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DRAFT
**Non-Residential
Jobs-Housing Nexus Study Update**

***Prepared for:
County of Napa***

***Prepared by:
Keyser Marston Associates, Inc.***

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INTRODUCTION

The materials provided in the document pertain to the non-residential component of the Napa County Affordable Housing Ordinance, or the requirement that commercial and industrial construction pay an affordable housing impact fee, or “housing fee.” The materials have been prepared by Keyser Marston Associates for Napa County pursuant to a contractual agreement.

Napa County adopted an Affordable Housing Ordinance in 1993 establishing a housing impact fee levied on all non-residential construction. The fee program was supported by a study prepared in 1992 entitled Napa Jobs Housing Study, City and County of Napa, Keyser Marston Associates. The 1992 work program was guided by a Jobs Housing Advisory Committee that had been formed to represent affected parties in both the City and the County. In 2004 Keyser Marston Associates prepared an update of the earlier study in support of adjusting fees and making other revisions to the ordinance. At the time of the 2004 study, Keyser Marston Associates also produced a companion document that was an in depth study of the Airport Industrial Area and its projected growth.

In 2009, KMA prepared a partial update to the housing impact fee analysis. The update included a revised mitigation cost estimate, but the other inputs into the nexus analysis remained at their 2004 levels. This document provides a complete update to the analysis.

Purpose

The purpose of a nexus analysis is to quantify and document the linkages among construction of new work place buildings (office, retail, etc.), the employees that work in them, and the demand for affordable housing. Since jobs in all buildings cover a range in compensation levels, and the households of the workers range in size, there are needs at all affordability levels. This analysis quantifies the need at the moderate and lower income affordability levels associated with each type of workplace building.

This analysis is conducted to meet the requirements of several U. S. Supreme Court decisions and California Code Section 66000 et seq. (which is sometimes referred to as “the Mitigation Fee Act”). Such analyses are called linkage or nexus analyses.

Analysis Scope and Organization

This analysis examines five types of workplace buildings, per direction of County staff.

- Office
- Hotel
- Retail/Restaurant
- Industrial/Manufacturing
- Warehousing/Storage

These building types represent a minor adjustment over the 2004 update analysis. In 2004, the analysis included Wineries as a separate land use category, encompassing wine-making, cave storage, and the office and retail components such as tasting rooms. Per direction from County staff, this category is not included in the current analysis because the County practice is to disaggregate a Winery into its components (office, retail, industrial, etc.) and charge the Housing Fees by the individual components. Wine-making activities are included in the Industrial/Manufacturing category in this analysis.

The household income categories addressed in the analysis are the same as those in the 2004 and 2009 reports: Very Low income (households earning under 50% of Area Median Income (AMI)), Low Income (between 50% and 80% of AMI) and Moderate Income (80%-120% of AMI).

Data Sources and Qualifications

The analyses in this report have been prepared using the best and most recent data available. Local and current data was used whenever possible. Sources such as the American Community Survey of the U.S. Census, the 2010 Census, and California Employment Department data were used extensively. Other sources and analyses when 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. Keyser Marston Associates, Inc. assumes no liability for information from these and other sources.

SECTION I: THE NEXUS CONCEPT

Introduction

This section outlines the nexus concept and some of the key issues surrounding the linking of new non-residential development to the demand for affordable residential units in Napa 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 linkages between new construction of the types of buildings in which there are workers and the need for additional affordable housing, a connection that is quantified both in terms of number of units and the amount of subsidy assistance needed to make the units affordable.

The Legal Basis and Context

The first jobs-housing linkage programs were adopted in the cities of San Francisco and Boston in the mid-1980s. To support the linkage, the City of San Francisco commissioned an analysis to show the relationships, or what might now be characterized as an early version of a nexus analysis. Since that time 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 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*. 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 because a valid nexus linking the impact of the proposed project to the fee, had not been demonstrated. In 2010, a court 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 jobs housing impact fees.

The Nexus Methodology

An overview of the basic nexus concept and methodology is helpful to understand the discussion and concepts presented in this section. This overview consists of a quick "walk through" of the major steps of the analysis. The nexus analysis links new commercial buildings with new workers in the County; 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.

The methodology utilized in this analysis is a "micro" analysis that examines individual buildings. The micro nexus analysis readily lends itself to quantification that serves as a basis for the nexus cost, or the maximum fee amount for each building type.

To illustrate the micro nexus analysis, very simply, we can walk through the major calculations of the analysis. We begin by assuming a prototypical building of some specific size and then make calculations as follows:

- We estimate the total number of employees working in the building based on average employment density data.
- We use occupation and income information for typical job types in the building to calculate how many of those jobs pay compensation at the levels addressed in the analysis. Compensation data is from the California Employment Development Department (EDD) and is specific to Napa County as of 2013. Worker occupations by building type are derived from the 2012 Occupational Employment Survey by the U.S. Bureau of Labor Statistics and weighted to reflect the industry mix in Napa County.
- 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 represented in each income category.

- Then, we calculate how many of the Very Low-, Low- and Moderate-Income households are associated with the building and divide by the building size to arrive at coefficients of housing units per square foot of building area.
- In the last step, we multiply the number of lower income households per square foot by the costs of delivering housing units affordable to these income groups.

The Relationship Between Construction and Job Growth

Employment growth does not have one cause. Many factors underlie the reasons for growth in employment in a given region; these factors are complex, interrelated, and often associated with forces at the national and international levels. One of the factors is the delivery of new workspace buildings. The nexus argument does not make the case that the construction of new buildings is solely responsible for growth. However, new construction is uniquely important, first, as one of a number of parallel factors contributing to growth, and second, as a unique and essential condition precedent to growth.

As to the first, construction itself encourages growth. When the state economy is growing, the most rapidly growing areas in the state are those where new construction is vigorous as a vital industry. In regions such as the Bay Area where multiple forces of growth exist, the development industry frequently serves as a proactive force inducing growth to occur or be attracted to specific geographic areas or locations by providing new work spaces, particularly those of a speculative nature.

Second, workplace buildings bear a special relationship to growth, different from other parallel causes, in that buildings are a *condition precedent* to growth. Job growth does not occur in modern service economies without buildings to house new workers. Unlike other factors that are responsible for growth, buildings play the additional unique role in that growth cannot occur without them for a sustained period of time. Conversely, it is well established that the inability to construct new workplace buildings will constrain or even halt job growth.

Discount for Changing Industries

The local economy, like that of the U.S. as a whole, is constantly evolving. In Napa County, over the past twenty years, the total number of jobs has grown by almost 60%. This job growth is predominantly in the service sector, which added 15,000 new jobs over that time period, although Napa saw growth in virtually every sector of the economy.

Typically, job growth in certain sectors occurs along with declines in other sectors. 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 nexus analysis typically makes an adjustment to account for these shifts between industries.

However, in Napa County, the only industries that have declined are Information, State and Federal Government jobs. In addition, these declines are minimal – 100 jobs in each sector (rounded).

The analysis makes a nominal adjustment to account for future declines, changes and shifts within all sectors of the economy, recognizing that jobs added are not 100% net new in all cases. A 2% adjustment is utilized based on the minimal long term shifts in employment that have occurred in the local economy and the likelihood of continuing changes in the future.

The 2% downward adjustment used for purposes of the analysis was derived from California Employment Development Department data on employment by industry in Napa County over the twenty year period from 1992 to 2012. Over this period, only 300 jobs were lost in declining industry sectors. Over the same period, growing and stable industries added a total of 25,100 jobs. The figures are used to establish a ratio between jobs lost in declining industries to jobs gained in growing and stable industries at about 2% (rounded up).

See the table below for additional information on the derivation of the 2% adjustment factor for declining industries:

Adjustment for Declining Industries

Jobs Lost in Declining Industries (1992 – 2012)*	(300)
Jobs Created in Growing Industries (1992 – 2012)	25,100
Ratio of Jobs Lost/Gained in Declining Industry Sectors versus Growing Industry Sectors	1.2%
Adjustment for Declining Industries (Rounded)	2%

Source: California Employment Development Department (EDD)

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, non-duplication between a residential housing impact fee and a non-residential housing impact fee, changes in labor force participation, commuting, and economic cycles.

SECTION II: JOBS HOUSING NEXUS ANALYSIS

This section presents a summary of the analysis of the linkage between four types of workplace buildings and the estimated number of worker households in the income categories that will, on average, be employed within those buildings. 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 linkages for individual building types or land use activities, quantifying the connection between employment growth in Napa County and affordable housing demand.

The analysis approach is to examine the employment associated with the development of workplace building prototypes. 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 households related to building area. In the final step, we convert the numbers of households for an entire building to the number of households per square foot level.

For ease of understanding, KMA conducts the analysis on 100,000 square foot buildings. In the final step of the analysis, the findings are converted back to the per-square-foot level.

Household Income Limits

The analysis estimates demand for affordable housing focusing on three household income categories: Very Low, Low and Moderate Income. Household income criteria for these affordability categories are published by the California Department of Housing and Community Development (HCD). For a four-person household, the maximum qualifying income levels for 2013 in Napa County are:

Household Income Definitions (Napa County, 2013)

<i>Income Category</i>	<i>Percent of Median</i>	<i>Income Range</i> (Four Person Household)
Very Low Income	0% to 50% of Median	\$0 to \$43,050
Low Income	50% to 80% of Median	\$43,050 to \$65,750
Moderate Income	80% to 120% of Median	\$65,750 to \$103,300

Source: California Department of Housing and Community Development.

The above income categories are set and utilized by HUD and HCD for most housing programs. Income definitions for other household sizes are presented in Appendix B Table 1.

When workers form households, their income, either alone or in combination with other workers, produces the household income. In addition, of course, there may be children and/or other household members who are not employed. According to HCD, the annual median income of a four-person household in Napa County for 2013 was \$86,100.

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, including our previous analysis conducted for the County. The model inputs are all local data to the extent possible, and are fully documented.

Tables II-1 through II-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 II-1 identifies the total number of direct employees who will work at or in the building type being analyzed. Average employment density factors are used to make the conversion.

The employment density estimates from 2004 were reviewed and updated as necessary to reflect changes in workplace space planning. In general, the employee densities utilized in the 2004 analysis reflected very generous amounts of workspace per employee (low employment densities). Over the past ten years, the trend is towards smaller amounts of workspace per employee, or higher employment densities. As such, KMA increased the employment density for the office and retail/restaurant categories.

- *Office* – 350 square feet per employee. In 2004, office space was estimated to have an employment density of 500 square feet per employee, which is a very low-density office (a large amount of office space per employee). Currently, office densities can go as high as 150 square feet per employee. The Napa Pipe Fiscal Impact Analysis, conducted in 2012, estimated office densities at 333 square feet per employee. KMA selected a moderate estimate of office employment density, designed to reflect the range of office buildings in the County.
- *Hotel* – 500 square feet per employee. This is unchanged since the 2004 analysis, and reflects the assumptions of one employee per room and 500 square feet per room. This rate covers a range of hotel types from lower service hotels with fewer staff and smaller rooms, to higher end convention hotels and/or resort operations where average room size (inclusive of the meeting space) is larger and the number of employees per room is higher. KMA's 2006 Industrial Land Use Study for the General Plan Update analysis

employed a higher employee density, at 1.2 employees per room; however, for the purpose of the nexus analysis update, we used a more conservative estimate.

- *Retail / Restaurant* – 350 square feet per employee. This reflects a mix of retail and restaurant space. Restaurant space typically has a very high employment density, in the 150 to 250 square foot per employee range, depending on the level of service provided. Retail space ranges widely depending on the type of retail. The Napa Pipe Fiscal Impact Analysis estimates employment densities at 200 square feet per employee for restaurant space, 500 square feet per employee for neighborhood retail and 850 square feet per employee for Costco. The 2004 analysis employment density for this land use was 400 square feet per employee; KMA's current estimate is slightly more dense at 350 square feet per employee, but still a conservative estimate.
- *Industrial* – 900 square feet per employee. This estimate is consistent with the 2004 analysis and the 2006 Industrial Land Use study. This category includes industrial parks, general light industrial uses, food products, manufacturing, building and equipment contractors, building materials and machine shops. It would also include the various wine-industry related industrial, such as cork production, barrel manufacturing and label printing.
- *Warehousing/Storage* – 4,000 square feet per employee. This estimate is also consistent with the 2004 analysis and the 2006 Industrial Land Use study. This category covers wholesalers and transportation and storage facilities, which tend to have few employees relative to total building area.

KMA notes that most of the development proposals submitted to the County will incorporate a variety of the above land uses. For example, the recent Amorim Cork & Capsule development includes 6,200 square feet of office space and 42,000 square feet of warehousing/storage space. At 350 square feet per employee for the office space and 4,000 square feet per employee of the warehousing space, the above employment densities would estimate that about 28 employees would be located in the new development. The Amorim application indicates that the company expects to employ 27 people. The overall employment density of that project is about 1,800 square feet per employee.

All density factors are averages and individual uses can be expected to be fairly divergent from the average from time to time.

As discussed above, KMA conducted the analysis on 100,000 square foot buildings. This facilitates the presentation of the nexus findings, as it allows us to count jobs and housing units in whole numbers that can be readily communicated and understood. At the conclusion of the analysis, the findings are divided by building size to express the linkages per square foot, which are very small fractions of housing units.

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. As discussed in Section I, a 2% adjustment is utilized to recognize the long-term shifts in employment occurring in Napa County and the likelihood of continuing changes to the local economy.

Step 3 – Adjustment from Employees to Employee Households

This step (Table II-1) converts the number of employees to the number of employee households that will work at or in the building type being analyzed. This step recognizes that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers must be reduced.

The workers per household characteristic provides the link between the number of employees and the number of households associated with the employees. Worker households are defined as those households with one or more persons with work related income, including the self-employed, as reported in the 2010-2012 American Community Survey (ACS). In other words, worker households are distinguished from total households in that the universe of worker households does not include elderly or other households in which members are retired or do not work for other reasons. Student households and unemployed households on public assistance are also excluded from worker households.

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 2010-2012 ACS, the number of workers per worker household in Napa County was 1.76.

Step 4 – Occupational Distribution of Employees

The occupational breakdown of employees is the first step to arriving at income levels. Using the 2012 National Industry-Specific Occupational Estimates, a cross matrix of “industries” and occupations, produced by the Bureau of Labor Statistics (BLS), we are able to estimate the occupational composition of employees in the five types of buildings. The occupations that reflect the expected mix of activities in the new buildings are presented in Appendix B Tables 2, 4, 6, 8 and 10.

- Office buildings’ “industry” mix has been tailored to reflect the industry base in the County. The industry mix has been customized based on employment by industry sector in Napa County using California Employment Development Department (EDD) data. Typical office uses are represented – realtors, insurance agents, employment services,

and others. Medical offices are also represented. Occupation categories applicable to the Office industry mix in Napa County encompass a range of management, business and financial, computer and mathematical, and sales occupations, among others. Administrative support occupations comprise almost 30% of all Office related employment.

- 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.
- Retail and restaurant employment consists of predominantly food preparation and serving occupations (46%) and sales related occupations (25%), with office and administrative support occupations making up an additional 8%. Occupation categories are based upon a mix of Retail and Restaurant uses tailored to Napa County based on current employment levels reported by EDD.
- Industrial/manufacturing occupations include production occupations (30%), transportation and material management occupations (20%), sales and related occupations (12%), and office administration and support occupations (10%). The industry mix has been customized based on employment by industry sector in Napa County using California EDD data. In Napa County, industrial employment is heavily weighted towards wine-making, which is part of the Beverage Manufacturing Industry.
- Warehousing/storage employment consists primarily of transportation and material management occupations (49%), office administration and support occupations (21%), and sales and related occupations (12%).

The numbers in Step #4 (Table II-1) indicate 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, occupation is translated to income based on recent Napa County wage and salary information for the occupations associated with each building type. This step in the analysis calculates the number of employee households that fall into each income category for each size household.

The following is a summary of the worker compensation levels for the three top occupation groups by building type. The percentages refer to the share of employment within the building in the occupation group. Appendix B, Tables 3, 5, 7, 9 and 11 show the more detailed wage and

salary information that were used as the income inputs to the model. Worker compensations used in the analysis assume full time employment (40 hours per week) per EDD.

Napa County Worker Compensations by Building Type (2013)

Building Type	Major Occupation Group	% of Employment in Building	Average Annual Worker Compensation (based on full time)
Office	Office and administrative support	29%	\$42,900
	Business and Financial	17%	\$80,100
	Sales and related occupations	11%	\$66,200
Hotel	Building and grounds cleaning and maintenance	32%	\$26,800
	Food preparation and serving	25%	\$26,100
	Office and administrative support	20%	\$31,100
Retail/Restaurant	Food preparation and serving	46%	\$25,100
	Sales and related occupations	25%	\$30,800
	Office and administrative support	8%	\$36,900
Industrial / Manufacturing	Production	30%	\$38,700
	Transportation & Material Moving	20%	\$35,600
	Sales and related occupations	12%	\$52,400
Warehousing / Storage	Transportation & Material Moving	49%	\$33,500
	Office and administrative support	21%	\$38,000
	Sales and related occupations	12%	\$73,100

Source: California Employment Development Department, 2012 Occupational Employment Statistics Survey, Wages 1st Quarter 2013.

The occupations with the lowest compensation levels are in Retail / Restaurant and Hotel buildings.

Individual *employee* income data was used to calculate the number of *households* that fall into these income categories by assuming that multiple earner households are, on average, formed of individuals with similar incomes. The model recognizes some households have multiple incomes while others do not.

Step 6 – Estimate of Household Size Distribution

In this step, household size distribution is input into the model in order to estimate the income and household size combinations that meet the income definitions established by the State, as used by the County.

The household size distribution utilized in the analysis is that of worker households in Napa County derived using American Community Survey (ACS) data. The model employs a distribution of the number of workers per household by household size. For example, four-person worker households can have one, two, three, or four workers in the household. The model uses ACS data to develop a distribution of the number of the workers per worker household, by household size.

Step 7 – Estimate of Households that meet HCD Size and Income Criteria

For this step the KMA model incorporates the matrix of household size and income to establish probability factors for the two criteria in combination. For each occupational group, a probability factor was calculated for each household income and size level. This step is performed for each occupational category and multiplied by the number of households.

Table II-2 shows the results after completing Steps #5, #6, and #7 for the Very Low Income Tier. This analysis is conducted for each of the income categories and the results are shown in Table II-3.

Summary by Income Level

Table II-3 indicates the results of the analysis for income categories for the five building types. 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.

Table II-3 also presents the percentage of total new worker households that fall into each income category. As indicated, over 93% of Retail / Restaurant and 92% of Hotel worker households are below the 120% of median income level. By contrast, in Office buildings, only about 53% of worker households fall below 120% of median. In Industrial buildings, 76% of worker households fall below 120% of median, while in Warehousing buildings, the figure is 78%.

Summary by Square Foot Building Area

The analysis thus far has worked with 100,000 square foot buildings. In this step, the conclusions are translated to a per-square-foot level and expressed as coefficients. These coefficients state the portion of a household, or housing unit, by affordability level for which each square foot of building area is associated (see Table II-4).

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 (understates at the low end) of the households by income/affordability level associated with these building types.

**TABLE II-1
NET NEW HOUSEHOLDS AND OCCUPATION DISTRIBUTION BY BUILDING TYPE
JOBS HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

DRAFT FOR REVIEW BY STAFF

	OFFICE	HOTEL	RETAIL/ RESTAURANT	MANUFACT. / INDUSTRIAL	WAREHOUSING/ STORAGE
Step 1 - Estimate of Number of Employees					
Employment Density (SF/Employee)	350	500	350	900	4,000
Number of Employees (100,000 SF Building)	286	200	286	111	25
Step 2 - Number of Employees after Declining Industries Adjustment (2%)	280	196	280	109	25
Step 3 - Adjustment for Number of Households (1.76)	159.2	111.5	159.2	61.9	13.9
Step 4 - Occupation Distribution ⁽¹⁾					
Management Occupations	9.1%	4.5%	2.2%	5.0%	4.5%
Business and Financial Operations	17.3%	1.5%	0.5%	2.3%	2.8%
Computer and Mathematical	8.9%	0.1%	0.1%	0.5%	0.6%
Architecture and Engineering	6.3%	0.0%	0.0%	1.2%	0.2%
Life, Physical, and Social Science	2.2%	0.0%	0.0%	0.6%	0.0%
Community and Social Services	0.2%	0.0%	0.0%	0.0%	0.0%
Legal	3.9%	0.0%	0.0%	0.0%	0.0%
Education, Training, and Library	0.4%	0.0%	0.0%	0.0%	0.0%
Arts, Design, Entertainment, Sports, and Media	1.7%	0.3%	0.3%	0.9%	1.0%
Healthcare Practitioners and Technical	1.5%	0.0%	1.0%	0.1%	0.1%
Healthcare Support	0.5%	0.4%	0.4%	0.0%	0.0%
Protective Service	0.5%	1.8%	0.1%	0.1%	0.4%
Food Preparation and Serving Related	0.4%	24.7%	45.5%	2.9%	0.2%
Building and Grounds Cleaning and Maint.	1.9%	32.0%	0.7%	0.9%	0.9%
Personal Care and Service	0.5%	4.0%	4.8%	0.1%	0.0%
Sales and Related	10.6%	2.1%	24.9%	11.9%	12.3%
Office and Administrative Support	29.4%	20.2%	8.1%	9.8%	20.6%
Farming, Fishing, and Forestry	0.0%	0.0%	0.1%	2.3%	0.7%
Construction and Extraction	0.6%	0.1%	0.2%	3.3%	0.0%
Installation, Maintenance, and Repair	3.2%	5.0%	3.5%	8.1%	2.6%
Production	0.7%	2.1%	2.3%	29.8%	4.2%
Transportation and Material Moving	<u>0.5%</u>	<u>1.1%</u>	<u>5.0%</u>	<u>20.2%</u>	<u>49.0%</u>
Totals	100.0%	100.0%	100.0%	100.0%	100.0%
Management Occupations	14.5	5.1	3.5	3.1	0.6
Business and Financial Operations	27.5	1.6	0.8	1.4	0.4
Computer and Mathematical	14.1	0.1	0.1	0.3	0.1
Architecture and Engineering	10.0	0.0	0.0	0.7	0.0
Life, Physical, and Social Science	3.5	0.0	0.0	0.4	0.0
Community and Social Services	0.3	0.0	0.0	0.0	0.0
Legal	6.1	0.0	0.0	0.0	0.0
Education, Training, and Library	0.6	0.0	0.0	0.0	0.0
Arts, Design, Entertainment, Sports, and Media	2.6	0.3	0.5	0.6	0.1
Healthcare Practitioners and Technical	2.3	0.0	1.7	0.1	0.0
Healthcare Support	0.8	0.5	0.7	0.0	0.0
Protective Service	0.8	2.0	0.2	0.1	0.1
Food Preparation and Serving Related	0.6	27.6	72.5	1.8	0.0
Building and Grounds Cleaning and Maint.	3.0	35.6	1.2	0.5	0.1
Personal Care and Service	0.8	4.4	7.7	0.1	0.0
Sales and Related	16.8	2.3	39.7	7.4	1.7
Office and Administrative Support	46.9	22.5	12.9	6.1	2.9
Farming, Fishing, and Forestry	0.1	0.0	0.2	1.4	0.1
Construction and Extraction	0.9	0.1	0.3	2.0	0.0
Installation, Maintenance, and Repair	5.0	5.6	5.6	5.0	0.4
Production	1.1	2.3	3.7	18.5	0.6
Transportation and Material Moving	<u>0.8</u>	<u>1.3</u>	<u>8.0</u>	<u>12.5</u>	<u>6.8</u>
Totals	159.2	111.5	159.2	61.9	13.9

Notes:

(1) See Appendix B Tables 2 through 11 for more information on how the percentages were derived.

**TABLE II-2
ESTIMATE OF QUALIFYING HOUSEHOLDS EARNING LESS THAN 50% AMI
JOBS HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

DRAFT FOR REVIEW BY STAFF

	<u>OFFICE</u>	<u>HOTEL</u>	<u>RETAIL/ RESTAURANT</u>	<u>MANUFACT. / INDUSTRIAL</u>	<u>WAREHOUSING / STORAGE</u>
<i>Per 100,000 SF Building</i>					
Step 5, 6, & 7 - Households Earning up to 50% of Median⁽¹⁾					
Management	0.17	0.03	0.00	0.00	0.00
Business and Financial Operations	0.13	0.00	0.00	0.02	0.01
Computer and Mathematical	0.24	0.00	0.00	0.00	0.00
Architecture and Engineering	0.09	0.00	0.00	0.00	0.00
Life, Physical and Social Science	0.11	0.00	0.00	0.00	0.00
Community and Social Services	0.00	0.00	0.00	0.00	0.00
Legal	0.22	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	0.00	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	14.95	40.57	1.00	0.00
Building Grounds and Maintenance	0.00	18.48	0.00	0.00	0.00
Personal Care and Service	0.00	2.35	3.69	0.00	0.00
Sales and Related	2.26	0.59	16.55	1.69	0.11
Office and Admin	8.26	9.40	3.65	1.30	0.73
Farm, Fishing, and Forestry	0.00	0.00	0.00	0.69	0.00
Construction and Extraction	0.00	0.00	0.00	0.09	0.00
Installation Maintenance and Repair	0.59	0.66	0.65	0.29	0.04
Production	0.00	1.20	1.21	4.56	0.17
Transportation and Material Moving	0.00	0.00	3.56	3.76	2.39
HH earning up to 50% of Median - major occupations	12.07	47.66	69.88	13.40	3.44
HH earning up to 50% of Median - all other occupations	1.23	2.72	2.58	0.62	0.15
Total Households Earning up to 50% of Median	13.3	50.4	72.5	14.0	3.6

Notes:

(1) See Appendix B Tables 2-11 for additional information on Major Occupation Categories.

**TABLE II-3
WORKER HOUSEHOLDS BY AFFORDABILITY LEVEL
JOBS HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

DRAFT FOR REVIEW BY STAFF

Per 100,000 square foot building

	<u>OFFICE</u>	<u>HOTEL</u>	<u>RETAIL/ RESTAURANT</u>	<u>MANUFACT. / INDUSTRIAL</u>	<u>WAREHOUSING/ STORAGE</u>
NUMBER OF HOUSEHOLDS BY INCOME TIER⁽¹⁾					
Up to 50% Median Income	13.3	50.4	72.5	14.0	3.6
50% to 80% Median Income	27.2	33.2	49.6	16.6	3.8
80% to 120% Median Income	43.2	19.3	26.8	16.6	3.5
Subtotal to 120% AMI	83.7	102.9	148.8	47.3	10.9
Above 120% of Median	75.5	8.6	10.4	14.6	3.0
Total New Worker Households	159.2	111.5	159.2	61.9	13.9

PERCENTAGE OF HOUSEHOLDS BY INCOME TIER

Up to 50% Median Income	8.4%	45.2%	45.5%	22.6%	25.7%
50% to 80% Median Income	17.1%	29.7%	31.1%	26.9%	27.2%
80% to 120% Median Income	27.2%	17.3%	16.8%	26.9%	25.2%
Subtotal to 120% AMI	52.6%	92.3%	93.4%	76.4%	78.2%
Above 120% of Median	47.4%	7.7%	6.6%	23.6%	21.8%
Total	100%	100%	100%	100%	100%

Notes:

(1) See Appendix B Tables 2 to 11 for data on compensation levels. See Appendix B Table 1 for income limits.

**TABLE II-4
HOUSING DEMAND NEXUS FACTORS PER SQ.FT. OF BUILDING AREA
JOBS HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

DRAFT FOR REVIEW BY STAFF

	Number of Housing Units per Square Foot of Building Area⁽¹⁾				
	OFFICE	HOTEL	RETAIL/ RESTAURANT	MANUFACT. / INDUSTRIAL	WAREHOUSING / STORAGE
Up to 50% Median Income	0.00013303	0.00050376	0.00072459	0.00014023	0.00003585
50% to 80% Median Income	0.00027204	0.00033155	0.00049550	0.00016630	0.00003796
80% to 120% Median Income	0.00043229	0.00019324	0.00026769	0.00016647	0.00003508
Total	0.00083735	0.00102855	0.00148778	0.00047300	0.00010889

Notes:

⁽¹⁾ Calculated by dividing number of household in Table II-3 by 100,000 square feet to convert to households per 1 sq. ft. of building.

SECTION III: TOTAL HOUSING NEXUS COSTS

This section takes the conclusions of the previous section on the number of households in the 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 additional housing in Napa County, known as the “affordability gap.” The assumption is that the County will assist in the development of affordable units at development cost levels based on the County’s recent experience.

For Very Low and Low Income households, KMA assumes that the County will provide rental units; for Moderate Income households, the County will assist in providing ownership units. For the Very Low Income households, the affordability gaps are calculated based upon rents affordable to households earning 50% of AMI, the top of the income tier. For the Low Income tier, the gaps are calculated based upon rents affordable to households earning 60% of AMI. This is a change from the 2004 analysis, where rents were based on 40% AMI and 65% AMI for the Very Low and Low Income tiers, respectively. The adjustment was made because in this update, KMA assumes the availability of federal and state tax credit financing for new affordable rental developments. Overall, the methodology for estimating the affordability gaps in this analysis is more conservative than the methodology used in the 2004 analysis.

For the Moderate Income tier, the affordable sales price is calculated for a household earning 100% of Median Income. This is consistent with the 2004 report. Additional information regarding the derivation of the affordability gaps may be found in Appendix C of this report.

Affordability Gaps

Very Low (0% - 50% AMI)	(\$164,000)
Low Income (51% - 80% AMI)	(\$138,000)
Moderate Income (81% - 120% AMI)	(\$80,000)

Source: KMA; see Appendix C.

AMI = Area Median Income

Total Nexus Costs

The last step in the nexus fee analysis relates the findings on the numbers of households at each of the lower income ranges associated with the five types of buildings to the affordability gaps, or the costs of delivering affordable housing for them in Napa County.

Table III-1 summarizes the analysis. The Affordability Gaps are described above. Demand for affordable units at each of the lower income ranges that is generated per square foot of building

area is drawn from Table II-4 in the previous section. At the right, the “Nexus Cost per Square Foot” shows the results of the calculation: affordability gap times the number of units per square foot of building area.

The total nexus costs for the five building types are as follows:

Total Nexus Cost Per Square Foot of Building Area

Office	\$93.94 psf
Hotel	\$143.83 psf
Retail / Restaurant	\$208.63 psf
Industrial / Manufacturing	\$59.27 psf
Warehousing / Storage	\$13.92 psf

Note: Nexus findings are not recommended fee levels.
See Table III-1 for detail.

These costs express the total linkage or nexus costs per square foot for the five building types. These total nexus costs represent the ceiling for any requirement placed on new construction for affordable housing. The totals are not recommended levels for fees; they represent only the maximums established by this analysis, below which fees or other requirements may be set.

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. The comparatively high median income for Napa County is also a factor because more households fall into one of the lower affordability tiers given the comparatively high income thresholds to qualify. These factors are especially pronounced with the Retail / Restaurant category yielding a very high nexus cost.

California Employment Development Department data for 2013 indicates compensation for Retail/Restaurant workers in Napa County averages approximately \$31,000 per year. This means many workers qualify as Very Low Income (four-person households earning \$43,050 and below¹); as shown in Table II-3, 46% of Retail/Restaurant workers fall in the Very Low Income category. Virtually all Retail/Restaurant employee households earn less than 120% of median. Hotel workers have similar compensation levels (averaging \$32,000 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.

For Office space, workers average approximately \$69,000 annually. This is more than double the average compensation for Retail / Restaurant and Hotel workers. The higher compensation levels result in a far lower affordable housing nexus cost for Office space as compared to Retail / Restaurant and Hotel.

¹ Income criteria vary by household size.

For Industrial and Warehouse/Storage space, workers average \$46,000 and \$45,000 annually, respectively. While many of these workers fall into the lower income categories (about three-quarters earn below 120% of the median), the lower employee densities result in lower total nexus costs for these land uses.

Conservative Assumptions

In establishing the total nexus cost many conservative assumptions were employed in the analysis that result in a total nexus cost 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, 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.
- Annual incomes for workers reflect full time employment based upon the California Employment Development Department’s convention for reporting the compensation information. Of course 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 federal and state tax credit financing will be available. In addition, a conservative estimate of total development costs for ownership units is used. Both assumptions reduce the affordability gap that needs to be filled.

In summary, many less conservative assumptions could be made that would result in higher nexus costs.

**TABLE III-1
TOTAL HOUSING NEXUS COST
JOBS HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

DRAFT FOR REVIEW BY STAFF

INCOME CATEGORY	Affordability Gap	Nexus Cost Per Sq.Ft. of Building Area ³				
		OFFICE	HOTEL	RETAIL	MANUFACT. / INDUSTRIAL	WAREHOUSING / STORAGE
Up to 50% Median Income	\$164,000 ¹	\$21.82	\$82.62	\$118.83	\$23.00	\$5.88
50% to 80% Median Income	\$138,000 ¹	\$37.54	\$45.75	\$68.38	\$22.95	\$5.24
80% to 120% Median Income	\$80,000 ²	\$34.58	\$15.46	\$21.42	\$13.32	\$2.81
Total		\$93.94	\$143.83	\$208.63	\$59.27	\$13.92

Notes:

¹ Assumes rental units. Development costs based on average for several recent tax-credit projects in the Napa County and include a mix of 9% and 4% tax credit projects. The gap is calculated assuming average tax credit proceeds for the recent tax credit projects.

² Affordability gap for moderate income households based on ownership units priced at 100% AMI.

³ Calculated by multiplying the number of households in Table II-4 by the affordability gap.

SECTION IV: MATERIALS TO ASSIST IN ADJUSTING FEE LEVELS

The purpose of this section of the report is to provide information to assist County policy makers in updating the housing impact fee program, or setting new fee levels and possibly modifying the existing program in other ways. As indicated at the end of the previous section, the nexus analysis establishes maximum fee levels supported by the analysis. Recognizing a variety of policy objectives, County decision makers may set the fees or other obligations at any level below the maximum and may design program features to meet local goals and objectives.

The materials in this section have nothing to do with establishing the nexus. Instead, this section provides an assembly of materials that help answer questions frequently asked when designing a fee program: How can a fee be selected? How do we evaluate when a fee will slow development activity? What do other jurisdictions do in their programs?

Essentially, a city or county may design a fee program any way it sees fit, as long as the amounts are under the established maximums and as long as there is a rational policy basis. Five building types have been analyzed. Fees may be the same for all building types, fees may be calculated systematically from a formula, or fees may be individually tailored to each building type. In addition, a range of considerations may be brought to bear in designing the program to adapt to local conditions and objectives.

Existing Fee Levels

The existing fee program was adopted in 1993 following a work program guided by an advisory group and a nexus analysis prepared in 1992. The analysis was updated in 2004 by KMA and the fees were subsequently adjusted to their current levels. The Housing Fees for non-residential development projects are as follows:

Office	\$2.00 per square foot
Hotel	\$3.00
Retail	\$2.00
Industrial	\$1.00
Warehouse	\$0.80

(Warehouse is \$1.00 if under 30,000 sq.ft.)

The updated nexus analysis has been prepared as a basis for updating these fee levels and making other revisions to the program.

Thresholds, Exemptions and Geographic Area Variations

Before proceeding to the approaches and considerations for adjusting fee levels, it can be helpful to recall that many programs employ thresholds, exemptions and other measures to adapt programs to specific situations and policy objectives. The existing Napa program does not utilize these tools, with the exception of the threshold applied to warehouse structures over

30,000 square foot. (The inclusionary program for residential construction does employ a minimum threshold.)

Briefly these tools or measures are:

- *Minimum Size Thresholds* – establishing 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 over the threshold.

Thresholds are often employed to minimize costs for infill small 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.

- *Thresholds for Fee Amount Adjustments.* The example of the Napa County's reduced fee on warehouses over 30,000 sq. ft. is a good example. Some jurisdictions apply reduced fees on small projects and higher fees on larger projects.
- *Exemptions for Specific Building Types.* Some programs exempt all buildings owned by non-profit organizations such as churches, hospitals, and schools. A common exemption is child care centers of any kind.
- *Geographic Area Variation.* Some cities exempt areas specifically targeted for growth and new investment. A geographic area variation can also be used to adjust the fee to jurisdictions where there is a broad difference in economic health from one subarea to the next. As a general rule, geographic area variations should be applied to already existing special areas with firm boundaries. Geographic variation for the purpose of fees alone is not advisable.

One possible subarea of Napa County for which different fee levels might be considered is the Napa Valley Business Park, formerly known as the Airport Industrial Area.

Fees as a Percent of Total Development Cost

This approach examines the total development cost associated with each building type and examines fee levels in the context of total costs. With this approach, we can consider the impact of a fee level on how it would relate to the total costs of developing each building type. This approach facilitates an evaluation of whether the amount is likely to affect development decisions.

Even within a County as small as Napa with a limited amount of new construction each year, there is still some range in what might be built for various building types. For retail, for example, there will be service retail built in the Napa Valley Business Park that will probably be modest in amenity and architectural treatment. Freestanding restaurants at key locations, or wineries, may make the building itself part of the attraction and “branding” and spend substantial amounts on

design, construction and landscaping. Compared to large cities where there may be enormous differences in density and how parking is handled (underground garages vs. surface lots), the variations in Napa are still relatively minor.

For Napa County, six non-residential prototype projects were selected for review of total development cost range. The prototypes include four industrial/business park type buildings, a retail structure, and a hotel. In the selection of prototypes, it has been a goal to cover the lower end of the cost range. In all prototypes, costs could be considerably higher. There is none to minimal development activity in hotel or retail in the unincorporated area at this time and given the restrictions in the airport area and elsewhere little is anticipated. The prototypes for retail and hotel represent modest quality projects as might be built within the Napa Valley Business Park or airport area. Retail and hotel projects Upvalley or in more rural locations would likely be far more upscale entailing higher development costs than assumed here.

For each prototype, total site area, building area, number of parking spaces and other key development program components are identified. Then we provide cost estimates for the major cost items — land, sitework, shell construction, tenant improvements, and indirect costs inclusive of all permits and fees. The cost estimates were developed from our firm’s extensive work with real estate projects throughout the Bay Area.

Table V-1 at the end of this section is a two-page chart that presents the cost analysis information. The chart indicates the mid-point of a cost range. Only the total development cost is of concern to the analysis for the purpose of examining fee amounts in context. The conclusions are as follows, with some minor rounding:

Flex Office	\$175-\$250 per sq.ft.
Retail – as in A.I.A.	\$250-\$350 per sq.ft.
Hotel	\$300-\$400 per sq.ft.
Industrial / Office/Flex	\$150-\$200 per sq.ft.
Storage / Warehouse	\$120-150 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% or 3% of costs, we would see the following fee ranges:

	1%	3%
Flex Office	\$1.75-\$2.50 per sq.ft.	\$5.25-\$7.50 per sq.ft.
Retail – as in A.I.A.	\$2.50-\$3.50 per sq.ft.	\$7.50-\$10.50 per sq.ft.
Hotel	\$3.00-\$4.00 per sq.ft.	\$9.00-\$12.00 per sq.ft.
Industrial / Office/Flex	\$1.50-\$2.00 per sq.ft.	\$4.50-\$6.00 per sq.ft.
Storage / Warehouse	\$1.20-\$1.50 per sq.ft.	\$3.60- \$6.00 per sq.ft.

Impact of Fees on Development Decisions

The foregoing discussion about examining fee levels in the context of total development costs has been presented because fees are sometimes accused of pushing up development costs and driving projects to other jurisdictions where costs are lower. It has been our experience as an observer and practitioner of housing impact fees for over twenty years now, that fees at a modest level have virtually no bearing on development decisions. Other factors weigh so much more heavily, the fee component, if moderate, is of relatively little importance in the equation of locational selection.

Moderate level housing fees, in our view, are in the 2 - 3% range or less, relative to total development costs.

Market Context

An important consideration in the selection of fee levels is the relative strength of the various land uses examined in the nexus analysis. As discussed in the 2004 analysis, industrial development is still first and foremost related to the wine industry, with a secondary interest in 'lifestyle branding' companies, those companies capitalizing on Napa Valley's name recognition and reputation. For example, the Made in Napa Valley food manufacturer recently expanded into new industrial space in the Airport Industrial Area.

The recent recovery and growth in the wine industry has fueled strong demand for industrial and warehouse space in the County. According to the North Bay Business Journal, the vacancy rate in the third quarter of 2013 for industrial space was 5.6%. Colliers International reports that 2013 was "one of the strongest in recent memory for the industrial market in... Napa County."² Colliers estimates industrial space vacancy in the fourth quarter of 2013 at 3.8%.

Demand for warehouse space is especially strong; Colliers International estimates that the vacancy rate for warehouse space in Napa County was 1.4% at the end of 2013. The developer of the Metropolitan Van & Storage warehouse, built in 2012, is currently building a second warehouse facility in the Napa Valley Gateway Business Park. The strength of the warehouse market in Napa Valley has attracted a pension fund investor to purchase an 18-acre site near the Napa County Airport with entitlements for wine warehouses. The two-phase project will create 300,000 square feet of new warehouse space. Significant new light-industrial / warehouse space is planned in American Canyon as well.

The strong demand for industrial and warehouse space is fueling new development, with several new warehouse and industrial projects in the development pipeline. Recent companies that have expanded into new industrial and warehouse space includes wine label printers, cork manufacturers, specialty food producers, and storage facilities.

² Colliers International, Research & Forecast Report, Industrial, Q4 2013.

The demand for office space is increasing although vacancy rates are still fairly high. According to the North Bay Business Journal, the vacancy rate for office space in Napa County was 12.7% in the third quarter of 2013. This represents a large improvement, however, as vacancy rates had been as high as 25%. Colliers International estimates an office vacancy in Napa of 19.1%, with Class A Office space vacancy at almost 40%, Class B office at 7.3% and Flex Office at 10.6%, in the fourth quarter of 2013. Colliers speculates that the slow pace of improvement in the office market may be due to structural changes in the economy, including technological changes and generational changes. One such long-term trend is increasing employee density for office space, discussed in Section I of this report. As employee densities increase, the total demand for office space declines. Despite the sluggish recovery, both Phase 2 of the Napa Gateway Project and the Napa Pipe project plan to include new office space in their developments. Within the Airport Area, however, demand for office uses continues to be weak relative to industrial and storage uses.

The rebounding of the wine industry has also fueled improvements in the retail and hotel sectors, although much of the demand for retail is now in downtown Napa. Significant renovations and new retail spaces are underway in the City of Napa, while new retail development outside the incorporated cities is minimal. There are some proposed new retail spaces in the County, however. The plans for Phase 2 of the Napa Gateway Project include 56,048 square feet of retail space and 10,348 square feet of restaurant space, but there appears to be little interest in these development opportunities as the sites are within the industrial area as opposed to on Highway 29. The proposed Napa Pipe project, which includes neighborhood retail space, restaurant space and a Costco, plus a hotel, is a special case as it a large development agreement project that will become part of the City of Napa.

In the 2004 analysis, KMA discussed that businesses locate in Napa because they are 1) related to the wine industry, 2) because they are capitalizing on the Napa Valley lifestyle brand, or 3) because senior management wants to live in Napa. Based on our current market research, one and two still hold true. However, the growth of the wine industry in Napa is such that it increasingly may no longer make financial sense for non- wine/Napa lifestyle related businesses to locate there. In summary, business and industry will still be primarily drawn to Napa for reasons that only Napa can deliver. In that sense, Napa does not compete “head to head” with any of the neighboring county industrial areas. A housing impact fee at any moderate level will not alter this condition, in our opinion.

Other Jurisdiction Housing Linkage Fee Programs

It is always of interest to policy makers to know what other jurisdictions have in place in the way of similar programs. As a generality, these programs are still relatively few in number, although many cities are considering them as a source of revenue for affordable housing, particularly since the end of redevelopment as a source of funds for affordable housing.

Table IV-2 is a three-page chart summarizing the programs in a range of California jurisdictions. The organization of the chart is by geographic area. The first section contains cities and counties in Napa, Sonoma and Marin Counties. The second section contains East Bay jurisdictions and the third section contains San Francisco, San Mateo and Santa Clara Counties.

The fee levels in Napa County are on the low end of the range of fees among its neighbors and the Bay Area as a whole. The jurisdictions with the highest fees tend to be in areas with very strong demand for non-residential space, such as San Francisco and Palo Alto. The jurisdictions with the lower fees tend to be the oldest programs, and in cities with a large volume of construction, such as San Diego and Sacramento. Most new programs adopt fees in the middle of the range.

The chart also provides information on a number of program features in addition to the fee amount.

Summary

This section of the report has provided materials to assist in deliberating a range of options for updating the fee levels on the five building types. All fee levels likely to be considered are well below the “total nexus cost” maximums established by the analysis.

The experience of other jurisdictions is often a powerful influence in approaching fee programs. The chart on other jurisdictions points to other places in the North Bay that have fees, such as Marin County and Petaluma. Marin County’s fees range from \$1.94 per square foot for warehouse space to \$7.19 per square foot for Office space. Petaluma’s fees are lower, at \$2.08 for office space up to \$3.59 for retail space.

In our judgment, fee levels should be sensitive to market strength. The stronger the market, the higher the fees can be without altering decisions about where to build. Strong market conditions are reflected in land values. In this context, the less expensive locations in Napa County fall into a lower to mid range – far lower than Silicon Valley and San Francisco, and by and large, below the jurisdictions that have fees in the mid range or \$4-\$9 per square foot at the top. All of this would suggest to us that Napa County should consider fees at the high end of the low tier. Given the wide disparity among the building types in Napa County, particularly between the very large warehouse/storage uses and the upscale wineries, we would suggest fee ranges for consideration bracketed as follows:

Office	\$2.50 to \$5.00
Retail/Restaurant	\$2.50 to \$5.00
Hotel	\$4.00 to \$6.00
Industrial/Manufacturing	\$2.00 to \$3.00
Warehousing/Storage	\$1.50 to \$2.00

The suggested fee range is under 2.0% of total development costs in most cases.

Finally, policy makers are quite free to consider each fee independently and bring to bear other policy aspects that may not be addressed in this summary.

We believe that there is no single best approach to selecting fees beyond careful consideration of local policies and goals, and, of course, fairness to those affected.

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**TABLE IV-1
DEVELOPMENT PROTOTYPES
JOBS HOUSING NEXUS ANALYSIS UPDATE
NAPA COUNTY, CA**

WORKING DRAFT

	<u>Prototype 1</u>		<u>Prototype 2</u>		<u>Prototype 3</u>	
	Flex Office		Retail		Hotel / Conference	
<u>Project Description</u>¹						
Site Size (Acres)		2.30		1.00		4.40
Floor Area Ratio (FAR)		0.25		0.25		0.35
Gross Building Area (GBA)		25,000		11,000		67,000
Number of Stories		2		1		3
Number of Rooms		N/A		N/A		100
Parking Spaces		100		60		100
Parking Ratio (per 1,000 SF)		4.0		5.0	Spaces Per Room	1.0
Type		Surface		Surface		Surface
<u>Development Costs</u>						
Land	\$6.5 /SF	\$651,000	\$12 /SF	\$523,000	\$30,000 /Room	\$3,000,000
Sitework / Amenities	\$5 /Land SF	\$501,000	\$6 /Land SF	\$261,000	\$8 /Land SF	\$1,533,000
Parking	\$2,000 /Space	\$200,000	\$2,000 /Space	\$120,000	\$3,500 /Space	\$350,000
Shell Construction	\$80 /SF GBA	\$2,000,000	\$135 /SF GBA	\$1,485,000	\$100,000 /Room	\$10,000,000
Tenant Improvements/FF&E	\$30 /SF GBA	<u>\$750,000</u>	\$30 /SF GBA	<u>\$330,000</u>	\$25,000 Per Room	<u>\$2,500,000</u>
Subtotal, Direct Costs	\$138 /SF GBA	\$3,451,000	\$200 /SF GBA	\$2,196,000	\$215 /SF GBA	\$14,383,000
Add: Indirects/Financing	35% of Directs	\$1,208,000	30% of Directs	\$659,000	35% of Directs	\$5,034,000
Total Development Costs	\$212 /SF GBA	\$5,310,000	\$307 /SF GBA	\$3,378,000	\$335 /SF GBA	\$22,417,000

1. Project Description Based On:

Made in Napa Valley
Condominium Flex Office

2004 analysis

Napa Gateway Plaza Marriott

**TABLE IV-1
DEVELOPMENT PROTOTYPES
JOBS HOUSING NEXUS ANALYSIS UPDATE
NAPA COUNTY, CA**

WORKING DRAFT

	Prototype 4		Prototype 5		Prototype 6	
	Storage / Office		Warehouse / Office		Industrial / Office	
<u>Project Description</u>¹						
Site Size (Acres)	6.00		3.40		3.00	
Floor Area Ratio (FAR)	0.40		0.33		0.35	
Gross Building Area (GBA)	105,000 *		49,000 *		46,000	
Number of Stories	1		1 +		1+	
Number of Rooms	N/A		N/A		N/A	
Parking Spaces	51		65		90	
Parking Ratio (per 1,000 SF)	0.5 **		1.3		2.0	
Type	Surface		Surface		Surface	
	* includes 12,000 sf of office space.		* includes 6,200 sf of office space.			
	** Site accommodates 106 spaces; only 51 required for current use.					
<u>Development Costs</u>						
Land	\$6 / Land SF	\$1,568,000	\$8.5 /SF	\$1,259,000	\$8.5 /SF	\$1,111,000
Sitework / Amenities	\$5 /Land SF	\$1,307,000	\$5 /Land SF	\$741,000	\$5 /Land SF	\$653,000
Parking	\$2,000 /Space	\$102,000	\$2,000 /Space	\$130,000	\$2,000 /Space	\$180,000
Shell Construction	\$75 /SF GBA	\$7,875,000	\$80 /SF GBA	\$3,920,000	\$80 /SF GBA	\$3,680,000
Tenant Improvements/FF&E	\$20 /SF GBA	<u>\$2,100,000</u>	\$20 /SF GBA	<u>\$980,000</u>	\$25 /SF GBA	<u>\$1,150,000</u>
Subtotal, Direct Costs	\$108 /SF GBA	\$11,384,000	\$118 /SF GBA	\$5,771,000	\$123 /SF GBA	\$5,663,000
Add: Indirects/Financing	30% of Directs	\$3,415,000	30% of Directs	\$1,731,000	30% of Directs	\$1,699,000
Total Development Costs	\$156 /SF GBA	\$16,367,000	\$179 /SF GBA	\$8,761,000	\$184 /SF GBA	\$8,473,000

1. Project Description Based On:

Metropolitan Storage

Amorim Cork
Highway 29 Frontage

Made in Napa Valley
Highway 29 Frontage

**TABLE IV-2
COMPARISON OF JOBS HOUSING LINKAGE FEE PROGRAMS, BAY AREA
JOBS-HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

Jurisdiction	Yr. Adopted /Updated	Current Fee Levels per SF	Thresholds & Exemptions	Build Option/ Other	Market Strength	Comments
MARIN, NAPA, SONOMA						
County of Marin Population: 71,00	2003	<ul style="list-style-type: none"> Office/R&D \$7.19 Retail/Rest. \$5.40 Warehouse \$1.94 Hotel/Motel \$1,745/room Manufacturing \$3.74 	No minimum threshold	Yes, preferred.	Substantial	
Town of Corte Madera Population: 9,816	2001	<ul style="list-style-type: none"> Office \$4.79 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 	No minimum threshold	N/A	Substantial	
City of St. Helena Population: 6,010	2004	<ul style="list-style-type: none"> Office \$4.11 Comm./Retail \$5.21 Hotel \$3.80 Winery/Industrial \$1.26 	Small childcare facilities, churches, non-profits, vineyards, and public facilities are exempt.	Yes, subject to City Council approval.	Substantial	
City of Petaluma Population: 58,401	2003	<ul style="list-style-type: none"> Commercial \$2.08 Industrial \$2.15 Retail \$3.59 	Schools and churches exempt	NA	Moderate/ Substantial	Fee adjusted annually by ENR construction cost index.
County of Sonoma Population: 155,031	2005	<ul style="list-style-type: none"> Office \$2.52 Hotel \$2.52 Retail \$4.37 Industrial \$2.61 R&D Ag Processing \$2.61 	First 2,000 SF exempt Non-profits, redevelopment areas exempt	Yes. Program specifies number of units per 1,000 SF.	Moderate	Fee adjusted annually by ENR construction cost index.
City of Cotati Population: 7,476	2006	<ul style="list-style-type: none"> Commercial \$2.08 Industrial \$2.15 Retail \$3.59 	First 2,000 SF exempt Non-profits exempt.	Yes. Program specifies number of units per 1,000 SF	Moderate	Fee adjusted annually by ENR construction cost index.
County of Napa Population: 28,653	Updated 2004	<ul style="list-style-type: none"> Office \$2.00 Hotel \$3.00 Retail \$2.00 Industrial \$1.00 Warehouse \$0.80 	No minimum threshold Non-profits are exempt	Units or land dedication; on a case by case basis.	Moderate/ Substantial	
City of Napa Population: 78,791	1999	<ul style="list-style-type: none"> Office \$1.00 Hotel \$1.40 Retail \$0.80 Industrial & Wine Pdn & small Warehouse \$0.50 Warehouse (30-100K) \$0.30 Warehouse (100K+) \$0.20 	No minimum threshold Non-profits are exempt	Units or land dedication; on a case by case basis.	Moderate/ Substantial	Fee has not changed since 1999.

Note: This chart has been assembled to present an overview, and as a result, terms are simplified. 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 IV-2
COMPARISON OF JOBS HOUSING LINKAGE FEE PROGRAMS, BAY AREA
JOBS-HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

Jurisdiction	Yr. Adopted /Updated	Current Fee Levels per SF	Thresholds & Exemptions	Build Option/ Other	Market Strength	Comments
SAN FRANCISCO, PENINSULA, SANTA CLARA COUNTY						
City and County of San Francisco Population: 789,000	1981 Updated fees in 2002, 07	<ul style="list-style-type: none"> Office \$22.06 Hotel \$16.52 Retail & Entertainment \$20.58 R&D \$14.70 Integrated PDR \$17.34 Small Enterprise Workspace \$17.34 	Exempt: freestanding retail < 50,000 SF; grocery < 75,000 Increase by 25,000 gsf or more of any combination of entertainment, hotel, Integrated PDR, office, research and development, retail, and/or Small Enterprise Workspace.	Yes, may contribute land for housing.	Very Substantial	Fee is adjusted annually based on the construction cost increases.
City of Palo Alto Population: 62,000	1984 Updated in March 2002	<ul style="list-style-type: none"> Nonresidential Development \$18.44 	Churches; colleges and universities; commercial recreation; hospitals, convalescent facilities; private clubs, lodges, fraternal organizations, private educational facilities, day care and nursery school, public facilities are exempt	Yes	Very Substantial	Fee is adjusted annually based on CPI.
City of Menlo Park Population: 31,000	1998	<ul style="list-style-type: none"> Office & R&D \$14.92 All other commercial and industrial \$8.10. 	10,000 gross SF threshold Churches, private clubs, lodges, fraternal orgs, public facilities and projects with few or no employees are exempt.	Yes, preferred. May provide housing on- or off-site.	Very Substantial	Fee is adjusted annually based on CPI.
City of Sunnyvale Population: 136,000	1984 Updated in 2003. Under review.	<ul style="list-style-type: none"> Industrial & Office \$9.27 	Applies only to the portion of the project that is in excess of allowable FAR (typically 0.35:1).	N/A	Very Substantial	
City of Mountain View Population: 73,000	Updated 2002	<ul style="list-style-type: none"> Office/High Tech/Industrial \$10.00 Hotel/Retail/Entertainment \$2.47 	Fee is 50% on building area under thresholds: Office <10,000 SF Hotel <25,000 SF Retail <25,000 SF	Yes	Very Substantial	Fee is adjusted annually based on CPI.
City of Cupertino Population: 56,000	1993	<ul style="list-style-type: none"> Office/Industrial/Hotel/Retail/R&D: \$5.56 Planned Industrial Park Zones: \$2.53 	No minimum threshold.	N/A	Very Substantial	Fee is adjusted annually based on CPI.

Note: This chart has been assembled to present an overview, and as a result, terms are simplified. 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 IV-2
COMPARISON OF JOBS HOUSING LINKAGE FEE PROGRAMS, BAY AREA
JOBS-HOUSING NEXUS ANALYSIS UPDATE
COUNTY OF NAPA, CA**

Jurisdiction	Yr. Adopted /Updated	Current Fee Levels per SF	Thresholds & Exemptions	Build Option/ Other	Market Strength	Comments
EAST BAY						
City of Walnut Creek Population: 66,584	2005	<ul style="list-style-type: none"> Office, retail, hotel and medical \$5.00 	First 500 SF no fee applied.	Yes	Very Substantial	Reviewed every five years.
City of Oakland Population: 430,666	2002	<ul style="list-style-type: none"> Office/ Warehouse \$4.00 	25,000 SF exemption	Yes - Can build units equal to total eligible SF times .0004	Moderate	Fee due in 3 installments. Fee adjusted with an annual escalator tied to residential construction cost increases.
City of Berkeley Population: 108,119	1993	<ul style="list-style-type: none"> All Commercial \$4.00 Industrial \$2.00 	7,500 SF threshold.	Yes	Substantial	Fee has not changed since 1993; may negotiate fee downward based on hardship or reduced impact.
City of Alameda Population: 75,000	1989	<ul style="list-style-type: none"> Office \$3.63 Retail \$1.84 Warehouse \$0.63 Hotel/Motel \$931 per room 	No minimum threshold	Yes. Program specifies # of units per 100,000 SF	Moderate	Fee may be adjusted by CPI.
City of Pleasanton Population: 71,000		<ul style="list-style-type: none"> Commercial, Office & Industrial \$2.57 	No minimum threshold	N/A	Moderate	Fee adjusted annually.
City of Livermore Population: 85,000	1999	<ul style="list-style-type: none"> Retail \$0.90 Service Retail \$0.678 Office \$0.579 Hotel \$442 per room Manufacturing \$0.277 Warehouse \$0.08 Business Park \$0.574 Heavy Industrial \$0.2 Light Industrial \$0.18 	No minimum threshold Church; private or public schools.	Yes; negotiated on a case-by-case basis.	Moderate	

Note: This chart has been assembled to present an overview, and as a result, terms are simplified. 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.

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

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This appendix provides a discussion of various specific factors and assumptions in relation to the nexus concept to supplement the overview provided in Section I.

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

The County of Napa, in its Housing Element, has clearly documented that the housing needs of existing lower income households are not being met. This existing housing shortage, especially at the lowest income levels, is manifested in numerous ways such as payment of far more than 30% of income for rent as set forth in federal and state guidelines, overcrowding, and other factors that are extensively documented by the Census and other reports.

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 of new households where an employee works in a new workplace building.

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 in the county were experiencing significant long term vacancy levels, particularly in affordable units, then the need for new units would be questionable.

Substitution Factor

Any given new building in Napa County may be occupied partly or even perhaps totally, by employees relocating from elsewhere in the county. 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 of the new buildings themselves.

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. Finally, 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. 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 chooses 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.

Changes in Labor Force Participation

In the 1960s through the 1980s, there were significant increases in labor force participation, primarily among women. As a result, some of the new workers were reentering the labor force and already had local housing, thus reducing demand for housing associated with job growth. In earlier nexus analyses, KMA would adjust the analysis to account for this. However, increases in participation rates by women have stabilized and even declined slightly and labor force participation rates for men have been on a downward trajectory since 1970. As such, an adjustment for increase in labor force participation is no longer warranted in a nexus analysis.

Commuting

Workers in Napa County commute from throughout the Bay Area. Nexus analyses sometimes make a downward adjustment based on commuting; in 2004, the nexus analysis was adjusted to reflect the fact that 74% of the jobs in Napa County were held by residents of Napa County. A commute adjustment reduces the findings based on an assumed portion of housing needs satisfied by other jurisdictions. Such an adjustment is not required for nexus purposes, however and KMA does not include commute adjustments in our current analyses; all housing demand generated by a project is included in the nexus. No adjustment for commuting has been reflected in the analysis.

Non-Duplication: Residential and Non-Residential Fees

Napa County also has an Affordable Housing Impact fee for residential development, supported by a nexus analysis based upon a similar analytical framework as this jobs-housing nexus analysis. Under certain circumstances the two analyses could count some of the same jobs. KMA has conducted an analysis of potential double-counting of jobs; this analysis is contained in Appendix D and it concludes that no double-counting would occur, even if the non-residential fees increase to \$5.00 per square foot.

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, current 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, though, 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 time, 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 from a larger percentage of the workforce and increase the cost of delivering affordable units.

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APPENDIX B: SUPPORTING TECHNICAL TABLES

	Household Size					
	1-person	2-person	3-person	4-person	5-person	6 + person
Household Income Limit						
Very Low (50% AMI)	\$30,150	\$34,450	\$38,750	\$43,050	\$46,500	\$49,950
Low (80% of AMI)	\$46,050	\$52,600	\$59,200	\$65,750	\$71,050	\$76,300
Moderate (120% of AMI)	\$72,300	\$82,650	\$92,950	\$103,300	\$111,550	\$119,850
Median (100% of AMI)	\$60,250	\$68,900	\$77,500	\$86,100	\$93,000	\$99,900

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AMI = Area Median Income

Source: California Department of Housing and Community Development FY 2013 Income Limits for Napa County.

**APPENDIX B TABLE 2
 2012 NATIONAL OFFICE WORKER DISTRIBUTION BY OCCUPATION
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA CA**

DRAFT - for Internal Review Only

Major Occupations (2% or more)	2012 National Office Industry Occupation Distribution	
Management Occupations	1,134,447	9.1%
Business and Financial Operations Occupations	2,149,767	17.3%
Computer and Mathematical Occupations	1,106,320	8.9%
Architecture and Engineering Occupations	784,690	6.3%
Life, Physical, and Social Science Occupations	270,874	2.2%
Legal Occupations	481,043	3.9%
Sales and Related Occupations	1,315,822	10.6%
Office and Administrative Support Occupations	3,667,583	29.4%
Installation, Maintenance, and Repair Occupations	393,682	3.2%
All Other Office Occupations	<u>1,150,171</u>	<u>9.2%</u>
INDUSTRY TOTAL	12,454,399	100.0%

*Industries weighted to reflect Napa County industry mix.

APPENDIX B TABLE 3
 AVERAGE ANNUAL COMPENSATION, 2013
 OFFICE WORKER OCCUPATIONS
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA CA

DRAFT - for Internal Review Only

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Office Workers</u>
Page 1 of 3			
<i>Management Occupations</i>			
Chief Executives	\$209,400	4.5%	0.4%
General and Operations Managers	\$117,400	24.9%	2.3%
Marketing Managers	\$152,100	5.4%	0.5%
Sales Managers	\$118,800	5.8%	0.5%
Administrative Services Managers	\$88,600	4.2%	0.4%
Computer and Information Systems Managers	\$137,500	9.3%	0.8%
Financial Managers	\$128,300	17.1%	1.6%
Architectural and Engineering Managers	\$145,200	5.3%	0.5%
Property, Real Estate, and Community Association Managers	\$59,300	12.8%	1.2%
Managers, All Other	\$105,300	5.9%	0.5%
All Other Management Occupations (Avg. All Categories)	<u>\$113,000</u>	<u>4.8%</u>	<u>0.4%</u>
	Weighted Mean Annual Wage	100.0%	9.1%
<i>Business and Financial Operations Occupations</i>			
Claims Adjusters, Examiners, and Investigators	\$73,000 ⁴	8.2%	1.4%
Management Analysts	\$84,100	11.2%	1.9%
Market Research Analysts and Marketing Specialists	\$77,800	6.9%	1.2%
Business Operations Specialists, All Other	\$73,800	8.7%	1.5%
Accountants and Auditors	\$77,500	22.8%	3.9%
Financial Analysts	\$113,700	4.7%	0.8%
Personal Financial Advisors	\$89,800	4.4%	0.8%
Loan Officers	\$99,900	6.8%	1.2%
All Other Business and Financial Operations (Avg. All Categories)	<u>\$72,700</u>	<u>26.3%</u>	<u>4.5%</u>
	Weighted Mean Annual Wage	100.0%	17.3%
<i>Computer and Mathematical Occupations</i>			
Computer Systems Analysts	\$78,900	14.9%	1.3%
Computer Programmers	\$83,800	9.2%	0.8%
Software Developers, Applications	\$88,200	18.8%	1.7%
Software Developers, Systems Software	\$95,100	11.4%	1.0%
Network and Computer Systems Administrators	\$78,500	8.7%	0.8%
Computer User Support Specialists	\$55,100	11.3%	1.0%
All Other Computer and Mathematical Occupations (Avg. All Categories)	<u>\$75,100</u>	<u>25.7%</u>	<u>2.3%</u>
	Weighted Mean Annual Wage	100.0%	8.9%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Office Workers</u>
Page 2 of 3			
<i>Architecture and Engineering Occupations</i>			
Architects, Except Landscape and Naval	\$95,000	8.6%	0.5%
Civil Engineers	\$90,100	16.8%	1.1%
Electrical Engineers	\$91,500	5.8%	0.4%
Industrial Engineers	\$100,500	4.1%	0.3%
Mechanical Engineers	\$87,600	8.0%	0.5%
Architectural and Civil Drafters	\$46,000	7.8%	0.5%
All Other Architecture and Engineering Occupations (Avg. All Categories)	<u>\$80,800</u>	<u>48.9%</u>	<u>3.1%</u>
Weighted Mean Annual Wage	\$82,800	100.0%	6.3%
<i>Life, Physical, and Social Science Occupations</i>			
Medical Scientists, Except Epidemiologists	\$113,600	9.6%	0.2%
Chemists	\$70,500	9.0%	0.2%
Environmental Scientists and Specialists, Including Health	\$72,700	12.5%	0.3%
Geoscientists, Except Hydrologists and Geographers	\$120,500 ⁴	4.9%	0.1%
Biological Technicians	\$46,700	6.0%	0.1%
Chemical Technicians	\$45,500	7.7%	0.2%
Environmental Science and Protection Technicians, Including Health	\$45,900	5.3%	0.1%
All Other Life, Physical, and Social Science Occupations (Avg. All Categories)	<u>\$77,900</u>	<u>44.8%</u>	<u>1.0%</u>
Weighted Mean Annual Wage	\$76,000	100.0%	2.2%
<i>Legal Occupations</i>			
Lawyers	\$92,900	60.4%	2.3%
Paralegals and Legal Assistants	\$48,800	31.3%	1.2%
Title Examiners, Abstractors, and Searchers	\$48,800 ⁵	5.7%	0.2%
All Other Legal Occupations (Avg. All Categories)	<u>\$71,600</u>	<u>2.5%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$76,000	100.0%	3.9%
<i>Sales and Related Occupations</i>			
Counter and Rental Clerks	\$32,100	9.7%	1.0%
Insurance Sales Agents	\$65,900	36.1%	3.8%
Securities, Commodities, and Financial Services Sales Agents	\$101,200	18.5%	2.0%
Sales Representatives, Services, All Other	\$67,400	9.2%	1.0%
Real Estate Sales Agents	\$98,800	5.3%	0.6%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$43,100</u>	<u>21.2%</u>	<u>2.2%</u>
Weighted Mean Annual Wage	\$66,200	100.0%	10.6%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Office Workers</u>
Page 3 of 3			
<i>Office and Administrative Support Occupations</i>			
First-Line Supervisors of Office and Administrative Support Workers	\$55,000	7.2%	2.1%
Bookkeeping, Accounting, and Auditing Clerks	\$47,400	8.3%	2.5%
Tellers	\$30,300	13.5%	4.0%
Customer Service Representatives	\$52,800	14.9%	4.4%
Executive Secretaries and Executive Administrative Assistants	\$56,600	4.3%	1.3%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$41,400	9.5%	2.8%
Insurance Claims and Policy Processing Clerks	\$40,900	5.7%	1.7%
Office Clerks, General	\$35,600	10.9%	3.2%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$40,900</u>	<u>25.6%</u>	<u>7.5%</u>
Weighted Mean Annual Wage	\$42,900	100.0%	29.4%
<i>Installation, Maintenance, and Repair Occupations</i>			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,000	6.6%	0.2%
Maintenance and Repair Workers, General	\$47,800	83.2%	2.6%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>10.2%</u>	<u>0.3%</u>
Weighted Mean Annual Wage	\$49,700	100.0%	3.2%
Weighted Average Annual Wage - All Occupations	\$69,000		90.8%

¹ Including occupations representing 4% or more of the major occupation group.

² 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.

³ Occupation percentages are based on the 2012 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2012 Occupational Employment Survey data applicable to Napa County updated by the California Employment Development Department to 2013 wage levels.

⁴ California Employment Development Department wage estimates not available for this occupation for Napa County. Wages estimated based on EDD data for Alameda & Contra Costa Counties.

⁵ Wage data not available for this occupation for Napa County or Alameda/Contra Costa Counties. Wages estimated based on wage data for similar occupation in Napa County.

**APPENDIX B TABLE 4
 2012 NATIONAL HOTEL WORKER DISTRIBUTION BY OCCUPATION
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA, CA**

DRAFT - for Internal Review Only

Major Occupations (2% or more)	2012 National Hotel Occupation Distribution (1)	
Management Occupations	66,890	4.5%
Food Preparation and Serving Related Occupations	364,910	24.7%
Building and Grounds Cleaning and Maintenance Occupations	471,690	32.0%
Personal Care and Service Occupations	58,770	4.0%
Sales and Related Occupations	30,710	2.1%
Office and Administrative Support Occupations	298,170	20.2%
Installation, Maintenance, and Repair Occupations	74,180	5.0%
Production Occupations	31,090	2.1%
All Other Hotel Related Occupations	<u>79,550</u>	<u>5.4%</u>
INDUSTRY TOTAL	1,475,960	100.0%

Notes

(1) Excludes casino hotels

APPENDIX B TABLE 5
AVERAGE ANNUAL COMPENSATION, 2013
HOTEL WORKER OCCUPATIONS
JOBS HOUSING NEXUS ANALYSIS
COUNTY OF NAPA, CA

DRAFT - for Internal Review Only

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Hotel Workers</u>
<i>Page 1 of 2</i>			
<i>Management Occupations</i>			
General and Operations Managers	\$117,400	21.4%	1.0%
Sales Managers	\$118,800	9.9%	0.4%
Administrative Services Managers	\$88,600	4.0%	0.2%
Financial Managers	\$128,300	4.3%	0.2%
Food Service Managers	\$67,700	11.6%	0.5%
Lodging Managers	\$57,700	39.2%	1.8%
All Other Management Occupations (Avg. All Categories)	<u>\$113,000</u>	<u>9.6%</u>	<u>0.4%</u>
Weighted Mean Annual Wage	\$87,200	100.0%	4.5%
<i>Food Preparation and Serving Related Occupations</i>			
First-Line Supervisors of Food Preparation and Serving Workers	\$40,300	5.1%	1.3%
Cooks, Restaurant	\$29,700	13.4%	3.3%
Bartenders	\$27,100	8.0%	2.0%
Waiters and Waitresses	\$23,800	29.6%	7.3%
Food Servers, Nonrestaurant	\$30,800	8.8%	2.2%
Dining Room and Cafeteria Attendants and Bartender Helpers	\$20,400	9.5%	2.4%
Dishwashers	\$21,600	6.5%	1.6%
All Other Food Preparation and Serving Occupations (Avg. All Categories)	<u>\$25,400</u>	<u>19.1%</u>	<u>4.7%</u>
Weighted Mean Annual Wage	\$26,100	100.0%	24.7%
<i>Building and Grounds Cleaning and Maintenance Occupations</i>			
First-Line Supervisors of Housekeeping and Janitorial Workers	\$43,300	5.9%	1.9%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	\$31,000	6.4%	2.0%
Maids and Housekeeping Cleaners	\$25,200	84.8%	27.1%
All Other Building and Grounds Occupations (Avg. All Categories)	<u>\$31,300</u>	<u>3.0%</u>	<u>1.0%</u>
Weighted Mean Annual Wage	\$26,800	100.0%	32.0%
<i>Personal Care and Service Occupations</i>			
First-Line Supervisors of Personal Service Workers	\$49,700	4.1%	0.2%
Amusement and Recreation Attendants	\$22,700	15.2%	0.6%
Baggage Porters and Bellhops	\$21,600	35.1%	1.4%
Concierges	\$31,400	18.1%	0.7%
Recreation Workers	\$22,000	9.6%	0.4%
All Other Personal Care and Service Occupations (Avg. All Categories)	<u>\$28,900</u>	<u>17.9%</u>	<u>0.7%</u>
Weighted Mean Annual Wage	\$26,000	100.0%	4.0%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Hotel Workers</u>
Page 2 of 2			
<i>Sales and Related Occupations</i>			
First-Line Supervisors of Retail Sales Workers	\$43,800	4.0%	0.1%
Cashiers	\$26,300	27.9%	0.6%
Retail Salespersons	\$29,800	13.8%	0.3%
Sales Representatives, Services, All Other	\$67,400	42.6%	0.9%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$43,100</u>	<u>11.6%</u>	<u>0.2%</u>
Weighted Mean Annual Wage	\$47,000	100.0%	2.1%
<i>Office and Administrative Support Occupations</i>			
First-Line Supervisors of Office and Administrative Support Workers	\$55,000	7.3%	1.5%
Bookkeeping, Accounting, and Auditing Clerks	\$47,400	5.6%	1.1%
Hotel, Motel, and Resort Desk Clerks	\$25,100	71.1%	14.4%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$40,900</u>	<u>16.0%</u>	<u>3.2%</u>
Weighted Mean Annual Wage	\$31,100	100.0%	20.2%
<i>Installation, Maintenance, and Repair Occupations</i>			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,000	7.9%	0.4%
Maintenance and Repair Workers, General	\$47,800	89.6%	4.5%
All Other Installation, Maint., and Repair Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>2.5%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$49,900	92.1%	4.6%
<i>Production Occupations</i>			
Bakers	\$26,200	6.2%	0.1%
Laundry and Dry-Cleaning Workers	\$25,800	86.7%	1.8%
All Other Production Occupations (Avg. All Categories)	<u>\$37,800</u>	<u>7.1%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$26,700	100.0%	2.1%
Weighted Average Annual Wage - All Occupations	\$32,000		94.6%

¹ Including occupations representing 4% or more of the major occupation group.

² 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.

³ Occupation percentages are based on the 2012 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2012 Occupational Employment Survey data applicable to Napa County updated by the California Employment Development Department to 2013 wage levels.

**APPENDIX B TABLE 6
 2012 NATIONAL RETAIL WORKER DISTRIBUTION BY OCCUPATION
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA, CA**

DRAFT - for Internal Review Only

Major Occupations (2% or more)	2012 National Retail Industry Occupation Distribution	
Management Occupations	519,972	2.2%
Food Preparation and Serving Related Occupations	10,654,786	45.5%
Personal Care and Service Occupations	1,132,604	4.8%
Sales and Related Occupations	5,836,877	24.9%
Office and Administrative Support Occupations	1,894,592	8.1%
Installation, Maintenance, and Repair Occupations	815,792	3.5%
Production Occupations	540,040	2.3%
Transportation and Material Moving Occupations	1,173,536	5.0%
All Other Retail Occupations	<u>831,738</u>	<u>3.6%</u>
INDUSTRY TOTAL	23,399,937	100.0%

Industries weighted to reflect Napa County industry mix.

APPENDIX B TABLE 7
AVERAGE ANNUAL COMPENSATION, 2013
RETAIL WORKER OCCUPATIONS
JOBS HOUSING NEXUS ANALYSIS
COUNTY OF NAPA, CA

DRAFT - for Internal Review Only

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Retail Workers</u>
Page 1 of 2			
<i>Management Occupations</i>			
General and Operations Managers	\$117,400	47.2%	1.0%
Sales Managers	\$118,800	8.7%	0.2%
Food Service Managers	\$67,700	33.0%	0.7%
All Other Management Occupations (Avg. All Categories)	<u>\$113,000</u>	<u>11.1%</u>	<u>0.2%</u>
	Weighted Mean Annual Wage	100.0%	2.2%
<i>Food Preparation and Serving Related Occupations</i>			
First-Line Supervisors of Food Preparation and Serving Workers	\$40,300	7.1%	3.2%
Cooks, Fast Food	\$20,800	5.4%	2.4%
Cooks, Restaurant	\$29,700	9.7%	4.4%
Food Preparation Workers	\$25,600	6.3%	2.9%
Combined Food Preparation and Serving Workers, Including Fast Food	\$21,900	29.0%	13.2%
Waiters and Waitresses	\$23,800	21.8%	9.9%
Dishwashers	\$21,600	4.5%	2.0%
All Other Food Preparation and Serving Related Occupations (Avg. All Categories)	<u>\$25,400</u>	<u>16.3%</u>	<u>7.4%</u>
	Weighted Mean Annual Wage	100.0%	45.5%
<i>Personal Care and Service Occupations</i>			
Nonfarm Animal Caretakers	\$26,800	5.1%	0.2%
Hairdressers, Hairstylists, and Cosmetologists	\$29,500 ⁴	59.2%	2.9%
Manicurists and Pedicurists	\$21,200	11.0%	0.5%
Skincare Specialists	\$34,100	4.2%	0.2%
All Other Personal Care and Service Occupations (Avg. All Categories)	<u>\$28,900</u>	<u>20.5%</u>	<u>1.0%</u>
	Weighted Mean Annual Wage	100.0%	4.8%
<i>Sales and Related Occupations</i>			
First-Line Supervisors of Retail Sales Workers	\$43,800	12.4%	3.1%
Cashiers	\$26,300	40.2%	10.0%
Counter and Rental Clerks	\$32,100	4.2%	1.0%
Retail Salespersons	\$29,800	38.9%	9.7%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$43,100</u>	<u>4.3%</u>	<u>1.1%</u>
	Weighted Mean Annual Wage	100.0%	24.9%
<i>Office and Administrative Support Occupations</i>			
First-Line Supervisors of Office and Administrative Support Workers	\$55,000	5.3%	0.4%
Bookkeeping, Accounting, and Auditing Clerks	\$47,400	8.3%	0.7%
Customer Service Representatives	\$52,800	10.6%	0.9%
Receptionists and Information Clerks	\$33,200	7.3%	0.6%
Shipping, Receiving, and Traffic Clerks	\$37,700	4.2%	0.3%
Stock Clerks and Order Fillers	\$27,800	40.7%	3.3%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$41,400	4.8%	0.4%
Office Clerks, General	\$35,600	10.7%	0.9%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$40,900</u>	<u>8.2%</u>	<u>0.7%</u>
	Weighted Mean Annual Wage	100.0%	8.1%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Retail Workers</u>
Page 2 of 2			
<i>Installation, Maintenance, and Repair Occupations</i>			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,000	8.3%	0.3%
Automotive Body and Related Repairers	\$49,000	12.0%	0.4%
Automotive Service Technicians and Mechanics	\$45,300	42.0%	1.5%
Tire Repairers and Changers	\$31,000	5.1%	0.2%
Maintenance and Repair Workers, General	\$47,800	5.6%	0.2%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>26.9%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$48,800	100.0%	3.5%
<i>Production Occupations</i>			
First-Line Supervisors of Production and Operating Workers	\$65,600	6.8%	0.2%
Bakers	\$26,200	17.7%	0.4%
Butchers and Meat Cutters	\$36,100	27.4%	0.6%
Meat, Poultry, and Fish Cutters and Trimmers	\$29,200 ⁴	6.0%	0.1%
Laundry and Dry-Cleaning Workers	\$25,800	10.7%	0.2%
Pressers, Textile, Garment, and Related Materials	\$24,600	4.2%	0.1%
Painters, Transportation Equipment	\$46,800	4.0%	0.1%
All Other Production Occupations (Avg. All Categories)	<u>\$37,800</u>	<u>23.2%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$35,200	100.0%	2.3%
<i>Transportation and Material Moving Occupations</i>			
Driver/Sales Workers	\$33,000	17.3%	0.9%
Light Truck or Delivery Services Drivers	\$34,800	15.5%	0.8%
Service Station Attendants	\$23,500 ⁴	4.6%	0.2%
Cleaners of Vehicles and Equipment	\$24,100	12.7%	0.6%
Laborers and Freight, Stock, and Material Movers, Hand	\$28,400	17.3%	0.9%
Packers and Packagers, Hand	\$24,000	17.2%	0.9%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$34,000</u>	<u>15.4%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$29,500	100.0%	5.0%
Weighted Average Annual Wage - All Occupations	\$31,000		96.4%

¹ Including occupations representing 4% or more of the major occupation group.

² 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.

³ Occupation percentages are based on the 2012 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2012 Occupational Employment Survey data applicable to Napa County updated by the California Employment Development Department to 2013 wage levels.

⁴ California Employment Development Department wage estimates not available for this occupation for Napa County. Wages estimated based on EDD data for Alameda & Contra Costa Counties.

APPENDIX B TABLE 8

2012 NATIONAL MANUFACTURING WORKER DISTRIBUTION BY OCCUPATION

JOBS HOUSING NEXUS ANALYSIS

DRAFT - for Internal Review Only

COUNTY OF NAPA, CA

Major Occupations (2% or more)	2012 National Manufacturing Industry Occupation Distribution	
Management Occupations	225,873	5.0%
Business and Financial Operations Occupations	104,657	2.3%
Food Preparation and Serving Related Occupations	133,224	2.9%
Sales and Related Occupations	540,286	11.9%
Office and Administrative Support Occupations	444,580	9.8%
Farming, Fishing, and Forestry Occupations	106,283	2.3%
Construction and Extraction Occupations	150,435	3.3%
Installation, Maintenance, and Repair Occupations	368,364	8.1%
Production Occupations	1,357,136	29.8%
Transportation and Material Moving Occupations	916,863	20.2%
All Other Manufacturing Occupations	<u>201,006</u>	<u>4.4%</u>
INDUSTRY TOTAL	4,548,707	100.0%

Industries weighted to reflect Napa County industry mix.

APPENDIX B TABLE 9
 AVERAGE ANNUAL COMPENSATION, 2013
 MANUFACTURING WORKER OCCUPATIONS
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA, CA

DRAFT - for Internal Review Only

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Manufacturing Workers</u>
Page 1 of 3			
<i>Management Occupations</i>			
Chief Executives	\$209,400	4.2%	0.2%
General and Operations Managers	\$117,400	36.5%	1.8%
Sales Managers	\$118,800	12.0%	0.6%
Financial Managers	\$128,300	5.7%	0.3%
Industrial Production Managers	\$125,400	17.3%	0.9%
Transportation, Storage, and Distribution Managers	\$109,000	5.4%	0.3%
All Other Management Occupations (Avg. All Categories)	<u>\$113,000</u>	<u>18.9%</u>	<u>0.9%</u>
	Weighted Mean Annual Wage	100.0%	5.0%
<i>Business and Financial Operations Occupations</i>			
Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$64,300	12.4%	0.3%
Cost Estimators	\$70,900	5.5%	0.1%
Human Resources Specialists	\$61,200	5.8%	0.1%
Logisticians	\$70,200	8.7%	0.2%
Meeting, Convention, and Event Planners	\$51,100	4.1%	0.1%
Market Research Analysts and Marketing Specialists	\$77,800	17.7%	0.4%
Business Operations Specialists, All Other	\$73,800	8.1%	0.2%
Accountants and Auditors	\$77,500	24.6%	0.6%
All Other Business and Financial Operations Occupations (Avg. All Categories)	<u>\$72,700</u>	<u>13.1%</u>	<u>0.3%</u>
	Weighted Mean Annual Wage	100.0%	2.3%
<i>Food Preparation and Serving Related Occupations</i>			
First-Line Supervisors of Food Preparation and Serving Workers	\$40,300	6.3%	0.2%
Cooks, Restaurant	\$29,700	9.1%	0.3%
Food Preparation Workers	\$25,600	6.8%	0.2%
Bartenders	\$27,100	12.9%	0.4%
Combined Food Preparation and Serving Workers, Including Fast Food	\$21,900	4.3%	0.1%
Waiters and Waitresses	\$23,800	46.6%	1.4%
All Other Food Preparation and Serving Related Occupations (Avg. All Categories)	<u>\$25,400</u>	<u>13.9%</u>	<u>0.4%</u>
	Weighted Mean Annual Wage	100.0%	2.9%
<i>Sales and Related Occupations</i>			
First-Line Supervisors of Non-Retail Sales Workers	\$76,800	4.4%	0.5%
Cashiers	\$26,300	5.2%	0.6%
Retail Salespersons	\$29,800	25.8%	3.1%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific	\$80,800	38.5%	4.6%
Demonstrators and Product Promoters	\$31,200	19.6%	2.3%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$43,100</u>	<u>6.4%</u>	<u>0.8%</u>
	Weighted Mean Annual Wage	100.0%	11.9%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Manufacturing Workers</u>
Page 2 of 3			
<i>Office and Administrative Support Occupations</i>			
First-Line Supervisors of Office and Administrative Support Workers	\$55,000	5.0%	0.5%
Bookkeeping, Accounting, and Auditing Clerks	\$47,400	11.1%	1.1%
Customer Service Representatives	\$52,800	9.1%	0.9%
Production, Planning, and Expediting Clerks	\$49,000	5.0%	0.5%
Shipping, Receiving, and Traffic Clerks	\$37,700	8.0%	0.8%
Stock Clerks and Order Fillers	\$27,800	20.8%	2.0%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive Office Clerks, General	\$41,400	8.4%	0.8%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$40,900</u>	<u>18.9%</u>	<u>1.9%</u>
Weighted Mean Annual Wage	\$40,200	100.0%	9.8%
<i>Farming, Fishing, and Forestry Occupations</i>			
First-Line Supervisors of Farming, Fishing, and Forestry Workers	\$48,100	8.0%	0.2%
Graders and Sorters, Agricultural Products	\$28,600 ⁵	4.3%	0.1%
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	\$25,700	84.2%	2.0%
All Other Farming, Fishing, and Forestry Occupations (Avg. All Categories)	<u>\$28,100</u>	<u>3.5%</u>	<u>0.1%</u>
Weighted Mean Annual Wage	\$27,700	100.0%	2.3%
<i>Construction and Extraction Occupations</i>			
First-Line Supervisors of Construction Trades and Extraction Workers	\$67,600	6.7%	0.2%
Carpenters	\$57,600	4.6%	0.2%
Construction Laborers	\$44,100	6.2%	0.2%
Electricians	\$68,700	35.6%	1.2%
Plumbers, Pipefitters, and Steamfitters	\$59,900	21.8%	0.7%
Sheet Metal Workers	\$66,700	5.7%	0.2%
Helpers--Electricians	\$37,300 ⁵	4.9%	0.2%
All Other Construction and Extraction Occupations (Avg. All Categories)	<u>\$54,100</u>	<u>14.6%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$60,900	100.0%	3.3%
<i>Installation, Maintenance, and Repair Occupations</i>			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,000	8.6%	0.7%
Bus and Truck Mechanics and Diesel Engine Specialists	\$63,500	6.9%	0.6%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$61,400	8.6%	0.7%
Industrial Machinery Mechanics	\$55,200	30.9%	2.5%
Maintenance Workers, Machinery	\$55,000	6.5%	0.5%
Maintenance and Repair Workers, General	\$47,800	20.1%	1.6%
Coin, Vending, and Amusement Machine Servicers and Repairers	\$42,300 ⁴	10.8%	0.9%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>7.6%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$54,600	100.0%	8.1%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation Group</u> ³	<u>% of Total Manufacturing Workers</u>
<i>Production Occupations</i>			
First-Line Supervisors of Production and Operating Workers	\$65,600	9.0%	2.7%
Team Assemblers	\$26,100	7.3%	2.2%
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, &	\$37,100	15.1%	4.5%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$41,400	5.9%	1.8%
Packaging and Filling Machine Operators and Tenders	\$37,600	31.4%	9.4%
Helpers--Production Workers	\$23,500	5.8%	1.7%
All Other Production Occupations (Avg. All Categories)	<u>\$37,800</u>	<u>25.4%</u>	<u>7.6%</u>
	Weighted Mean Annual Wage	100.0%	29.8%
Page 3 of 3			
<i>Transportation and Material Moving Occupations</i>			
Driver/Sales Workers	\$33,000	18.2%	3.7%
Heavy and Tractor-Trailer Truck Drivers	\$45,800	18.8%	3.8%
Light Truck or Delivery Services Drivers	\$34,800	10.1%	2.0%
Industrial Truck and Tractor Operators	\$39,500	15.8%	3.2%
Laborers and Freight, Stock, and Material Movers, Hand	\$28,400	24.6%	5.0%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$34,000</u>	<u>12.6%</u>	<u>2.5%</u>
	Weighted Mean Annual Wage	100.0%	20.2%
	Weighted Average Annual Wage - All Occupations	\$46,000	95.6%

¹ Including occupations representing 4% or more of the major occupation group.

² 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.

³ Occupation percentages are based on the 2012 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2012 Occupational Employment Survey data applicable to Napa County updated by the California Employment Development Department to 2013 wage levels.

⁴ California Employment Development Department wage estimates not available for this occupation for Napa County. Wages estimated based on EDD data for Alameda & Contra Costa Counties.

⁵ Wage data not available for this occupation for Napa County or Alameda/Contra Costa Counties. Wages estimated based on wage data for similar occupation in Napa County or Alameda/Contra Costa Counties (if Napa not available).

APPENDIX B TABLE 10

2012 NATIONAL WAREHOUSING & STORAGE WORKER DISTRIBUTION BY OCCUPATION

JOBS HOUSING NEXUS ANALYSIS

DRAFT - for Internal Review Only

COUNTY OF NAPA, CA

Major Occupations (2% or more)	2012 National Warehousing & Storage Occupation Distribution	
Management Occupations	69,940	4.5%
Business and Financial Operations Occupations	43,600	2.8%
Sales and Related Occupations	193,230	12.3%
Office and Administrative Support Occupations	322,160	20.6%
Installation, Maintenance, and Repair Occupations	40,460	2.6%
Production Occupations	65,460	4.2%
Transportation and Material Moving Occupations	768,580	49.0%
All Other Warehousing & Storage Related Occupations	<u>64,210</u>	<u>4.1%</u>
INDUSTRY TOTAL	1,567,640	100.0%

APPENDIX B TABLE 11
 AVERAGE ANNUAL COMPENSATION, 2013
 WAREHOUSING & STORAGE WORKER OCCUPATIONS
 JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA, CA

DRAFT - for Internal Review Only

<u>Occupation</u> ¹	<u>2013 Avg.</u> <u>Compensation</u> ²	<u>% of Total</u> <u>Occupation using & Storage</u> <u>Group</u> ³	<u>% of Total</u> <u>Workers</u>
<i>Page 1 of 2</i>			
<i>Management Occupations</i>			
Chief Executives	\$209,400	4.7%	0.2%
General and Operations Managers	\$117,400	36.3%	1.6%
Sales Managers	\$118,800	18.0%	0.8%
Financial Managers	\$128,300	4.7%	0.2%
Transportation, Storage, and Distribution Managers	\$109,000	17.9%	0.8%
All Other Management Occupations (Avg. All Categories)	<u>\$113,000</u>	<u>18.4%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$120,200	100.0%	4.5%
<i>Business and Financial Operations Occupations</i>			
Buyers and Purchasing Agents, Farm Products	\$56,000	4.4%	0.1%
Wholesale and Retail Buyers, Except Farm Products	\$51,500 ⁴	19.0%	0.5%
Human Resources Specialists	\$61,200	7.9%	0.2%
Logisticians	\$70,200	7.1%	0.2%
Market Research Analysts and Marketing Specialists	\$77,800	12.0%	0.3%
Business Operations Specialists, All Other	\$73,800	14.7%	0.4%
Accountants and Auditors	\$77,500	16.6%	0.5%
All Other Business and Financial Operations Occupations (Avg. All Categories)	<u>\$72,700</u>	<u>18.2%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$68,400	100.0%	2.8%
<i>Sales and Related Occupations</i>			
First-Line Supervisors of Non-Retail Sales Workers	\$76,800	8.2%	1.0%
Retail Salespersons	\$29,800	4.5%	0.6%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scier	\$80,800	73.7%	9.1%
All Other Sales and Related Occupations (Avg. All Categories)	<u>\$43,100</u>	<u>13.6%</u>	<u>1.7%</u>
Weighted Mean Annual Wage	\$73,100	100.0%	12.3%
<i>Office and Administrative Support Occupations</i>			
First-Line Supervisors of Office and Administrative Support Workers	\$55,000	5.4%	1.1%
Bookkeeping, Accounting, and Auditing Clerks	\$47,400	5.4%	1.1%
Customer Service Representatives	\$52,800	8.8%	1.8%
Shipping, Receiving, and Traffic Clerks	\$37,700	15.5%	3.2%
Stock Clerks and Order Fillers	\$27,800	31.4%	6.4%
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	\$41,400	4.3%	0.9%
Office Clerks, General	\$35,600	9.2%	1.9%
All Other Office and Administrative Support Occupations (Avg. All Categories)	<u>\$40,900</u>	<u>20.1%</u>	<u>4.1%</u>
Weighted Mean Annual Wage	\$38,000	100.0%	20.6%

<u>Occupation</u> ¹	<u>2013 Avg. Compensation</u> ²	<u>% of Total Occupation using & Storage Group</u> ³	<u>% of Total Workers</u>
Page 2 of 2			
<i>Installation, Maintenance, and Repair Occupations</i>			
First-Line Supervisors of Mechanics, Installers, and Repairers	\$73,000	8.4%	0.2%
Bus and Truck Mechanics and Diesel Engine Specialists	\$63,500	13.8%	0.4%
Maintenance and Repair Workers, General	\$47,800	46.8%	1.2%
Coin, Vending, and Amusement Machine Servicers and Repairers	\$42,300 ⁴	10.4%	0.3%
All Other Installation, Maintenance, and Repair Occupations (Avg. All Categories)	<u>\$50,100</u>	<u>20.6%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$52,000	100.0%	2.6%
<i>Production Occupations</i>			
First-Line Supervisors of Production and Operating Workers	\$65,600	9.0%	0.4%
Team Assemblers	\$26,100	15.3%	0.6%
Butchers and Meat Cutters	\$36,100	5.4%	0.2%
Meat, Poultry, and Fish Cutters and Trimmers	\$29,200 ⁴	8.2%	0.3%
Food Batchmakers	\$27,900	5.7%	0.2%
Inspectors, Testers, Sorters, Samplers, and Weighers	\$41,400	12.2%	0.5%
Packaging and Filling Machine Operators and Tenders	\$37,600	20.8%	0.9%
Helpers--Production Workers	\$23,500	4.2%	0.2%
All Other Production Occupations (Avg. All Categories)	<u>\$37,800</u>	<u>19.1%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$37,000	100.0%	4.2%
<i>Transportation and Material Moving Occupations</i>			
Driver/Sales Workers	\$33,000	12.1%	5.9%
Heavy and Tractor-Trailer Truck Drivers	\$45,800	14.3%	7.0%
Light Truck or Delivery Services Drivers	\$34,800	6.0%	2.9%
Industrial Truck and Tractor Operators	\$39,500	13.6%	6.7%
Laborers and Freight, Stock, and Material Movers, Hand	\$28,400	33.6%	16.5%
Packers and Packagers, Hand	\$24,000	9.7%	4.7%
All Other Transportation and Material Moving Occupations (Avg. All Categories)	<u>\$34,000</u>	<u>10.8%</u>	<u>5.3%</u>
Weighted Mean Annual Wage	\$33,500	100.0%	49.0%
Weighted Average Annual Wage - All Occupations	\$45,000		95.9%

¹ Including occupations representing 4% or more of the major occupation group.

² 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.

³ Occupation percentages are based on the 2012 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2012 Occupational Employment Survey data applicable to Napa County updated by the California Employment Development Department to 2013 wage levels.

⁴ California Employment Development Department wage estimates not available for this occupation for Napa County. Wages estimated based on EDD data for Alameda & Contra Costa Counties.

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APPENDIX C: AFFORDABILITY GAPS

A key component of the nexus analysis is the size of the gap between what households can afford and the cost of producing new housing in Napa County, known as the “affordability gap.” In this section, we document the calculation of the affordability gaps used in the nexus analysis.

I. County-Assisted 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 County intends to assist in the production of rental units for households in the Very Low (less than 50% of median income) and Low (50 – 80% of median income) income categories, and the production of ownership units for households in the Moderate (80% - 120% of median income) income category. KMA reviewed the development pro forma for four recent affordable rental housing developments – three from Napa Valley Community Housing (Oak Creek Terrace, Arroyo Grande and Magnolia Park) and one from Bridge Housing (Napa Creekside). Based on these recent projects, KMA concluded that, on average, the new affordable rental units have 2.0 bedrooms. The affordable ownership units are assumed to be small single family units with a mix of unit sizes averaging 2.0 bedrooms per unit.

The analysis assumes that tax credit financing is available for the rental income units. The level of tax credit equity per unit represents a blend of 4% and 9% tax credit projects, based on the sample pro formas reviewed.

II. Affordable Rent Levels

Affordable rent levels are a function of the income level for which the unit is aimed to be affordable. KMA utilized the maximum rents published by the California Tax Credit Allocation Committee (CTCAC). The published rents include utilities, so KMA subtracted out a utility allowance based on the average of those utilized in the Napa Creekside and Oak Creek Terrace projects. The two-bedroom Very Low Income unit is assumed to rent for \$864 per month and the Low Income unit for \$1,048, after utilities. See Appendix C Table 1 for more detail on the calculation of these rent levels.

III. Affordable Sales Price

For the ownership unit affordable to Moderate Income households, KMA utilized Napa County's affordable sales prices for a 2 bedroom unit earning 100% of median. The County estimate does not include an allowance for HOA dues, which would lower the affordable sales price.

The maximum affordable sales price for a 2.0 bedroom unit at 100% of Area Median Income is \$267,444.

IV. Affordability Gaps

For the ownership units, the affordability gap is the amount of subsidy dollars required to bridge the difference between total development costs and the value of the affordable unit. The unit value of an affordable ownership unit is the affordable sales price.

For the rental units, the affordability gap is calculated slightly differently because we assume that these units will receive tax credit financing. For these units, KMA estimates the total sources of funds (including permanent debt, tax credits and a deferred developer fee) and compares that to the total development costs; the difference is the affordability gap, or the amount of additional subsidy dollars necessary to make the project feasible.

a) Development Costs

For the purposes of the nexus analysis, KMA prepared an estimate of total development cost for typical affordable rental units. Total development costs include land, direct construction, all fees and permits, financing and other indirect costs, including profit. KMA drew this estimate from the total costs in the development pro forma for the recent tax credit projects in Napa, which ranged from about \$300,000 per unit to almost \$400,000 per unit. KMA estimated that a new affordable rental unit has total development costs of about \$350,000 per unit.

The County has not recently assisted with the development of affordable ownership units. For the purposes of this analysis, therefore, KMA uses an estimate of the market rate sales price for newer single family units in Napa County (including the incorporated cities) as a proxy for total development costs. KMA also reviewed sales prices for condominiums in the County, but the prices were higher than the median for single family units, probably due to their location and upscale amenities. To be conservative, KMA used the single family figures.

For units built since 2005, the median sales price for two bedroom single family homes sold or resold in 2013 was \$347,500 and the average sales price was \$397,500. From this data, KMA estimates that a 2.0 bedroom home in Napa County would have a market value of \$350,000 or total development cost of at least \$350,000, or similar to a rental unit.

For many new developments, particularly County-assisted developments, total development costs would be higher than those estimated here. The conservative estimate of development costs results in a lower supportable nexus amount.

b) Unit Values

To calculate the value of the restricted rental units, KMA first estimated the Net Operating Income generated by the units. The first step is to convert monthly gross rent to an annual gross rent by multiplying by 12. Annual gross rent is then adjusted for vacancy rates during turnover, and then operating costs are netted out. Lost income due to vacancy is estimated at 5% of

gross rents. Operating costs cover management, property taxes, and certain other expenses. Based on KMA’s experience reviewing operating budgets for affordable apartment projects proposed or built in the local area, the operating expenses are estimated at \$6,600 per unit per year including replacement reserves but excluding property taxes. The rental units are assumed to be owned by a non-profit general partner and therefore exempt from property taxes. Net Operating Income is calculated by netting out vacancy, operating costs and property taxes from the gross income generated by the unit.

The Net Operating Income is used to estimate the amount of permanent debt the project can support, given the underwriting assumptions assumed by Bridge Housing in their Napa Creekside project (5.5% interest for 30 years with a 1.15 debt coverage ratio). Additional sources of funds include the market value of the tax credits (estimated at \$140,000 based on a blend of 4% and 9% projects) and the deferred developer fee. Altogether, these Sources of Funds total \$186,000 for Very Low income units and \$212,000 for Low Income unit.

For the Moderate Income units, the unit value is the affordable sales price, or \$267,444.

The results are summarized below and shown in Appendix C Tables 1 and 2.

Supported Unit Values		
	<i>Net Operating Income</i>	<i>Unit Value</i>
Very Low Income	\$3,347 per year	\$186,000*
Low Income	\$5,444 per year	\$212,000*
Moderate Income	n/a	\$267,444

*Total Sources of Funds, which includes permanent debt, tax credits and deferred developer fee.

As shown in the table above, the affordable units do not generate enough value to cover the total development costs of the unit. The resulting gap between unit value and development costs is referred to as the Affordability Gap.

c) Affordability Gaps

The affordability gap conclusions are presented in Appendix C Tables 1 and 2, and summarized below.

Affordability Gaps			
<i>Income Level</i>	<i>Unit Value</i>	<i>Development Cost</i>	<i>Affordability Gap</i>
Very Low Income	\$186,000	\$350,000	\$164,000
Low Income	\$212,000	\$350,000	\$138,000
Moderate Income	\$267,444	\$350,000	\$80,000

These affordability gaps represent the mitigation cost to the City per affordable unit, by income level. They are entered into the nexus analysis to calculate the maximum supported impact fees.

**APPENDIX C TABLE 1
NEXUS AFFORDABILITY GAPS
UPDATED JOBS HOUSING NEXUS
COUNTY OF NAPA**

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I. Affordable Rent	<u>50% AMI</u>	<u>60% AMI</u>
Average Number of Bedrooms	2.0 Bedrooms	2.0 Bedrooms
Average Household Size	3.0 Persons per HH	3.0 Persons per HH
Household Income	\$36,850	\$44,220
Income Allocation to Housing	30%	30%
Monthly Housing Cost	\$921	\$1,106
(Less) Utility Allowance	(\$57)	(\$57) ¹
Maximum Monthly Rent per County	\$864	\$1,049
Maximum Rent per CTCAC	\$921	\$1,105
(Less) Utility Allowance	(\$57)	(\$57) ¹
Maximum Monthly Rent per CTCAC	\$864	\$1,048
II. Net Operating Income (NOI)	<u>Per Unit</u>	<u>Per Unit</u>
Gross Scheduled Income (GSI)		
Monthly	\$864	\$1,048
Annual	\$10,368	\$12,576
Other Income	\$9	\$102
(Less) Vacancy	5% (\$524)	(\$634)
Effective Gross Income (EGI)	\$9,947	\$12,044
(Less) Operating Expenses ²	(\$6,600)	(\$6,600)
(Less) Property Taxes	1.10% exempt ³	exempt ³
Net Operating Income (NOI)	\$3,347	\$5,444
III. Capitalized Value and Affordability Gap		
I. Net Operating Income (NOI)	\$3,347	\$5,444
II. Sources of Funds		
Supportable Debt ⁴	\$43,000	\$69,000
Market Value of Tax Credits ⁵	\$140,000	\$140,000
Deferred Developer Fee	\$3,000	\$3,000
III. Total Sources of Funds	\$186,000	\$212,000
IV. (Less) Total Development Costs ⁶	(\$350,000)	(\$350,000)
V. Affordability Gap	(\$164,000)	(\$138,000)

1. Based on Bridge Housing's Napa Creekside and NVCH's Oak Creek Terrace projects' utility allowance calculations.
2. Includes replacement reserves. Based on Napa Creekside and Oak Creek project estimates.
3. Assumes developer will partner with non-profit organization.
4. Based on underwriting assumptions from Bridge Housing's Napa Creekside project (5.5% interest for 30 years with a 1.15 debt coverage ratio).
5. Based on average tax credit proceeds for several recent projects in Napa County (a mix of 4% and 9% tax credit projects).
6. Based on average total development costs for several recent projects in Napa County.

**APPENDIX C TABLE 2
 NEXUS AFFORDABILITY GAP - MODERATE INCOME
 UPDATED JOBS HOUSING NEXUS ANALYSIS
 COUNTY OF NAPA**

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I. County-Assisted Affordable For-Sale Prototype

Unit Type	Single Family
Number of Bedrooms	Two bedroom
Market Rate Sales Price	\$350,000 ²

II. Affordable Sales Price

Household Size	Three persons
Affordability Level	100% AMI
Maximum Affordable Sales Price	\$267,444 ¹

III. Affordability Gap

Market Rate Sale Price	\$350,000
(Less) Affordable Price	<u>(\$267,444)</u>
Affordability Gap	(\$82,556)
(rounded)	(\$80,000)

¹. County estimate. Does not include HOA dues, which would lower affordable sales price.

². Based on recent resales of newer homes in Napa County, primarily in Napa City. Note that the cost of new development is likely to exceed \$350,000.

**APPENDIX D:
NON-DUPLICATION BETWEEN RESIDENTIAL AND NON-RESIDENTIAL FEE PROGRAMS**

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Napa County has established impact fees on both non-residential and residential construction to help mitigate the impacts of the new development on the demand for affordable housing in the County. KMA conducted a Residential Nexus analysis in 2009 to support the residential impact fee; 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 such as 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 renting or buying new market rate residential units and the assumption that new units represent new households in Napa. 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 Napa County residents, such as expenditures for food, personal services, restaurant meals and entertainment. Many jobs counted in the residential nexus are not addressed in the jobs housing analysis at all. For example, school and government employees are counted in the residential nexus analysis but are not counted in the jobs housing analysis which is limited to private sector office, hotel, retail/restaurant, and various types of industrial projects.

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.

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 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.

Non-Residential Requirement as a Percent of Nexus

The Non-Residential Nexus Analysis calculates the maximum mitigation amount supported by the analysis. For the purposes of the overlap analysis, we are assuming a fee of \$5.00 per square foot for non-residential development. If the County ultimately selects a higher fee level, the overlap analysis should be rerun at the higher fee level.

	Total Nexus Amount	Illustrative Fee	Percent of Nexus
Office	\$93.94	\$5.00	5%
Retail / Restaurant	\$208.63	\$5.00	2%
Hotel	\$143.83	\$5.00	3%
Industrial / Manufacturing	\$59.27	\$5.00	8%
Warehouse / Storage	\$13.92	\$5.00	36%

The conclusion is that a fee level of \$5.00 per square foot represents 2% to 8% of the nexus cost for most land uses; for warehouse and storage space, a \$5.00 per square foot fee represents 36% of the total nexus cost. In summary, the Non-Residential fee at \$5.00 mitigates less than 10% of the demand for affordable units generated by the new non-residential space, with the exception of warehouse space, which would mitigate 36%.

Residential Requirement under Consideration as a Percent of Nexus

The affordable housing impact fee levied on residential units in Napa County ranges from \$5.50 to \$12.25 per square foot. The Residential Nexus Analysis report was prepared by KMA in 2009. To evaluate the combined programs today, KMA updated the affordability gap figures to reflect today's development costs. The total updated nexus costs per square foot are shown below. The total nexus cost is the maximum mitigation amount, or maximum fee that could be charged, supported by the analysis. The current fee charged by Napa County is indicated below and shown as a percent of the total updated nexus cost.

Current Fees as Percent of Updated Maximum Nexus Amounts, Residential Units			
	Total Nexus Amount	Current Fee	Percent of Nexus
Rental	\$26.97	\$5.50	20%
Condo, 1,000 SF	\$28.24	No fee ³	0%
Single Family Detached, 2,000 SF	\$24.28	\$9.00	37%
Single Family Detached, 3,000 SF	\$25.10	\$10.75	43%

³ No fee under 1,200 sq. ft.; fees are based on unit size.

The conclusion is that the affordable housing impact fee in effect in Napa County is equal to up to 43% of the maximum supported by the Residential Nexus analysis.

Combined Requirements within Nexus

A Non-Residential housing fee of \$5.00 per square foot would be between 2% and 36% of the supported nexus amount and the Residential Affordable Housing Fee is between 0% and 43% of the supported nexus 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.

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