

*The Economics of Land Use*



## **Administrative Draft Report**

# Nexus-Based Affordable Housing Fee Analysis for For-Sale Housing

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March 23, 2016

EPS #151080

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## *EXECUTIVE SUMMARY*

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Economic & Planning Systems, Inc. (EPS) was retained by the City of Walnut Creek (City) to conduct a nexus study analyzing the impact that development of market-rate housing has on the demand for below-market-rate housing and, based on the results, to determine the defensible nexus-based fee that could be charged to market-rate housing development.

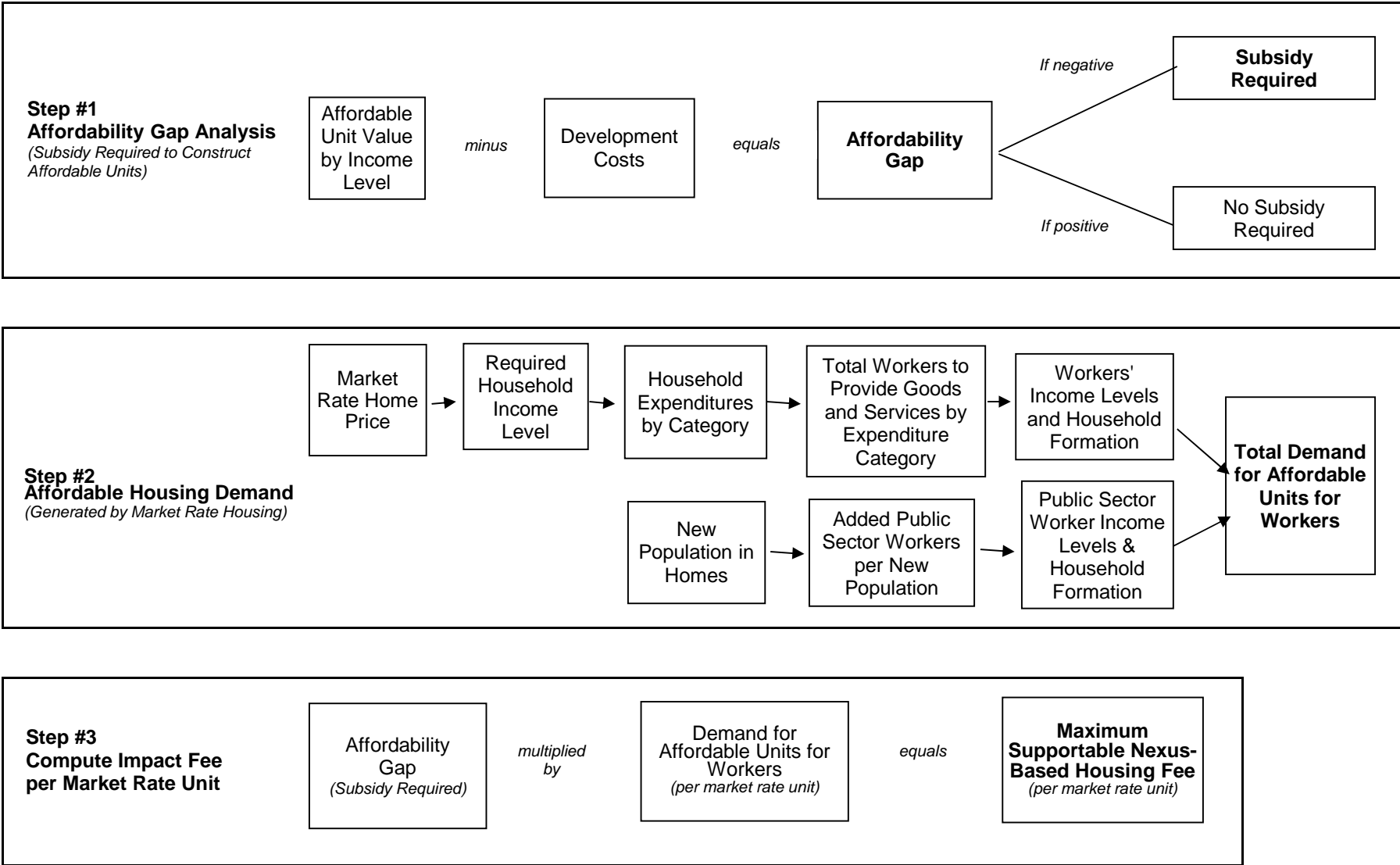
The technical approach used herein quantifies the impacts that the introduction of market-rate units have on the local economy and the demand for additional affordable housing. As new households are added to the community, local employment also will grow to provide the goods and services required by the new households. To the extent that these new jobs do not pay adequate wages for the employees to afford market-rate housing in the community, the new households' spending is creating a need for affordable housing. A nexus-based affordable housing fee is therefore based on the impact of the new market-rate homes on the demand for affordable housing. The fee calculated in this study represents the maximum fee that may be charged to new market-rate housing units to mitigate their impacts on the affordable housing supply. Such fees may be used by the City to subsidize the production of new affordable units for moderate- and lower-income households not accommodated by market-rate projects.

Calculating the impact of market-rate development in the City on affordable housing needs, and the fees needed to mitigate those impacts, involves three main analytical steps:

- **Step #1.** Estimate the typical subsidy required to construct units affordable at various income levels (the "affordability gap").
- **Step #2.** Determine the market-rate households' demand for goods and services, the jobs created by that demand, and the affordable housing needs of workers in those jobs.
- **Step #3.** Combine the affordability gap with the affordable housing demand projections to compute the maximum supportable nexus-based affordable housing fees per market-rate unit.

These technical steps are illustrated in **Figure 1** and detailed in the body of this Report and the attached Technical Appendices. The findings regarding each of these steps are presented below.

Figure 1  
Illustration of Nexus-Based Housing Fee Methodology



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- 1. The costs to construct housing units affordable to many households exceed those units' values based on the rents or prices that the households can afford to pay. The estimated subsidy required to construct affordable housing units in Walnut Creek ranges from roughly \$101,550 for a Moderate Income household earning up to 110 percent of AMI to \$324,400 for a Very Low Income household earning up to 50 percent of AMI.**

An "affordability gap analysis" evaluates whether or not the costs to construct affordable units exceed the values of units that are affordable to lower- and moderate-income households. For each affordable housing income level—households with incomes at 50, 80, and 110 percent of Area Median Income (AMI)—this analysis estimates the subsidy required to construct affordable housing units.

The affordability gap analysis assumes that the average affordable unit for all income levels will be a 2-bedroom unit in a multifamily development in a four- to five-story stacked flats building (an average density of 100 dwelling units per acre). The estimated costs to construct the prototypical affordable unit are based on recent City of Walnut Creek development projects and transactions, as well as other development cost data sources. The costs of land acquisition are included in these development cost calculations.

A household's ability to pay is based on standard percentages of income available for housing costs at each household income level. Income available for housing costs is converted into a monthly affordable rent and a capitalized unit value or an affordable mortgage payment and supportable unit price. This unit value is then compared to the cost of development to determine the subsidy required to make the unit affordable to each income level.

- 2. The demand for affordable housing generated by the expenditures of new households in City of Walnut Creek increases along with the market-rate unit value (and related owner income). For example, a small unit selling for \$500,000 is estimated to create demand for 0.185 affordable housing units, while a large home selling for \$1.25 million creates demand for 0.375 affordable units.**

Any justified nexus-based fee is based on the total demand for affordable housing units generated by construction of market-rate homes. The link (or nexus) between market-rate housing and increased demand for affordable housing is that residents of market-rate units demand goods and services that rely on wage earners (for example, retail sales clerks) some of whom typically cannot afford market-rate housing and thus require affordable housing.

Because more expensive housing units require owners to have higher incomes, and higher income households create more jobs through their spending, the nexus impacts and thus the justified fees for units vary in relation to the price of the market-rate units. The price of the unit is typically a function of its size, and the fees calculated herein can be applied based on the square footage of the market-rate units.

This analysis evaluates the demand for affordable housing generated by a range of sale prices. For each price, the demand-based nexus fee calculation involves the following steps:

- A. Market-Rate Household Income Levels.** The required income levels of households occupying new market-rate housing are derived based on the unit's mortgage, property taxes, HOA dues, insurance, and utilities, assuming standard housing cost expenses as a proportion of overall household income. For example, a typical household purchasing a market-rate home for \$1.0 million would have an income of roughly \$205,000, if they spend 35 percent of their income on housing costs.
- B. Household Expenditures.** Based on the household income computed in Step A, Consumer Expenditure Survey data is used to evaluate the typical spending patterns of the household. This analysis provides an estimate of how much the household spends on specific categories of expenditures, such as "Food at Home." As the households' income increases with the value of the market-rate units, the total spending on goods and services also increases. The Consumer Expenditure Survey also indicates that these relationships are not linear (e.g., a household with twice the income does not necessarily spend twice as much on food).
- C. Job Creation and Worker Households.** Having estimated the households' spending on various items, that spending is then converted into an estimation of jobs created. For each expenditure category, data regarding average worker wages and the ratio between gross business receipts and wages are used to translate these household expenditures into the total number of private-sector workers. For selected public-sector jobs that typically grow in proportion to the local population size (e.g., teachers), the demand for new workers is estimated by relating current levels of employment in such categories to the current population and applying this ratio to future development. Because each new worker does not represent an independent household (Walnut Creek has an average of 1.58 workers per working household), the total number of new households created is somewhat less than the number of new jobs created. This analysis assumes that workers form households with others with similar wages. EPS has further adjusted the household formation rates to reflect the fact that a certain proportion of workers will *not* form their own households, particularly those of younger ages.<sup>1</sup>
- D. Worker Households by Income Category.** Each worker household generated is assigned to an income category—represented as a proportion of AMI ranging from 50 to 110 percent—based on its estimated gross wages.<sup>2</sup> This provides the total number of households generated at each income level by construction of market-rate units at various price points. The results indicate that residents of smaller, lower-priced units generate fewer worker households requiring affordable housing than do residents of larger, higher-priced units.

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<sup>1</sup> BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers overall (this factor is applied to other industries). EPS has assumed that such young workers do not form their own households.

<sup>2</sup> Although the moderate income category covers affordability between 80 and 120 percent of AMI, this analysis uses a mid-point of 110 percent based on input from City staff.

These steps of the nexus-based fee calculation provide the total number of income-qualified workers required to meet the needs for goods and services generated by market-rate housing. The number of workers servicing market-rate housing (at each unit price level) is then converted to total income qualified households and each such household is assumed to require one housing unit.

**3. This analysis calculates the maximum fees that could fully mitigate the impact that new market-rate housing has on Walnut Creek's affordable housing demand at various representative price points. These fees could range from about \$50,500 for \$500,000 units to \$104,700 for \$1.25 million units.**

The nexus fee is calculated by applying the number of affordable units needed by income qualified households to the affordability gap for each housing income category. This calculation is made for several different home values, as shown in **Table 1**. The City may also consider whether to allow developers to provide affordable units within their projects, rather than paying the nexus-based fee. **Table 1** illustrates the proportions of affordable units that correspond to the fee calculation and demands created by the market-rate units. For instance, a project offering \$750,000 units would effectively mitigate the demand being created by the market-rate units if it provided 0.253 affordable units for each market-rate unit.

It is understood that a lower fee level below the maximum fee may be appropriate given a range of development feasibility and economic development considerations. The lower fee may also be appropriate due to the fact that affordable housing development is not the sole responsibility of for-sale housing developers, as the City, State, and federal government have other programs and resources that can offset some affordable housing production costs. This notion will be further explored by EPS in subsequent analyses.



**Table 1**  
**Summary of Maximum Supportable Nexus-Based Housing Fees or Unit Requirements**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

For-Sale Unit Price	Nexus-Based Fees			Unit Requirements by Income Level			Total
	Fee per Unit	% of Value	Per Sq.Ft. (1)	VLI (<50% of AMI)	Low (<80% of AMI)	Moderate (<120% of AMI)	
\$500,000	\$50,487	10.1%	\$50	12.1%	5.4%	1.0%	18.5%
\$750,000	\$70,362	9.4%	\$47	17.3%	6.9%	1.0%	25.3%
\$1,000,000	\$85,461	8.5%	\$43	21.2%	8.1%	1.3%	30.6%
\$1,250,000	\$104,731	8.4%	\$42	26.0%	9.9%	1.6%	37.5%

(1) Assumes an average value of \$500 per square foot.

Source: Economic & Planning Systems, Inc.

# 1. AFFORDABILITY GAP ANALYSIS

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For any nexus-based affordable housing fee calculation, it is necessary to estimate the subsidy required to construct affordable housing units. **Table 2** shows the subsidy needed to produce for-sale housing that is affordable to low- and moderate-income households (80 through 110 percent of AMI), while **Table 3** calculates the subsidies for multifamily rental housing affordable to very low- through moderate-income households (50 through 110 percent of AMI).

## Product Type

While the nexus fees calculated herein are based on demands created by for-sale housing that may be single-family or multifamily, the analysis assumes that new lower-income worker households would actually be housed in affordable units similar to those recently built in the City. On the for-sale side, the units are assumed to be single-family attached product in the 20-units-per-acre range, as similarly built by affordable housing developers. On the rental side, the units are assumed as flats in the 100 units per acre range with podium parking. As suggested by a high number of these multifamily flats developed in the City in recent years, this product type is likely to efficiently utilize the subsidies for multifamily affordable units.

In order to determine the average household size of future affordable housing units, EPS used two estimates from the US Census 2009-2013 American Community Survey (ACS)—the average household size for working households in Walnut Creek being 2.52, and average family size being 2.87. Rounding these averages, EPS compared the estimated household wage with the income thresholds for a 3-person household to identify the income category into which each occupation would fall for new units.

The analysis assumes that the most cost-efficient tenure type would be used; if for-sale units can be built with a lower subsidy than units offered for rent, the analysis would assume new affordable units would be for-sale. As shown on **Tables 2** and **3** and discussed below, for-rent units are estimated to require a lower subsidy under present market conditions. In addition to representing cost savings, and thus a minimization of the impact fee, the reliance on rental housing may be more easily implemented and sustained, as many households at lower incomes will not have adequate wealth reserves for down payments on homeownership units, and may have further difficulty absorbing the ongoing costs of homeownership (taxes, repairs, etc.) that they can effectively avoid by renting their homes rather than buying.

California State law (California Health and Safety Code Section 50052.5) assumes that a 2-bedroom unit is occupied by a 3-person household, and this assumption is used in this analysis. Typically, a 2-bedroom rental unit in the Bay Area has a gross size of about 1,100 square feet (accounting for shared lobbies, hallways, etc.) and a net size of 950 square feet. This analysis estimates the subsidy that would be required to build for-rent housing for the lower-income worker households (for-sale units are assumed to be larger).

**Table 2**  
**Affordability Gap Analysis -- For-Sale Affordable Housing Unit Type**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Single Family Attached Duplexes and Triplexes	
	Low Income (80% AMI)	Moderate Income (110% AMI)
<b>Development Program Assumptions</b>		
Density/Acre	20	20
Gross Unit Size	1,300	1,300
Number of Bedrooms	2	2
Number of Persons per 2-bedroom Unit [1]	3	3
Parking Spaces/Unit	2.00	2.00
<b>Cost Assumptions</b>		
Land/Acre [2]	\$2,670,000	\$2,670,000
Land/Unit (rounded)	\$133,500	\$133,500
Direct Costs		
Direct Construction Costs/Net SF	\$180	\$180
Direct Construction Costs/Unit	\$234,000	\$234,000
Parking Construction Costs/Space	\$0	\$0
Parking Construction Costs/Unit	\$0	\$0
Subtotal, Direct Costs/Unit	\$234,000	\$234,000
Indirect Costs as a % of Direct Costs [3]	40%	40%
Indirect Costs/Unit	\$93,600	\$93,600
Profit Margin (% of all costs)	10%	10%
Profit (rounded)	\$46,000	\$46,000
<b>Total Cost/Unit</b>	<b>\$507,100</b>	<b>\$507,100</b>
<b>Maximum Supported Home Price</b>		
Household Income [4]	\$64,450	\$92,575
Income Available for Housing Costs/Year [5]	\$22,558	\$32,401
(Less) Annual HOA Fees and Insurance [6]	(\$4,700)	(\$4,700)
(Less) Property Taxes (1.2%) [7]	(\$2,700)	(\$4,200)
Income Available for Mortgage	\$15,158	\$23,501
Mortgage Interest Rate [8]	5.0%	5.0%
Mortgage Repayment Period (years)	30	30
Down Payment [9]	\$12,250	\$19,000
Total Supportable Unit Value (rounded)	\$245,000	\$380,000
<b>Affordability Gap</b>	<b>\$262,100</b>	<b>\$127,100</b>

[1] An average of 3 persons is used for this analysis based on Census data indicating the average family and household size in Walnut Creek is approximately 3 persons, and State law (Health and Safety Code Section 50052.5) indicates that a 2-bedroom unit should be assumed to be occupied by a 3-person household. Thus, EPS has assumed an average unit for income-qualified worker households would be 2-bedrooms.

[2] Based on the review of the recent land sale transactions, consistent with the feasibility analysis EPS completed in 2014 for a range of uses in WDSP and assumes that land value is based on commercial zoning; this is a conservative assumption.

[3] Includes costs for architecture and engineering; entitlement and fees; project management, marketing, commissions, and general administration; financing and charges; insurance; and contingency.

[4] Based on 2015 income limits for a three-person household in Contra Costa County at 80% and 110% of AMI, respectively.

[5] Assumes housing costs to be 35% of gross household income.

[6] Assumes HOA dues of \$350 per month and insurance costs of 0.1% of the construction cost.

[7] Rounded; includes special assessment districts in addition to the base tax rate of 1.0%, and is applied to total cost/unit; the total tax rate varies within the City.

[8] Based on typical 30-year fixed rate mortgage terms adjusted for risk associated with household income below the regional average.

[9] Assumes a 5% down payment.

Source: City of Walnut Creek; HCD; Economic & Planning Systems, Inc.

**Table 3**  
**Affordability Gap Analysis -- Rental Product Type**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	4 - 5 Stories Multifamily Building With Podium Parking		
	Very Low Income (50% AMI)	Low Income (80% AMI)	Moderate Income (110% AMI)
<b>Development Program Assumptions</b>			
Density/Acre	100	100	100
Gross Unit Size	1,100	1,100	1,100
Net Unit Size	950	950	950
Number of Bedrooms	2	2	2
Number of Persons per 2-bedroom Unit [1]	3	3	3
Parking Spaces/Unit (podium)	1.25	1.25	1.25
<b>Cost Assumptions</b>			
Land/Acre [2]	\$2,670,000	\$2,670,000	\$2,670,000
Land/Unit	\$26,700	\$26,700	\$26,700
<b>Direct Costs</b>			
Direct Construction Costs/Net SF [3]	\$230	\$230	\$230
Direct Construction Costs/Unit	\$253,000	\$253,000	\$253,000
Parking Construction Costs/Space	\$20,000	\$20,000	\$20,000
Parking Construction Costs/Unit	\$25,000	\$25,000	\$25,000
Subtotal, Direct Costs/Unit	\$278,000	\$278,000	\$278,000
Indirect Costs as a % of Direct Costs [4]	40%	40%	40%
Indirect Costs/Unit	\$111,200	\$111,200	\$111,200
Profit Margin (% of all costs)	10%	10%	10%
Profit (rounded)	\$41,590	\$41,590	\$41,590
Total Cost/Unit (rounded)	\$457,000	\$457,000	\$457,000
<b>Maximum Supported Home Price</b>			
Household Income [5]	\$42,100	\$64,450	\$92,575
Income Available for Housing Costs/Year [6]	\$12,630	\$19,335	\$27,773
(less) Operating Expenses per Unit/Year [7]	(\$6,000)	(\$6,000)	(\$10,000)
Net Operating Income	\$6,630	\$13,335	\$17,773
Capitalization Rate [8]	5.0%	5.0%	5.0%
Total Supportable Unit Value [9]	\$132,600	\$266,700	\$355,450
<b>Affordability Gap</b>	<b>\$324,400</b>	<b>\$190,300</b>	<b>\$101,550</b>

[1] An average of 3 persons is used for this analysis based on Census data indicating the average family size in Walnut Creek and State law (Health and Safety Code Section 50052.5) indicates that a 2-bedroom unit should be assumed to be occupied by a 3-person household. Thus, EPS has assumed an average unit for income-qualified worker households would be 2-bedrooms.

[2] Based on the review of the recent land sale transactions, consistent with the feasibility analysis EPS completed in 2014 for a range of uses in WDSP and assumes that land value is based on commercial zoning; this is a conservative assumption.

[3] Includes on-site work, offsite work, vertical construction, general requirements, overhead and builder fees. The cost estimate reflects wood-frame construction above podium parking.

[4] Includes costs for architecture and engineering; entitlement and fees; project management; appraisal and market study; marketing, commissions, and general administration; financing and charges; insurance; developer fee and contingency.

[5] Based on 2015 income limits for a three person household in Contra Costa County.

[6] Assumes housing costs to be 30% of gross household income.

[7] Operating expenses are generally based on EPS 2014 feasibility analysis (assumed for moderate-income households) inclusive of utility costs; units at or below 80% of AMI are assumed to be built as non-profit and are therefore exempt from property taxes. Property taxes are assumed to comprise a share of the operating expenses for the moderate income category.

[8] The capitalization rate is used to determine the current value of a property based on estimated future operating income, and is typically a measure of estimated operating risk.

[9] The total supportable unit value is determined by dividing the net operating income by the capitalization rate.

Sources: City of Walnut Creek; HCD; IRR Monitor Investor Survey; and Economic & Planning Systems, Inc.

## Development Cost Assumptions

Affordable housing development costs include land costs, direct costs (e.g., labor and materials), indirect or “soft” costs (e.g., architecture, entitlement, marketing, etc.), and developer profit. For rental projects, operating costs also must be incorporated into the analysis. Data from recent Walnut Creek developments and land transactions have been combined with EPS’s information from various market-rate and affordable housing developers to estimate appropriate development cost assumptions. These assumptions are shown in **Tables 2** and **3**.

EPS has further estimated direct and indirect development costs for multifamily housing based on reviews of recent pro formas for local projects and developer interviews conducted as part of the West Downtown Specific Plan project. As shown in **Tables 2** and **3**, the total costs for for-sale housing development are higher than for rental apartments due to larger unit sizes and liability insurance required for condominium development despite lower development density.

## Revenue Assumptions

To calculate the values of the affordable units, assumptions must be made regarding the applicable income level and the percentage of income spent on housing costs. In addition, translating these assumptions into unit prices and values requires estimates of operating expenses, capital reserves, and capitalization rates. The following assumptions were used in these calculations:

- *Income Levels*—This analysis estimates the subsidy required to produce units for households earning 50, 80, and 110 percent of Area Median Income for a three-person household. In 2015, AMI for these households was \$84,150, as shown in the California Department of Housing and Community Development’s (HCD’s) income limits chart.
- *Percentage of Gross Household Income Available for Housing Costs*—HCD standards on overpaying for rent indicate that households should pay no more than 30 percent of their gross income on housing costs. For this analysis, EPS has assumed that all rental households shall spend 30 percent of their gross income on housing costs (and 35 percent of for-sale households), including rent in rental projects or mortgage payments, homeowner association fees, insurance, and property taxes for for-sale units.
- *Operating Costs for Rental Units*—The analysis assumes that apartment operators incur annual operating costs of \$6,000 per unit, which include the cost of utilities, for units affordable at 80 percent of AMI or below. EPS has assumed the units for moderate income households would have similar operating costs but would be built by for-profit builders and thus also subject to property taxes, increasing their annual operating cost to \$10,000 per unit.

## Affordability Gap Results

**Table 2** shows the estimated subsidies for construction of affordable for-sale units for low and moderate-income households. As shown, a unit for a household at 80 percent of AMI is expected to require a subsidy of roughly \$262,100, while a unit for a household at 110 percent of AMI is expected to require a subsidy of \$127,100. **Table 3** shows the subsidies for construction of for-rent apartments for households at various income levels. A comparison of **Tables 2** and **3** indicates the affordability gap for rentals is consistently lower than if the same household were offered a for-sale unit.

These rental housing affordability gaps then were used to calculate the justified nexus-based fees by multiplying this required subsidy by the number of units required to house workers providing goods and services to new market-rate housing development. This methodology is discussed in more detail in the following chapter.

It is worth noting that the affordability gaps estimated in this analysis are not as large as they might be using other also-valid assumptions. For example, the funding gaps for low income units assume that prices are set at 80 percent of median income, while State law suggest low-income unit prices may be set at 70 percent of median income. This methodology used by EPS yields higher unit values and thus results in lower maximum fees than the City's current practices would yield, and has been used by EPS to preempt objections that the assumptions and calculations overstate the actual funding gap for affordable units.

## 2. DEMAND-BASED NEXUS FEE CALCULATION

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The maximum supportable nexus-based fees are based on both the affordability gap and the estimated impact that new market-rate units have on the need for affordable units, as reflected in the number of income-qualified local workers required to support the residents of market-rate units and the total subsidy required to construct housing for those workers. This approach is based on the following logic: (a) residents of market-rate housing have disposable incomes and require a variety of goods and services (including private sector goods and services and government services), (b) the provision of those goods and services will require some workers who make lower incomes and cannot afford market-rate housing, and (c) fees charged to market-rate projects can mitigate the impact of those projects on the increased need for affordable housing.

### **Market-Rate Household Income Levels**

Households with larger incomes typically spend more on goods and services, therefore creating additional lower income jobs, which in turn generate a greater demand for affordable housing. To assess the impact that market-rate units have on the need for affordable housing, EPS has estimated the household income required to purchase a home at various price levels, as shown in **Table 4**.

The income required to purchase a particular unit value is based on assumptions of the standard down payment, financing terms, property taxes, and other costs related to owning a home. These housing costs typically account for 35 percent of a household's income, and therefore, by knowing these costs, the required income to purchase each unit can be estimated. As shown, required household incomes under recent market conditions range from approximately \$111,100 for a \$500,000 unit to roughly \$252,100 for a \$1.25 million unit. Changes to housing market and financing conditions can have a significant effect on the calculations in this study.

### **Household Expenditures and Job Creation by Income Level**

Having established the income requirements for purchasing units at various values, the fee calculation then requires an analysis of the household spending patterns at those required income levels. Consistent with nexus fee calculations and impact analysis for schools, parks, roads, etc., this analysis also assumes that all households purchasing new market-rate units in Walnut Creek are "net new" households to the City. To assume otherwise—for instance, that only those buyers of new housing units relocating from outside Walnut Creek should be counted in the impact analysis—would require assuming that the homes left by those households relocating *within* Walnut Creek would be demolished or left vacant in perpetuity. This would only be the case were the City experiencing a significant loss of population and housing inventory, as has occurred, for instance, in Detroit. Walnut Creek has not experienced such declines.

The Consumer Expenditure Survey from the United States Bureau of Labor Statistics provides data for households at a variety of income levels, detailing the amounts that typical households spend on things like Food at Home, Apparel and Services, and Vehicle Maintenance and Repairs.

**Table 4**  
**Required Income by Unit Price - Market-Rate For-Sale Units**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Base Unit Price	Mortgage (Price less 20% Down)	Annual Cost					Minimum Required Income
		Mortgage Payment	Property Taxes	HOA Dues	Home Insurance	Utilities	
		[1]	[2]	[3]	[4]	[5]	[6]
\$500,000	\$400,000	\$26,021	\$6,000	\$4,200	\$350	\$2,316	\$111,100
\$750,000	\$600,000	\$39,031	\$9,000	\$4,200	\$525	\$2,616	\$158,200
\$1,000,000	\$800,000	\$52,041	\$12,000	\$4,200	\$700	\$2,916	\$205,300
\$1,250,000	\$1,000,000	\$65,051	\$15,000	\$4,200	\$875	\$3,120	\$252,100

[1] Based on mortgage terms of 20% down payment and 5% interest for 30 years.

[2] Assumes property tax rate of 0.012.

[3] HOA dues are assumed at \$350/month.

[4] Assumes homeowners insurance costs of 0.1% of the unit cost assumed at 70% of the value.

[5] Based on the Contra Costa County Housing Authority Utility Allowance (assumes natural gas).

[6] Assumes 35% of gross household income spent on housing costs; rounded.

Source: City of Walnut Creek; HCD; Economic & Planning Systems, Inc.



Interestingly, household expenditures by category are not uniformly proportional to household income levels. For example, households earning around \$111,100 (adequate to purchase a \$500,000 unit) spend roughly 10.1 percent of their income on food and drink (at home and eating out), while households earning \$252,100 who can afford to purchase a \$1.25 million unit spend only about 7.3 percent of their income on food and drink. Because of these and other differences in proportionate spending, the expenditure profile varies at different income levels.

The homebuyer household's typical expenditures were converted to the number of jobs created by their spending. The first step in this process is to determine how much of an industry's gross receipts are used to pay wages and employee compensation. EPS relied on data from the Economic Census,<sup>3</sup> which provides employment, gross sales, and payroll data by industry for Contra Costa County. In certain instances, where local data was not available for every Economic Census industry, EPS relied on statewide Economic Census data for that industry.

To link the Economic Census data and the Consumer Expenditure Survey data, EPS made determinations as to the industries involved with expenditures in various categories. For example, purchases in the Consumer Expenditure Survey's "Food at Home" category would likely involve the Economic Census's "Food & Beverage Stores" industry, where gross receipts were more than nine times the employees' wages. By contrast, purchases in the Consumer Expenditure Survey's "Entertainment Fees and Admissions" category were attributed to the Economic Census' "Arts, Entertainment, and Recreation" industry, where gross receipts are only about four times the employees' wages. Where more than one Economic Census category was attributable to a Consumer Expenditure Survey category, EPS estimated the proportion of expenditures associated with each Economic Census category.

After determining the amount of the household's expenditures that were used for employee wages, EPS estimated the number of employees those aggregate wages represent. EPS calculated the number of workers supported by that spending using the average wage per worker (also from the 2013 Economic Census). These wages ranged from a low of roughly \$11,900 per year for workers in the personal and laundry services industry to a high of more than \$134,700 for data processing, hosting, and related services.

A range of occupations and incomes exist in a given industry sector. For instance, the methodology used to generate **Tables B-1 to B-4 in Appendix B** distinguishes between the typical incomes of workers in different types of retail stores (e.g., "food and beverage stores" versus "general merchandise stores"), rather than assuming all retail sector workers earn the same income. However, the average wage is used for each sub-category of industry employment and represents a reasonable proxy for the range of incomes in that group: while some employees will have higher wages and require lower subsidies, others will have lower incomes and require higher subsidies. Using the average approximates the total housing subsidy needed by workers in that industry.

To calculate the number of *households* supported by the expenditures of market-rate housing units, EPS estimated the employees' household formation rates. Importantly, employees

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<sup>3</sup> Note that the Consumer Expenditure Survey data is based on information current as of 2014. The latest data available for the Economic Census was published in 2013. EPS converted all numbers to 2015 dollars using the Consumer Price Index (CPI) for the San Francisco Metropolitan Statistical Area (MSA) from the Bureau of Labor Statistics.

generated from the increase in housing units do not all form households; some employees, in the retail and food services industries in particular, are young workers and do not form households. Data from the Bureau of Labor Statistics indicates that 12.5 percent of retail/restaurant workers are age 16 to 19, but an average of only 1.9 percent of workers in the workforce overall. EPS applied these discounts to household formation by type of business to get a more accurate calculation of households formed by the employees and the average total incomes of those households.

To get the overall households' income rather than the individual workers', the wages of workers forming households were multiplied by the average of approximately 1.58 workers per working household in Walnut Creek.<sup>4</sup> This assumption implies the workers in a given household will have roughly equivalent compensation. While certainly there will often be some variation in wages per employee within a household, on average this assumption is reasonable because it implies comparable levels of education and training among all workers in a household. The average household incomes then are allocated to various income categories to estimate the number of affordable housing units demanded in each income category (50 through 110 percent of AMI).

A simplified example of these calculations follows:

A.	Number of Households (prototype project)	1,000
B.	Average Household Income (in the project)	\$125,000
C.	Aggregate Household Income (A x B)	\$125 million
D.	Average Income Spent on Retail (Consumer Expenditure Survey)	\$40,000
E.	Aggregate Retail Spending (A x D)	\$40 million
F.	Retail Gross Receipts: Payroll Ratio (Economic Census)	9:1
G.	Estimated Retail Payroll (E ÷ F)	\$4.44 million
H.	Average Retail Wage (Economic Census)	\$28,500
I.	Estimated Total Retail Jobs (G ÷ H)	156
J.	Percent Age 20+ (Bureau of Labor Statistics)	87.5%
K.	Total Retail Workers Forming Households	136
J.	Average Workers/Household (Census Data)	1.58
K.	Estimated Households Created (K ÷ J)	86
L.	Average Household Income (H x J)	\$45,000
M.	Income Category	Low-Income (up to 80% of AMI)

In this simplified example, 1,000 new market-rate units sold to households earning \$125,000 per year would create demand for 86 housing units for retail workers with household incomes typically between 50 and 80 percent of AMI. Actual calculations and impact distinctions by type of household expenditure for various home values are shown in the series of tables presented in **Appendix B**.

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<sup>4</sup> Workers per working household based on American Community Survey (ACS) Census data current as of 2013. Although ACS data reported is based on historical figures, these figures can vary somewhat based on ongoing revisions to the ACS data.

## Demand for Public-Sector Workers

In addition to the jobs created by the spending of the new market-rate households, this analysis also evaluates the number of public-sector employees generated by the public service demands of new market-rate households. Rather than a comprehensive computation of public-sector employment, the analysis aims to be conservative by sampling only certain public-sector jobs (e.g., teachers and transportation providers) that are expected to grow in proportionate measure to household growth.

Data from the 2014 Occupational Employment Survey for the Oakland-Fremont-Hayward MSA was used to determine the number of these public-sector employees needed to serve new market-rate development. This data was generated by the California Employment Development Department (EDD) and provides employment and wage information for a variety of occupational categories. EPS reviewed the data and sampled occupations that were public sector–related.

Based on the ratio of the selected public-sector jobs to the total households in the MSA, EPS estimates that approximately 37 government jobs or 23 households with a government employee are required per 1,000 total households. These figures are conservative (i.e., low) because numerous types of public-sector jobs are *not* included in this analysis (such as federal postal workers, County health and human services workers, etc.). Also, please note that EPS has no basis to distinguish differences in the number of public-sector workers demanded by households based on different income levels or in different sizes of units, so the same numbers of public-sector jobs are assumed to be generated by units of all sizes and prices.

## Combined Demand for Income-Qualified Workers

The total number of income-qualified households required to support the expenditure and public-sector service needs of new market-rate units were determined based on the affordable housing income limits from HCD for a 3-person household. **Table 5** summarizes the HCD income limits used to compute the total number of income-qualified households generated by construction of market-rate units.<sup>5</sup> The number of income-qualified households required to provide goods and services to new housing units is detailed in **Appendix B**.

The nexus methodology used herein computes the total number of income-qualified households generated by market-rate units (as shown in **Table 6**) and calculates the impact fee based on the estimated cost to subsidize the production of units to meet that affordable housing demand. This analysis assumes that the fees on residential development will fund required affordable housing for all new workers generated. In practice, only a portion of Walnut Creek’s workers resides in the City as many workers in-commute from other areas for a variety of reasons, one of which is the relative cost of housing among different communities. However, if every jurisdiction were to adopt a policy that it would only fund housing for the fraction of its locally generated workers that chooses to live within the City, in aggregate the region’s affordable housing demand would be grossly underrepresented and underfunded.

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<sup>5</sup> To correspond to the available data regarding employee wages, the 2015 Contra Costa County affordable housing income limits from HCD were used to determine the number of income-qualified households based on household expenditures.

**Table 5**  
**Income Limits for Affordable Housing**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

<b>Affordability Category</b>	<b>Maximum Percentage of County Median</b>	<b>2015 Max Income 3-person household</b>
		[1]
Very Low Income (VLI)	50%	\$42,100
Low Income (LI)	80%	\$64,450
Median Income	100%	\$84,150
Moderate Income (Mod) (2)	120%	\$101,000

(1) 2015 HCD maximum income thresholds are used to translate employment, wages and total worker household incomes to affordable housing categories and to compute supportable housing costs based on household income levels.

(2) This analysis uses a midpoint for the moderate income category of 110% based on direction from City staff.

Sources: CA Department of Housing and Community Development; Economic & Planning Systems, Inc.

**Table 6**  
**Summary of Worker and Household Generation per 100 Market-Rate Units**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Unit Type	Minimum Household Income Requirement	Total Workers Generated	Total Worker Households	Total Income Qualified Households	Income Qualified Households by Income Category		
					VLI Households	LI Households	Moderate Income Households
<b>For-Sale Units</b>		[1]	[2]	[3]			
\$500,000	\$111,100	36	21.1	<b>18.5</b>	12.1	5.4	1.0
\$750,000	\$158,200	48	27.9	<b>25.3</b>	17.3	6.9	1.0
\$1,000,000	\$205,300	57	33.5	<b>30.6</b>	21.2	8.1	1.3
\$1,250,000	\$252,100	69	40.6	<b>37.5</b>	26.0	9.9	1.6

[1] Total workers generated detailed by unit price point and rental apartment size in Tables B-1 through B-4.

[2] Total worker households derived assuming 1.58 workers per household. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

[3] Total income qualified households reflects those households eligible for affordable housing based on total household income. Income qualified households therefore exclude households earning above moderate income. See Tables B-1 through B-4 for detail. Total may not sum due to rounding.

Source: Economic & Planning Systems, Inc.

## Fee Calculation

The affordability gap analysis quantifies the subsidy required to construct affordable housing at various income levels. Analysis of consumer expenditures that rely on lower wage workers provides an estimate of the total number of income-qualified households generated by new for-sale units. Then for each category of market-rate units, the nexus-based fee is calculated by applying the total number of income-qualified households generated to the affordability gap computed for each affordable household income level. The analysis provides the maximum supportable nexus-based fees for new housing development in Walnut Creek.

**Tables 7** through **10** show the impact fee calculation by for-sale home value ranging from \$500,000 to \$1.25 million per unit. The total impact fees required for a representative project of 100 units is calculated by multiplying the number of affordable units required per income level by the cost of subsidizing such housing. All income-qualified households are assumed to be housed in multifamily rental units and the subsidies needed are calculated as the affordability gaps shown in **Table 3**. The resulting maximum impact fee for market-rate units ranges from \$50,500 for a \$500,000 unit to \$104,700 for a \$1.25 million unit.

These fee estimates result in the maximum fee range of between \$42 and \$50 per square foot and significantly exceed the existing housing fee of \$15 per square foot in Walnut Creek. While the City has the option of adopting fees up to the maximum levels calculated, there may be a variety of reasons to adopt the fee level below the maximum, including insufficient wages relative to development costs. Market forces, land use regulations, construction costs, and entitlement costs also affect housing affordability. In addition, revenue generated through this fee program is just one source of potential subsidy funds to help finance affordable housing projects. Imposing a maximum fee on the residential and commercial linkage fee would also result in the double-counting of impacts attributed to new housing and new commercial uses. Finally, adoption of the maximum fees for certain employment categories would represent a very large addition to the costs of development, and could hamper the City's economic development and competitiveness objectives. Other California communities—including Sunnyvale, Mountain View, and Santa Rosa, among others—have made reductions to the maximum allowable fee when adopting their fee program, for reasons such as those cited above. The notion of the appropriate fee level will be further explored by EPS in subsequent analyses.

**Table 7**  
**Nexus-Based Housing Fee Calculations (\$500,000 Unit)**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	12.1	\$324,400	\$3,910,104	
Affordable Units - Low Income	5.4	\$190,300	\$1,032,740	
Affordable Units - Moderate Income	1.0	\$101,550	\$105,895	
<b>Total</b>	<b>18.5</b>		<b>\$5,048,739</b>	<b>\$50,487</b>

[1] See Table 6.

[2] See Tables 2 and 3. EPS has assumed all affordable units will be rental because the subsidy to construct rental units is lower than for-sale for every income-category.

Source: Economic & Planning Systems, Inc.

**Table 8**  
**Nexus-Based Housing Fee Calculations (\$750,000 Unit)**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	17.3	\$324,400	\$5,615,907	
Affordable Units - Low Income	6.9	\$190,300	\$1,314,441	
Affordable Units - Moderate Income	1.0	\$101,550	\$105,846	
<b>Total</b>	<b>25.3</b>		<b>\$7,036,194</b>	<b>\$70,362</b>

[1] See Table 6.

[2] See Tables 2 and 3. EPS has assumed all affordable units will be rental because the subsidy to construct rental units is lower than for-sale for every income-category.

Source: Economic & Planning Systems, Inc.



**Table 9**  
**Nexus-Based Housing Fee Calculations (\$1,000,000 Unit)**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	21.2	\$324,400	\$6,870,842	
Affordable Units - Low Income	8.1	\$190,300	\$1,541,521	
Affordable Units - Moderate Income	1.3	\$101,550	\$133,705	
<b>Total</b>	<b>30.6</b>		<b>\$8,546,068</b>	<b>\$85,461</b>

[1] See Table 6.

[2] See Tables 2 and 3. EPS has assumed all affordable units will be rental because the subsidy to construct rental units is lower than for-sale for every income-category.

Source: Economic & Planning Systems, Inc.

**Table 10**  
**Nexus-Based Housing Fee Calculations (\$1,250,000 Unit)**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	26.0	\$324,400	\$8,432,121	
Affordable Units - Low Income	9.9	\$190,300	\$1,879,546	
Affordable Units - Moderate Income	1.6	\$101,550	\$161,386	
<b>Total</b>	<b>37.5</b>		<b>\$10,473,053</b>	<b>\$104,731</b>

[1] See Table 6.

[2] See Tables 2 and 3. EPS has assumed all affordable units will be rental because the subsidy to construct rental units is lower than for-sale for every income-category.

Source: Economic & Planning Systems, Inc.



## APPENDICES:

Appendix A: Household Expenditures and  
Employment Generation

Appendix B: Income Levels for Worker Households

## APPENDIX A:

### Household Expenditures and Employment Generation



**Table A-1**  
**Household Expenditures and Employment Generation - \$500,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Food at Home</b>	5.6%	100%	\$6,264										
Food & Beverage Stores		100%	\$6,264	\$6,263,910	9.46	\$662,012	\$29,961	22.1	87.5%	1.58	12.2	\$47,455	LI Households
<b>Food Away From Home</b>	4.5%	100%	\$4,998										
Food Services and Drinking Places		100%	\$4,998	\$4,998,378	3.59	\$1,391,538	\$16,942	82.1	87.5%	1.58	45.4	\$26,834	VLI Households
<b>Alcoholic Beverages</b>	0.8%	100%	\$909										
Food & Beverage Stores		50%	\$455	\$454,505	9.46	\$48,035	\$29,961	1.6	87.5%	1.58	0.9	\$47,455	LI Households
Food Services and Drinking Places		50%	\$455	\$454,505	3.59	\$126,533	\$16,942	7.5	87.5%	1.58	4.1	\$26,834	VLI Households
<b>Housing Maintenance, Repairs, Insurance, Other expenses</b>	2.2%	100%	\$2,409										
Personal and Household Goods Repair and Maintenance		45%	\$1,084	\$1,084,261	3.22	\$336,237	\$12,737	26.4	98.1%	1.58	16.3	\$20,174	VLI Households
Building Material and Garden Equipment and Supplies Dealer		45%	\$1,084	\$1,084,261	7.31	\$148,257	\$34,899	4.2	87.5%	1.58	2.3	\$55,277	LI Households
Real Estate and Rental and Leasing		10%	\$241	\$240,947	5.33	\$45,240	\$55,131	0.8	98.1%	1.58	0.5	\$87,322	Moderate Income
<b>Fuel oil and Other fuels [7]</b>	0.2%		\$251										
Nonstore Retailers		100%	\$251	\$251,454	9.81	\$25,639	\$37,953	0.7	87.5%	1.58	0.4	\$60,114	LI Households
<b>Water and Other Public Services [7]</b>	0.8%	100%	\$845										
Waste Management and Remediation Services		100%	\$845	\$845,262	3.45	\$245,328	\$65,302	3.8	98.1%	1.58	2.3	\$103,432	Above Mod
<b>Household Operations Personal Services</b>	0.7%	100%	\$733										
Nursing and Residential Care Facilities		40%	\$293	\$293,245	2.64	\$111,040	\$30,684	3.6	98.1%	1.58	2.2	\$48,600	LI Households
Social Assistance [8]		60%	\$440	\$439,867	2.98	\$147,434	\$24,832	5.9	98.1%	1.58	3.7	\$39,331	VLI Households
<b>Household Operations Other Household Expenses</b>	1.1%	100%	\$1,261										
Services to Buildings and Dwellings		100%	\$1,261	\$1,260,810	2.54	\$495,832	\$27,607	18.0	98.1%	1.58	11.1	\$43,726	LI Households
<b>Housekeeping Supplies</b>	1.0%	100%	\$1,143										
Building Materials and Garden Equipment and Supplies Dealers		10%	\$114	\$114,276	7.31	\$15,626	\$34,899	0.4	87.5%	1.58	0.2	\$55,277	LI Households
Food & Beverage Stores		35%	\$400	\$399,965	9.46	\$42,271	\$29,961	1.4	87.5%	1.58	0.8	\$47,455	LI Households
General Merchandise		35%	\$400	\$399,965	11.54	\$34,645	\$25,807	1.3	87.5%	1.58	0.7	\$40,876	VLI Households
Miscellaneous Store Retailers		20%	\$229	\$228,551	6.64	\$34,443	\$24,517	1.4	87.5%	1.58	0.8	\$38,833	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$500,000 Unit requires a household income of \$111,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-1**  
**Household Expenditures and Employment Generation - \$500,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHS	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j	
<b>Calculation</b>													
<b>Household Furnishings and Equipment</b>	2.5%	100%	\$2,801										
Furniture and Home Furnishings Stores		40%	\$1,121	\$1,120,562	8.40	\$133,344	\$27,418	4.9	87.5%	1.58	2.7	\$43,427	LI Households
Electronics and Appliance Stores		40%	\$1,121	\$1,120,562	9.79	\$114,441	\$26,665	4.3	87.5%	1.58	2.4	\$42,234	LI Households
General Merchandise Stores		10%	\$280	\$280,141	11.54	\$24,266	\$25,807	0.9	87.5%	1.58	0.5	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$280	\$280,141	6.64	\$42,217	\$24,517	1.7	87.5%	1.58	1.0	\$38,833	VLI Households
<b>Apparel and Services</b>	2.6%	100%	\$2,938										
Clothing and Clothing Accessories Stores		40%	\$1,175	\$1,175,339	7.64	\$153,875	\$20,424	7.5	87.5%	1.58	4.2	\$32,350	VLI Households
General Merchandise		40%	\$1,175	\$1,175,339	11.54	\$101,809	\$25,807	3.9	87.5%	1.58	2.2	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$294	\$293,835	6.64	\$44,281	\$24,517	1.8	87.5%	1.58	1.0	\$38,833	VLI Households
Personal and Household Goods Repair and Maintenance		5%	\$147	\$146,917	3.22	\$45,560	\$12,737	3.6	87.5%	1.58	2.0	\$20,174	VLI Households
Dry cleaning and Laundry Services		5%	\$147	\$146,917	3.22	\$45,560	\$12,737	3.6	87.5%	1.58	2.0	\$20,174	VLI Households
<b>Vehicle Purchases (net outlay)</b>	5.9%	100%	\$6,607										
Motor Vehicle and Parts Dealers		100%	\$6,607	\$6,607,446	10.06	\$657,014	\$53,507	12.3	87.5%	1.58	6.8	\$84,750	Moderate Income
<b>Gasoline and motor oil</b>	3.8%	100%	\$4,258										
Gasoline Stations		100%	\$4,258	\$4,258,184	47.55	\$25,866	\$21,168	1.2	87.5%	1.58	0.7	\$33,528	VLI Households
<b>Vehicle Maintenance and Repairs</b>	1.3%	100%	\$1,394										
Repair and Maintenance		100%	\$1,394	\$1,394,210	3.66	\$380,869	\$34,965	10.9	98.1%	1.58	6.7	\$55,381	LI Households
<b>Medical Services</b>	1.2%	100%	\$1,341										
Ambulatory Health Care Services		40%	\$536	\$536,434	2.42	\$221,672	\$78,785	2.8	98.1%	1.58	1.7	\$124,788	Above Mod
General Medical and Surgical Hospitals		30%	\$402	\$402,326	2.91	\$138,309	\$73,749	1.9	98.1%	1.58	1.2	\$116,811	Above Mod
Nursing and Residential Care Facilities		30%	\$402	\$402,326	2.64	\$152,345	\$30,684	5.0	98.1%	1.58	3.1	\$48,600	LI Households
<b>Drugs</b>	0.6%	100%	\$649										
Health and Personal Care Stores		100%	\$649	\$649,293	7.39	\$87,897	\$39,122	2.2	87.5%	1.58	1.2	\$61,966	LI Households
<b>Medical Supplies</b>	0.2%	100%	\$237										
Health and Personal Care Stores		100%	\$237	\$237,287	7.39	\$32,123	\$39,122	0.8	87.5%	1.58	0.5	\$61,966	LI Households
<b>Entertainment Fees and Admissions</b>	1.1%	100%	\$1,224										
Arts, Entertainment, & Recreation		100%	\$1,224	\$1,224,213	4.26	\$287,347	\$26,280	10.9	87.5%	1.58	6.0	\$41,624	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$500,000 Unit requires a household income of \$111,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-1**  
**Household Expenditures and Employment Generation - \$500,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j	
<b>Calculation</b>													
<b>Entertainment Audio and Visual Equipment and Services</b>	1.4%	100%	\$1,539										
Electronics and Appliance Stores		100%	\$1,539	\$1,539,416	9.79	\$157,217	\$26,665	5.9	87.5%	1.58	3.3	\$42,234	LI Households
<b>Entertainment Pets, Toys, Hobbies, and Playground Equip.</b>	0.8%	100%	\$937										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	\$375	\$374,937	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Miscellaneous Store Retailers		40%	\$375	\$374,937	6.64	\$56,503	\$24,517	2.3	87.5%	1.58	1.3	\$38,833	VLI Households
Veterinary Services		20%	\$187	\$187,469	2.56	\$73,182	\$39,442	1.9	98.1%	1.58	1.1	\$62,472	LI Households
<b>Other Entertainment Supplies, Equipment, and Services</b>	1.1%	100%	\$1,236										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	\$1,051	\$1,050,616	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Photographic Services		15%	\$185	\$185,403	4.40	\$42,132	\$26,467	1.6	98.1%	1.58	1.0	\$41,921	VLI Households
<b>Personal Care Products and Services</b>	1.0%	100%	\$1,109										
Unspecified Retail		50%	\$554	\$554,260	6.64	\$83,527	\$24,517	3.4	87.5%	1.58	1.9	\$38,833	VLI Households
Personal Care Services		50%	\$554	\$554,260	2.89	\$191,690	\$17,688	10.8	98.1%	1.58	6.7	\$28,016	VLI Households
<b>Reading</b>	0.2%	100%	\$183										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	\$183	\$182,983	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
<b>Education</b>	1.8%	100%	\$1,996										
Educational Services		100%	\$1,996	\$1,996,282	3.11	\$641,352	\$22,455	28.6	98.1%	1.58	17.7	\$35,566	VLI Households
<b>Tobacco Products and Smoking Supplies</b>	0.4%	100%	\$432										
Unspecified Retail		100%	\$432	\$432,075	6.64	\$65,114	\$24,517	2.7	87.5%	1.58	1.5	\$38,833	VLI Households
<b>Miscellaneous</b>	1.2%	100%	\$1,309										
Accounting		20%	\$262	\$261,842	2.11	\$123,805	\$58,902	2.1	98.1%	1.58	1.3	\$93,294	Above Mod
Architectural, Engineering, and Related		20%	\$262	\$261,842	2.98	\$87,895	\$95,809	0.9	98.1%	1.58	0.6	\$151,751	Above Mod
Specialized Design Services		20%	\$262	\$261,842	3.84	\$68,173	\$52,815	1.3	98.1%	1.58	0.8	\$83,653	Moderate Income
Death Care Services		20%	\$262	\$261,842	3.41	\$76,861	\$42,194	1.8	98.1%	1.58	1.1	\$66,830	Moderate Income
Legal Services		20%	\$262	\$261,842	2.99	\$87,536	\$98,006	0.9	98.1%	1.58	0.6	\$155,231	Above Mod
<b>Total per 1,000 Market Rate Households</b>								<b>325.8</b>			<b>188.6</b>		

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$500,000 Unit requires a household income of \$111,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

Source: 2014 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2013 Economic Census, American Community Survey; and Economic & Planning Systems, Inc.

**Table A-2**  
**Household Expenditures and Employment Generation - \$750,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Food at Home</b>	3.5%	100%	\$5,512										
Food & Beverage Stores		100%	\$5,512	\$5,512,034	9.46	\$582,549	\$29,961	19.4	87.5%	1.58	10.7	\$47,455	LI Households
<b>Food Away From Home</b>	3.8%	100%	\$5,975										
Food Services and Drinking Places		100%	\$5,975	\$5,974,523	3.59	\$1,663,294	\$16,942	98.2	87.5%	1.58	54.2	\$26,834	VLI Households
<b>Alcoholic Beverages</b>	0.8%	100%	\$1,207										
Food & Beverage Stores		50%	\$603	\$603,339	9.46	\$63,765	\$29,961	2.1	87.5%	1.58	1.2	\$47,455	LI Households
Food Services and Drinking Places		50%	\$603	\$603,339	3.59	\$167,968	\$16,942	9.9	87.5%	1.58	5.5	\$26,834	VLI Households
<b>Housing Maintenance, Repairs, Insurance, Other expenses</b>	1.7%	100%	\$2,692										
Personal and Household Goods Repair and Maintenance		45%	\$1,211	\$1,211,260	3.22	\$375,621	\$12,737	29.5	98.1%	1.58	18.3	\$20,174	VLI Households
Building Material and Garden Equipment and Supplies Dealer		45%	\$1,211	\$1,211,260	7.31	\$165,622	\$34,899	4.7	87.5%	1.58	2.6	\$55,277	LI Households
Real Estate and Rental and Leasing		10%	\$269	\$269,169	5.33	\$50,539	\$55,131	0.9	98.1%	1.58	0.6	\$87,322	Moderate Income
<b>Fuel oil and Other fuels [7]</b>	0.2%		\$259										
Nonstore Retailers		100%	\$259	\$258,994	9.81	\$26,408	\$37,953	0.7	87.5%	1.58	0.4	\$60,114	LI Households
<b>Water and Other Public Services [7]</b>	0.5%	100%	\$741										
Waste Management and Remediation Services		100%	\$741	\$740,824	3.45	\$215,016	\$65,302	3.3	98.1%	1.58	2.0	\$103,432	Above Mod
<b>Household Operations Personal Services</b>	2.0%	100%	\$3,195										
Nursing and Residential Care Facilities		40%	\$1,278	\$1,277,816	2.64	\$483,860	\$30,684	15.8	98.1%	1.58	9.8	\$48,600	LI Households
Social Assistance [8]		60%	\$1,917	\$1,916,725	2.98	\$642,444	\$24,832	25.9	98.1%	1.58	16.0	\$39,331	VLI Households
<b>Household Operations Other Household Expenses</b>	1.2%	100%	\$1,944										
Services to Buildings and Dwellings		100%	\$1,944	\$1,944,138	2.54	\$764,561	\$27,607	27.7	98.1%	1.58	17.2	\$43,726	LI Households
<b>Housekeeping Supplies</b>	0.6%	100%	\$949										
Building Materials and Garden Equipment and Supplies Dealers		10%	\$95	\$94,936	7.31	\$12,981	\$34,899	0.4	87.5%	1.58	0.2	\$55,277	LI Households
Food & Beverage Stores		35%	\$332	\$332,278	9.46	\$35,117	\$29,961	1.2	87.5%	1.58	0.6	\$47,455	LI Households
General Merchandise		35%	\$332	\$332,278	11.54	\$28,782	\$25,807	1.1	87.5%	1.58	0.6	\$40,876	VLI Households
Miscellaneous Store Retailers		20%	\$190	\$189,873	6.64	\$28,614	\$24,517	1.2	87.5%	1.58	0.6	\$38,833	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$750,000 Unit requires a household income of \$158,200.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.



**Table A-2**  
**Household Expenditures and Employment Generation - \$750,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j	
<b>Calculation</b>													
<b>Household Furnishings and Equipment</b>	2.1%	100%	\$3,317										
Furniture and Home Furnishings Stores		40%	\$1,327	\$1,326,924	8.40	\$157,901	\$27,418	5.8	87.5%	1.58	3.2	\$43,427	LI Households
Electronics and Appliance Stores		40%	\$1,327	\$1,326,924	9.79	\$135,516	\$26,665	5.1	87.5%	1.58	2.8	\$42,234	LI Households
General Merchandise Stores		10%	\$332	\$331,731	11.54	\$28,735	\$25,807	1.1	87.5%	1.58	0.6	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$332	\$331,731	6.64	\$49,992	\$24,517	2.0	87.5%	1.58	1.1	\$38,833	VLI Households
<b>Apparel and Services</b>	2.5%	100%	\$3,967										
Clothing and Clothing Accessories Stores		40%	\$1,587	\$1,586,928	7.64	\$207,761	\$20,424	10.2	87.5%	1.58	5.6	\$32,350	VLI Households
General Merchandise		40%	\$1,587	\$1,586,928	11.54	\$137,461	\$25,807	5.3	87.5%	1.58	2.9	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$397	\$396,732	6.64	\$59,788	\$24,517	2.4	87.5%	1.58	1.3	\$38,833	VLI Households
Personal and Household Goods Repair and Maintenance		5%	\$198	\$198,366	3.22	\$61,515	\$12,737	4.8	87.5%	1.58	2.7	\$20,174	VLI Households
Dry cleaning and Laundry Services		5%	\$198	\$198,366	3.22	\$61,515	\$12,737	4.8	87.5%	1.58	2.7	\$20,174	VLI Households
<b>Vehicle Purchases (net outlay)</b>	3.9%	100%	\$6,170										
Motor Vehicle and Parts Dealers		100%	\$6,170	\$6,169,610	10.06	\$613,478	\$53,507	11.5	87.5%	1.58	6.3	\$84,750	Moderate Income
<b>Gasoline and motor oil</b>	2.1%	100%	\$3,291										
Gasoline Stations		100%	\$3,291	\$3,291,243	47.55	\$25,866	\$21,168	1.2	87.5%	1.58	0.7	\$33,528	VLI Households
<b>Vehicle Maintenance and Repairs</b>	1.0%	100%	\$1,590										
Repair and Maintenance		100%	\$1,590	\$1,590,123	3.66	\$434,389	\$34,965	12.4	98.1%	1.58	7.7	\$55,381	LI Households
<b>Medical Services</b>	0.9%	100%	\$1,364										
Ambulatory Health Care Services		40%	\$546	\$545,569	2.42	\$225,447	\$78,785	2.9	98.1%	1.58	1.8	\$124,788	Above Mod
General Medical and Surgical Hospitals		30%	\$409	\$409,177	2.91	\$140,665	\$73,749	1.9	98.1%	1.58	1.2	\$116,811	Above Mod
Nursing and Residential Care Facilities		30%	\$409	\$409,177	2.64	\$154,940	\$30,684	5.0	98.1%	1.58	3.1	\$48,600	LI Households
<b>Drugs</b>	0.5%	100%	\$724										
Health and Personal Care Stores		100%	\$724	\$724,006	7.39	\$98,012	\$39,122	2.5	87.5%	1.58	1.4	\$61,966	LI Households
<b>Medical Supplies</b>	0.2%	100%	\$243										
Health and Personal Care Stores		100%	\$243	\$243,017	7.39	\$32,898	\$39,122	0.8	87.5%	1.58	0.5	\$61,966	LI Households
<b>Entertainment Fees and Admissions</b>	1.4%	100%	\$2,201										
Arts, Entertainment, & Recreation		100%	\$2,201	\$2,200,609	4.26	\$516,526	\$26,280	19.7	87.5%	1.58	10.9	\$41,624	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$750,000 Unit requires a household income of \$158,200.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-2**  
**Household Expenditures and Employment Generation - \$750,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j	
<b>Calculation</b>													
<b>Entertainment Audio and Visual Equipment and Services</b>	0.9%	100%	\$1,474										
Electronics and Appliance Stores		100%	\$1,474	\$1,474,080	9.79	\$150,545	\$26,665	5.6	87.5%	1.58	3.1	\$42,234	LI Households
<b>Entertainment Pets, Toys, Hobbies, and Playground Equip.</b>	0.8%	100%	\$1,234										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	\$494	\$493,771	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Miscellaneous Store Retailers		40%	\$494	\$493,771	6.64	\$74,412	\$24,517	3.0	87.5%	1.58	1.7	\$38,833	VLI Households
Veterinary Services		20%	\$247	\$246,885	2.56	\$96,377	\$39,442	2.4	98.1%	1.58	1.5	\$62,472	LI Households
<b>Other Entertainment Supplies, Equipment, and Services</b>	0.7%	100%	\$1,071										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	\$911	\$910,600	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Photographic Services		15%	\$161	\$160,694	4.40	\$36,517	\$26,467	1.4	98.1%	1.58	0.9	\$41,921	VLI Households
<b>Personal Care Products and Services</b>	0.8%	100%	\$1,247										
Unspecified Retail		50%	\$624	\$623,520	6.64	\$93,965	\$24,517	3.8	87.5%	1.58	2.1	\$38,833	VLI Households
Personal Care Services		50%	\$624	\$623,520	2.89	\$215,643	\$17,688	12.2	98.1%	1.58	7.6	\$28,016	VLI Households
<b>Reading</b>	0.1%	100%	\$209										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	\$209	\$209,382	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
<b>Education</b>	2.6%	100%	\$4,123										
Educational Services		100%	\$4,123	\$4,122,884	3.11	\$1,324,573	\$22,455	59.0	98.1%	1.58	36.5	\$35,566	VLI Households
<b>Tobacco Products and Smoking Supplies</b>	0.1%	100%	\$177										
Unspecified Retail		100%	\$177	\$176,587	6.64	\$26,612	\$24,517	1.1	87.5%	1.58	0.6	\$38,833	VLI Households
<b>Miscellaneous</b>	1.0%	100%	\$1,571										
Accounting		20%	\$314	\$314,157	2.11	\$148,541	\$58,902	2.5	98.1%	1.58	1.6	\$93,294	Above Mod
Architectural, Engineering, and Related		20%	\$314	\$314,157	2.98	\$105,456	\$95,809	1.1	98.1%	1.58	0.7	\$151,751	Above Mod
Specialized Design Services		20%	\$314	\$314,157	3.84	\$81,793	\$52,815	1.5	98.1%	1.58	1.0	\$83,653	Moderate Income
Death Care Services		20%	\$314	\$314,157	3.41	\$92,217	\$42,194	2.2	98.1%	1.58	1.4	\$66,830	Moderate Income
Legal Services		20%	\$314	\$314,157	2.99	\$105,025	\$98,006	1.1	98.1%	1.58	0.7	\$155,231	Above Mod
<b>Total per 1,000 Market Rate Households</b>								<b>438.5</b>			<b>256.2</b>		

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$750,000 Unit requires a household income of \$158,200.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

Source: 2014 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2013 Economic Census, American Community Survey; and Economic & Planning Systems, Inc.

**Table A-3**  
**Household Expenditures and Employment Generation - \$1,000,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Food at Home</b>	3.5%	100%	\$7,153										
Food & Beverage Stores		100%	\$7,153	\$7,153,101	9.46	\$755,988	\$29,961	25.2	87.5%	1.58	13.9	\$47,455	LI Households
<b>Food Away From Home</b>	3.8%	100%	\$7,753										
Food Services and Drinking Places		100%	\$7,753	\$7,753,285	3.59	\$2,158,497	\$16,942	127.4	87.5%	1.58	70.4	\$26,834	VLI Households
<b>Alcoholic Beverages</b>	0.8%	100%	\$1,566										
Food & Beverage Stores		50%	\$783	\$782,967	9.46	\$82,749	\$29,961	2.8	87.5%	1.58	1.5	\$47,455	LI Households
Food Services and Drinking Places		50%	\$783	\$782,967	3.59	\$217,976	\$16,942	12.9	87.5%	1.58	7.1	\$26,834	VLI Households
<b>Housing Maintenance, Repairs, Insurance, Other expenses</b>	1.7%	100%	\$3,493										
Personal and Household Goods Repair and Maintenance		45%	\$1,572	\$1,571,882	3.22	\$487,452	\$12,737	38.3	98.1%	1.58	23.7	\$20,174	VLI Households
Building Material and Garden Equipment and Supplies Dealer		45%	\$1,572	\$1,571,882	7.31	\$214,932	\$34,899	6.2	87.5%	1.58	3.4	\$55,277	LI Households
Real Estate and Rental and Leasing		10%	\$349	\$349,307	5.33	\$65,586	\$55,131	1.2	98.1%	1.58	0.7	\$87,322	Moderate Income
<b>Fuel oil and Other fuels [7]</b>	0.2%		\$336										
Nonstore Retailers		100%	\$336	\$336,103	9.81	\$34,270	\$37,953	0.9	87.5%	1.58	0.5	\$60,114	LI Households
<b>Water and Other Public Services [7]</b>	0.5%	100%	\$961										
Waste Management and Remediation Services		100%	\$961	\$961,386	3.45	\$279,032	\$65,302	4.3	98.1%	1.58	2.6	\$103,432	Above Mod
<b>Household Operations Personal Services</b>	0.8%	100%	\$1,623										
Nursing and Residential Care Facilities		40%	\$649	\$649,072	2.64	\$245,779	\$30,684	8.0	98.1%	1.58	5.0	\$48,600	LI Households
Social Assistance [8]		60%	\$974	\$973,607	2.98	\$326,332	\$24,832	13.1	98.1%	1.58	8.1	\$39,331	VLI Households
<b>Household Operations Other Household Expenses</b>	1.2%	100%	\$2,523										
Services to Buildings and Dwellings		100%	\$2,523	\$2,522,955	2.54	\$992,190	\$27,607	35.9	98.1%	1.58	22.3	\$43,726	LI Households
<b>Housekeeping Supplies</b>	0.6%	100%	\$1,232										
Building Materials and Garden Equipment and Supplies Dealers		10%	\$123	\$123,201	7.31	\$16,846	\$34,899	0.5	87.5%	1.58	0.3	\$55,277	LI Households
Food & Beverage Stores		35%	\$431	\$431,205	9.46	\$45,573	\$29,961	1.5	87.5%	1.58	0.8	\$47,455	LI Households
General Merchandise		35%	\$431	\$431,205	11.54	\$37,351	\$25,807	1.4	87.5%	1.58	0.8	\$40,876	VLI Households
Miscellaneous Store Retailers		20%	\$246	\$246,403	6.64	\$37,133	\$24,517	1.5	87.5%	1.58	0.8	\$38,833	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,000,000 Unit requires a household income of \$205,300.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-3**  
**Household Expenditures and Employment Generation - \$1,000,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j	
<b>Calculation</b>													
<b>Household Furnishings and Equipment</b>	2.1%	100%	\$4,305										
Furniture and Home Furnishings Stores		40%	\$1,722	\$1,721,982	8.40	\$204,912	\$27,418	7.5	87.5%	1.58	4.1	\$43,427	LI Households
Electronics and Appliance Stores		40%	\$1,722	\$1,721,982	9.79	\$175,862	\$26,665	6.6	87.5%	1.58	3.6	\$42,234	LI Households
General Merchandise Stores		10%	\$430	\$430,496	11.54	\$37,290	\$25,807	1.4	87.5%	1.58	0.8	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$430	\$430,496	6.64	\$64,876	\$24,517	2.6	87.5%	1.58	1.5	\$38,833	VLI Households
<b>Apparel and Services</b>	2.5%	100%	\$5,148										
Clothing and Clothing Accessories Stores		40%	\$2,059	\$2,059,395	7.64	\$269,616	\$20,424	13.2	87.5%	1.58	7.3	\$32,350	VLI Households
General Merchandise		40%	\$2,059	\$2,059,395	11.54	\$178,386	\$25,807	6.9	87.5%	1.58	3.8	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$515	\$514,849	6.64	\$77,588	\$24,517	3.2	87.5%	1.58	1.7	\$38,833	VLI Households
Personal and Household Goods Repair and Maintenance		5%	\$257	\$257,424	3.22	\$79,829	\$12,737	6.3	87.5%	1.58	3.5	\$20,174	VLI Households
Dry cleaning and Laundry Services		5%	\$257	\$257,424	3.22	\$79,829	\$12,737	6.3	87.5%	1.58	3.5	\$20,174	VLI Households
<b>Vehicle Purchases (net outlay)</b>	3.9%	100%	\$8,006										
Motor Vehicle and Parts Dealers		100%	\$8,006	\$8,006,453	10.06	\$796,125	\$53,507	14.9	87.5%	1.58	8.2	\$84,750	Moderate Income
<b>Gasoline and motor oil</b>	2.1%	100%	\$4,271										
Gasoline Stations		100%	\$4,271	\$4,271,127	47.55	\$25,866	\$21,168	1.2	87.5%	1.58	0.7	\$33,528	VLI Households
<b>Vehicle Maintenance and Repairs</b>	1.0%	100%	\$2,064										
Repair and Maintenance		100%	\$2,064	\$2,063,541	3.66	\$563,717	\$34,965	16.1	98.1%	1.58	10.0	\$55,381	LI Households
<b>Medical Services</b>	0.9%	100%	\$1,770										
Ambulatory Health Care Services		40%	\$708	\$707,999	2.42	\$292,568	\$78,785	3.7	98.1%	1.58	2.3	\$124,788	Above Mod
General Medical and Surgical Hospitals		30%	\$531	\$530,999	2.91	\$182,544	\$73,749	2.5	98.1%	1.58	1.5	\$116,811	Above Mod
Nursing and Residential Care Facilities		30%	\$531	\$530,999	2.64	\$201,069	\$30,684	6.6	98.1%	1.58	4.1	\$48,600	LI Households
<b>Drugs</b>	0.5%	100%	\$940										
Health and Personal Care Stores		100%	\$940	\$939,561	7.39	\$127,192	\$39,122	3.3	87.5%	1.58	1.8	\$61,966	LI Households
<b>Medical Supplies</b>	0.2%	100%	\$315										
Health and Personal Care Stores		100%	\$315	\$315,369	7.39	\$42,693	\$39,122	1.1	87.5%	1.58	0.6	\$61,966	LI Households
<b>Entertainment Fees and Admissions</b>	1.4%	100%	\$2,856										
Arts, Entertainment, & Recreation		100%	\$2,856	\$2,855,784	4.26	\$670,309	\$26,280	25.5	87.5%	1.58	14.1	\$41,624	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,000,000 Unit requires a household income of \$205,300.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-3**  
**Household Expenditures and Employment Generation - \$1,000,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Entertainment Audio and Visual Equipment and Services</b>	0.9%	100%	\$1,913										
Electronics and Appliance Stores		100%	\$1,913	\$1,912,950	9.79	\$195,365	\$26,665	7.3	87.5%	1.58	4.0	\$42,234	LI Households
<b>Entertainment Pets, Toys, Hobbies, and Playground Equip.</b>	0.8%	100%	\$1,602										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	\$641	\$640,778	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Miscellaneous Store Retailers		40%	\$641	\$640,778	6.64	\$96,566	\$24,517	3.9	87.5%	1.58	2.2	\$38,833	VLI Households
Veterinary Services		20%	\$320	\$320,389	2.56	\$125,070	\$39,442	3.2	98.1%	1.58	2.0	\$62,472	LI Households
<b>Other Entertainment Supplies, Equipment, and Services</b>	0.7%	100%	\$1,390										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	\$1,182	\$1,181,708	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Photographic Services		15%	\$209	\$208,537	4.40	\$47,389	\$26,467	1.8	98.1%	1.58	1.1	\$41,921	VLI Households
<b>Personal Care Products and Services</b>	0.8%	100%	\$1,618										
Unspecified Retail		50%	\$809	\$809,157	6.64	\$121,940	\$24,517	5.0	87.5%	1.58	2.7	\$38,833	VLI Households
Personal Care Services		50%	\$809	\$809,157	2.89	\$279,845	\$17,688	15.8	98.1%	1.58	9.8	\$28,016	VLI Households
<b>Reading</b>	0.1%	100%	\$272										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	\$272	\$271,720	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
<b>Education</b>	2.6%	100%	\$5,350										
Educational Services		100%	\$5,350	\$5,350,367	3.11	\$1,718,931	\$22,455	76.6	98.1%	1.58	47.4	\$35,566	VLI Households
<b>Tobacco Products and Smoking Supplies</b>	0.1%	100%	\$229										
Unspecified Retail		100%	\$229	\$229,161	6.64	\$34,535	\$24,517	1.4	87.5%	1.58	0.8	\$38,833	VLI Households
<b>Miscellaneous</b>	1.0%	100%	\$2,038										
Accounting		20%	\$408	\$407,689	2.11	\$192,765	\$58,902	3.3	98.1%	1.58	2.0	\$93,294	Above Mod
Architectural, Engineering, and Related		20%	\$408	\$407,689	2.98	\$136,852	\$95,809	1.4	98.1%	1.58	0.9	\$151,751	Above Mod
Specialized Design Services		20%	\$408	\$407,689	3.84	\$106,145	\$52,815	2.0	98.1%	1.58	1.2	\$83,653	Moderate Income
Death Care Services		20%	\$408	\$407,689	3.41	\$119,672	\$42,194	2.8	98.1%	1.58	1.8	\$66,830	Moderate Income
Legal Services		20%	\$408	\$407,689	2.99	\$136,293	\$98,006	1.4	98.1%	1.58	0.9	\$155,231	Above Mod
<b>Total per 1,000 Market Rate Households</b>								<b>535.8</b>			<b>311.9</b>		

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,000,000 Unit requires a household income of \$205,300.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

Source: 2014 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2013 Economic Census, American Community Survey; and Economic & Planning Systems, Inc.

**Table A-4**  
**Household Expenditures and Employment Generation - \$1,250,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Food at Home</b>	3.5%	100%	\$8,784										
Food & Beverage Stores		100%	\$8,784	\$8,783,715	9.46	\$928,323	\$29,961	31.0	87.5%	1.58	17.1	\$47,455	LI Households
<b>Food Away From Home</b>	3.8%	100%	\$9,521										
Food Services and Drinking Places		100%	\$9,521	\$9,520,717	3.59	\$2,650,547	\$16,942	156.4	87.5%	1.58	86.4	\$26,834	VLI Households
<b>Alcoholic Beverages</b>	0.8%	100%	\$1,923										
Food & Beverage Stores		50%	\$961	\$961,452	9.46	\$101,613	\$29,961	3.4	87.5%	1.58	1.9	\$47,455	LI Households
Food Services and Drinking Places		50%	\$961	\$961,452	3.59	\$267,666	\$16,942	15.8	87.5%	1.58	8.7	\$26,834	VLI Households
<b>Housing Maintenance, Repairs, Insurance, Other expenses</b>	1.7%	100%	\$4,289										
Personal and Household Goods Repair and Maintenance		45%	\$1,930	\$1,930,206	3.22	\$598,571	\$12,737	47.0	98.1%	1.58	29.1	\$20,174	VLI Households
Building Material and Garden Equipment and Supplies Dealer		45%	\$1,930	\$1,930,206	7.31	\$263,927	\$34,899	7.6	87.5%	1.58	4.2	\$55,277	LI Households
Real Estate and Rental and Leasing		10%	\$429	\$428,935	5.33	\$80,537	\$55,131	1.5	98.1%	1.58	0.9	\$87,322	Moderate Income
<b>Fuel oil and Other fuels [7]</b>	0.2%		\$413										
Nonstore Retailers		100%	\$413	\$412,721	9.81	\$42,082	\$37,953	1.1	87.5%	1.58	0.6	\$60,114	LI Households
<b>Water and Other Public Services [7]</b>	0.5%	100%	\$1,181										
Waste Management and Remediation Services		100%	\$1,181	\$1,180,542	3.45	\$342,640	\$65,302	5.2	98.1%	1.58	3.2	\$103,432	Above Mod
<b>Household Operations Personal Services</b>	0.8%	100%	\$1,993										
Nursing and Residential Care Facilities		40%	\$797	\$797,033	2.64	\$301,806	\$30,684	9.8	98.1%	1.58	6.1	\$48,600	LI Households
Social Assistance [8]		60%	\$1,196	\$1,195,550	2.98	\$400,722	\$24,832	16.1	98.1%	1.58	10.0	\$39,331	VLI Households
<b>Household Operations Other Household Expenses</b>	1.2%	100%	\$3,098										
Services to Buildings and Dwellings		100%	\$3,098	\$3,098,085	2.54	\$1,218,369	\$27,607	44.1	98.1%	1.58	27.3	\$43,726	LI Households
<b>Housekeeping Supplies</b>	0.6%	100%	\$1,513										
Building Materials and Garden Equipment and Supplies Dealers		10%	\$151	\$151,286	7.31	\$20,686	\$34,899	0.6	87.5%	1.58	0.3	\$55,277	LI Households
Food & Beverage Stores		35%	\$530	\$529,502	9.46	\$55,961	\$29,961	1.9	87.5%	1.58	1.0	\$47,455	LI Households
General Merchandise		35%	\$530	\$529,502	11.54	\$45,866	\$25,807	1.8	87.5%	1.58	1.0	\$40,876	VLI Households
Miscellaneous Store Retailers		20%	\$303	\$302,573	6.64	\$45,598	\$24,517	1.9	87.5%	1.58	1.0	\$38,833	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,250,000 Unit requires a household income of \$252,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to 2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-4**  
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**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Household Furnishings and Equipment</b>	2.1%	100%	\$5,286										
Furniture and Home Furnishings Stores		40%	\$2,115	\$2,114,524	8.40	\$251,623	\$27,418	9.2	87.5%	1.58	5.1	\$43,427	LI Households
Electronics and Appliance Stores		40%	\$2,115	\$2,114,524	9.79	\$215,952	\$26,665	8.1	87.5%	1.58	4.5	\$42,234	LI Households
General Merchandise Stores		10%	\$529	\$528,631	11.54	\$45,790	\$25,807	1.8	87.5%	1.58	1.0	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$529	\$528,631	6.64	\$79,665	\$24,517	3.2	87.5%	1.58	1.8	\$38,833	VLI Households
<b>Apparel and Services</b>	2.5%	100%	\$6,322										
Clothing and Clothing Accessories Stores		40%	\$2,529	\$2,528,852	7.64	\$331,077	\$20,424	16.2	87.5%	1.58	9.0	\$32,350	VLI Households
General Merchandise		40%	\$2,529	\$2,528,852	11.54	\$219,051	\$25,807	8.5	87.5%	1.58	4.7	\$40,876	VLI Households
Miscellaneous Store Retailers		10%	\$632	\$632,213	6.64	\$95,275	\$24,517	3.9	87.5%	1.58	2.1	\$38,833	VLI Households
Personal and Household Goods Repair and Maintenance		5%	\$316	\$316,107	3.22	\$98,027	\$12,737	7.7	87.5%	1.58	4.3	\$20,174	VLI Households
Dry cleaning and Laundry Services		5%	\$316	\$316,107	3.22	\$98,027	\$12,737	7.7	87.5%	1.58	4.3	\$20,174	VLI Households
<b>Vehicle Purchases (net outlay)</b>	3.9%	100%	\$9,832										
Motor Vehicle and Parts Dealers		100%	\$9,832	\$9,831,597	10.06	\$977,609	\$53,507	18.3	87.5%	1.58	10.1	\$84,750	Moderate Income
<b>Gasoline and motor oil</b>	2.1%	100%	\$5,245										
Gasoline Stations		100%	\$5,245	\$5,244,769	47.55	\$25,866	\$21,168	1.2	87.5%	1.58	0.7	\$33,528	VLI Households
<b>Vehicle Maintenance and Repairs</b>	1.0%	100%	\$2,534										
Repair and Maintenance		100%	\$2,534	\$2,533,944	3.66	\$692,221	\$34,965	19.8	98.1%	1.58	12.3	\$55,381	LI Households
<b>Medical Services</b>	0.9%	100%	\$2,173										
Ambulatory Health Care Services		40%	\$869	\$869,394	2.42	\$359,261	\$78,785	4.6	98.1%	1.58	2.8	\$124,788	Above Mod
General Medical and Surgical Hospitals		30%	\$652	\$652,045	2.91	\$224,157	\$73,749	3.0	98.1%	1.58	1.9	\$116,811	Above Mod
Nursing and Residential Care Facilities		30%	\$652	\$652,045	2.64	\$246,904	\$30,684	8.0	98.1%	1.58	5.0	\$48,600	LI Households
<b>Drugs</b>	0.5%	100%	\$1,154										
Health and Personal Care Stores		100%	\$1,154	\$1,153,742	7.39	\$156,187	\$39,122	4.0	87.5%	1.58	2.2	\$61,966	LI Households
<b>Medical Supplies</b>	0.2%	100%	\$387										
Health and Personal Care Stores		100%	\$387	\$387,261	7.39	\$52,425	\$39,122	1.3	87.5%	1.58	0.7	\$61,966	LI Households
<b>Entertainment Fees and Admissions</b>	1.4%	100%	\$3,507										
Arts, Entertainment, & Recreation		100%	\$3,507	\$3,506,786	4.26	\$823,112	\$26,280	31.3	87.5%	1.58	17.3	\$41,624	VLI Households

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,250,000 Unit requires a household income of \$252,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-4**  
**Household Expenditures and Employment Generation - \$1,250,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c * 1,000</i>	<i>e</i>	<i>f = d / e</i>	<i>g</i>	<i>h = f / g</i>	<i>i</i>	<i>j</i>	<i>k = h * i / j</i>	<i>l = g * j</i>	
<b>Entertainment Audio and Visual Equipment and Services</b>	0.9%	100%	\$2,349										
Electronics and Appliance Stores		100%	\$2,349	\$2,349,024	9.79	\$239,901	\$26,665	9.0	87.5%	1.58	5.0	\$42,234	LI Households
<b>Entertainment Pets, Toys, Hobbies, and Playground Equip.</b>	0.8%	100%	\$1,967										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	\$787	\$786,849	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Miscellaneous Store Retailers		40%	\$787	\$786,849	6.64	\$118,579	\$24,517	4.8	87.5%	1.58	2.7	\$38,833	VLI Households
Veterinary Services		20%	\$393	\$393,425	2.56	\$153,581	\$39,442	3.9	98.1%	1.58	2.4	\$62,472	LI Households
<b>Other Entertainment Supplies, Equipment, and Services</b>	0.7%	100%	\$1,707										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	\$1,451	\$1,451,089	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
Photographic Services		15%	\$256	\$256,074	4.40	\$58,192	\$26,467	2.2	98.1%	1.58	1.4	\$41,921	VLI Households
<b>Personal Care Products and Services</b>	0.8%	100%	\$1,987										
Unspecified Retail		50%	\$994	\$993,612	6.64	\$149,738	\$24,517	6.1	87.5%	1.58	3.4	\$38,833	VLI Households
Personal Care Services		50%	\$994	\$993,612	2.89	\$343,639	\$17,688	19.4	98.1%	1.58	12.0	\$28,016	VLI Households
<b>Reading</b>	0.1%	100%	\$334										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	\$334	\$333,661	0.00		\$19,829	0.0	87.5%	1.58	0.0	\$31,408	VLI Households
<b>Education</b>	2.6%	100%	\$6,570										
Educational Services		100%	\$6,570	\$6,570,031	3.11	\$2,110,777	\$22,455	94.0	98.1%	1.58	58.2	\$35,566	VLI Households
<b>Tobacco Products and Smoking Supplies</b>	0.1%	100%	\$281										
Unspecified Retail		100%	\$281	\$281,400	6.64	\$42,407	\$24,517	1.7	87.5%	1.58	1.0	\$38,833	VLI Households
<b>Miscellaneous</b>	1.0%	100%	\$2,503										
Accounting		20%	\$501	\$500,625	2.11	\$236,707	\$58,902	4.0	98.1%	1.58	2.5	\$93,294	Above Mod
Architectural, Engineering, and Related		20%	\$501	\$500,625	2.98	\$168,049	\$95,809	1.8	98.1%	1.58	1.1	\$151,751	Above Mod
Specialized Design Services		20%	\$501	\$500,625	3.84	\$130,342	\$52,815	2.5	98.1%	1.58	1.5	\$83,653	Moderate Income
Death Care Services		20%	\$501	\$500,625	3.41	\$146,953	\$42,194	3.5	98.1%	1.58	2.2	\$66,830	Moderate Income
Legal Services		20%	\$501	\$500,625	2.99	\$167,363	\$98,006	1.7	98.1%	1.58	1.1	\$155,231	Above Mod
<b>Total per 1,000 Market Rate Households</b>								<b>657.7</b>			<b>382.9</b>		

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for households at this income level. The sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represent a conservative estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.

[3] Expenditures are based on the percent of household income spent per the 2014 U.S. Consumer Expenditure Survey. Per Table 3, the purchase of a \$1,250,000 Unit requires a household income of \$252,100.

[4] Based on the 2012-13 average wage reported by the American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers in other industries. EPS has assumed that young workers do not form their own households.

[6] Based on the American Community Survey data 2009-2013.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the Economic Census.

[8] Contra Costa County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

Source: 2014 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2013 Economic Census, American Community Survey; and Economic & Planning Systems, Inc.



**Table A-5  
Representative Public Sector Employment and Wages, 2014 [1]  
Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Item	Estimated Public Sector Empl.	2015 Total MD HH	Public Sector Empl/ 1,000 MD HH	Public Sector Employee HH [2]	2015 Avg. Wage	Public Sector Employee HH Income [2]	Income Category [3]
Preschool Teachers, Except Special Education	4,670	937,837	5.0	3.1	\$36,594	\$57,961	LI
Kindergarten Teachers, Except Special Education	1,400	937,837	1.5	0.9	\$62,592	\$99,139	Above Mod
Elementary School Teachers, Except Special Education	8,870	937,837	9.5	5.9	\$73,188	\$115,922	Above Mod
Middle School Teachers, Except Special and Vocational Education	4,470	937,837	4.8	3.0	\$66,090	\$104,679	Above Mod
Secondary School Teachers, Except Special and Vocational Education	6,240	937,837	6.7	4.1	\$72,124	\$114,237	Above Mod
Special Education Teachers, Preschool, Kindergarten, and Elementary School	1,450	937,837	1.5	1.0	\$64,924	\$102,833	Above Mod
Special Education Teachers, Middle School	530	937,837	0.6	0.4	\$65,705	\$104,070	Above Mod
Special Education Teachers, Secondary School	500	937,837	0.5	0.3	\$79,627	\$126,121	Above Mod
Teachers and Instructors, All Other	4,460	937,837	4.8	2.9	\$60,635	\$96,039	Above Mod
Bus Drivers	1,830	937,837	<u>2.0</u>	<u>1.2</u>	\$53,162	\$84,203	Mod
<b>Total</b>			<b>36.7</b>	<b>22.7</b>			

[1] Not a comprehensive list of public sector employment. Rather a sampling of public sector jobs for which employment and wage data was available for the Oakland-Hayward-Berkeley Metropolitan Division (MD) from the Employment Development Department (EDD).

[2] Total worker households derived assuming 1.58 workers per household based on the American Community Survey 2009-2013 estimates for the City of Walnut Creek with 98.1% of workers assumed to be forming households.

[3] See Table 5.

Sources: 2014 Occupational Employment Statistics, CA Employment Development Department; California Department of Finance; and Economic & Planning Systems, Inc.

## APPENDIX B:

### Income Levels for Worker Households



**Table B-1**  
**Income Levels for Worker Households**  
**Worker Household Generation per 1,000 Market Rate Units - \$500,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Industry	Total Workers	Total Worker Households [1]	VLI Households	LI Households	Moderate Income Households	Above Moderate Income Households
<b>Retail</b>						
Unspecified Retail	6.1	3.3	3.3	0.0	0.0	0.0
Food & Beverage Stores	25.1	13.9	0.0	13.9	0.0	0.0
Food Services and Drinking Places	89.6	49.5	49.5	0.0	0.0	0.0
Health and Personal Care Stores	3.1	1.7	0.0	1.7	0.0	0.0
General Merchandise	6.2	3.4	3.4	0.0	0.0	0.0
Furniture and Home Furnishings Stores	4.9	2.7	0.0	2.7	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	4.7	2.6	0.0	2.6	0.0	0.0
Electronics and Appliance Stores	10.2	5.6	0.0	5.6	0.0	0.0
Clothing and Clothing Accessories Stores	7.5	4.2	4.2	0.0	0.0	0.0
Motor Vehicle and Parts Dealers	12.3	6.8	0.0	0.0	6.8	0.0
Gasoline Stations	1.2	0.7	0.7	0.0	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Store Retailers	7.2	4.0	4.0	0.0	0.0	0.0
Nonstore Retailers	0.7	0.4	0.0	0.4	0.0	0.0
<b>Arts, Entertainment, &amp; Recreation</b>	<b>10.9</b>	<b>6.0</b>	<b>6.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Medical/Health</b>						
Ambulatory Health Care Services	2.8	1.7	0.0	0.0	0.0	1.7
General Medical and Surgical Hospitals	1.9	1.2	0.0	0.0	0.0	1.2
Nursing and Residential Care Facilities	8.6	5.3	0.0	5.3	0.0	0.0
Social Assistance	5.9	3.7	3.7	0.0	0.0	0.0
<b>Services</b>						
Personal and Household Goods Repair and Maintenance	30.0	18.3	18.3	0.0	0.0	0.0
Services to Buildings and Dwellings	18.0	11.1	0.0	11.1	0.0	0.0
Waste Management and Remediation Services	3.8	2.3	0.0	0.0	0.0	2.3
Real Estate and Rental and Leasing	0.8	0.5	0.0	0.0	0.5	0.0
Personal Care Services	10.8	6.7	6.7	0.0	0.0	0.0
Dry Cleaning and Laundry Services	3.6	2.0	2.0	0.0	0.0	0.0
Auto Repair and Maintenance	10.9	6.7	0.0	6.7	0.0	0.0
Veterinary Services	1.9	1.1	0.0	1.1	0.0	0.0
Photographic Services	1.6	1.0	1.0	0.0	0.0	0.0
Educational Services	28.6	17.7	17.7	0.0	0.0	0.0
Accounting	2.1	1.3	0.0	0.0	0.0	1.3
Architectural, Engineering, and Related	0.9	0.6	0.0	0.0	0.0	0.6
Specialized Design Services	1.3	0.8	0.0	0.0	0.8	0.0
Death Care Services	1.8	1.1	0.0	0.0	1.1	0.0
Legal Services	0.9	0.6	0.0	0.0	0.0	0.6
<b>Government</b>	<b>36.7</b>	<b>22.7</b>	<b>0.0</b>	<b>3.1</b>	<b>1.2</b>	<b>18.4</b>
<b>Total Workers and Households</b>	<b>362.5</b>	<b>211.3</b>	<b>120.5</b>	<b>54.3</b>	<b>10.4</b>	<b>26.1</b>
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		<b>185.2</b>	120.5	54.3	10.4	0.0
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		<b>18.5</b>	12.1	5.4	1.0	0.0

[1] Assumes 1.58 workers per worker household in the City of Walnut Creek based on 2009-2013 American Community Survey. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.

Source: Economic & Planning Systems, Inc.

**Table B-2**  
**Income Levels for Worker Households**  
**Worker Household Generation per 1,000 Market Rate Units - \$750,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Industry	Total Workers	Total Worker Households [1]	VLI Households	LI Households	Moderate Income Households	Above Moderate Income Households
<b>Retail</b>						
Unspecified Retail	4.9	2.7	2.7	0.0	0.0	0.0
Food & Beverage Stores	22.7	12.6	0.0	12.6	0.0	0.0
Food Services and Drinking Places	108.1	59.7	59.7	0.0	0.0	0.0
Health and Personal Care Stores	3.3	1.8	0.0	1.8	0.0	0.0
General Merchandise	7.6	4.2	4.2	0.0	0.0	0.0
Furniture and Home Furnishings Stores	5.8	3.2	0.0	3.2	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	5.1	2.8	0.0	2.8	0.0	0.0
Electronics and Appliance Stores	10.7	5.9	0.0	5.9	0.0	0.0
Clothing and Clothing Accessories Stores	10.2	5.6	5.6	0.0	0.0	0.0
Motor Vehicle and Parts Dealers	11.5	6.3	0.0	0.0	6.3	0.0
Gasoline Stations	1.2	0.7	0.7	0.0	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Store Retailers	8.7	4.8	4.8	0.0	0.0	0.0
Nonstore Retailers	0.7	0.4	0.0	0.4	0.0	0.0
<b>Arts, Entertainment, &amp; Recreation</b>	<b>19.7</b>	<b>10.9</b>	<b>10.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Medical/Health</b>						
Ambulatory Health Care Services	2.9	1.8	0.0	0.0	0.0	1.8
General Medical and Surgical Hospitals	1.9	1.2	0.0	0.0	0.0	1.2
Nursing and Residential Care Facilities	20.8	12.9	0.0	12.9	0.0	0.0
Social Assistance	25.9	16.0	16.0	0.0	0.0	0.0
<b>Services</b>						
Personal and Household Goods Repair and Maintenance	34.3	20.9	20.9	0.0	0.0	0.0
Services to Buildings and Dwellings	27.7	17.2	0.0	17.2	0.0	0.0
Waste Management and Remediation Services	3.3	2.0	0.0	0.0	0.0	2.0
Real Estate and Rental and Leasing	0.9	0.6	0.0	0.0	0.6	0.0
Personal Care Services	12.2	7.6	7.6	0.0	0.0	0.0
Dry Cleaning and Laundry Services	4.8	2.7	2.7	0.0	0.0	0.0
Auto Repair and Maintenance	12.4	7.7	0.0	7.7	0.0	0.0
Veterinary Services	2.4	1.5	0.0	1.5	0.0	0.0
Photographic Services	1.4	0.9	0.9	0.0	0.0	0.0
Educational Services	59.0	36.5	36.5	0.0	0.0	0.0
Accounting	2.5	1.6	0.0	0.0	0.0	1.6
Architectural, Engineering, and Related	1.1	0.7	0.0	0.0	0.0	0.7
Specialized Design Services	1.5	1.0	0.0	0.0	1.0	0.0
Death Care Services	2.2	1.4	0.0	0.0	1.4	0.0
Legal Services	1.1	0.7	0.0	0.0	0.0	0.7
<b>Government</b>	<b>36.7</b>	<b>22.7</b>	<b>0.0</b>	<b>3.1</b>	<b>1.2</b>	<b>18.4</b>
<b>Total Workers and Households</b>	<b>475.2</b>	<b>279.0</b>	<b>173.1</b>	<b>69.1</b>	<b>10.4</b>	<b>26.3</b>
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		<b>252.6</b>	173.1	69.1	10.4	0.0
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		<b>25.3</b>	17.3	6.9	1.0	0.0

[1] Assumes 1.58 workers per worker household in the City of Walnut Creek based on 2009-2013 American Community Survey. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.

Source: Economic & Planning Systems, Inc.

**Table B-3**  
**Income Levels for Worker Households**  
**Worker Household Generation per 1,000 Market Rate Units - \$1,000,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Industry	Total Workers	Total Worker Households [1]	VLI Households	LI Households	Moderate Income Households	Above Moderate Income Households
<b>Retail</b>						
Unspecified Retail	6.4	3.5	3.5	0.0	0.0	0.0
Food & Beverage Stores	29.5	16.3	0.0	16.3	0.0	0.0
Food Services and Drinking Places	140.3	77.5	77.5	0.0	0.0	0.0
Health and Personal Care Stores	4.3	2.4	0.0	2.4	0.0	0.0
General Merchandise	9.8	5.4	5.4	0.0	0.0	0.0
Furniture and Home Furnishings Stores	7.5	4.1	0.0	4.1	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	6.6	3.7	0.0	3.7	0.0	0.0
Electronics and Appliance Stores	13.9	7.7	0.0	7.7	0.0	0.0
Clothing and Clothing Accessories Stores	13.2	7.3	7.3	0.0	0.0	0.0
Motor Vehicle and Parts Dealers	14.9	8.2	0.0	0.0	8.2	0.0
Gasoline Stations	1.2	0.7	0.7	0.0	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Store Retailers	11.3	6.2	6.2	0.0	0.0	0.0
Nonstore Retailers	0.9	0.5	0.0	0.5	0.0	0.0
<b>Arts, Entertainment, &amp; Recreation</b>	<b>25.5</b>	<b>14.1</b>	<b>14.1</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Medical/Health</b>						
Ambulatory Health Care Services	3.7	2.3	0.0	0.0	0.0	2.3
General Medical and Surgical Hospitals	2.5	1.5	0.0	0.0	0.0	1.5
Nursing and Residential Care Facilities	14.6	9.0	0.0	9.0	0.0	0.0
Social Assistance	13.1	8.1	8.1	0.0	0.0	0.0
<b>Services</b>						
Personal and Household Goods Repair and Maintenance	44.5	27.2	27.2	0.0	0.0	0.0
Services to Buildings and Dwellings	35.9	22.3	0.0	22.3	0.0	0.0
Waste Management and Remediation Services	4.3	2.6	0.0	0.0	0.0	2.6
Real Estate and Rental and Leasing	1.2	0.7	0.0	0.0	0.7	0.0
Personal Care Services	15.8	9.8	9.8	0.0	0.0	0.0
Dry Cleaning and Laundry Services	6.3	3.5	3.5	0.0	0.0	0.0
Auto Repair and Maintenance	16.1	10.0	0.0	10.0	0.0	0.0
Veterinary Services	3.2	2.0	0.0	2.0	0.0	0.0
Photographic Services	1.8	1.1	1.1	0.0	0.0	0.0
Educational Services	76.6	47.4	47.4	0.0	0.0	0.0
Accounting	3.3	2.0	0.0	0.0	0.0	2.0
Architectural, Engineering, and Related	1.4	0.9	0.0	0.0	0.0	0.9
Specialized Design Services	2.0	1.2	0.0	0.0	1.2	0.0
Death Care Services	2.8	1.8	0.0	0.0	1.8	0.0
Legal Services	1.4	0.9	0.0	0.0	0.0	0.9
<b>Government</b>	<b>36.7</b>	<b>22.7</b>	<b>0.0</b>	<b>3.1</b>	<b>1.2</b>	<b>18.4</b>
<b>Total Workers and Households</b>	<b>572.5</b>	<b>334.7</b>	<b>211.8</b>	<b>81.0</b>	<b>13.2</b>	<b>28.7</b>
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		<b>306.0</b>	211.8	81.0	13.2	0.0
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		<b>30.6</b>	21.2	8.1	1.3	0.0

[1] Assumes 1.58 workers per worker household in the City of Walnut Creek based on 2009-2013 American Community Survey. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.

Source: Economic & Planning Systems, Inc.

**Table B-4**  
**Income Levels for Worker Households**  
**Worker Household Generation per 1,000 Market Rate Units - \$1,250,000 Unit**  
**Walnut Creek Housing Mitigation Nexus and Fee Study; EPS #151080**

Industry	Total Workers	Total Worker Households [1]	VLI Households	LI Households	Moderate Income Households	Above Moderate Income Households
<b>Retail</b>						
Unspecified Retail	7.8	4.3	4.3	0.0	0.0	0.0
Food & Beverage Stores	36.2	20.0	0.0	20.0	0.0	0.0
Food Services and Drinking Places	172.2	95.2	95.2	0.0	0.0	0.0
Health and Personal Care Stores	5.3	2.9	0.0	2.9	0.0	0.0
General Merchandise	12.0	6.7	6.7	0.0	0.0	0.0
Furniture and Home Furnishings Stores	9.2	5.1	0.0	5.1	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	8.2	4.5	0.0	4.5	0.0	0.0
Electronics and Appliance Stores	17.1	9.4	0.0	9.4	0.0	0.0
Clothing and Clothing Accessories Stores	16.2	9.0	9.0	0.0	0.0	0.0
Motor Vehicle and Parts Dealers	18.3	10.1	0.0	0.0	10.1	0.0
Gasoline Stations	1.2	0.7	0.7	0.0	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	0.0	0.0	0.0	0.0	0.0	0.0
Miscellaneous Store Retailers	13.8	7.6	7.6	0.0	0.0	0.0
Nonstore Retailers	1.1	0.6	0.0	0.6	0.0	0.0
<b>Arts, Entertainment, &amp; Recreation</b>	<b>31.3</b>	<b>17.3</b>	<b>17.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Medical/Health</b>						
Ambulatory Health Care Services	4.6	2.8	0.0	0.0	0.0	2.8
General Medical and Surgical Hospitals	3.0	1.9	0.0	0.0	0.0	1.9
Nursing and Residential Care Facilities	17.9	11.1	0.0	11.1	0.0	0.0
Social Assistance	16.1	10.0	10.0	0.0	0.0	0.0
<b>Services</b>						
Personal and Household Goods Repair and Maintenance	54.7	33.4	33.4	0.0	0.0	0.0
Services to Buildings and Dwellings	44.1	27.3	0.0	27.3	0.0	0.0
Waste Management and Remediation Services	5.2	3.2	0.0	0.0	0.0	3.2
Real Estate and Rental and Leasing	1.5	0.9	0.0	0.0	0.9	0.0
Personal Care Services	19.4	12.0	12.0	0.0	0.0	0.0
Dry Cleaning and Laundry Services	7.7	4.3	4.3	0.0	0.0	0.0
Auto Repair and Maintenance	19.8	12.3	0.0	12.3	0.0	0.0
Veterinary Services	3.9	2.4	0.0	2.4	0.0	0.0
Photographic Services	2.2	1.4	1.4	0.0	0.0	0.0
Educational Services	94.0	58.2	58.2	0.0	0.0	0.0
Accounting	4.0	2.5	0.0	0.0	0.0	2.5
Architectural, Engineering, and Related	1.8	1.1	0.0	0.0	0.0	1.1
Specialized Design Services	2.5	1.5	0.0	0.0	1.5	0.0
Death Care Services	3.5	2.2	0.0	0.0	2.2	0.0
Legal Services	1.7	1.1	0.0	0.0	0.0	1.1
<b>Government</b>	<b>36.7</b>	<b>22.7</b>	<b>0.0</b>	<b>3.1</b>	<b>1.2</b>	<b>18.4</b>
<b>Total Workers and Households</b>	<b>694.4</b>	<b>405.6</b>	<b>259.9</b>	<b>98.8</b>	<b>15.9</b>	<b>31.0</b>
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		<b>374.6</b>	259.9	98.8	15.9	0.0
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		<b>37.5</b>	26.0	9.9	1.6	0.0

[1] Assumes 1.58 workers per worker household in the City of Walnut Creek based on 2009-2013 American Community Survey. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.

Source: Economic & Planning Systems, Inc.