts of the county between 2000 and 2015, and demonstrates that the increase in low-income households of color was concentrated in these neighborhoods. Entrenched racial disparities in access to higher resource areas also persisted, despite significant shifts in the neighborhoods where low-income people of color lived during the 15-year period.<sup>33</sup>

## **Segregation and Concentrated Poverty**

Racial segregation has been a defining feature of the U.S. urban landscape for centuries and became entrenched in especially consequential ways after World War II. Through both legal and extralegal forms of discrimination and exclusion, African-Americans and other people of color were both denied access to emerging high-resource areasin both urban and suburban neighborhoodsand redlined so that their communities did not have equal access to financial services and other resources.<sup>34</sup> Over time, the twin legacies of exclusion and disinvestment produced a raciallysegregated geography of opportunity that persists in every metropolitan area across the country. Recent work on the Bay Area has highlighted how this geography has increased vulnerability to displacement<sup>35</sup> and is also in the process of reconfiguring due to increases in poverty and people of color at the outer edges of the region.<sup>36</sup>

Map 5 shows the census tracts that were both high poverty and racially segregated in Alameda County in 2000 and 2015. Tracts were considered high poverty if more than 20 percent of their population was living below the federal poverty line, and racially segregated if at least one non-White group was overrepresented in the tract relative to their share of the region's population by over 50%. Nearly all tracts in the county that were high poverty in 2015 were also racially segregated, according to these definitions.<sup>37</sup>

In 2015, more than 20 percent of tracts in Alameda County met the previously-described definition of being segregated and high poverty (77 out of 356), including 26 tracts that were not segregated and high poverty in 2000 but became so by 2015. Map 5 shows that large portions of the Oakland flatlands met this definition in 2000, with new areas of segregation and poverty in West Berkeley and East Oakland, as well as a cluster of tracts in unincorporated Ashland and Cherryland, Hayward, and Castro Valley by 2015. As previously noted, the latter areas in particular have seen substantial increases in low-income people of color in recent years.

Eleven tracts in the county that were segregated and high poverty in 2000 no longer met this definition in 2015. These included tracts in North







Source: U.S. Census 2000 (Table H063), ACS 2011-2015 (Table B25064)

Oakland, South Berkeley, and some edges of East Oakland—places where rents rose dramatically in recent years, and that have undergone some stage of gentrification and displacement.<sup>38</sup> No tracts in the southern and eastern portions of Alameda County met the criteria of high poverty or racial segregation in either 2000 or 2015.

Figure 4 shows the share of low-income households for different racial groups living in segregated, high-poverty tracts in 2000 and 2015.

The chart shows that low-income Black households were much more likely to live in segregated, high-poverty neighborhoods in 2000 than low-income households of other races, and that held true in 2015. Approximately 58% of low-income Black households lived in highpoverty, segregated tracts in 2015, up from 50% in 2000. This figure jumped from 30% to 42% for low-income Latinx households during the same period, the highest relative percentage increase of any group. Low-income White families were much less likely to live in these areas in both 2000 and 2015. Figure 4 also shows that, depending on the racial group, much of the growth in the share of lowincome people living in segregated, high-poverty areas during the 15-year period was a result of living in—or moving to—tracts that became segregated and high-poverty by 2015.<sup>39</sup> These areas include the aforementioned parts of Hayward, unincorporated Ashland and Cherryland, and East Oakland that saw large increases in low-income households of color. This pattern suggests that migration and displacement patterns outlined above are contributing to new clusters of racial segregation and poverty in Alameda County.

Even segregated, high-poverty areas of Alameda County were not immune to rent increases between 2000 and 2015. Although many such tracts had below-average median rents in 2000, they experienced above-average rent increases over the following 15 years. This data suggests continued vulnerability to displacement for low-income people of color, even in segregated, high-poverty neighborhoods, due to rising rents.



#### Figure 4. Share of Low-Income Households Living in Segregated, High-Poverty Tracts (2000 and 2015)

Source: U.S. Census 2000 (Table P007), ACS 2011-2015 (Table B03002)

#### **Access to Opportunity**

Another feature of Alameda County's uneven geography of opportunity is the concentration of resources in particular neighborhoods. In 2017, the State of California adopted "opportunity maps" for each region in California to inform new incentives to locate affordable housing for low-income families in higher resourced neighborhoods.<sup>40</sup> These opportunity maps categorize each tract based on its composite opportunity score and then compares it to other tracts in the region. The portion of the Bay Area opportunity map that covers Alameda County is shown in Map 6.<sup>41</sup> lower resource tracts are concentrated in the flatlands of Oakland, San Leandro, Hayward, and unincorporated areas such as Ashland and Cherryland. Its higher resource tracts are clustered in Berkeley, the Oakland Hills, Alameda, and in suburbs within the eastern and southern ends of the county.<sup>42</sup>

Figure 5 shows where households of different races and incomes lived in 2015 relative to this opportunity map.

These data show disparities in access to opportunity by both race and income. Differences

This map shows that Alameda County's

Map 6. Alameda County Oportunity Map (2015)



Source: California Fair Housing Task Force, 2017



#### Figure 5. Level of Neighborhood Resources by Race and Income (2015)

Source: California Fair Housing Task Force, 2017, U.S. Census 2000 (Table P151), ACS 2011-2015 (Table B19001)

in access between races were much larger than differences between income groups of the same race. For example, the share of low-income Black households living in higher resource tracts in Alameda County was the same as the share of moderate- and high-income Black households living in these areas. However, in 2015, low-income White households in Alameda County were seven times more likely to live in higher resource tracts than moderate and high-income Black households. Access to higher resource neighborhoods for Latinx households in 2015 closely resembled that of Black households, and Asian households' access to higher resource neighborhoods was similar to that of White households. In-migration patterns between different racial groups in Alameda County suggest the perpetuation of disparities in access to opportunity. Figure 6 shows the racial breakdown of in-movers in 2015 for tracts with different levels of resources.<sup>43</sup>

In 2015, Black and Latinx households represented a significantly higher share of in-movers in lower resource tracts than in higher resource ones. Meanwhile, the opposite was true for White and Asian households: they represented a much higher share of movers in higher and moderate resource tracts than in lower resource ones.



#### Figure 6. Racial characteristics of In-Movers by Neighborhood Type (2015)

Source: California Fair Housing Task Force, 2017, ACS 2011-2015 (Table B07004)

#### The Need for Solutions that Account for Neighborhood Context

Displacement of low-income Black households from flatland neighborhoods in Oakland and Berkeley, alongside simultaneous growth of lowincome households of color in new areas of racial segregation and poverty—such as in Hayward and unincorporated Ashland and Cherryland contributed to significant changes in Alameda County's racial and economic geography between 2000 and 2015. Rising rents have played a role in these local demographic changes and in the outmigration of low-income people of color to other parts of the region, state, and country; renters need to earn \$49 per hour to afford the median asking rent in the county today.<sup>44</sup> Despite shifts in where low-income Black and Latinx households live within the county, in 2015 they were still much more likely than low-income households from other racial groups to live in segregated and high-poverty neighborhoods, and much less likely to live in higher resource areas.

These findings highlight the urgent need to increase access to affordable housing and stabilize communities throughout Alameda County. They also point to a need for policies and investments that reduce unequal access to high-resource neighborhoods for low-income people of color by accounting for local context and responding to new and enduring patterns of racial and economic segregation. Different sets of policies and investments are needed to: a) stabilize areas where rents are rising fastest and low-income people of color may be at risk of displacement, especially as these neighborhoods experience an influx of investments, b) ensure economic opportunities and institutional supports for those living in highpoverty, segregated neighborhoods, and c) create new opportunities for low-income people of color to live in higher resource areas where they have historically been excluded. These place-conscious strategies are critical for preserving and expanding the important place low-income communities of color have in Alameda County's landscape, and for increasing their long-term economic prospects in the region.

# ENDNOTES

1 Although not every household move is an example of displacement, low-income households often move for reasons beyond their control. Data on migration patterns and demographic changes in Alameda County neighborhoods are useful indicators of potential displacement, given the scale of housing price changes increases over the last 15 years. The Census data used for this report does not track individual households, but rather reports on a cross-section of randomly surveyed households. Therefore, the Census cannot tell us definitively if changes between 2000 and 2015 were the result of out-migration, in-migration, birth and death rates, or income changes within the existing population. Further, if a household that left a Census tract was replaced with a demographically-similar one, the Census would not register this replacement as a change. For this reason, we describe these demographic changes as potential indicators of displacement, rather than precise estimates.

2 "Pushed Out: Displacement Today and its Lasting Impacts," Urban Displacement Project, accessed August 15, 2018, <u>http://urbandisplace-ment.org/pushedout.</u>

3 Kimberly Skobba and Ed Goetz, "Mobility Decisions of Very Low-Income Households," *Cityscape* 15, no. 2 (2013); Justine Marcus and Miriam Zuk, "Displacement in San Mateo County, California: Consequences for Housing,

Neighborhoods, Quality of Life, and Health," Institute for Governmental Studies (May 2017).

4 Raj Chetty, Nathaniel Hendren, and Lawrence F. Katz, "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment," *American Economic Review* 106, No. 4, (April 2016): 855-902; Lisa Sanbonmatsu et al., *Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation* (U.S. Department of Housing and Urban Development, Office of Policy Development & Research, November 2011); "City Maps," Robert Wood Johnson Foundation, accessed August 8, 2018, <u>http://www.rwjf.org/en/</u> <u>library/features/Commission/resources/city-maps.html</u>.

5 Alameda County Public Health Department, *Alameda County Health Data Profile, 2014: Community Health Status Assessment for Public Health Accreditation* (May 2014), http://www.acphd.org/media/395851/acphd\_cha.pdf.

The years 2000 and 2015 came at somewhat different points in the real estate cycle. The year 2000 was a peak and 2015 may have been just after the midpoint of the current cycle, since prices in the Bay Area are still rising in 2018. The use of 2015 data means that the change estimates since 2000 are potentially conservative; more recent data from a similarly high point in the real estate cycle would likely show more dramatic changes in rental housing prices and neighborhood demographics. Bay Area Real Estate Market Cycles," Paragon Real Estate Group, accessed September 3, 2018, <u>https://paragonpublic.blob.core.windows.net/public-assets/hosted\_files/SF-Real-Estate-Cycles-Article\_Condensed-Version.pdf</u>.

7 Derek Hyra, "The back-to-the-city movement: Neighbourhood redevelopment and processes of political and cultural displacement," *Urban Studies* 52, no. 10 (August 2015): 1753 – 1773; Mindy Thompson Fullilove, *Root Shock* (New York: New Village Press, 2016).

8 Causa Justa: Just Cause, "Development without Displacement: Resisting Gentrification in the Bay Area" (2014).

9 California's demographic profile changed substantially during this period as well. The state's Latinx and Asian populations increased by 275% and 375% during this period, respectively, while its Black population grew by 79% and its White population grew by 22%.

10 The numbers presented in Table 2 are rounded to the nearest hundred in recognition of the uncertainty in the ACS estimates. Unlike the 2000 census, the ACS is a sample of the overall population and there are margins of error associated with the 2015 estimates.

11 83% of gentrifying census tracts in the East Bay were formerly rated as "hazardous" (red) or "definitely declining" (yellow) by the Home Owners' Loan Corporation, the federal agency that created the redlining maps. For more on the history of redlining and its relationship to contemporary gentrification patterns, see "Redlining and Gentrification," Urban Displacement Project, accessed August 12, 2018, <u>www.urbandisplacement.</u> <u>org/redlining</u>.

12 Robert Self, American Babylon: Race and the Struggle for Postwar Oakland. (Princeton, NJ: Princeton University Press, 2003).

13 Nicole Montojo and Beki McElvain, *Accessibility and Investment in North Oakland* (Center for Community Innovation, June 2015), <u>http://</u>www.urbandisplacement.org/sites/default/files/macarthur\_final.pdf.

14 Defined here as Alameda census tract 4010.

15 Self, American Babylon.

16 This figure is likely an underestimate, due to the Census' undercounting of immigrants, particularly undocumented ones. For example, see Mary Romero, "Ethnographic Evaluation of Behavioral Causes of Census

Undercount of Undocumented Immigrants and Salvadorans in the Mission District of San Francisco," U.S. Census Bureau (1992), https://www. census.gov/srd/papers/pdf/ev92-18.pdf.

17 Alameda census tract 4339.

The following three ZIP codes had the highest number of cases from 2007 to 2011: 94601, 94621, and 94603, with nearly 600 cases combined. Alameda County Public Health Department and Health Homes Department, *Housing Habitability and Health: Oakland's Hidden Crisis* (April 2018).

19 "Policy Tools," Urban Displacement Project, accessed September 2, 2018, http://www.urbandisplacement.org/policy-tools/sf.

20 Kriston Capps, "In California, Landlords Threaten Immigrant Tenants with Deportations," *City Lab*, April 5, 2017, <u>https://www.citylab.com/</u>equity/2017/04/landlords-are-threatening-immigrant-tenants-with-ice-deportations/521370/.

21 Beki McElvain, "Oakland Chinatown - Displacement Vulnerability and the Ethnic Economic Enclave," *The Policy Forum at Mills College* vol. 3 (2015), 14-33.

The ACS Public Use Microdata Sample (PUMS) used in this analysis is not available at the tract level. This data tracks a person's county of origin and their destination by Public Use Microdata Area (PUMA), a sub-county geography containing around 100,000 people. For more information on PUMS data, see the appendix.

23 Research has shown that interpersonal relationships and overall housing instability drive the mobility decisions of very low-income households in particular, and that many therefore remain in similar, nearby neighborhoods when they move. See for example: Skobba and Goetz, "Mobility Decisions of Very Low-Income Households."

24 PUMS uses the racial category "Asian-Pacific Islander" rather than separating Asians from Pacific Islanders, as in the tract-level census/ ACS data.

25 Tony Roshan Samara, "Race, Inequality, and the Resegregation of the Bay Area," Urban Habitat (November 2016). <u>http://urbanhabitat.org/sites/default/files/UH%20Policy%20Brief2016.pdf</u>.

26 Rents in this report are calculated "gross rent," which includes both contract rent and estimated utility payments. 2000 rents were inflated to 2015 values, using median gross rent as reported in the census. This estimate represents the self-reported rents of all census respondents, rather than the asking rents of units currently on the market, which are typically significantly higher.

27 Census data on median rent paid represents the middle rent paid by all renters in the tract, including longer-term tenants living in rent controlled units, residents of subsidized units or those receiving rent vouchers—as well as newly arrived tenants in vacancy decontrolled apartments or new luxury units. In this analysis, median rent values for 2000 were also inflated to 2015 dollars to adjust for the lower purchasing power in that year. Further, "2015" median rents in this report aggregate from the 2011-2015 period in order to ensure data reliability at the tract level, so median rents for 2015 do not represent actual 2015 values. Finally, as previously noted, 2015 was somewhere in the middle of the current housing market cycle, as opposed to 2000, which was the peak of that cycle. For all of these reasons, the percent changes in tract-level median rents included in this report likely underestimate the level of rent increases.

28 73 out of 360 tracts in Alameda County saw median inflation-adjusted rent paid grow by over 30% between 2000 and 2015

29 California Housing Partnership, *Alameda County Needs Report* (2018), <u>https://1p08d91kd0c03rlxhmhtydpr-wpengine.netdna-ssl.com/</u>wp-content/uploads/2018/04/Alameda-HNR-2018.pdf

30 This statistic comes from a regression analysis. For more details, see the appendix.

\* The "minimal change" category in the map encompasses change in median rent between negative and positive 5%. This threshold was based on an examination of the underlying data distribution and the goal of highlighting areas in the county where rent changes were smaller.

Joint Center for Housing Studies of Harvard University, *America's Rental Housing - Expanding Options For Diverse And Growing Demand* (2015), <u>http://www.jchs.harvard.edu/sites/default/files/americas\_rental\_housing\_2015\_web.pdf</u>

32 Joint Center for Housing Studies, America's Rental Housing.

33 75% of today's exclusionary areas in the East Bay were rated "best" or "still desirable" in HOLC's redlining maps. See <u>http://urbandis-placement.org/redlining</u> for more information on these relationships.

34 Richard Rothstein, *The Color of Law: A Forgotten History of How our Government Segregated America*. (New York: Liveright Publishing Corporation, 2017).

35 "Redlining and Gentrification," Urban Displacement Project.

36 Samara, "Race, Inequality, and the Resegregation of the Bay Area."

37 This definition was based on a review of literature on segregation and poverty indicators, adapted to the specific Bay Area context. See the appendix for further explanation.

38 "San Francisco Map," Urban Displacement Project, accessed August 10, 2018, http://www.urbandisplacement.org/map/sf.

39 Tract-level poverty rates may have increased between 2000 and 2015 due to multiple reasons, including both in-migration of poor residents and existing residents becoming poorer.

40 Higher resource tracts are those whose characteristics are most predictive of educational success, economic mobility, and good health for both low-income children and adults.

The "Lower Resource" and "Higher Resource" tracts in Map 5 combine those designated as Low Resource and High Segregation & Poverty, and the High Resource and Highest Resource, respectively, in the opportunity maps that the State uses. For more background on these maps and how they were developed, see: California Fair Housing Taskforce, "Revised Opportunity Mapping Methodology," accessed August 10, 2018, <u>https://</u> www.treasurer.ca.gov/ctcac/opportunity/methodology.pdf.

42 Prior research has documented significant differences in health outcomes, including life expectancy, between affluent, high-opportunity neighborhoods in the hills and poor neighborhoods in the flatlands of Oakland. Beyers, M. and et al. "Life and Death from Unnatural Causes: Health and Social Inequity in Alameda County" (2008).

43 The census data used for this analysis neither provides where the in-movers originated, nor their income.

44 California Housing Partnership, Alameda County Needs Report.

45 "State and Federal Income, Rent, and Loan/Value Limits," California Department of Housing and Community Development, accessed August 10, 2018, <u>http://www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits.shtml</u>

46 "State and Federal Income, Rent, and Loan/Value Limits;" "Income Limits," U.S. Department of Housing and Urban Development, accessed August 24, 2018, <u>https://www.huduser.gov/portal/datasets/il.html.</u>

47 California Fair Housing Taskforce, "Revised Opportunity Mapping Methodology" <u>https://www.treasurer.ca.gov/ctcac/opportunity/meth-odology.pdf</u>

48 Understanding Neighborhood Effects of Concentrated Poverty," U.S. Department of Housing and Urban Development, Office of Policy Development & Research (Winter 2011).

49 As reported in California Housing Partnership, Alameda County Needs Report.

# **APPENDIX - METHODOLOGY**

#### **Data Sources**

This study primarily relies on tract-level data from the 2000 U.S. Census and the 2011 – 2015 5-year sample from the American Community Survey. For tract-level estimates used in this report, "2015" refers to 5-year aggregate (2011 to 2015). This increases the sample size and improves the reliability of the data at this small geography but may lead to lower estimates than what might be expected in terms of rents and demographic changes, since it encompasses preceding years.

Census tracts permit a detailed analysis of demographics transformations and housing trends over 15 years at a very local scale. However, the tract-level datasets did not contain data needed for analyses of mover destinations and rent burden. In these cases, we used the Census' Public Use Microdata Sample (PUMS), a person-level sample available at the sub-county level (also known as a "PUMA"). Within analyses based on PUMS data, "2015" refers to that year only, since it draws on the 1-year sample. Finally, we used the opportunity map data from the California Fair Housing Task Force.

## Definitions

For the purposes of this study, "the region" refers to the 9-county Bay Area: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma counties. These counties are linked economically, politically, and through transportation infrastructure. There has also been substantial migration between the nine counties, as shown in this report. Income categories are defined relative to the region because part of this study involves comparing trends across counties within the Bay Area. We use an interpolated Area Median Income (AMI) for the nine counties. This means that AMI in this report is lower than county-derived median incomes in wealthier counties like San Mateo or Santa Clara, and higher than county-derived medians in lower-income counties like Solano County. This regional approach also allows for consistent comparisons when looking at migration between counties. For 2000, regional AMI was \$62,528; in 2015, it was \$81,366.

We define income categories in 2000 and 2015 relative to the median income for the respective year in order to reflect incomes for that period. We interpolated the income data to estimate the number of households in each income category. The interpolation process made it difficult to report uncertainty in the 2015 income data. For this reason, we rounded demographic change estimates to the nearest hundred when reporting absolute instead of relative values.

In general, the study uses the term "low-income" to refer households earning under 80 percent of AMI in a given year. Although tract-level Census data does not allow incomes to be adjusted for household size, PUMS data does allow for this adjustment. In analyzing the PUMS data, we used the household size-adjusted income limits provided by the California Housing and Community Development and calculated a population-weighted average of the nine counties.<sup>45</sup> In both cases, the income brackets are as follows: Extremely Low Income (under 30% AMI), Very Low Income (30-50% AMI), Low Income (50-80%), Moderate Income (80-120%) and High Income (above 120%). This follows definitions used by state and federal housing agencies.<sup>46</sup>

This study combines the U.S. Census definitions of race and ethnicity, such that each racial category refers to non-Hispanic members of that group. In other words, "White" here refers to "non-Hispanic white" and so on. We use the gender-inclusive term Latinx in place of the census category of "Hispanic or Latino of any race." "People of color" include all people who are not non-Hispanic Whites. One distinction between the census/ACS and PUMS is the categorization of Asians and Pacific Islanders. PUMS data uses the category of "Asian-Pacific Islander" while the Census and ACS groups Pacific Islanders with Hawaiians and puts Asians in their own category. For purposes of this study, Pacific Islanders are included in the "Asian-Pacific Islander" category when analyzing the PUMS migration and rent burden data but included in the larger "all people of color" category for the Census tract-level summary data. Finally, for household-level metrics, race refers to that of the householder (the person who answered the census).

### **Segregation and Poverty**

Studies within academic and policy spheres have defined racial segregation and poverty within neighborhoods in different ways. Here we used location quotient as measure of racial segregation, as it allowed for a relative comparison across multiple racial groups. The location quotient is a ratio of the population of a given group within a tract to its share of the total Bay Area population. For example, the California Fair Housing Task Force used location quotients to measure racial segregation within the state, defining a neighborhood as segregated if the location quotient for Black, Latinx, Asian or all people of color was greater than 1.25 relative to the county.<sup>47</sup> In other words, if any of these groups was 25% more concentrated in the tract relative to the state, the tract was considered segregated. We initially applied the 1.25 threshold but found it to be too low of a threshold, in some cases, to capture concentrations of non-White groups in the Bay Area. To be conservative in labeling neighborhoods segregated, we used the more stringent ratio of 1.5.

We defined a tract as high-poverty if over 20% of the population lives below the federal poverty line. Research has shown that the effects of poverty concentration begin to emerge at 20%, and this threshold is generally used as a shorthand for "high-poverty" neighborhoods in both policy and academic circles (other common terms include "extreme poverty" for tracts with more than 40% of the population below the federal poverty line).<sup>48</sup> In addition, the high cost of living in the Bay Area means that the federal poverty line is an especially high bar for poverty; according to the Public Policy Institute of California (PPIC), the poverty rate for Alameda County increases from 11.3% to 17.1% when accounting for the cost of living using the California Poverty Measure.<sup>49</sup>

#### Regression

To understand whether rent increases were associated with demographic change at the local level–particularly the loss of low-income people of color–we conducted a linear regression using tract-level data from 2000 and 2015 for the 9-county region. We controlled for a variety of demographic and built environment variables to isolate the effect of rent on demographic change. The control variables we included are: proportion of adult population with a college degree (2000), proportion of POC households with severe rent burden (2000), proportion of population over 65 years old (2000), proportion of housing units built (2000-2015), # affordable housing units built (2000-2015), # households of color (2000), population density (2000), population change (2000-2015), proportion of all households that are renter (2000), proportion of population living in poverty (2000), proportion of households with children (2000), proportion of population living in poverty (2000), proportion of households with children for POC (2000), median rent (2000), proportion of households with children households (> 120% AMI), foreclosure rate (2006-2013), # affordable housing units (2000).

We clustered error at the city level to account for similarities among tracts in the same jurisdiction–potentially due to specific housing policies–and evaluated potential multicollinearity among independent variables using a variance inflation factor.





# **Macarthur** Accessibility and Investment in North Oakland







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<sup>&</sup>lt;sup>2</sup> The statements and conclusions in this report are those of the authors and not necessarily those of the California Air Resources Board. The mention of commercial products, their source, or their use in connection with material reported herein is not to be construed as actual or implied endorsement of such products.

# **Accessibility and Investment in North Oakland**

Case Study on Gentrification and Displacement Pressures in the MacArthur Area of Oakland, CA

## Introduction

The current economic and real estate market boom in San Francisco and Silicon Valley have produced profound ramifications for neighboring Bay Area cities, contributing to a regional crisis of housing availability and affordability that has resulted in marked demographic shifts. With its close proximity to San Francisco and transit accessibility via the BART system, the City of Oakland has been deeply impacted by this phenomenon, which emerged as many of Oakland's institutions and residents endeavored to recover from the Great Recession of 2008. Many residents, community organizations, and city leaders have expressed concern over residential displacement, anxious that as San Francisco becomes increasingly unaffordable, its residents will move to Oakland and extend a ripple effect of gentrification throughout the East Bay.

The MacArthur Station Area (Figure 1), which includes the neighborhoods known as Longfellow (part of North Oakland), Hoover-Foster (part of West Oakland), Temescal, Pill Hill, and Koreatown-Northgate (KONO), exemplifies the nexus of these regional and macroeconomic trends. Centrally located among the five residential neighborhoods is the MacArthur BART Station, a major transit hub for the Bay Area with an average of 8,826 people exiting at the station on a typical weekday (BART 2015). Since its construction in 1972, the station has played a defining role in the area's development. Staff at the community-based organization Causa Justa :: Just Cause (CJJC) explain that "the gentrifying pressures on this area rest fundamentally on the neighborhood's connectivity, its access to major freeways, a BART transfer station, and the 1 and 57 bus lines. The transportation connections become even more important as San Francisco's workforce moves east, seeking cheaper rents" (CJJC 2014).



Figure 1: MacArthur Area Neighborhoods by Census Tract

Divided by the major freeways of I-580 and CA-24 (Grove-Shafter Freeway), the five neighborhoodseach with its own unique history and demographic profile-have responded differently to the housing crisis, as measured by various indicators of change. However, as a whole, the MacArthur area's proximity to retail corridors, historically affluent neighborhoods like Piedmont and Rockridge, and transit-oriented development (TOD) have made its neighborhoods particularly appealing to both homebuyers and renters from outside the vicinity. A 2009 Center for Community Innovation study classified the Temescal, Pill Hill, and Koreatown-Northgate neighborhoods as highly susceptible to gentrification and the Longfellow and Hoover-Foster neighborhoods as moderately susceptible (Chapple 2009).<sup>3</sup>

MacArthur's development potential has been factored into official city and regional plans, as indicated by the area's designation as a Priority Development Area (PDA) in Plan Bay Area, the region's long-range plan for transit-oriented development (ABAG and MTC

<sup>&</sup>lt;sup>3</sup> This study evaluated the susceptibility of Bay Area census tracts to gentrification based on an index of factors that influenced gentrification in the 1990s. Among the top factors included in the index are the availability of recreational and/or youth facilities, availability of public space, percent of workers taking transit, and percent of dwelling units with three or more cars.

2013).<sup>4</sup> Under Plan Bay Area, the City of Oakland is expected to absorb a major portion of the region's population growth and housing demand in future decades, with a projected 30 percent growth in housing units (51,000 units) by 2040—the third-largest overall increase after San Jose and San Francisco (ABAG & MTC 2013). The majority of the city's growth is expected to occur within Oakland's six Planned PDAs.

Total households in MacArthur PDA are expected to increase by 40 percent, reaching an estimated 13,410 by 2040. The vision for this area centers on the MacArthur Transit Village, a mixed-use development expected to house 1,000 new residents over the next decade and provide 42,000 square feet of retail space (DCRP Transportation Studio 2014). The Transit Village includes plans for an affordable housing development with 90 income-restricted units (MacArthur Station 2014). In implementing its vision for a "vibrant hub of transit, housing, shopping and recreation that reduces dependency [on] vehicles by placing new residents near both transit and employment opportunities," the City plans to improve streetscapes, build a new BART plaza, and support the development of "abundant housing choices" (ABAG & MTC 2012, 10). Planning efforts for the Transit Village were initiated in 1993, and construction finally began in 2011 (Alameda County Transportation Commission 2010, MacArthur Station 2014).

Much of the transit-oriented development planned for the MacArthur area and surrounding PDAs has emphasized economic development in commercial districts. Initially under the authority of the Oakland Redevelopment Agency known as CEDA (Community and Economic Development Agency), the City's efforts in this area have included the Broadway/MacArthur/ San Pablo Redevelopment Plan, the Broadway-Valdez Specific Plan and support for the Temescal/Telegraph and Koreatown-Northgate Business Improvement Districts (BIDs). These and other related initiatives have spurred much public advocacy and debate regarding affordable housing, livability and gentrification in Oakland that we discuss later in this report. The impact of these economic development strategies, which are part of confluence of multiple potentially gentrifying forces, remains challenging to parse. This case study endeavors to understand the specific impact of many of these factors on the MacArthur area neighborhoods' susceptibility to gentrification and displacement.

# **Case Study Methods**

This case study uses mixed methods to determine demographic and housing changes in the neighborhoods surrounding the MacArthur BART Station since 1980, primarily drawing from US Census data. The data presented for the study is aggregated from five census tracts that capture the adjacent neighborhoods of Temescal (4011) and Temescal-Broadway (4012)<sup>5</sup>, Longfellow (4010), Hoover-Foster (4014), and Pill Hill and Koreatown-Northgate (4013) (Figure 1).

The indicators presented in this case study are those associated with processes of gentrification and residential displacement, and/or are thought to influence susceptibility to such processes (Chapple 2009). Unless otherwise noted, data on these characteristics are from the decennial Census for the years 1980, 1990, 2000, and 2010, and from the American Community Survey for the periods 2006-2010 and 2009-2013. Data from 1980 to 2000 is from the Geolytics Neighborhood Change Database, normalized to 2010 census tracts, which allows for standardized comparisons across the years (Geolytics 2014). This is supplemented by quantitative data from several other sources, including Zillow housing data.

Validity of these data was evaluated through a "ground-truthing" methodology that involved a systematic survey via visual observation of all residential parcels on a sample set of two blocks within the case study area. The data gathered through ground-truthing was subsequently compared to Census figures and sales data from the Alameda County Assessor's Office, which was obtained through Dataquick, Inc.

<sup>&</sup>lt;sup>4</sup> The MacArthur Transit Village PDA overlaps with much of the case study area, encompassing tracts 4010, 4011, 4012, and the northern half of 4013. Tract 4014 is included in the West Oakland PDA, and the southern portion of Tract 4013 is included in the Downtown PDA.

<sup>&</sup>lt;sup>5</sup> While the Temescal neighborhood is made up of Tracts 4011 and 4012, for the purpose of this study, these are analyzed separately as distinct halves of the same geographic neighborhood (distinguished as Temescal to the west and Temescal-Broadway to the east) to illustrate differing trends within each tract.

This comparison showed that of the sample blocks' 111 parcels recorded in the assessor dataset, field researchers were able to match the parcel numbers of 72 percent and land use of 84 percent of buildings through ground-truthing.<sup>6</sup> These results suggest that some error may exist in either the Census or Assessor's reported count of housing units and unit type, likely due to rapid or unpermitted changes to parcels that may go unaccounted for. In order to account for possible errors, we cross-referenced the data with qualitative field observations, archival research, and interviews with key informants. We also relied upon research and insight provided by Causa Justa :: Just Cause (CJJC), a community-based nonprofit organization that served as a core partner in this project.

A similar process of ground-truthing and further qualitative research was employed to assess commercial change in the Temescal/Telegraph commercial corridor, a prominent retail district within the area. Using baseline data gathered as part of a 2007 Temescal merchant survey (Munektyo, Simundza, and Chapple 2007), we observed and inventoried the businesses along the corridor to identify changes on a parcel-by-parcel basis. This information was analyzed in relation to data on sales and number of establishments from the National Employment Time-Series Database (NETS). These methods are discussed further below.

## Neighborhood Historical Context

The neighborhoods within the MacArthur Station Area reflect a long history of residential segregation along racial lines, with persisting impacts that shape their built environment today. The "radically unequal patterns of capital investment" (Self 2005, 136) from the 1940s onward throughout Oakland have not only informed demographic differences among the MacArthur neighborhoods, but also disparate levels of vulnerability to residential displacement.

The racial divide between African American and White residents became institutionalized as Oakland's African American population grew during the World War II era. Between 1950 and 1960, the city's African

American population nearly doubled, from 55,778 to 100,000, as many migrated to the Bay Area in search of work (Self 2005, 160). Many of the available jobs were near the port in West Oakland, the city's industrial center. As a result, this neighborhood became one of Oakland's largest concentrations of African American residents.

By the end of World War II, the boundary between African American and White residents stood at 36th and Grove (later renamed Martin Luther King, Jr. Boulevard) Streets, a product of institutionalized discriminatory practices such as redlining, which made it "nearly impossible for African Americans to purchase homes and establish businesses east of Telegraph" (Norman 2006, 8). Across this entrenched boundary, Temescal, Longfellow, Rockridge and other neighborhoods of North Oakland, were home to Italian, Portuguese, and Irish immigrant families (Norman 2006, 91).

These neighborhood-based divides were promptly disrupted in the 1960s with the construction of the Grove-Shafter Freeway (CA-24) and other urban renewal projects, which cut through the area and ultimately catalyzed decades of economic decline through the 1980s (Norman 2006, 78). Aside from the many whose homes were demolished to make way for the freeway, hundreds of others left the area as the construction project "decimated entire commercial districts" of long-established local businesses and completely transformed the culture and community of affected neighborhoods (Norman 2006, 68).

This, coupled with WWII veterans who decided to resettle in the suburbs using their federal housing subsidies upon return, drove an exodus of White residents from the area. With this drastic change, the racial boundary became no longer relevant. As the Italian, Portuguese and Irish communities moved out, African American residents began to move into the North Oakland neighborhoods that were formerly inaccessible (Norman 2006). By the 1980s, the MacArthur area was predominantly African American.

The combination of national trends of deindustrialization, urban renewal, and White flight during the decades after World War II left a profound impact on Oakland and its African American residents. As White households left the city for surrounding suburbs, "investment and taxable wealth left the city" (Self 2005, 136). The industrial jobs that much of the African American community had relied on began to disappear as the nation shifted toward a service-oriented economy.

<sup>&</sup>lt;sup>6</sup> In this case, the discrepancy between assessor records and what we observed through ground-truthing is primarily due assessor entries for 22 condominiums, each with their own parcel number. However, our ground-truthing results listed all 22 units under one parcel number. Excluding this case of condominiums, the percentage of parcels matched is 86 percent.

Between 1990 and 2000, poverty rates rose significantly in all MacArthur neighborhoods except Temescal. Crime also became a pressing concern. Amidst lower residential property values, Temescal, Pill Hill and Koreatown-Northgate saw an influx of Korean, Ethiopian and Eritrean residents and businesses, while the share of African American families declined (Norman 2006). Following this, real estate prices in these areas east of the Grove-Shafter freeway began to rise, marking the onset of gentrification in the Temescal and Broadway neighborhoods. After 2000, merchant-initiated efforts such as the establishment of the Temescal/Telegraph Business Improvement District and government-led plans such as the Broadway-MacArthur-San Pablo Redevelopment Plan, Broadway-Valdez Specific Plan, and Telegraph Streetscape Improvements Project sought to advance economic development primarily in the neighborhoods east of the Grove-Shafter Freeway.

While real estate prices and median income rose in portions of Temescal, other MacArthur neighborhoods, particularly Hoover-Foster, continue to struggle with higher poverty, unemployment, and crime rates (Ostler 2007). These issues have correlated with one of Oakland's highest rates of vacancy and "occupied blight," a term used by the City of Oakland Building Services Department that refers to "interior habitability issues that are generally derived from tenant complaints, as well as structural defects or failures" that may have significant implications for residents' health (Urban Strategies Council 2014).<sup>7</sup>

These challenges in Hoover-Foster, considered in comparison to trajectory of Temescal, illustrate the range of neighborhood differences within the MacArthur area. With an eye toward these differences as well as the context of disparate impacts of institutionalized racism across the MacArthur neighborhoods, the following section examines the demographic changes within MacArthur since 1980.

## **Demographic Changes**

US Census data shows that the MacArthur area population increased 12% from 1980 to 2013, though growth was not consistent among the neighborhood tracts over this thirty-year period. From 1980 to 1990, the study area saw a 3% increase overall – from 17,722 people to 20,092 people – with the most rapid growth occurring in Pill Hill and Koreatown-Northgate. By 2000, growth in Hoover-Foster peaked, and by 2013 the neighborhood population had decreased to 4,340 people (from 4,738 in 2000). Population in Longfellow also decreased between 2000 and 2013. Meanwhile, the Pill Hill and Koreatown-Northgate neighborhood saw a large increase in population between 2000 and 2013. This uneven change, which may be related to the recession and foreclosure crisis from 2007 and 2011, or even a decrease in household size associated with gentrification, is explored further below.

#### **Racial and Ethnic Changes**

Reflecting the broader trend of demographic change throughout Oakland, the MacArthur area experienced a major decrease in the number of African American residents since 1980. As shown in Figure 2, in 1980, over 64 percent of the study area was home to African-American households while the White population made up 25% of residents. By 2013, the African American population had fallen to 34% while the White population climbed to 34%. The total decrease in the African American population between 1980 and 2013 equaled 4,829 individuals - a drastic 42% reduction that corresponds with a 32% increase in the White population during the same period. Figure 3 shows that the sharpest declines in number of African American residents occurred in Longfellow and Hoover-Foster, which together accounted for 4,030 - or 83 percent - of African American residents who moved out during the thirty year period.



Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

<sup>&</sup>lt;sup>7</sup> Examples of "occupied blight" include damaged structures, plumbing or electrical problems, and the presence of debris or mold (Urban Strategies Council 2014).



■ 1980 ■ 1990 ■ 2000 ■ 2009-2013

Figure 3. MacArthur Area African-American Population by Neighborhood, 1980-2013.

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates



Figure 4. MacArthur Occupied Housing Units by Tenure, 1980-2013.

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

While the MacArthur area has housed far more renters than homeowners (Figure 4) the rates of both homeownership and tenancy among African American households further illustrate the stark declines among African American households by tenure (Figures 5 and 6). Since the 1990s, the share of White homeowners has more than doubled. By 2013, 41 percent of owner-occupied units across all five neighborhoods were owned by White householders while 35 percent were owned by African American householders - a marked decrease from 1990, when African American households comprised 64 percent of the area's homeowner population. Similarly, the share of African American households fell for the renter population, from 62 percent in 1980 to 38 percent in 2013. Though the share of African American homeowners has more severely declined than the share of the African American renters, the overall number of African American renter households lost was nearly triple the number of homeowner households lost for the same period.



# Figure 5 Macarthur Station Area Homeowners by Race/Ethnicity, 1980-2013

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates



#### Figure 6 Macarthur Station Area Renters by Race/Ethnicity, 1980-2013

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

From 2000 to 2010, most of the decrease among the African American population occurred among residents under the age of 44, with even greater decreases among the youth population, which suggests that the population change can be attributed to African American families, rather than senior citizens, leaving the area (Figures 7 and 8).

Nonetheless, individual neighborhoods show an uneven distribution of these outcomes. For example, in Hoover-Foster, 42 percent of adults in 1980 had not completed high school. This rate held at about 40 percent through 2000, until dropping sharply to 26 percent by 2013. Despite this decrease, Hoover-Foster had the highest percentage among the MacArthur neighborhoods





Figures 7 and 8. MacArthur Area Non-Hispanic White and Black/African American Populations by Age, 2000 and 2010

#### **Education, Income, and Poverty**

Along with dramatic changes in population demographics, the MacArthur area saw an increase in educational attainment over the 30 year period. In 1980, 14 percent of residents had a college degree; this increased to 38 percent in 2013 (Figure 9).

Nonetheless, individual neighborhoods show an uneven distribution of these outcomes. For example, in Hoover-Foster, 42 percent of adults in 1980 had not completed high school. This rate held at about 40 percent through 2000, until dropping sharply to 26 percent by 2013. Despite this decrease, Hoover-Foster had the highest percentage among the MacArthur neighborhoods of adults that had not completed a high school education. Conversely, Temescal/Broadway began 1980 with 22 percent of its residents not graduating high school. That percentage decreased to 8 percent in 2000, and then 4 percent in 2013. Moreover, only 16 percent of Hoover-Foster's population in 2013 had earned a college degree or higher, compared to 52 percent of Temescal and 56 percent of Temescal-Broadway.

College graduation rates in Koreatown-Northgate and Longfellow lag behind Temescal and Temescal-Broadway, but their increase has been as rapid. Koreatown-Northgate's college educated population more than doubled— from 12 percent in 1980 to 33 percent in 2013. Similarly, Longfellow's college-educated population went from 7 percent in 1980 to 34 percent in 2013.





# Figure 9. MacArthur Educational Attainment, 1980-2013.

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates



# Figure 10. MacArthur Median Household Income, 1980-2013 (in 2010 dollars).

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates



Figure 11. MacArthur Median Household Income by Neighborhood, 1980-2013 (in 2010 dollars).

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

Coupled with major shifts in the MacArthur area's racial/ethnic demographics, these data suggest that the 30 year changes in educational attainment are due to a higher level of education among newcomers in specific neighborhoods.

The area's median household income also changed significantly within the time period, rising nearly 25 percent between 1980 and 2009-2013 (Figure 10). However, when disaggregated by neighborhood, median household income rose modestly in Longfellow and Pill Hill/Koreatown-Northgate, and dropped in Hoover-Foster. Much of the growth is limited to both Temescal tracts, indicating a trend of gentrification in the neighborhood that has gone on for some time. As a whole, the MacArthur area has seen little fluctuation in poverty rates since 1980, although the number of impoverished residents has declined substantially since the poverty rate spiked in 2000 (Table 1).

But as with household income, disaggregated figures show that the Longfellow and Hoover-Foster neighborhoods west of CA-24 have seen consistently higher rates of poverty at the neighborhood scale. As the income gap between neighborhoods within the MacArthur area increases, areas with disproportionately high poverty rates may be particularly vulnerable to residential displacement.

Recent data for Hoover-Foster may be indicative of such a circumstance. Between 2000 and 2010, Hoover-Foster experienced a major drop in its poverty rate – from 50 to 27 percent (2,365 to 918 individuals) – that was unparalleled among other neighborhoods in the area.<sup>8</sup> Such a stark change, combined with a population decrease of 424 (the only population decrease in MacArthur for this decade) suggests that a significant portion of Hoover-Foster's population below the poverty line may have been displaced between 2000 and 2013. This change is explored further in the following section.

#### Table 1. MacArthur Area Poverty Rate, 1980 to 2009-2013

Year	Total Residents	% of Population
1980	4664	27%
1990	4606	26%
2000	6217	32%
2009-2013	5159	26%

Table 2. Poverty Rate by Neighborhood, 1980 to 2009-2013

Neighborhood	1980	1990	2000	2009 -2013
Longfellow	29%	29%	31%	25%
Temescal	25%	17%	20%	15%
Temescal/ Broad- way	19%	18%	11%	10%
Pill Hill/ KONO	30%	27%	40%	33%
Hoover- Foster	30%	34%	50%	40%

<sup>&</sup>lt;sup>8</sup> ACS 5-year estimates show that Hoover-Foster's poverty rate between 2009 and 2013 was 40 percent, suggesting that it rose back to levels comparable to 1990 after a drop in 2010.

## Residential Displacement among Homeowners

The story told by demographic and socio-economic trends in Hoover-Foster contribute to a larger picture of the severe impacts of the Great Recession and foreclosure crisis on the MacArthur area and Oakland overall, with over 10,000 properties foreclosed citywide between 2007 and 2011 (Urban Strategies Council 2012).

Between 2006 and 2014, 195 properties (2.3 percent) were foreclosed within the case study area. Of the 195, 67 percent occurred west of the Grove-Shafter freeway in Longfellow and Hoover-Foster (Figure 12). This is equivalent to an approximate 2.5 percent foreclosure rate in Longfellow and 5.0 percent in Hoover-Foster. These neighborhoods, which as previously detailed, have historically been home to the highest concentrations of African American households in the MacArthur area, correspond with nationwide reports that show high-risk lending practices by banks and subsequent foreclosures have disproportionately impacted the African American community (Housing and Economic Rights Advocates 2007).



Figure 12: 2006-2014 MacArthur Foreclosures by Neighborhood Source: Open Oakland 2014

However, a closer look at the numbers of African American owner-occupied units shows that the decrease in African American homeownership began decades prior to the Great Recession. The largest decreases occurring between 1990 and 2000 for both Longfellow and Hoover-Foster, with the downward trend continuing more gradually through the height of the foreclosure crisis. This initial decrease corresponds with an increase in mortgage-burdened households between 1980 and 1990 (Figure 14). Mortgage-burden rates for 2013, which reached 78 percent in Hoover-Foster, demonstrate the extent of the housing affordability crisis after the Great Recession.



#### Figure 13. Number of African American Owner-Occupied Households by Neighborhood, 1980-2013.

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates



Figure 14. Percent of Mortgage-Burdened Households in Longfellow and Hoover-Foster, 1980-2013. Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

Fueled by the real estate market, outside investment and "flipping" properties have become commonplace in the tracts of West Oakland closest to transit, according to local real estate agents. The Urban Strategies Council produced a report in 2011 quantifying the level of investment on foreclosed properties throughout Oakland. According to the report, 81 percent of the homes sold in Oakland between 2007 and 2011 were to banks or other financial institutions. Of these, 42 percent were sold to investors looking to "flip" the homes for a profit, where 93 percent of homes acquired by investors were located in flatland neighborhoods like Hoover-Foster – the same neighborhoods targeted by sub-prime lenders before the foreclosure crisis (Urban Strategies Council 2011).

Such transactions have contributed to the rapid change of these neighborhoods. Sales data from the Alameda County Assessor's Office shows that the prevalence of flipping corresponds with hot real estate markets of the dot com boom at the turn of the century and the over-heated market prior to the housing crisis, with most incidences occurring within Longfellow and Hoover-Foster.<sup>9</sup> Furthermore, Hoover-Foster's vacancy rate spiked to 27 percent in 2010 from 11 percent in 2000, making it the highest in the area and nearly double the vacancy rate of MacArthur as a whole (14 percent).<sup>10</sup> This may be indicative of the turnover that occurs with flips, as new owners evict current residents and allow units to remain vacant while waiting for property values to increase.

On the other hand, between 2000 and 2013, the number of owner-occupied units in the MacArthur area increased from 22 to 26 percent. This could indicate a change in the mix of housing offered in the area due to a combination of conversion to owner-occupied units due to owner- move-in, condo conversion of multi-unit buildings, and new construction.<sup>11</sup>

While flips have been more prevalent in the neighborhoods west of the Grove-Shafter Freeway, sales prices have been highest in Temescal and Temescal-Broadway (Figure 15). The architectural character of Temes-

<sup>9</sup> A parcel was classified as flipped if assessor data showed that it changed ownership more than once in a two-year period.

cal's housing stock may play a role in the area's desirability. 70 percent of the housing stock in the study area was built before 1949. These older homes tend to be bought and renovated by middle- and high-income earners as they migrate into older urban environments. Therefore, the presence of these architectural types within the housing stock – craftsmans, Victorians, and pre-war bungalows – may itself be an indicator of risk for gentrification. Housing in the Pill Hill/ Koreatown-Northgate area tends to be slightly newer in comparison to the other tracts, with 58 percent built before 1949, whereas housing in the Temescal-Broadway area tends to be older, with 80% of housing built before 1949. This indicates a strong vulnerability to gentrification, realized in the 1980s and 1990s.



Figure 15. Median sales price per square foot for single family units in in MacArthur by Neighborhood, 1989 – 2014 Source: Dataguick (2014)



Neighborhood, 1980-2013.

Source: US Census 1980, 1990, 2000 (Geolytics, 2014); 2009-2013 American Community Survey 5-Year Estimates

<sup>&</sup>lt;sup>10</sup> Five-year estimates from the American Community Survey indicate that the vacancy rate has since decreased, with a 19 percent vacancy rate between 2009 and 2013.

<sup>&</sup>lt;sup>11</sup> Since 2000, approximately 500 new units have been constructed, with the majority (52 percent) built in Pill Hill/Koreatown-Northgate (Dataquick).

## Loss of Affordable Rental Units

The decreased share of renter-occupied units raises concern about the vulnerability of MacArthur's renter population, which comprised approximately 74 percent of the total units in 2013. Similar to homeowners, by 2013 over half of renter households were spending over 30 percent of their income on housing, making the majority of the population susceptible to displacement (Figure 17).

The increase in rent-burdened households corresponds with an increase in median rent in all 5 neighborhoods. Adjusted for inflation, average rent in the study area tracts rose from \$520 per month in 1980 to just over \$1,000 by 2013 (in 2010 dollars). According to Zillow.com, the 2014 median rent for zip code 94609. which makes up the central majority of the study area, was \$1,876, indicating a steep rise in rents in recent vears.<sup>12</sup> As depicted in Figure 18, rental prices increased nominally between 1990 and 2000 but rose significantly by 2013, with the highest median rent in the Temescal-Broadway neighborhood. While rents in Longfellow, Pill Hill & Koreatown-Northgate and Hoover-Foster were comparable in in 1990 and 2000, by 2013, the median rents in Longfellow and Pill-Hill & Koreatown-Northgate surpassed Hoover-Foster's.





By measuring the median contract rent in each neighborhood against average household income, CJJC analyzed potential rent gaps to understand housing pressures and potential movement of high-income newcomers to the area. This analysis reveals the largest differences between average monthly income and median rent are generally among the northern-most portions of Longfellow, Temescal and Temescal-Broadway (CJJC, 2014). For example, one block group in Temescal-Broadway has a median contract rent of \$1,404 and a median monthly income of \$7,416, yielding a rent gap of \$6,013. This difference suggests more affluent households are pricing out lower-income households and potentially driving up prices of formerly "naturally affordable" units. Moreover, areas with large rent gaps may indicate greater redevelopment and profit potential for landlords, which would trigger further gentrification (Smith 1979). CJJC's analysis suggests that the Longfellow neighborhood may be especially vulnerable within this context, with rent gaps on some blocks between \$3,500 and \$4,700.

#### Subsidized Housing

These rent increases throughout the MacArthur area pose major challenges for families who rely on housing choice vouchers to afford housing. With public housing authorities generally only able to set a maximum payment standard for Section 8 property owners at 120 percent of fair market rent (HUD Housing Choice Voucher Program Guidebook 2001), landlords can often earn a larger profit by renting their units to non-voucher holders in the private market. Moreover, due to the lengthy waitlist, households may wait several years before they can receive Section 8 assistance.<sup>13</sup>

With the challenges related to voucher-based subsidies, other subsidized units such as public housing and inclusionary units built with Low Income Housing Tax Credits (LIHTC) are important to preserving affordability in MacArthur and Oakland overall. Currently, nearly all of the MacArthur area's 611 subsidized

<sup>&</sup>lt;sup>12</sup> Zillow data provides information on the price of rental units that are currently on the market, rather than for all units in an area.

<sup>&</sup>lt;sup>13</sup> The Oakland Housing Authority's Section 8 Housing Choice Voucher waitlist was last opened in 2011 (Oakland Housing Authority, 2013). At the end of fiscal year 2011, there were 10,007 households on the general (tenant-based subsidy) wait list. These households were chosen by lottery among the over 55,000 households who applied to be on the wait list (Oakland Local 2013). OHA reported that at the end of FY 2011, there was a combined total of 26,362 households on all wait lists for public housing, Section 8 and other mixed finance subsidized housing in the city (Oakland Housing Authority 2011).

housing units across 10 separate developments are located in the Pill Hill & Koreatown-Northgate and Hoover-Foster neighborhoods; in contrast, only 6 units are located in Longfellow, and none exist in Temescal (CHPC 2014). Approximately one half (328) of the total are designated as senior housing (CHPC 2014). This may contribute to the relatively stable population numbers of senior citizens between 2000 and 2013.

Due to the elimination of funding for local redevelopment agencies statewide, affordable housing development projects have become even more challenging to finance in Oakland. Previously, the City's Community and Economic Development Agency (CEDA) awarded approximately \$20 million per year in funding to develop affordable housing throughout the city, but in 2014, its successor agency's funding pool had shrunk to \$3 million (Musiker 2015).

However, archived CEDA reports on the Broadway/ MacArthur/San Pablo Project Area that covered portions of Temescal/Temescal-Broadway and Pill Hill show that Redevelopment Agency funds were not used to build a single unit of affordable housing between 2000 and 2009. All of the 373 units built within this time period did not have income restrictions. In order to meet redevelopment requirements for the production of 56 low and moderate income and 23 very low-income units for the 2000-2009 compliance period, the City constructed two developments, with a total of 203 affordable units, outside of the Project Area (City of Oakland 2009, 14).<sup>14</sup>

CEDA's dissolution also disrupted the implementation of Redevelopment Area plans, including those for the MacArthur Transit Village and others within the Broadway/MacArthur/San Pablo Project Area. With an expanding need for below market rate units, these issues further exacerbate mounting market pressures on the existing housing stock.

## **Commercial Gentrification**

Another marker of increased market pressure is change in surrounding commercial districts. Changes in the commercial environment of gentrifying neighborhoods have been seen as both an instigator and consequence of residential demographic change (Chapple and Jacobus 2009). Researchers have shown that retail and commercial amenities signal to middle class residents that a low-income neighborhood is changing, consequently attracting new residents (Brown-Saracino 2004). On the other side, others have shown how shifting buying power and cultural preferences of new residents in gentrifying neighborhoods may influence the mix of retail in nearby commercial corridors (Chapple and Jacobus 2009). Many scholars believe that commercial gentrification results in the disappearance of small, mom-and-pop stores and the arrival of boutiques, chains or commercial establishments that do not serve the needs of the existing, low income residents (Zukin et al. 2009). In its analysis of the MacArthur neighborhoods, CJJC notes that commercial development in major retail nodes-both within the MacArthur area, such as the Temescal/Telegraph Corridor, and outside of it, such as Bay Street and other retail centers in Emeryville-has played a role in defining neighborhood change (CJJC 2014).

#### **Temescal/Telegraph Corridor**

Centrally located within the case study area, the Temescal/Telegraph retail corridor may be a key "gentrifying pressure" on the MacArthur area as a whole, with the greatest vulnerability in neighborhoods west of the Grove-Shafter Freeway (CJJC 2014). The Temescal/ Telegraph Corridor, which consists of a six-block strip of small locally owned businesses along Telegraph Avenue, runs through some of the most affluent neighborhoods in the MacArthur area that have gentrified in recent decades (CJJC 2014). With the support of the Temescal Business Improvement District, the "hip" and "cool" neighborhood strip boasts signs touting its restaurants, shopping, and authentic local flavor. While the neighborhood was once home to Italian, then African, and then Korean immigrants, it is now a predominantly White, middle to upper middle class hotspot. National media has described the neighborhood as "Oakland's answer to San Francisco's Mission District and the city of Berkeley drawing a mix of yuppies and plaid-wearing hipsters" (Woo 2009), and the "hippest part of Oakland" (Haber 2014).

To understand patterns of change among the Corridor's business mix, we evaluated data on commercial establishments from the National Employment Time-Series Database (NETS), which provided information on sales and number of establishments for businesses by

<sup>&</sup>lt;sup>14</sup> These two developments, Fox Courts and Jack London Gateway, also fall outside of the case study area. California Redevelopment Law credited the City with one unit toward its affordable housing production requirement for every two units built outside of the Project Area (City of Oakland 2009, 14).

North American Industrial Classification System (NA-ICS) code (Walls & Associates 2013). We categorized each business as either local-serving or region-serving based on its NAICS code, following a method used by Koebel and Chapple and Jacobus which classifies specific business types as most likely to serve local market areas (Koebel 2002; Chapple and Jacobus 2009). These types—which include grocery and food product stores, restaurants, financial institutions, salons and barbershops, and laundromats—are detailed in the table below.

Additionally, data gathered through ground-truthing was used to compare current businesses and businesses that existed in 2007, which were inventoried as part of the 2007 Temescal/Telegraph Merchant Survey (Munektyo, Simundza, and Chapple 2007).<sup>15</sup>

As the neighborhood's desirability has increased since 2000, the Temescal/Telegraph Corridor has undergone significant change. Of the 224 commercial parcels along the Corridor, 49 percent turned over between 2007 and 2014. Twenty-five percent of the businesses replaced by 2014 were retail businesses, and another 17 percent were restaurants or food service establishments. The greatest amount of change in business type occurred among service establishments, with 35 percent replaced by 2014.

Nearly all local-serving businesses that have turned over were replaced by new local-serving establishments. NETS data show that in fact, the ratio of regional to local-serving businesses has remained fairly consistent over time (Figure 18). However, certain names of new businesses suggest that, while they may still be local-serving, they cater to a new local demographic—one that differs from the clientele of replaced businesses. For example, several African/ African American hair salons and barber shops<sup>16</sup> are among the replaced businesses, which reflects the decline in African American residents throughout the MacArthur Area.

Table 3. 'Local-serving' Business Types

NAICS code	Business type
444130	Hardware Stores
445110	Supermarkets and Other Grocery (except Convenience) Stores
445120	Convenience Stores
445210	Meat Markets
445220	Fish and Seafood Markets
445230	Fruit and Vegetable Markets
445291	Baked Goods Stores
445292	Confectionery and Nut Stores
445299	All Other Specialty Food Stores
445310	Beer, Wine, and Liquor Stores
446110	Pharmacies and Drug Stores
451212	News Dealers and Newsstands
522120	Savings Institutions
522130	Credit Unions
522190	Other Depository Credit Intermediation
522291	Consumer Lending
722330	Mobile Food Services
722410	Drinking Places (Alcoholic Beverages)
722511	Full-Service Restaurants
722513	Limited-Service Restaurants
722514	Cafeterias, Grill Buffets, and Buffets
722515	Snack and Nonalcoholic Beverage Bars
812111	Barber Shops
812112	Beauty Salons
812113	Nail Salons
812310	Coin-Operated Laundries and Drycleaners
812320	Drycleaning and Laundry Services (except Coin-Operated)



Figure 18. Number of Business Establishments, Temescal/Telegraph Corridor, 2000-2011. Source: National Employment Time Series Dataset

However, this data also reveals that regional-serving businesses have generated much more revenue per establishment than local-serving businesses since at least 2000. Furthermore, average sales per establishment have fluctuated greatly over time—and resulted in an overall decrease since 2000—for region-serv-

<sup>&</sup>lt;sup>15</sup> The date of this survey poses a limitation to this methodology, as the Temescal district's commercial revitalization began prior to 2007. Many of the businesses that can be considered part of this revitalization (because they were established after 2005) were already in place by 2007 and are classified here as having not been replaced. Thus, this analysis only captures a partial extent of the changes since associated with the present wave of commercial revitalization.

<sup>&</sup>lt;sup>16</sup> Among these are ADOM Hair Braiding, Hair Extraordinaire, Ebony Men, My Sista My Brotha Beauty Salon, Destiny 2000 and Madingo Braids.



ing businesses, while staying fairly consistent for local-serving businesses (Figure 19). Thus, despite the relatively even distribution in the number of local and regional-serving businesses, the Corridor's business patterns appear to be susceptible to changes in regional consumer preferences and/or spending power.

# Business Improvement Districts and City of Oakland Planning Efforts

Changes along the Corridor correlate with the founding of the Temescal/Telegraph Business Improvement District (BID) in 2005. The BID notes in its 2015 Management Plan that sales tax revenues within its boundaries have risen 32 percent within the past 10 years, despite an overall 4 percent decline in citywide sales tax revenues (New City America 2014). It attributes this success as well as the "new identity" of the Temescal commercial district to the organization's physical improvement and marketing activities, which have included installation of pedestrian street lights and pole banners, sidewalk sweeping and graffiti abatement, underwriting of several public events and street fairs, and coordination of social media marketing (New City America 2014).

The Temescal/Telegraph Corridor's evolution can provide insight into the future of surrounding residential areas as well as nearby commercial districts. With the Temescal district's revitalization viewed as a model of positive economic development, business and commercial property owners in Koreatown-Northgate (KONO) followed a similar path by forming their own BID (called a Community Benefit District) in 2007 and engaging heavily in marketing efforts that brand KONO as "the neighborhood that defines the new Oakland," and an "up and coming community that has become the 'unofficial' hub of arts and culture in the Bay Area." This identity is reflected in the Broadway-Valdez District Specific Plan (BVDSP), which envisions the area as a "new, re-imagined 21st Century neighborhood" that emphasizes destination retail (City of Oakland 2014).

Adopted in 2014 after a six-year planning process that started with funding from CEDA, the BVDSP includes a vision for development along Telegraph Avenue and Broadway in the form of housing projects, complete streets transportation plans, and retail upgrades. Among the planned new establishments is a development called "the Shops at 30th and Broadway," which will be anchored by a higher-end Sprouts Farmer's Market grocery store. The image and target demographic of this development stand in contrast to a Grocery Outlet Bargain Market located just across the street that has served the community for much longer. The developer's online marketing materials explicitly demonstrate its intention of catering its retail toward affluent residents by including an income map that shows "major access to and from Piedmont and the Oakland Hills" (Lockehouse & Portfolio Development Partners, LLC 2012).

This development is guided by the City of Oakland's "Retail Enhancement Strategy," which was first developed in 2008 to address the issue of retail gaps and leakage, which leads to the loss of potential sales tax revenue from resident purchases made in neighboring municipalities (Conley Consulting Group 2008). With this plan guiding citywide development projects, including the MacArthur Transit Village, the implications of commercial gentrification on neighborhood change are important to consider.

Development interest in the Broadway-Valdez corridor has recently taken off; a January 2015 article in the San Francisco business times states that "The area... is attracting big interest in the way of mixed-use projects. Applications have been pouring in since the city finalized its specific plan for the transit-rich area" (Azevedo 2015). A private developer of a mixed use project that was the first to receive entitlements under the BVDSP states that this 435-unit development will target supporting medical staff and millennials who can't afford San Francisco rents" as tenants (Azevedo 2015).

As demand for real estate in the Broadway-Valdez area grows, it is likely that market rate development will quickly outpace subsidized housing development and leave few viable opportunity sites available to affordable housing developers. City institutions and community-based organizations continue to grapple with the question of how to effectively manage neighborhood change in order to support inclusive economic development and prevent displacement. Early drafts of the BVDSP focused primarily on sales tax revenue generation and failed to directly address affordable housing needs in the plan area (Wampler 2015). In 2008, a coalition of community groups known as the Better Broadway Coalition launched a campaign to ensure that the Broadway-Valdez Specific Plan included strong affordable housing measures and goals (Great Communities Collaborative 2014). The coalition also pushed for economic development strategies that would benefit residents through local hiring and living wage policies (Wampler 2015).

As a result of this advocacy, the adopted plan includes a target of 15 percent of new homes to be affordable for low- and moderate-income households as well as language on anti-displacement strategies and workforce housing (City of Oakland 2014).

While the plan includes a stated policy to "explore the formulation and adoption of a comprehensive citywide affordable housing policy that addresses concerns from all constituents," it remains vague in terms of actions that the City will commit to in order to preserve affordability in the area (City of Oakland 2014). Thus, implementation of the Broadway Valdez Specific Plan may provide a crucial leverage point for resident and community engagement. Organizations involved with the Better Broadway Coalition have called for an affordable housing impact fee that would contribute to a sustained source of funding for affordable housing production and preservation in Oakland. The City has embarked on a nexus study to explore the specifics of a possible impact fee, but further advocacy is needed (Wampler 2015).

## Conclusion

With major revitalization projects slated for central locations within MacArthur, the area's desirability will likely continue to increase, placing further strain on the housing stock and continuing to drive change blockby-block. The implications of this change on low-income residents must be considered pre-emptively, so as to not exacerbate the existing affordability crisis.

While MacArthur has passed the peak of the latest foreclosure crisis, many residents remain vulnerable to displacement, and the full impact of the foreclosures is yet to be determined as properties continue to rapidly change hands and sales prices climb. The data points to increasing severity of the affordability crisis, with continuously rising rents and a tremendous jump in rates of housing burden.

As discussed throughout this case study, the housing affordability crisis' varied manifestations, whether in the form of foreclosures, high vacancy rates and flips, or increasing rent gaps and changing retail patterns, paint a picture of residential displacement in the various MacArthur neighborhoods that may remain an ongoing threat, especially for low-income households. In this, MacArthur is not an exception, but an example of trends throughout the rest of Oakland. These current housing dynamics in MacArthur are born of a long history of institutionalized racial discrimination, with the most notable impact on the area's African American residents. Any efforts to achieve equitable development must take this history into account.

As much of the region's challenges are actively debated and addressed in MacArthur, changes in the area provide an opportunity for advocates, researchers, community leaders, and government officials to inform regional solutions through careful tracking of MacArthur's ongoing neighborhood change and evaluation of tested anti-displacement strategies.

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## Appendix: Ground-Truthing Methodology and Results

Because visual indicators of neighborhood change most likely vary from block to block - and even parcel to parcel - the three blocks selected as a sample for visual observation were chosen based on the likelihood that we would be able to systematically observe indicators of neighborhood change and/or vulnerability to gentrification. Criteria used to select blocks included higher than average percentage change in tenure (from owner-occupancy to renter-occupancy or vice versa), percentage of white residents, and percentage of parcels sold since 2012. Researchers further narrowed the sample pool by working with the project's CBO partner, Causa Justa :: Just Cause (CJJC), to identify specific blocks that, based on the organization's work with the Oakland community, staff know have experienced recent change. Finally, logistical considerations, such as land area as well as number of parcels on each block, were also taken into account.

In Fall 2014, two researchers from the Center for Community Innovation (CCI) surveyed three blocks, Block 3009 in Tract 4011 and Block 2003 in 4010. As part of the ground-truthing exercise, researchers observed and recorded a range of variables for all parcels on three different Census blocks in three different tracts within the Greater Chinatown case study area. These include the primary land use, building type (multi-family, single-family, business, etc.), the number of units it appears to hold, and indicators of recent investment such as permanent blinds and updated paint. Researchers also looked for signs of concern over safety, such as security alarm signage or barred windows, as well as signs of disinvestment, such as litter or debris, boarded windows, or peeling paint. The data gathered through this process is referred to in this memo as "ground-truthing data."

The ground-truthing exercise is meant to provide an additional set of data to verify conclusions reached through analyzing assessor and Census data. Complicating this effort is that the data sets do not have the same set of parcels (Table 1). All data reported from the assessor data (Dataquick) includes all parcels in that set; likewise, all data reported from the ground-truthing data collection includes all parcels in that set (which is based on parcels from Boundary Solutions). For two variables—land use and number of units—comparisons are made on a parcel-by-parcel basis; only parcels that appear in both data sets are used for this comparison. Census data is not provided on a parcel level, and so includes all households surveyed by the Census.

#### **Table 1: Parcel Mismatch Among Datasets**

Block and Tract	# Parcels in Assessor But Not Ground-truth
Block 3009 Tract 4011	24 / 54
Block 2003 Tract 4010	2 / 45

Table 2. Dates mistory of Farters since bonstruction					
Block	Median Year of Construction	Median Year of Last Sale	Median Sale Price	Median Sale Price Per Square Foot	
3009	1919	2006	\$226,500	\$202	
2003	1920	2004	\$283,000	\$209	

#### Table 2: Sales History of Parcels since Construction

Source: Dataquick, 2014. These figures refer to all parcels in the area, including non-residential uses.

Table 3: Sales History of Parcels	Sold Since 2007 and 2010
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Block	Percent Sold 2007- 2014	Percent Sold 2010- 2014	Median sales price per square foot if sold 2007 or later	Median sales price per square foot if sold 2010 or later
3009	38	18	\$258,000	\$276,000
2003	31	24	\$315,000	\$315,000

Source: Dataquick, 2014. These figures refer to all parcels in the area, including non-residential uses.
Block	Primary Land Use, based on Ground- truthing data	Percent Land Use Matched	Total Number of Units on Block			Percent of
			Assessor Data – Dataquick	Visual Observations on Ground- truthing	Census Data: Total Housing Units – 2010	Parcels whose Number of Units match between Assessor Data and Visual Ob- servation
3009	Multi-family and single-family	48%	150	105	115	17%
2003	Single-family	70%	73	67	72	59%

Table 4: Summary of Parcel Matches and Primary Land Use

Note: Percent Land Use Matched and Percent Units Matched take as their denominator only those parcels for which a land use or number of units was indicated by both assessor data and ground-truth data.