

## Draft Report

# Nexus-Based Affordable Housing Fee Analysis for Rental Housing

*The Economics of Land Use*



Prepared for:

City of Pleasanton

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## **EXECUTIVE SUMMARY**

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Economic & Planning Systems, Inc. (EPS) was retained by the City of Pleasanton to conduct a nexus study analyzing the impact that development of market-rate rental 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 development. EPS is also conducting nexus studies for the impact of development on for-sale housing, commercial linkage, and public facilities needs. These reports are provided under a separate cover. The technical analysis presented in this report was originally completed in 2016 and is largely based on the 2015 numbers.

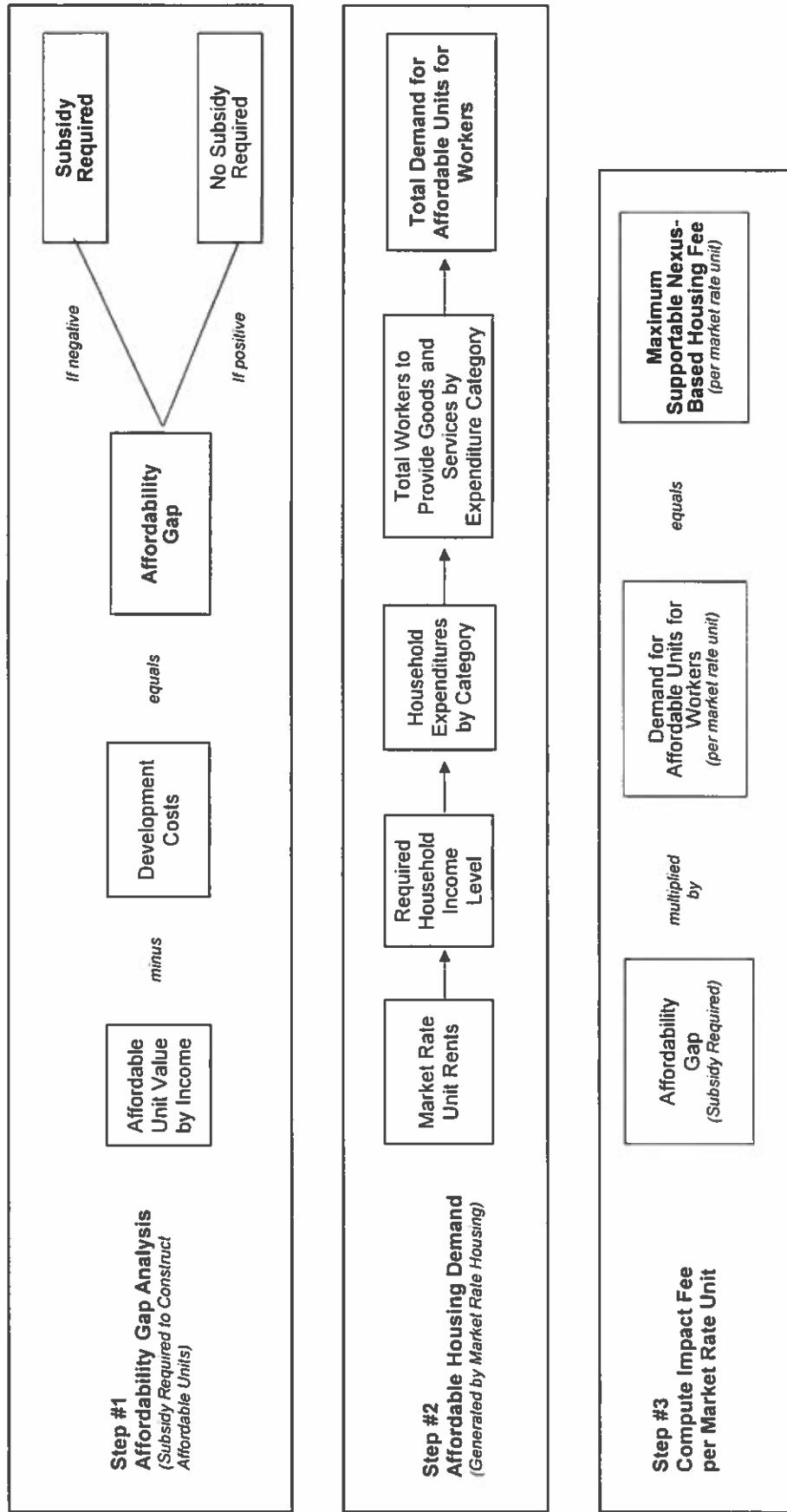
The technical approach used herein quantifies the impacts that the introduction of market-rate rental apartments has on the local economy and the demand for additional affordable housing. As new households are added to the community, local employment also will grow to provide the goods and services required 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 then may be used by the City to subsidize the production of new affordable units for 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



- 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 Pleasanton range from roughly \$2,000 for a Moderate Income household earning up to 120 percent of AMI to \$265,400 for a Very Low Income household earning up to 50 percent of AMI. Households with median and above-median incomes do not appear to require subsidies, as affordable prices for such households can support the costs of construction.**

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, 60, 80, 100, and 120 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 with an average density of 30 dwelling units per acre. The estimated costs to construct the prototypical affordable unit are based on recent Bay Area 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 estimated based on standard percentages of income available for housing costs at each household income level. Income available for housing costs is then converted into a monthly affordable rent and a capitalized unit value or an affordable mortgage payment and supportable home price. This unit value is then compared to the costs of development to determine the subsidy, if any, required to make the unit affordable to each income level.

- 2. The demand for affordable housing generated by the expenditures of new households in Pleasanton increases along with the market-rate rent price (and related renter income). For example, a 1-bedroom unit that rents for \$2,500 per month is estimated to create demand for 0.16 affordable housing units, while a 3-bedroom unit that rents for \$3,400 per month creates demand for 0.215 affordable units.**

Any justified nexus-based fee is based on the total demand for affordable housing units generated by construction of market-rate units. 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) who typically cannot afford market-rate housing and thus require affordable housing.

Because more expensive housing units require renters to have higher incomes, and higher income households create more jobs through their spending, the nexus impacts and thus the justified fees for rental units vary according to the rental price range of the market-rate units. Typically, larger apartments (i.e., more bedrooms) command higher rents, so their occupants are required to have higher household incomes than renters of smaller units. Thus, larger units create more jobs as a result of their occupants’ spending. Consequently, nexus impacts and the justified fees for market-rate rental apartments vary by unit size.

This analysis evaluates the demand for affordable housing generated by a range of for-rent unit sizes. For each unit size, the demand-based nexus fee calculation involves the following steps:

- A. Market-Rate Household Income Levels.** The expected rental price of the unit is based on market data regarding the actual asking rents of apartments of various sizes. The required income levels of households occupying new market-rate housing are derived based on the rental rate, assuming standard housing cost expenses as a proportion of overall household income. For example, a typical household renting a market-rate two-bedroom unit for around \$2,700 per month would have an income of roughly \$113,840, if they spent 30 percent of their income on housing costs (rent and utilities).
- 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 along with the price and size 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 (Pleasanton has an average of 1.67 workers per working household), the total number of new households created is somewhat less than the number of new jobs created. 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 120 percent—based on its estimated gross wages. This provides the total number of households generated at each income level by construction of market-rate units at various sizes and 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.

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 rental housing. The number of workers servicing market-rate housing (at each apartment unit size) is then converted to total income qualified households and each such household is assumed to require one housing unit.

- 3. This analysis calculates the fees that could be charged to fully mitigate the impact that new market-rate housing has on Pleasanton's affordable housing demand at various representative unit sizes. These fees could range from \$24,911 for studio apartments to \$46,631 for 3-bedroom apartments.**

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 apartment sizes. **Table 1** summarizes the maximum nexus-based fees calculated for representative rental unit sizes. The City may also consider whether to allow developers to provide affordable apartment 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 two-bedroom units would effectively mitigate the demand being created by the market-rate units if it provided 0.173 affordable units for each market-rate unit.

**Table 1**  
**Summary of Housing Impact Fees or Unit Equivalents per Market-Rate Unit**  
**Pleasanton Housing Impact Fee, EPS #151111**

Market-Rate Unit Size	Maximum Impact Fee	Max. Fee per Sq. Ft. [1]	Affordable Units Generated/100 Market-Rate Units			Mod
			Total	Very Low (50%)	Low (60%)	
Studio	\$24,911	\$47.45	11.7	6.6	1.8	2.3
1 Bedroom	\$34,555	\$42.17	16.1	9.4	2.5	0.3
2 Bedroom	\$37,358	\$34.80	17.3	10.2	2.7	0.3
3 Bedroom	\$46,631	\$36.14	21.5	12.6	3.5	1.0

[1] Assumes unit square footages as shown on Table 4.

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 multifamily for-sale housing that is affordable to low- through moderate-income households (60 through 120 percent of AMI), while **Table 3** calculates the subsidies for rental housing affordable to very low- through moderate-income households (50 through 120 percent of AMI).

### **Product Type**

According to City staff, at this time in Pleasanton the housing subsidies available are most efficiently used to develop multifamily affordable units rather than single family units. As a result, the subsidy required to construct affordable units of this multifamily product type is used to determine the impact fee that applies to all types of market-rate apartments. EPS has assumed that these affordable multifamily projects will have an average density of 30 units per acre and will adhere to Pleasanton Code that requires two parking spaces per unit, assumed to be surface parking.

In order to determine the average household size of future affordable housing units, EPS used two estimates from the US Census 2014 American Community Survey. The Census indicates that the average household size is 2.89 people and the average family size in Pleasanton is 3.25 people. Each of these figures rounds to an average of three people per unit, so EPS uses this assumption to determine the applicable income limits for the new units.

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 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-sale and for-rent housing for the lower-income worker households. The subsequent impact fee analysis would assume that the most cost-efficient tenure type would be used; if for-sale units can be built for less 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.

**Table 2**  
**Financing Gap Analysis -- For-Sale Product Type**  
**Pleasanton Housing Impact Fee, EPS #151111**

Item	2-Story Multifamily With Surface Parking			
	Low Income (60% AMI)	Low Income (80% AMI)	Median Income (100% AMI)	Moderate Income (120% AMI)
<b>Development Program Assumptions</b>				
Density/Acre	30	30	30	30
Average Gross Unit Size	1,100	1,100	1,100	1,100
Average Net Unit Size	950	950	950	950
Average Number of Bedrooms	2	2	2	2
Average Number of Persons per Household	3	3	3	3
Parking Spaces/Unit [1]	2.00	2.00	2.00	2.00
<b>Cost Assumptions</b>				
Land/Acre	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Land/Unit	\$66,667	\$66,667	\$66,667	\$66,667
Direct Construction Costs/Gross SF [2]	\$225	\$225	\$225	\$225
Direct Construction Costs/Unit	\$247,500	\$247,500	\$247,500	\$247,500
Parking Construction Costs/Space	\$3,000	\$3,000	\$3,000	\$3,000
Parking Construction Costs/Unit	\$6,000	\$6,000	\$6,000	\$6,000
Subtotal, Direct Costs/Unit	\$253,500	\$253,500	\$253,500	\$253,500
Indirect Costs as a % of Direct Costs [3]	33%	33%	33%	33%
Indirect Costs/Unit	\$83,655	\$83,655	\$83,655	\$83,655
Developer Profit Margin (% of all costs)	8%	8%	8%	8%
Developer Profit	\$32,306	\$32,306	\$32,306	\$32,306
<b>Total Cost/Unit (rounded)</b>	<b>\$436,000</b>	<b>\$436,000</b>	<b>\$436,000</b>	<b>\$436,000</b>
<b>Maximum Supported Home Price</b>				
Household Income [4]	\$49,550	\$64,450	\$84,150	\$101,000
Income Available for Housing Costs/Year [5]	\$14,865	\$19,335	\$25,245	\$30,300
Less Annual HOA Fees [6]	\$3,480	\$3,480	\$3,480	\$3,480
Less Property Taxes (1.15%) [7]	\$5,014	\$5,014	\$5,014	\$5,014
Less Annual Insurance	\$215	\$215	\$215	\$215
Income Available for Mortgage	\$6,156	\$10,626	\$16,536	\$21,591
Mortgage Interest Rate [8]	4.5%	4.5%	4.5%	4.5%
Mortgage Repayment Period (years)	30	30	30	30
Down Payment [9]	\$5,300	\$9,100	\$14,200	\$18,500
<b>Total Supportable Home Price (rounded)</b>	<b>\$106,000</b>	<b>\$182,000</b>	<b>\$284,000</b>	<b>\$370,000</b>
<b>Financing Gap</b>	<b>\$330,000</b>	<b>\$254,000</b>	<b>\$152,000</b>	<b>\$66,000</b>

[1] Reflects an average as apartments with up to 2 bedrooms are required to provide a minimum of 2 spaces for the first 4 units and 1.5 spaces for each additional unit. In addition, visitor parking ratio of 1 space for each 7 units is also required.

[2] Includes costs for labor and materials.

[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 HCD 2015 income limits for Alameda County

[5] Assumes housing costs to be 30% of gross household income for low-income and moderate-income households.

[6] Homeowner association fees are from Redfin.com based on recent for-sale multifamily units in and around the City of Pleasanton.

[7] Exceeds basic 1.00% tax rate to include allowance for special assessment districts. Reflective of current tax rates in City of Pleasanton.

[8] Interest rates slightly exceed current market for 30-year fixed mortgages, but are well below historic averages and reflect blend of first- and second-mortgage rates.

[9] Assumes a 5% down payment.

Sources: Alameda County housing developers; Department of Housing and Urban Development; Economic & Planning Systems, Inc.

**Table 3**  
**Financing Gap Analysis – Rental Product Type**  
**Pleasanton Housing Impact Fee, EPS #151111**

Item	2-Story Multifamily With Surface Parking				
	Very Low Income (50% AMI)	Low Income (60% AMI)	Low Income (80% AMI)	Median Income (100% AMI)	Moderate Income (120% AMI)
<b>Development Program Assumptions</b>					
Density/Acre	30	30	30	30	30
Average Gross Unit Size	1,100	1,100	1,100	1,100	1,100
Average Net Unit Size	950	950	950	950	950
Average Number of Bedrooms	2	2	2	2	2
Average Number of Persons per Household	3	3	3	3	3
Parking Spaces/Unit [1]	2.00	2.00	2.00	2.00	2.00
<b>Cost Assumptions</b>					
Land/Acre	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Land/Unit	\$66,667	\$66,667	\$66,667	\$66,667	\$66,667
Direct Construction Costs/Gross SF [2]	\$215	\$215	\$215	\$215	\$215
Direct Construction Costs/Unit	\$236,500	\$236,500	\$236,500	\$236,500	\$236,500
Parking Construction Costs/Space	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
Parking Construction Costs/Unit	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Subtotal, Direct Costs/Unit	\$242,500	\$242,500	\$242,500	\$242,500	\$242,500
Indirect Costs as a % of Direct Costs [3]	35%	35%	35%	35%	35%
Indirect Costs/Unit	\$84,875	\$84,875	\$84,875	\$84,875	\$84,875
Total Cost/Unit (rounded)	\$394,000	\$394,000	\$394,000	\$394,000	\$394,000
<b>Maximum Supported Unit Value</b>					
Household Income [4]	\$42,100	\$49,550	\$64,450	\$84,150	\$101,000
Income Available for Housing Costs/Year [5]	\$12,630	\$14,865	\$19,335	\$25,245	\$30,300
Operating Expenses per Unit/Year [6]	\$6,200	\$6,200	\$6,200	\$10,700	\$10,700
Net Operating Income	\$6,430	\$8,665	\$13,135	\$14,545	\$19,600
Capitalization Rate	5.0%	5.0%	5.0%	5.0%	5.0%
Total Supportable Unit Value	\$128,600	\$173,300	\$262,700	\$290,900	\$392,000
Financing Gap	\$265,400	\$220,700	\$131,300	\$103,100	\$2,000

[1] Reflects an average as apartments with up to 2 bedrooms are required to provide a minimum of 2 spaces for the first 4 units and 1.5 spaces for each additional unit. In addition, visitor parking ratio of 1 space for each 7 units is also required

[2] Direct construction costs based upon EPS findings in Pleasanton. Includes costs for labor and materials. Assumes Direct Construction Costs for rentals are \$10/SF less than for-sale developments

[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 HCD 2015 income limits for Alameda County

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

[6] Operating expenses based upon previous findings in other Bay Area jurisdictions, and include costs of tenants' utilities. Units for median- and moderate-income households are assumed to be built as for-profit projects and thus subject to property tax

Sources: Alameda County housing developers; Department of Housing and Urban Development; Economic & Planning Systems, Inc.

## Development Cost Assumptions

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

EPS has investigated the listed prices of multifamily residential land in Pleasanton's boundaries and urban growth limit, as shown on **Appendix Table A-1**. EPS has further estimated the costs of direct and indirect development costs for multifamily housing based on reviews of recent Bay Area project pro formas, with adjustments for location factors. As shown on **Tables 2 and 3**, the total costs for for-sale housing development are slightly higher than for rental apartments due to higher levels of finish and liability insurance required for condominium development.

## Revenue Assumptions

To calculate the values of the affordable units, assumptions must be made regarding the applicable income level (moderate, median, and low) 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, 60, 80, 100, and 120 percent of Area Median Income for a three-person household. In 2015, AMI in Alameda County 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 earning less than 80 percent of AMI should pay no more than 30 percent of their gross income on housing costs. For this analysis, EPS has assumed that all households shall spend 30 percent of their gross income on housing costs, including rent in rental projects or mortgage payments, homeowner association fees, insurance, and property taxes for for-sale units. A sample of homeowner association fees in the Pleasanton area is shown on **Appendix Table A-2**, and the average fee is incorporated into these calculations.
- *Operating Costs for Rental Units*—The analysis assumes that apartment operators incur annual operating costs of \$6,200 per unit, which include the cost of utilities, for units affordable at 80 percent of AMI or below. EPS has assumed the units for median income households and above would have similar operating costs but would be built by for-profit builders and thus also subject to property taxes.

## 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 60 percent of AMI is expected to require a subsidy of roughly \$254,000, and units for higher-income households require lower subsidies. **Table 3** shows the subsidies for construction of for-rent apartments for households at various income levels. For any equivalent income level (e.g., 60 percent of AMI), a comparison of **Tables 2 and 3** indicates the affordability gap for low-income rental units is estimated to be less than if the same unit were offered for-sale. This is generally due to slightly higher development costs for for-sale units, including the need for immediate rather than longer-term profit returns.

These 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 section.

## **2. DEMAND-BASED NEXUS FEE CALCULATION**

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The maximum supportable nexus-based fees are based on both the affordability gap, calculated in the previous section, and the estimated impact that new market-rate rental 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 apartments 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 moderate or 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 rental units have on the need for affordable housing, EPS estimated the minimum income required to rent a market-rate apartment at various bedroom sizes, as shown in **Table 4**.

Average rents for various apartment sizes (studio, and 1, 2, and 3 bedrooms) are based on a survey of rental rates for five market-rate multifamily projects recently developed in Pleasanton. New apartment rents are significantly higher, on average, than rental rates for existing rental housing stock, both because the newer units are of better-than-average quality and because the higher rents are required to cover the costs of construction. The rents for the most recent apartment projects were used, rather than average rents for all apartments, because these newer apartments best represent the rents that can be expected with new market-rate apartment development. Assuming utility costs for each unit size based on the City of Pleasanton Housing and Redevelopment Department Allowances for Tenant Furnished Utilities and Other Services, the minimum household income needed to rent each unit is then computed, predicated on the assumption that a household will spend 30 percent of their income on housing costs (rent and utility payments). As shown, required household incomes range from approximately \$76,560 for a studio apartment to roughly \$143,520 for a 3-bedroom apartment.

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

Having established the income requirements for renting apartments of various sizes, 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 renting new market-rate units in Pleasanton are "net new" households to the City. To assume otherwise—for instance,

**Table 4**  
**Required Income by Unit Type- Market-Rate Rental Apartments**  
**Pleasanton Housing Impact Fee, EPS #151111**

Apartment Size	Avg. Sq. Ft. [1]	Required Income by Unit Type				
		Average Rent [1]	Utility Allowance [2]	Subtotal Rent and Utilities	Annual Rent and Utility Expenditures	Minimum Annual Household Income Required [3]
<i>Formula</i>		A	B	C = A + B	D = C * 12	E = D / 30%
<b>Studio</b>	525	\$1,800	\$114	\$1,914	\$22,968	<b>\$76,560</b>
<b>1-Bedroom</b>	819	\$2,500	\$129	\$2,629	\$31,548	<b>\$105,160</b>
<b>2-Bedroom</b>	1,073	\$2,700	\$146	\$2,846	\$34,152	<b>\$113,840</b>
<b>3-Bedroom</b>	1,290	\$3,400	\$188	\$3,588	\$43,056	<b>\$143,520</b>

[1] Based on average rents and sizes for new rental project in each unit size category as determined by a survey of the City's most recently developed multifamily projects - Park Hacienda, The Promenade, and The Kensington, rounded. Reflects a 5% premium for new space. Studio units are assumed to generate average rents of \$3,50 per square foot since no studios are included in the evaluated survey data.

[2] Based on 2015 Housing Authority of the County of Alameda Utility Allowance Table assuming a low-rise garden apartment and natural gas for heating and cooking.

[3] Assumes that a maximum of 30% of annual household income is dedicated to utility and rent expenditures.

Sources: City of Pleasanton; Real Facts; Housing Authority of the County of Alameda; Economic & Planning Systems, Inc.

that only those buyers or renters of new housing units relocating from outside Pleasanton should be counted in the impact analysis—would require assuming that the homes left by those households relocating *within* Pleasanton 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. Pleasanton 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." Interestingly, household expenditures by category are not uniformly proportional to household income levels. For example, households earning around \$76,560 (adequate to rent a studio apartment) spend roughly 10.9 percent of their income on food and drink (at home and eating out), while households earning \$143,520 who can afford to rent a three-bedroom apartment spend only about 9.5 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 renter 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>2</sup> which provides employment, gross sales, and payroll data by industry for Alameda County. In certain instances, Alameda County data was not available for every Economic Census industry—in those cases, 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 eight 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 three 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 laundry services industry to a high of more than \$134,700 average salary for data processing, hosting, and related services industry.

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<sup>2</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. Because the data sources were from different years, 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.

This methodology recognizes that 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 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 1.67 workers per working household in Pleasanton.<sup>3</sup> This assumption implies the workers in a given household will have roughly equivalent pay per hour. 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 120 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 Food Away From Home (Consumer Expenditure Survey)	\$5,200
E.	Aggregate Food Spending (A x D)	\$5.2 million
F.	Food Away From Home Gross Receipts: Payroll Ratio (Economic Census)	3.59:1
G.	Estimated Retail Payroll (E + F)	\$1.4 million
H.	Average Food Service Wage (Economic Census)	\$16,900
I.	Estimated Total Retail Jobs (G + H)	83.5
J.	Percent Age 20+ (Bureau of Labor Statistics)	87.5%
K.	Total Retail Workers Forming Households	73
L.	Average Workers/Household (Census Data)	1.67

<sup>3</sup> Workers per working household based on American Community Survey (ACS) Census data. Although ACS data reported is based on historical figures, these figures can vary somewhat based on ongoing revisions to the ACS data.

K.	Estimated Households Created ( $K \div J$ )	44
L.	Average Household Income ( $H \times J$ )	\$28,200
M.	Income Category	Very Low-Income (up to 50% of AMI)

In this simplified example, 1,000 new market-rate apartments rented to households earning \$125,000 per year would create demand for 44 housing units for food and eating place workers with household incomes below 50 percent of AMI. Actual calculations and impact distinctions by type of household expenditure for various rental unit sizes are shown in the series of tables presented in Appendix B.

## Demand for Public-Sector Workers

In addition to the jobs created by the spending of the new market-rate households, this analysis also aims to evaluate 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 2015 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, as shown in Table B-5 in Appendix B.

Based on the ratio of the selected public-sector jobs to the total households in the MSA, EPS estimates that approximately 57 government jobs or 33.5 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

**Table 5**  
**HUD Income Limits\***  
**Pleasanton Housing Impact Fee, EPS #151111**

<b>Affordability Category</b>	<b>Percentage of County Median</b>	<b>2007</b>		<b>2012</b>		<b>2015</b>	
		<b>Max Income Threshold 3-person household</b>					
Very Low Income (LI) - 50%	31% - 50%	\$37,700	\$37,700	\$45,240	\$42,100	\$50,520	\$42,100
Low Income (LI) - 60%	51% - 60%	\$45,240	\$45,240	\$59,600	\$58,850	\$64,450	\$49,550
Low Income (LI) - 80%	6% - 80%	\$59,600	\$59,600	\$75,400	\$84,150	\$84,150	\$64,450
Median Income (Med)	81% - 100%	\$75,400	\$90,480	\$90,480	\$101,000	\$101,000	\$84,150
Moderate Income (Mod)	101% - 120%						\$101,000

\*Note: Data for Alameda County

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

used to compute the total number of income-qualified households generated by construction of market-rate units. The number of income-qualified households required to provide goods and services to new housing units is summarized on **Tables 6 through 9** and detailed in **Appendix B**.

The nexus methodology used herein computes the total number of income-qualified households generated by market-rate units and calculates the impact fee based on the estimated cost to subsidize the production of units to meet that affordable housing demand. This methodology does not suggest that all lower income service workers serving City residents will reside in the City, but it does assume that new development should mitigate for the new affordable housing demand it creates, even if some of those lower income households reside outside the City.

## 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 rental units. Then for each category of market-rate rental 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 rental housing development in Pleasanton.

**Tables 6 through 9** show the impact fee calculation by number of bedrooms for rental units. 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 units and the subsidies needed are calculated as the affordability gaps shown in **Table 3**. The resulting maximum impact fee for market-rate rental units ranges from \$24,911 for a studio apartment to \$46,631 for a 3-bedroom apartment.

**Table 6**  
**Maximum Impact Fee Calculations -- Studio**  
**Pleasanton Housing Impact Fee, EPS #15111**

Item	Affordable Units Required Per 100 Market-Rate Units (A)	Financing Gap per Affordable Unit [1] (B)	Total In-Lieu Fee Required	
			Per 100 Units	Market-Rate Per Market Rate Unit (C = A * B) (D = C / 100)
Affordable Units - Very Low Income (50%)	6.6	\$265,400	\$1,757,891	
Affordable Units - Low Income (60%)	1.8	\$220,700	\$399,835	
Affordable Units - Low Income (80%)	2.3	\$131,300	\$301,140	
Affordable Units - Median Income	0.3	\$103,100	\$30,811	
Affordable Units - Moderate Income	0.7	\$2,000	\$1,432	
<i>Total</i>	11.7	\$2,491,109	\$24,911	

[1] Very low- and low-income subsidy based on financing gap for rental units, while the moderate income subsidy is based on financing gap for for-sale units.  
 See Tables 2 and 3.

Source: Economic & Planning Systems, Inc.

**Table 7**  
**Maximum Impact Fee Calculations -- 1 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Item	Affordable Units Required Per 100 Market-Rate Units	Financing Gap per Affordable Unit [1]	Total In-Lieu Fee Required		
			Per 100 Units	Market-Rate	Per Market Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)	
Affordable Units - Very Low Income (50%)	9.4	\$265,400	\$2,491,533		
Affordable Units - Low Income (60%)	2.5	\$220,700	\$549,809		
Affordable Units - Low Income (80%)	2.9	\$131,300	\$378,148		
Affordable Units - Median Income	0.3	\$103,100	\$34,115		
Affordable Units - Moderate Income	<u>1.0</u>	\$2,000	<u>\$1,922</u>		
<i>Total</i>	<u>16.1</u>		<u>\$3,455,527</u>		<b>\$34,555</b>

[1] Very low- and low-income subsidy based on financing gap for rental units, while the moderate income subsidy is based on financing gap for for-sale units.  
See Tables 2 and 3.

Source: Economic & Planning Systems, Inc.

**Table 8**  
**Maximum Impact Fee Calculations -- 2 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Item	Affordable Units Required Per 100 Market-Rate Units (A)	Financing Gap per Affordable Unit [1] (B)	Total In-Lieu Fee Required	
			Per 100 Units	Market-Rate Per Market Rate Unit (C = A * B) (D = C / 100)
Affordable Units - Very Low Income (50%)	10.2	\$265,400	\$2,697,187	
Affordable Units - Low Income (60%)	2.7	\$220,700	\$595,191	
Affordable Units - Low Income (80%)	3.1	\$131,300	\$404,428	
Affordable Units - Median Income	0.4	\$103,100	\$36,931	
Affordable Units - Moderate Income	<u>1.0</u>	\$2,000	<u>\$2,051</u>	
<i>Total</i>	<i>17.3</i>	<i>\$3,735,787</i>	<i>\$37,358</i>	

[1] Very low- and low-income subsidy based on financing gap for rental units, while the moderate income subsidy is based on financing gap for for-sale units.  
 See Tables 2 and 3.

Source: Economic & Planning Systems, Inc.

**Table 9**  
**Maximum Impact Fee Calculations -- 3 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #15111**

Item	Affordable Units Required Per 100 Market-Rate Units <b>(A)</b>	Financing Gap per Affordable Unit [1] <b>(B)</b>	Total In-Lieu Fee Required		
			Per 100 Units	Market-Rate Unit	Per Market Rate Unit
Affordable Units - Very Low Income (50%)	12.6	\$265,400			\$3,345,379
Affordable Units - Low Income (60%)	3.5	\$220,700			\$780,595
Affordable Units - Low Income (80%)	3.7	\$131,300			\$485,127
Affordable Units - Median Income	0.5	\$103,100			\$49,555
Affordable Units - Moderate Income	1.2	\$2,000			\$2,403
<i>Total</i>	21.5				<b>\$46,630.59</b>

[1] Very low- and low-income subsidy based on financing gap for rental units, while the moderate income subsidy is based on financing gap for for-sale units.  
See Tables 2 and 3.

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

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**Table A-1**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - Studio**  
**Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type	% of Household Income Spent per Category [1]	% of Category Expenditure per Business [2]	% of Category Expenditure per Type of Business [2]	d = c + 1,000 e	f = d / e	g = f / e	Total Wages per 1,000 HH [3]	2015 Avg. Wages [4]	# of New Workers [5]	% Forming HH [5]	Workers/ HH [6]	Total Worker HH [6]	Avg. Worker HH Income	Income Category
<b>Calculation</b>														
Food at Home	6.0%	100%	\$4,576	\$4,576	\$4,235,739	9.45	\$447,662	\$29,961	14.9	87.5%	1.67	78	\$49,915	LI Households 80%
Food & Beverage Stores	4.9%	100%	\$4,576	\$3,758	\$3,476,530	3.59	\$968,415	\$16,942	57.2	87.5%	1.67	300	\$28,225	VLI Households
Food Away From Home	0.8%	100%	\$615	\$308	\$307,742	9.46	\$32,524	\$29,961	1.1	87.5%	1.67	0.7	\$49,915	LI Households 80%
Food Services and Drinking Places	50%	\$308	\$307,742	3.59	\$85,675	\$16,942	5.1	67.5%	1.67	30	\$28,225	VLI Households		
Alcoholic Beverages														
Food & Beverage Stores														
Food Services and Drinking Places														
Housing Maintenance, Repairs, Insurance, Other expenses Personal and Household Goods Repair and Maintenance [7]	1.8%	100%	\$1,415	\$637	\$569,549	3.22	\$182,824	\$12,737	14.4	98.1%	1.67	6.5	\$21,220	VLI Households
Building Material and Garden Equipment and Supplies Dealer	45%	45%	\$637	\$569,549	7.31	\$80,612	\$34,899	2.3	87.5%	1.67	1.2	\$58,142	LI Households 80%	
Real Estate and Rental and Leasing	10%	10%	\$142	\$131,011	5.33	\$24,598	\$55,131	0.4	98.1%	1.67	0.3	\$91,849	Moderate Income	
Fuel Oil and Other Fuels [7]	0.3%	100%	\$214	\$197,991	9.81	\$20,168	\$37,953	0.5	87.5%	1.67	0.3	\$63,230	LI Households 80%	
Nonstore Retailers														
Water and Other Public Services [7]	1.0%	100%	\$732	\$732	\$677,171	3.45	\$196,542	\$65,302	3.0	98.1%	1.67	1.8	\$108,794	Above Mod
Waste Management and Remediation Services														
Household Operations, Personal Services	0.6%	100%	\$443	\$177	\$163,869	2.64	\$62,051	\$30,684	2.0	98.1%	1.67	1.2	\$51,120	LI Households 80%
Nursing and Residential Care Facilities	40%	40%	\$265	\$245,803	2.98	\$82,988	\$4,832	3.3	98.1%	1.67	2.0	\$41,370	VLI Households	
Social Assistance [8]	60%	60%												
Household Operations Other Household Expenses														
Services to Buildings and Dwellings	1.2%	100%	\$934	\$864,630	2.54	\$340,029	\$27,607	12.3	98.1%	1.67	7.3	\$45,993	LI Households 60%	
Housekeeping Supplies														
Building Materials and Garden Equipment and Supplies Dealers	0.9%	100%	\$681	\$681	\$61,083	7.31	\$8,626	\$24,899	0.2	87.5%	1.67	0.1	\$58,142	LI Households 60%
Food & Beverage Stores	10%	68	\$68	\$220,791	9.46	\$23,335	\$29,961	0.8	87.5%	1.67	0.4	\$49,915	LI Households 60%	
General Merchandise	35%	35%	\$239	\$220,791	11.54	\$19,125	\$25,807	0.7	87.5%	1.67	0.4	\$42,985	LI Households 60%	
Miscellaneous Store Retailers	20%	\$136	\$126,166	6.64	\$19,013	\$24,517	0.8	87.5%	1.67	0.4	\$40,846	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 represents 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 this expenditure category, EPS has estimated the proportion according 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 4, tent of a studio unit requires a household income of \$76,560.

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

[5] BLS data indicate that 12.5% of retail/restaurant workers are age 16-19, but an average of only 19% 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 2010-2014.

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

**Table A-1  
Estimated Average Annual Household Expenditures and Associated Employment Generation - Studio**

[11] 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 4, rent of a studio unit requires a household

<sup>44</sup> 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.

EPS has assumed that young workers do not form their own households

61 Based on the American Community Survey data 2010-2014

[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.

<sup>1</sup>Alameda County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-1**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - Studio**  
**Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	d = c * f [600]	e	f = d / e	g	Total Wages per 1,000 HH [3]	2015 Avg. Wages [4]	# of New Workers [5]	% Forming HH [5]	Workers/ HH [6]	Total Worker HH [7]	Avg. Worker HH Income	Income Category
<b>Calculation</b>														
Audio and Visual Equipment and Services	1.7%	100%	\$1,312	\$1,214,273	9.79	\$124,011	\$26,665	4.7	87.5%	1.67	2.4	\$44,423	LI Households 60%	
Electronics and Appliance Stores	1.3%	100%	\$1,312	\$1,214,273	9.79	\$124,011	\$26,665	4.7	87.5%	1.67	2.4	\$44,423	LI Households 60%	
Pets, Toys, Hobbies, and Playground Equip.	1.3%	100%	\$1,907	\$403	\$372,812	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households	
Sporting Goods, Hobby, and Musical Instrument Stores	4.0%	40%	\$403	\$372,812	6.64	\$56,483	\$24,517	2.3	87.5%	1.67	1.2	\$40,846	VLI Households	
Miscellaneous Store Retailers	4.0%	40%	\$403	\$372,812	2.55	\$72,767	\$39,442	1.8	88.1%	1.67	1.1	\$65,711	Median Income	
Veterinary Services [7]	20%	20%	\$201	\$186,406										
Other Entertainment Supplies, Equipment, and Services	0.7%	100%	\$509	\$432	\$400,141	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households	
Photographic Services [7]	0.7%	15%	\$76	\$70,613	4.40	\$16,047	\$26,467	0.6	98.1%	1.67	0.4	\$44,095	LI Households 60%	
Personal Care Products and Services	1.0%	100%	\$780	\$390	\$361,228	6.64	\$54,437	\$24,517	2.2	87.5%	1.67	1.2	\$40,846	VLI Households
Unspecified Retail	50%	50%	\$390	\$361,228	2.89	\$124,930	\$17,688	7.1	98.1%	1.67	4.2	\$29,469	VLI Households	
Personal Care Services [7]														
Reading	0.2%	100%	\$126	\$116,899	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households		
Sporting Goods, Hobby, and Musical Instrument Stores														
Education	1.2%	100%	\$935	\$935	\$665,683	3.11	\$278,121	\$222,455	12.4	98.1%	1.67	7.3	\$37,410	VLI Households
Educational Services														
Tobacco Products and Smoking Supplies	0.6%	100%	\$430	\$430	\$198,088	6.64	\$59,992	\$24,517	2.4	87.5%	1.67	1.3	\$40,846	VLI Households
Unspecified Retail														
Miscellaneous	1.0%	100%	\$757	\$151	\$140,068	2.11	\$66,227	\$58,902	1.1	98.1%	1.67	0.7	\$98,131	Moderate Income
Accounting [7]	20%	20%	\$151	\$140,068	2.98	\$47,018	\$95,809	0.5	98.1%	1.67	0.3	\$159,617	Above Mod	
Architectural Engineering, and Related [7]	20%	20%	\$151	\$140,068	3.84	\$36,468	\$52,815	0.7	98.1%	1.67	0.4	\$87,980	Moderate Income	
Specialized Design Services [7]	20%	20%	\$151	\$140,068	3.41	\$41,115	\$42,194	1.0	98.1%	1.67	0.6	\$70,284	Median Income	
Death Care Services [7]	20%	20%	\$151	\$140,068	2.99	\$46,826	\$98,006	0.5	98.1%	1.67	0.3	\$163,278	Above Mod	
Legal Services [7]														
<b>Total per 1,000 Market Rate Households</b>									<b>210</b>			<b>115.4</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 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 according 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 4, rent of a studio unit requires a household income of \$76,560.

[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] EPS 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 2010-2014.

[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] Alameda County data not available from 2013 Economic Census.

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  
Estimated Average Annual Household Expenditures and Associated Employment Generation - 1 Bedroom  
Pleasanton Housing Impact Fee, EPS #151111**

Expenditure Category/ Business Type	% of Household Income Spent Per Category (#)	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 Households	Gross Receipts to Wages	Total Wages per 1,000 HH	# of New Workers [4]	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j
Food at Home	5.6%	100%	\$5,929	\$5,929	\$5,488 454	9.46	\$580,057	\$29,961	19.4	87.5%	1.67	10.2
Food & Beverage Stores	4.5%	100%	\$4,731	\$4,731	\$4,379 592	3.59	\$1,219,269	\$16,942	72.0	87.5%	1.67	37.8
Food Away From Home												\$49,915 LI Households 80%
Food Services and Drinking Places												\$26,225 VI Households
Alcoholic Beverages	0.8%	100%	\$860	\$860	\$430,205	9.46	\$45,467	\$29,961	1.5	87.5%	1.67	0.9
Food & Beverage Stores	50%	50%	\$430	\$430	\$430,205	3.59	\$119,768	\$16,942	7.1	87.5%	1.67	4.2
Food Services and Drinking Places												\$26,225 VI Households
Housing Maintenance, Repairs, Insurance, Other Expenses	2.2%	100%	\$2,281	\$2,281	\$950,032	3.22	\$294,612	\$12,737	23.1	98.1%	1.67	13.6
Personal and Household Goods Repair and Maintenance [7]	45%	51.026	\$950,032	\$950,032	\$129,903	3.71	\$34,699	\$34,699	3.7	87.5%	1.67	2.0
Building Material and Garden Equipment and Supplies Dealer	45%	51.026	\$950,032	\$950,032	\$211,118	5.33	\$39,640	\$55,131	0.7	98.1%	1.67	0.4
Real Estate and Rental and Leasing	10%											\$91,849 Moderate Income
Fuel Oil and Other Fuels [7]	0.2%	100%	\$238	\$238	\$220,324	9.81	\$22,465	\$37,953	0.6	87.5%	1.67	0.3
Nonstore Retailers	100%											\$63,230 LI Households 80%
Water and Other Public Services [7]	0.8%	100%	\$800	\$800	\$740,621	3.45	\$214,957	\$65,302	3.3	98.1%	1.67	1.9
Waste Management and Remediation Services												\$108,794 Above Mod
Household Operations Personal Services	0.7%	100%	\$694	\$694	\$256,942	2.64	\$97,294	\$30,684	3.2	98.1%	1.67	1.9
Nursing and Residential Care Facilities	40%	5278	\$256,942	\$256,942	\$129,182	2.98	\$24,832	\$24,832	5.2	98.1%	1.67	3.1
Social Assistance [8]	60%	\$416	\$395,412	\$395,412	\$104,725	2.54	\$434,450	\$27,607	15.7	98.1%	1.67	9.3
Household Operations Other Household Expenses	1.1%											\$45,993 LI Households 60%
Services to Buildings and Dwellings												
Housekeeping Supplies	1.0%	100%	\$1,082	\$1,082	\$100,129	7.31	\$13,691	\$34,899	0.4	87.5%	1.67	0.2
Building Materials and Garden Equipment and Supplies Dealers	10%	\$108	\$108	\$108	\$350,450	9.46	\$37,038	\$29,961	1.2	87.5%	1.67	0.6
Food & Beverage Stores	35%	\$379	\$379	\$379	\$350,450	11.54	\$30,356	\$25,807	1.2	87.5%	1.67	0.6
General Merchandise	35%	\$379	\$379	\$379	\$200,257	6.64	\$30,178	\$24,517	1.2	87.5%	1.67	0.6
Miscellaneous Store Retailers	20%	\$216	\$216	\$216								\$40,846 VI 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, 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 4, rent at a 1-bedroom unit requires a household income of \$105,150.

[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 2010-2014.

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

**Table A-2**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 1 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Expenditure Category/ Business Type	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 Households	Gross Receipts to Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Workers/ HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<i>Calculation</i>													
Household Furnishings and Equipment	2.5%	100%	\$2,652	\$ = c * 1,000	e	f = d/e	g	h = f/g	i	j	k = h * i / j	l = g * i	
Furniture and Home Furnishings Stores	40%		\$1,061	\$981,840	8.40	\$116,837	\$27,418	4.3	87.5%	1.67	2.2	\$45,678	LI Households 60%
Electronics and Appliance Stores	40%		\$1,061	\$981,840	9.79	\$100,273	\$26,665	3.6	87.5%	1.67	2.0	\$44,423	LI Households 60%
General Merchandise Stores	10%		\$225	\$245,460	11.54	\$21,262	\$25,807	0.8	87.5%	1.67	0.4	\$42,995	LI Households 60%
Miscellaneous Store Retailers	10%		\$265	\$245,460	6.64	\$36,991	\$24,517	1.5	87.5%	1.67	0.8	\$40,846	VLI Households
Apparel and Services	2.6%	100%	\$2,781										
Clothing and Clothing Accessories Stores	40%		\$1,112	\$1,029,835	7.64	\$134,826	\$20,424	6.6	87.5%	1.67	3.5	\$34,027	VLI Households
General Merchandise	40%		\$1,112	\$1,029,835	11.54	\$89,205	\$25,807	3.5	87.5%	1.67	1.8	\$42,995	LI Households 60%
Miscellaneous Store Retailers	10%		\$278	\$257,459	6.64	\$38,799	\$24,517	1.6	87.5%	1.67	0.8	\$40,846	VLI Households
Personal and Household Goods Repair and Maintenance [7]	5%		\$139	\$128,729	3.22	\$39,920	\$12,737	3.1	87.5%	1.67	1.6	\$21,220	VLI Households
Dry Cleaning and Laundry Services [7]	5%		\$139	\$128,729	3.22	\$39,920	\$12,737	3.1	87.5%	1.67	1.6	\$21,220	VLI Households
Vehicle Purchases (net outlay)	5.9%	100%	\$6,254										
Motor Vehicle and Parts Dealers	100%		\$6,254	\$5,789,461	10.06	\$575,678	\$53,507	10.6	87.5%	1.67	5.7	\$69,143	Moderate Income
Gasoline and motor oil	3.8%	100%	\$4,031										
Gasoline Stations	100%		\$4,031	\$3,731,032	47.55	\$78,465	\$21,168	3.7	87.5%	1.67	1.9	\$35,266	VLI Households
Vehicle Maintenance and Repairs	1.3%	100%	\$1,320										
Repair and Maintenance [7]	100%		\$1,320	\$1,221,610	3.66	\$333,719	\$34,965	9.5	98.1%	1.67	5.6	\$58,251	LI Households 80%
Medical Services	1.2%	100%	\$1,269										
Ambulatory Health Care Services	40%		\$508	\$470,025	2.42	\$194,229	\$78,785	2.5	98.1%	1.67	1.5	\$131,256	Above Mod
General Medical and Surgical Hospitals [7]	30%		\$381	\$352,519	2.91	\$121,187	\$37,749	1.6	98.1%	1.67	1.0	\$122,867	Above Mod
Nursing and Residential Care Facilities	30%		\$381	\$352,519	2.64	\$133,485	\$30,684	4.4	98.1%	1.67	2.6	\$51,120	LI Households 80%
Drugs	0.6%	100%	\$615										
Health and Personal Care Stores	100%		\$615	\$568,913	7.39	\$77,016	\$39,122	2.0	87.5%	1.67	1.0	\$65,178	Median Income
Medical Supplies	0.2%	100%	\$225										
Health and Personal Care Stores	100%		\$225	\$207,912	7.39	\$28,146	\$39,122	0.7	87.5%	1.67	0.4	\$65,178	Median Income
Entertainment Fees and Admissions	1.1%	100%	\$1,159	\$1,072,659	4.26	\$251,774	\$26,280	9.6	87.5%	1.67	5.0	\$43,782	LI Households 60%
Arts, Entertainment, & Recreation	100%		\$1,159										

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for 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 according 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 4, rent of a 1-bedroom unit requires a household income of \$105,160.

[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 2010-2014.

[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 available because data was not available in the Economic Census.

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

**Table A-2**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 1 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type	% of Household Income Spent per Category ([1])	% of Category Expenditure per Type of Business ([2])	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	l = g * j
<i>Calculation</i>													
Audio and Visual Equipment and Services	1.4%	100%	\$1,457	\$1,348,840	979	\$137,754	\$26,665	5.2	87.5%	1.67	2.7	\$44,423	LI Households 60%
Electronics and Appliance Stores	1.00%	\$1,457	\$1,348,840										
Pets, Toys, Hobbies, and Playground Equip.	0.8%	100%	3887	\$328,521	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VU Households	
Sporting Goods, Hobby, and Musical Instrument Stores	40%	\$355	\$328,521	6.64	\$49,508	\$24,517	2.0	87.5%	1.67	1.1	\$40,846	VU Households	
Miscellaneous Store Retailers	40%	\$355	\$328,521	2.56	\$64,122	\$39,442	1.6	98.1%	1.67	1.0	\$65,711	Median Income	
Veterinary Services [7]	20%	\$177	\$164,261										
Other Entertainment Supplies, Equipment, and Services	1.1%	100%	51,170	\$920,552	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VU Households	
Sporting Goods, Hobby, and Musical Instrument Stores	85%	\$994	\$920,552	4.40	\$36,916	\$26,467	1.4	98.1%	1.67	0.8	\$44,085	LI Households 60%	
Photographic Services [7]	15%	\$175	\$162,450										
Personal Care Products and Services	1.0%	100%	\$1,049	\$485,644	6.64	\$73,187	\$24,517	3.0	87.5%	1.67	1.6	\$40,846	VU Households
Unspecified Retail	50%	\$525	\$485,644	2.89	\$167,959	\$17,688	9.5	98.1%	1.67	5.6	\$29,469	VU Households	
Personal Care Services [7]	50%	\$525	\$485,644										
Reading	0.2%	100%	\$173	\$160,330	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VU Households	
Sporting Goods, Hobby, and Musical Instrument Stores	100%	\$173	\$160,330										
Education	1.8%	100%	\$1,890	\$1,749,147	3.11	\$561,955	\$22,455	25.0	98.1%	1.67	14.7	\$37,410	VU Households
Educational Services	100%	\$1,890	\$1,749,147										
Tobacco Products and Smoking Supplies	0.4%	100%	\$409	\$378,585	6.64	\$57,053	\$24,517	2.3	87.5%	1.67	1.2	\$40,846	VU Households
Unspecified Retail	100%	\$409	\$378,585										
Miscellaneous	1.2%	100%	\$1,239	\$108,478	2.11	\$58,902	1.8	98.1%	1.67	1.1	\$98,131	Moderate Income	
Accounting [7]	20%	\$248	\$229,427	2.98	\$77,014	\$95,869	0.8	98.1%	1.67	0.5	\$159,617	Above Mod	
Architectural, Engineering, and Related [7,8]	20%	\$248	\$229,427	3.84	\$59,733	\$52,815	1.1	98.1%	1.67	0.7	\$87,990	Moderate Income	
Specialized Design Services [7]	20%	\$248	\$229,427	3.41	\$67,346	\$42,194	1.6	98.1%	1.67	0.9	\$70,294	Median Income	
Death Care Services [7]	20%	\$248	\$229,427	2.99	\$76,699	\$98,006	0.8	98.1%	1.67	0.5	\$163,278	Above Mod	
Legal Services [7]													
Total per 1,000 Market Rate Households								289					159.5

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for 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 4, rent of a 1-bedroom unit requires a household income of \$105,180.

[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 USA.

[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 2010-2014.

[7] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services.

[8] Alameda 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**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 2 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Expenditure Category/ Business Type	% of Household Income Spent per Category \$11	% of Category Expenditure per Type of Business [2]	b	c	d = c + 1,000	e	f = d/e	Gross Receipts to Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<b>Calculation</b>																
Food at Home	5.6%	100%	\$6,418	\$6,418	\$6,418	9.46	\$627,935	\$29,961	21.0	87.5%	1,67	11.0	\$49,915	LI Households 80%		
Food & Beverage Stores	4.5%	100%	\$5,122	\$5,122	\$4,741,088	3.59	\$1,319,908	\$16,942	77.9	87.5%	1,67	40.9	\$28,225	VLI Households		
Food Away From Home	0.8%	100%	\$931	\$466	\$465,715	9.46	\$49,220	\$29,961	1.6	87.5%	1,67	1.0	\$49,915	LI Households 80%		
Alcoholic Beverages	50%	50%	\$466	\$465,715	3.59	\$129,654	\$16,942	7.7	87.5%	1,67	4.6	\$28,225	VLI Households			
Food & Beverage Stores	Food Services and Drinking Places															
Housing Maintenance, Repairs, Insurance, Other expenses	2.2%	100%	\$2,469	\$1,028,449	3.22	\$318,930	\$12,737	25.0	98.1%	1,67	14.7	\$21,220	VLI Households			
Personal and Household Goods Repair and Maintenance [7]	45%	\$1,111	\$1,028,449	7.31	\$140,025	\$34,899	4.0	87.5%	1,67	2.1	\$58,142	LI Households 80%				
Building Material and Garden Equipment and Supplies Dealer	45%	\$1,111	\$1,028,449	5.33	\$42,912	\$55,131	0.8	98.1%	1,67	0.5	\$91,849	Moderate Income				
Real Estate and Rental and Leasing	10%	\$247	\$228,544	9.81	\$24,319	\$37,953	0.6	87.5%	1,67	0.3	\$63,230	LI Households 80%				
Fuel/Oil and Other Fuels [7]	0.2%	100%	\$258	\$238,510	3.45	\$232,700	\$65,302	3.6	98.1%	1,67	2.1	\$108,794	Above Mod			
Nonsite Retailers	100%	\$866	\$801,752	3.45	\$232,700	\$65,302	3.6	98.1%	1,67	2.1	\$108,794	Above Mod				
Water and Other Public Services [7]	0.8%	100%	\$866	\$801,752	3.45	\$232,700	\$65,302	3.6	98.1%	1,67	2.1	\$108,794	Above Mod			
Waste Management and Remediation Services																
Household Operations, Personal Services	0.7%	100%	\$751	\$300	\$278,150	2.64	\$105,325	\$30,684	3.4	98.1%	1,67	2.0	\$51,120	LI Households 80%		
Nursing and Residential Care Facilities	40%	\$300	\$451	\$417,725	2.98	\$139,645	\$24,832	5.6	98.1%	1,67	3.3	\$41,370	VLI Households			
Social Assistance [8]	60%	\$1,292	\$1,195,910	2.54	\$470,309	\$27,607	17.0	98.1%	1,67	10.0	\$45,993	LI Households 60%				
Household Operations, Other Household Expenses																
Services to Buildings and Dwellings	1.1%	100%	\$1,292	\$1,195,910	2.54	\$470,309	\$27,607	17.0	98.1%	1,67	10.0	\$45,993	LI Households 60%			
Housekeeping Supplies																
Building Materials and Garden Equipment and Supplies Dealers	1.0%	100%	\$1,171	\$117	\$108,393	7.31	\$14,821	\$34,899	0.4	87.5%	1,67	0.2	\$58,142	LI Households 80%		
Food & Beverage Stores	35%	\$410	\$379,377	9.46	\$40,985	\$29,961	1.3	87.5%	1,67	0.7	\$49,915	LI Households 80%				
General Merchandise	35%	\$410	\$379,377	11.54	\$32,962	\$25,807	1.3	87.5%	1,67	0.7	\$42,995	LI Households 60%				
Miscellaneous Store Retailers	20%	\$234	\$216,787	6.64	\$32,670	\$24,517	1.3	87.5%	1,67	0.7	\$40,846	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 according 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 4, rent of a 2-bedroom unit requires a household income of \$113,840.

[4] Based on the 2012-13 average wage reported by the American Community Survey initiated 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 2010-2014.

[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 available from 2013 Economic Census.

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

**Table A-3**  
**Pleasanton Housing Impact Fee, EPS #H51111**

Expenditure Category/ Business Type	% Household Income Spent per Category [1]	% of Household Expenditure per Type of Business [2]	Expenditure [3]	Gross Receipts No Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i	j	k = h * i / j	f = g * j
<b>Household Furnishings and Equipment</b>												
Furniture and Home Furnishings Stores	2.5%	100%	\$2,670	\$1,062,882	8.40	\$126,480	\$27,418	4.6	87.5%	1.67	2.4	\$45,678 LI Households 60%
Electronics and Appliance Stores	40%	\$1,148	\$1,062,882	9.79	\$108,550	\$26,665	4.1	87.5%	1.67	2.1	\$44,423 LI Households 60%	
General Merchandise Stores	10%	\$287	\$265,720	11.54	\$23,017	\$25,807	0.9	87.5%	1.67	0.5	\$42,995 LI Households 60%	
Miscellaneous Store Retailers	10%	\$287	\$265,720	6.64	\$40,044	\$24,517	1.6	87.5%	1.67	0.9	\$40,846 VI Households	
<b>Apparel and Services</b>												
Clothing and Clothing Accessories Stores	2.6%	100%	\$3,011	\$1,148,839	7.64	\$145,955	\$20,424	7.1	87.5%	1.67	3.8	\$34,027 VIJ Households
General Merchandise	40%	\$1,204	\$1,148,839	11.54	\$96,568	\$25,807	3.7	87.5%	1.67	2.0	\$42,895 LI Households 60%	
Miscellaneous Store Retailers	10%	\$301	\$278,715	6.64	\$42,002	\$24,517	1.7	87.5%	1.67	0.9	\$40,846 VIJ Households	
Personal and Household Goods Repair and Maintenance [7]	5%	\$151	\$139,355	3.22	\$43,215	\$12,737	3.4	87.5%	1.67	1.8	\$21,220 VIJ Households	
Dry Cleaning and Laundry Services [7]	5%	\$151	\$139,355	3.22	\$43,215	\$12,737	3.4	87.5%	1.67	1.8	\$21,220 VIJ Households	
<b>Vehicle Purchases (net outlay)</b>												
Motor Vehicle and Parts Dealers	5.9%	100%	\$6,770	\$6,267,328	10.06	\$623,194	\$53,507	11.6	87.5%	1.67	6.1	\$89,143 Moderate Income
<b>Gasoline and Motor Oil</b>												
Gasoline Stations	3.8%	100%	\$4,363	\$4,038,995	47.55	\$84,942	\$21,168	4.0	87.5%	1.67	2.1	\$35,266 VIJ Households
<b>Vehicle Maintenance and Repairs</b>												
Repair and Maintenance [7]	1.3%	100%	\$1,429	\$1,322,443	3.66	\$361,264	\$34,965	10.3	98.1%	1.67	6.1	\$58,251 LI Households 60%
<b>Medical Services</b>												
Ambulatory Health Care Services	1.2%	100%	\$1,374	\$508,621	2.42	\$10,261	\$78,705	2.7	98.1%	1.67	1.6	\$131,256 Above Mod
General Medical and Surgical Hospitals [7]	40%	\$550	\$381,616	2.91	\$131,190	\$73,749	1.8	98.1%	1.67	1.0	\$122,867 Above Mod	
Nursing and Residential Care Facilities	30%	\$412	\$381,616	2.64	\$144,503	\$30,684	4.7	98.1%	1.67	2.8	\$51,120 LI Households 80%	
<b>Drugs</b>												
Health and Personal Care Stores	0.6%	100%	\$665	\$615,871	7.39	\$81,373	\$39,122	2.1	87.5%	1.67	1.1	\$65,178 Median Income
<b>Medical Supplies</b>												
Health and Personal Care Stores	0.2%	100%	\$243	\$225,073	7.39	\$30,469	\$39,122	0.8	87.5%	1.67	0.4	\$65,178 Median Income
<b>Entertainment Fees and Admissions</b>												
Arts, Entertainment, & Recreation	1.1%	100%	\$1,254	\$1,161,197	4.26	\$272,556	\$26,260	10.4	87.5%	1.67	5.4	\$43,782 LI Households 60%

- [1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for 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/meal 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 according 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 4, rent of a 2-bedroom unit requires a household income of \$113,640.
- [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 2010-2014.
- [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 available because data was not available in the Economic Census.
- [8] Alameda County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-3**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 2 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Expenditure Category/ Business Type	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	d = c * 1,000 [3]	Expenditures per 1,000 Households	Gross Receipts to Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category	
<b>Calculation</b>														
Audio and Visual Equipment and Services	1.4%	100%	\$1,577	\$1,460.174	9.79	\$149,124	\$26,665	5.6	87.5%	1.67	2.9	\$44,423	L1 Households 60%	
Electronics and Appliance Stores	0.8%	100%	\$960	\$384	\$355,638	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households	
Pets, Toys, Hobbies, and Playground Equip.	0.8%	40%	\$384	\$355,638	6.64	\$53,595	\$24,517	2.2	87.5%	1.67	1.1	\$40,846	VLI Households	
Sporting Goods, Hobby, and Musical Instrument Stores	0.4%	40%	\$384	\$355,638	2.56	\$69,415	\$39,442	1.8	98.1%	1.67	1.0	\$55,711	Median Income	
Miscellaneous Store Retailers	20%	100%	\$192	\$177,819										
Veterinary Services [7]														
Other Entertainment Supplies, Equipment, and Services	1.1%	100%	\$1,267	\$1,077	\$996,535	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households	
Sporting Goods, Hobby, and Musical Instrument Stores	0.5%	85%	\$190	\$175,959	4.40	\$39,963	\$26,467	1.5	98.1%	1.67	0.9	\$44,095	L1 Households 60%	
Photographic Services [7]	15%													
Personal Care Products and Services	1.0%	100%	\$1,136	\$1,136	\$568	\$25,730	6.64	\$79,228	\$24,517	3.2	87.5%	1.67	1.7	
Unspecified Retail	50%	50%	\$568	\$525,730	2.89	\$181,523	\$17,688	10.3	98.1%	1.67	6.1	\$29,469	VLI Households	
Personal Care Services [7]														
Reading	0.2%	100%	\$187	\$187	\$173,564	0.00	\$19,829	0.0	87.5%	1.67	0.0	\$33,036	VLI Households	
Reading														
Sporting Goods, Hobby, and Musical Instrument Stores	1.8%	100%	\$2,046	\$1,893,524	3.11	\$608,338	\$22,455	27.1	98.1%	1.67	16.0	\$37,410	VLI Households	
Educational Services														
Tobacco Products and Smoking Supplies	0.4%	100%	\$443	\$443	\$409,034	6.64	\$61,762	\$24,517	2.5	87.5%	1.67	1.3	\$40,846	VLI Households
Unspecified Retail														
Miscellaneous	1.2%	100%	\$1,341	\$1,341	\$248,364	2.11	\$117,432	\$58,902	2.0	98.1%	1.67	1.2	\$98,131	Moderate Income
Architectural, Engineering, and Related [7]	20%	20%	\$268	\$248,364	2.98	\$85,371	\$55,809	0.9	98.1%	1.67	0.5	\$159,617	Above Mod	
Specialized Design Services [7]	20%	20%	\$268	\$248,364	3.84	\$64,964	\$52,815	1.2	98.1%	1.67	0.7	\$87,930	Moderate Income	
Death Care Services [7]	20%	20%	\$268	\$248,364	3.41	\$72,904	\$42,194	1.7	98.1%	1.67	1.0	\$70,234	Median Income	
Legal Services [7]	20%	20%	\$268	\$248,364	2.99	\$83,030	\$98,006	0.8	98.1%	1.67	0.5	\$163,278	Above Mod	
Total per 1,000 Market Rate Households								313					172.6	

[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 according 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 4, rent of a 2-bedroom unit requires a household income of \$113,840.

[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 19% 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 2010-2014.

[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] Alameda 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**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 3 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type	% of Household Income spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditure [3]	Expenditure per 1,000 Households	Gross Receipts to Wages	Total Wages per 1,000 HH	# of New Workers	% Forming HH [4]	Workers/ HH [5]	Total Worker HH	Avg. Worker HH Income	Income Category	
Calculation	a	b	c	d = c * 1,000	e	f = d/e	g	h = f/g	i	j	k = h * i/j	l = g *	
Food at Home	5.4%	100%	\$7,682	\$7,682	9.46	\$751,517	\$29,061	25.1	87.5%	1,67	13.2	\$49,915 LI Households 80%	
Food & Beverage Stores	4.1%	100%	\$5,923	\$5,923	55,482,851	3.59	\$1,526,414	\$16,942	90.1	87.5%	1,67	47.3	\$26,225 VLI Households
Food Away From Home													
Food Services and Drinking Places	0.7%	100%	\$1,904	\$502	\$501,827	9.46	\$53,036	\$29,961	1.8	87.5%	1.67	1.1	\$49,915 LI Households 80%
Alcoholic Beverages													
Food & Beverage Stores	0.7%	50%	\$502	\$501,827	3.59	\$139,708	\$16,942	8.2	87.5%	1,67	4.9	\$26,225 VLI Households	
Food Services and Drinking Places													
Housing Maintenance, Repairs, Insurance, Other Expenses	2.1%	100%	\$2,864	\$1,234,699	3.22	\$382,889	\$12,737	30.1	98.1%	1.67	17.7	\$21,220 VLI Households	
Personal and Household Goods, Repair and Maintenance [7]	45%	\$1,334	\$1,234,699	7.31	\$168,827	\$34,869	4.8	87.5%	1.67	2.5	\$58,142 LI Households 80%		
Building Material and Garden Equipment and Supplies Dealer	45%	\$1,334	\$1,234,699	5.33	\$274,377	\$51,517	0.9	98.1%	1.67	0.6	\$91,649 Moderate Income		
Real Estate and Rental and Leasing	10%	\$296											
Fuel Oil and Other Fuels [7]	0.2%	100%	\$277	\$256,054	9.81	\$26,108	\$37,933	0.7	87.5%	1.67	0.4	\$63,230 LI Households 80%	
Nonstore Retailers													
Water and Other Public Services [7]	0.7%	100%	\$957	\$805,619	3.45	\$257,041	\$65,302	3.9	98.1%	1.67	2.3	\$103,794 Above Mod	
Waste Management and Remediation Services													
Household Operations, Personal Services	0.8%	100%	\$1,160	\$429,420	2.64	\$162,605	\$30,684	5.3	98.1%	1.67	3.1	\$51,120 LI Households 80%	
Nursing and Residential Care Facilities	40%	\$464	\$429,420	2.58	\$215,898	\$24,832	6.7	98.1%	1.67	5.1	\$41,370 VLI Households		
Social Assistance [8]	60%	\$396	\$644,129										
Household Operations, Other Household Expenses	1.1%	100%	\$1,634	\$1,512,835	2.54	\$594,945	\$27,607	21.6	98.1%	1.67	12.7	\$45,993 LI Households 60%	
Services to Buildings and Dwellings													
Housekeeping Supplies	0.8%	100%	\$1,203										
Building Materials and Garden Equipment and Supplies Dealers	10%	\$120	\$111,348	7.31	\$15,225	\$34,869	0.4	87.5%	1.67	0.2	\$58,142 LI Households 80%		
Food & Beverage Stores	35%	\$421	\$389,719	9.46	\$41,188	\$29,961	1.4	87.5%	1.67	0.7	\$49,915 LI Households 80%		
General Merchandise	35%	\$421	\$389,719	11.54	\$33,758	\$25,807	1.3	87.5%	1.67	0.7	\$42,995 LI Households 60%		
Miscellaneous Store Retailers	20%	\$241	\$222,697	6.64	\$33,561	\$24,517	1.4	87.5%	1.67	0.7	\$40,846 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, and thus represents 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 its proportion according 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 4, rent on a 2-bedroom unit requires a household income of \$143,520.

[4] Based on the 2012/13 average wage reported by the American Community Survey initiated in 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 2010-2014.

[7] Part of 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] Alameda County data not available from 2013 Economic Census. Gross receipts to wages and average wage thus based on statewide data.

**Table A-4**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 3 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 Households	Gross Receipts to Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
<b>Calculation</b>													
Household Furnishings and Equipment	2.8%	100%	\$4,006	\$4,006									
Furniture and Home Furnishings Stores	40%	\$1,602	\$1,483,236	8.40	\$176,502	\$27,418	6.4	87.5%	1.67	3.4	\$45,678	LI Households 60%	
Electronics and Appliance Stores	40%	\$1,602	\$1,483,236	9.79	\$151,380	\$26,685	5.7	87.5%	1.67	3.0	\$44,423	LI Households 60%	
General Merchandise Stores	10%	\$401	\$370,809	11.54	\$32,120	\$25,807	1.2	87.5%	1.67	0.7	\$42,995	LI Households 60%	
Miscellaneous Store Retailers	10%	\$401	\$370,809	6.64	\$55,881	\$24,517	2.3	87.5%	1.67	1.2	\$40,846	VLI Households	
Apparel and Services	2.8%	100%	\$4,088	\$4,088									
Clothing and Clothing Accessories Stores	40%	\$1,635	\$1,513,774	7.64	\$198,183	\$20,424	9.7	87.5%	1.67	5.1	\$34,027	VLI Households	
General Merchandise	40%	\$1,635	\$1,513,774	11.54	\$131,124	\$25,807	5.1	87.5%	1.67	2.7	\$42,995	LI Households 60%	
Miscellaneous Store Retailers	10%	\$409	\$378,444	6.64	\$57,032	\$24,517	2.3	87.5%	1.67	1.2	\$40,846	VLI Households	
Personal and Household Goods Repair and Maintenance [7]	5%	\$204	\$169,222	3.22	\$58,679	\$12,737	4.6	87.5%	1.67	2.4	\$21,220	VLI Households	
Dry Cleaning and Laundry Services [7]	5%	\$204	\$189,222	3.22	\$58,679	\$12,737	4.6	87.5%	1.67	2.4	\$21,220	VLI Households	
Vehicle Purchases (net outlay)	5.5%	100%	\$7,938	\$7,938									
Motor Vehicle and Parts Dealers	100%	\$7,938	\$7,348,054	10.06	\$730,657	\$53,507	13.7	87.5%	1.67	7.2	\$89,143	Moderate Income	
Gasoline and motor oil	3.4%	100%	\$4,884	\$4,884									
Gasoline Stations	100%	\$4,884	\$4,520,685	47.55	\$95,076	\$21,168	4.5	87.5%	1.67	2.4	\$35,266	VLI Households	
Vehicle Maintenance and Repairs	1.1%	100%	\$1,643	\$1,643									
Repair and Maintenance [7]	100%	\$1,643	\$1,521,057	3.66	\$415,521	\$34,965	11.9	98.1%	1.67	7.0	\$58,251	LI Households 80%	
Medical Services	1.4%	100%	\$2,076	\$2,076									
Ambulatory Health Care Services	40%	\$830	\$768,633	2.42	\$317,624	\$78,785	4.0	98.1%	1.67	2.4	\$131,256	Above Mod	
General Medical and Surgical Hospitals [7]	30%	\$623	\$576,475	2.91	\$198,177	\$37,749	2.7	98.1%	1.67	1.6	\$122,887	Above Mod	
Nursing and Residential Care Facilities	30%	\$623	\$576,475	2.64	\$218,289	\$30,684	7.1	98.1%	1.67	4.2	\$51,120	LI Households 80%	
Drugs	0.6%	100%	\$839	\$839									
Health and Personal Care Stores	100%	\$839	\$776,385	7.39	\$105,102	\$39,122	2.7	87.5%	1.67	1.4	\$65,178	Median Income	
Medical Supplies	0.2%	100%	\$298	\$298									
Health and Personal Care Stores	100%	\$298	\$276,922	7.39	\$37,366	\$39,122	1.0	87.5%	1.67	0.5	\$65,178	Median Income	
Entertainment Fees and Admissions	1.3%	100%	\$1,797	\$1,663,178	4.26	\$390,381	\$26,280	14.9	87.5%	1.67	7.0	\$43,782	LI Households 60%
Arts, Entertainment & Recreation	100%	\$1,797											

[1] Percent of income spent per category is based on the 2014 U.S. Consumer Expenditure Survey data for 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 according 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 4, rent of a 2-bedroom unit requires a household income of \$143,520.

[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] BLSS 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 2010-2014.

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

**Table A-4**  
**Estimated Average Annual Household Expenditures and Associated Employment Generation - 3 Bedroom  
 Pleasanton Housing Impact Fee, EPS #15111**

Expenditure Category/ Business Type		% of Household Income Spent per Category [11]	% of Category Expenditure per Type of Business [12]	Gross Receipts to Wages	Total Wages per 1,000 HH	2015 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Total Worker/ HH [6]	Avg. Worker HH Income	Income Category
Calculation		a	b	c	d = c * 1,000	e	f = d / e	g	h = f / g	i = g * j	j = g * k
Audio and Visual Equipment and Services	Electronics and Appliance Stores	1.5%	100%	\$2,086	\$1,930,978	9.79	\$197,207	\$26,665	7.4	87.5%	1.67
Pets, Toys, Hobbies, and Playground Equip.	Sporting Goods, Hobby, and Musical Instrument Stores	1.0%	100%	\$1,433	\$530,432	0.00	\$19,829	0.0	87.5%	1.67	0.0
Miscellaneous Store Retailers	Veterinary Services [7]	40%	40%	\$573	\$530,432	6.64	\$79,896	\$24,517	3.3	87.5%	1.67
Other Entertainment Supplies, Equipment, and Services	Spating Goods, Hobby, and Musical Instrument Stores	0.6%	100%	\$882	\$693,872	0.00	\$19,829	0.0	87.5%	1.67	0.0
Photographic Services [7]	Personal Care Products and Services	15%	15%	\$132	\$122,448	4.40	\$27,626	\$26,467	1.1	98.1%	1.67
Unspecified Retail		1.0%	100%	\$1,492	\$690,642	6.64	\$104,080	\$24,517	4.2	87.5%	1.67
Personal Care Services [7]		50%	50%	\$746	\$690,642	2.89	\$238,857	\$17,688	13.5	98.1%	1.67
Reading	Sporting Goods, Hobby, and Musical Instrument Stores	0.2%	100%	\$230	\$2,125.6	0.00	\$19,829	0.0	87.5%	1.67	0.0
Education	Educational Services	2.0%	100%	\$2,883	\$2,668,003	3.11	\$857,351	\$22,455	38.2	98.1%	1.67
Tobacco Products and Smoking Supplies		0.3%	100%	\$385	\$357,067	6.64	\$53,810	\$24,517	2.2	87.5%	1.67
Unspecified Retail		100%	100%	\$385	\$357,067	6.64	\$53,810	\$24,517	2.2	87.5%	1.67
Miscellaneous	Accounting [7]	1.2%	100%	\$1,778	\$329,112	2.11	\$155,612	\$56,902	2.6	98.1%	1.67
	Architectural Engineering and Related [7, 8]	20%	20%	\$356	\$329,112	2.98	\$110,476	\$82,809	1.2	98.1%	1.67
	Specialized Design Services [7]	20%	20%	\$356	\$329,112	3.84	\$85,687	\$52,815	1.6	98.1%	1.67
	Death Care Services [7]	20%	20%	\$356	\$329,112	3.41	\$96,507	\$42,194	2.3	98.1%	1.67
	Legal Services [7]	20%	20%	\$356	\$329,112	2.99	\$110,025	\$98,006	1.1	98.1%	1.67

[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 care, personal life, and food.

Expenditure category EPS has estimated the proportion according to each business type

Table 4, rent of a 2-bedroom unit requires a household income of \$143,520.

<sup>1</sup> The American Community Survey inflated to \$2015 based on the Bureau of Labor Statistics data for the San Francisco MSA.

Young 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

20-0-2014

category, which also includes natural gas, electricity and telephone services. Natural gas, electricity and telephone services not available in the Economic Census.

**Carnegie Census** Gross receipts to wages and average wage thus based on statewide data.

Bureau of Labor Statistics, 2013 Economic Census, American Community Survey and Economic & Planning Systems Inc.

**Table A-5**  
**Representative Public Sector Employment and Wages [1]**  
**Pleasanton Housing Impact Fee, EPS #151111**

Occupation	Estimated Govt. Emp.	2015 MSA Total HH	Govt. Emp/ 1,000 MSA 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	604,204	7.7	4.6	\$36,594	\$60,966	L1 80%
Kindergarten Teachers, Except Special Education	1,400	604,204	2.3	1.4	\$62,592	\$104,278	Above Mod
Elementary School Teachers, Except Special Education	8,870	604,204	14.7	8.6	\$73,188	\$121,931	Above Mod
Middle School Teachers, Except Special and Vocational Education	4,470	604,204	7.4	4.4	\$66,090	\$110,106	Above Mod
Secondary School Teachers, Except Special and Vocational Education	6,240	604,204	10.3	6.1	\$72,124	\$120,159	Above Mod
Special Education Teachers, Preschool, Kindergarten, and Elementary School	1,450	604,204	2.4	1.4	\$64,924	\$108,163	Above Mod
Special Education Teachers, Middle School	530	604,204	0.9	0.5	\$65,705	\$109,465	Above Mod
Special Education Teachers, Secondary School	500	604,204	0.8	0.5	\$79,627	\$132,659	Above Mod
Teachers and Instructors, All Other	4,460	604,204	7.4	4.3	\$60,635	\$101,018	Above Mod
Bus Drivers	1,830	604,204	3.0	1.8	\$53,162	\$88,568	Mod
<b>Total</b>				<b>57.0</b>	<b>\$33.5</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-Fremont-Hayward MSA from the Employment Development Department (EDD).

[2] Total worker households derived assuming 1.67 workers per household based on the American Community Survey 2010-2014 estimates for the City of Pleasanton with 98.1% of workers assumed to be forming households.

[3] See Table 5.

Sources: 2015 Occupational Employment Statistics, CA Employment Development Department, 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—For-Rent Studio Apartment .....	B-1
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**Table B-1**  
**Household Generation per 1,000 Market Rate Units - Studio**  
**Pleasanton Housing Impact Fee, EPS #151111**

Industry	Total Employees	HH [1]	Very Low (50%)	Low (60%)	Low (80%)	Median	Moderate	Above Mod
<b>Retail</b>								
Unspecified Retail	2	2	2	0	0	0	0	0
Food & Beverage Stores	17	9	0	0	9	0	0	0
Food Services and Drinking Places	62	33	33	0	0	0	0	0
Health and Personal Care Stores	3	1	0	0	0	1	0	0
General Merchandise	4	2	0	2	0	0	0	0
Furniture and Home Furnishings Stores	3	2	0	2	0	0	0	0
Building Material and Garden Equipment and Supplies Dealer	3	1	0	0	1	0	0	0
Electronics and Appliance Stores	7	4	0	4	0	0	0	0
Clothing and Clothing Accessories Stores	4	2	2	0	0	0	0	0
Motor Vehicle and Parts Dealers	8	4	0	0	0	0	4	0
Gasoline Stations	3	2	2	0	0	0	0	0
Sporting Goods, Hobby, and Musical Instrument Stores	0	0	0	0	0	0	0	0
Miscellaneous Store Retailers	5	3	3	0	0	0	0	0
Nonstore Retailers	1	0	0	0	0	0	0	0
<b>Arts, Entertainment, &amp; Recreation</b>								
	6	3	0	3	0	0	0	0
<b>Medical/Health</b>								
Ambulatory Health Care Services	2	1	0	0	0	0	0	1
General Medical and Surgical Hospitals	1	1	0	0	0	0	0	1
Nursing and Residential Care Facilities	5	3	0	0	3	0	0	0
Social Assistance	3	2	2	0	0	0	0	0
<b>Services</b>								
Personal and Household Goods Repair and Maintenance	16	10	10	0	0	0	0	0
Services to Buildings and Dwellings	12	7	0	7	0	0	0	0
Waste Management and Remediation Services	3	2	0	0	0	0	0	2
Real Estate and Rental and Leasing	0	0	0	0	0	0	0	0
Personal Care Services	7	4	4	0	0	0	0	0
Dry Cleaning and Laundry Services	2	1	1	0	0	0	0	0
Auto Repair and Maintenance	8	5	0	0	5	0	0	0
Veterinary Services	2	1	0	0	0	1	0	0
Photographic Services	1	0	0	0	0	0	0	0
Educational Services	12	7	7	0	0	0	0	0
Accounting	1	1	0	0	0	0	1	0
Architectural Engineering and Related	0	0	0	0	0	0	0	0
Specialized Design Services	1	0	0	0	0	0	0	0
Death Care Services	1	1	0	0	0	1	0	0
Legal Services	0	0	0	0	0	0	0	0
<b>Government</b>								
	57	34	0	0	5	0	2	27
<b>Total HH Generated Per 1,000 Market-Rate Units</b>	<b>264</b>	<b>149</b>	<b>66</b>	<b>18</b>	<b>23</b>	<b>3</b>	<b>7</b>	<b>31</b>
<b>Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]</b>		<b>11.0</b>	<b>6.6</b>	<b>1.8</b>	<b>2.3</b>	<b>0.3</b>	<b>0.7</b>	<b>0.0</b>

[1] Assumes 1.67 workers per worker household in Pleasanton based on 2010-2014 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.

Sources: American Community Survey, and Economic & Planning Systems, Inc.

**Table B-2**  
**Household Generation per 1,000 Market Rate Units - 1 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Industry	Total Employees	HH [1]	Very Low (50%)	Low (60%)	Low (80%)	Median	Moderate	Above Mod
<b>Retail</b>								
Unspecified Retail	3	3	3	0	0	0	0	0
Food & Beverage Stores	22	12	0	0	12	0	0	0
Food Services and Drinking Places	79	42	42	0	0	0	0	0
Health and Personal Care Stores	3	1	0	0	0	1	0	0
General Merchandise	5	3	0	3	0	0	0	0
Furniture and Home Furnishings Stores	4	2	0	2	0	0	0	0
Building Material and Garden Equipment and Supplies Dealer	4	2	0	0	2	0	0	0
Electronics and Appliance Stores	9	5	0	5	0	0	0	0
Clothing and Clothing Accessories Stores	7	3	3	0	0	0	0	0
Motor Vehicle and Parts Dealers	11	6	0	0	0	0	6	0
Gasoline Stations	4	2	2	0	0	0	0	0
Sporting Goods, Hobby, and Musical Instrument Stores	0	0	0	0	0	0	0	0
Miscellaneous Store Retailers	6	3	3	0	0	0	0	0
Nonstore Retailers	1	0	0	0	0	0	0	0
<b>Arts, Entertainment, &amp; Recreation</b>								
	10	5	0	5	0	0	0	0
<b>Medical/Health</b>								
Ambulatory Health Care Services	2	1	0	0	0	0	0	1
General Medical and Surgical Hospitals	2	1	0	0	0	0	0	1
Nursing and Residential Care Facilities	8	4	0	0	4	0	0	0
Social Assistance	5	3	3	0	0	0	0	0
<b>Services</b>								
Personal and Household Goods Repair and Maintenance	26	15	15	0	0	0	0	0
Services to Buildings and Dwellings	16	9	0	9	0	0	0	0
Waste Management and Remediation Services	3	2	0	0	0	0	0	2
Real Estate and Rental and Leasing	1	0	0	0	0	0	0	0
Personal Care Services	9	6	6	0	0	0	0	0
Dry Cleaning and Laundry Services	3	2	2	0	0	0	0	0
Auto Repair and Maintenance	10	6	0	0	6	0	0	0
Veterinary Services	2	1	0	0	0	1	0	0
Photographic Services	1	1	0	1	0	0	0	0
Educational Services	25	15	15	0	0	0	0	0
Accounting	2	1	0	0	0	0	1	0
Architectural, Engineering, and Related	1	0	0	0	0	0	0	0
Specialized Design Services	1	1	0	0	0	0	1	0
Death Care Services	2	1	0	0	0	1	0	0
Legal Services	1	0	0	0	0	0	0	0
<b>Government</b>								
	57	34	0	0	5	0	2	27
<b>Total HH Generated Per 1,000 Market-Rate Units</b>	<b>343</b>	<b>193</b>	<b>94</b>	<b>25</b>	<b>29</b>	<b>3</b>	<b>10</b>	<b>33</b>
<b>Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]</b>	<b>15.1</b>	<b>9.4</b>	<b>2.5</b>	<b>2.9</b>	<b>0.3</b>	<b>1.0</b>	<b>0.0</b>	

[1] Assumes 1.67 workers per worker household in Pleasanton based on 2010-2014 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.

Sources: American Community Survey and Economic & Planning Systems, Inc.

**Table B-3**  
**Household Generation per 1,000 Market Rate Units - 2 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Industry	Total Employees	HH [1]	Very Low (50%)	Low (50%)	Low (80%)	Median	Moderate	Above Mod
<b>Retail</b>								
Unspecified Retail	3	3	3	0	0	0	0	0
Food & Beverage Stores	24	13	0	0	13	0	0	0
Food Services and Drinking Places	86	46	46	0	0	0	0	0
Health and Personal Care Stores	3	2	0	0	0	2	0	0
General Merchandise	5	3	0	3	0	0	0	0
Furniture and Home Furnishings Stores	5	2	0	2	0	0	0	0
Building Material and Garden Equipment and Supplies Dealer	4	2	0	0	2	0	0	0
Electronics and Appliance Stores	10	5	0	5	0	0	0	0
Clothing and Clothing Accessories Stores	7	4	4	0	0	0	0	0
Motor Vehicle and Parts Dealers	12	6	0	0	0	0	6	0
Gasoline Stations	4	2	2	0	0	0	0	0
Sporting Goods, Hobby, and Musical Instrument Stores	0	0	0	0	0	0	0	0
Miscellaneous Store Retailers	7	4	4	0	0	0	0	0
Nonsotre Retailers	1	0	0	0	0	0	0	0
<b>Arts, Entertainment, &amp; Recreation</b>								
	10	5	0	5	0	0	0	0
<b>Medical/Health</b>								
Ambulatory Health Care Services	3	2	0	0	0	0	0	2
General Medical and Surgical Hospitals	2	1	0	0	0	0	0	1
Nursing and Residential Care Facilities	8	5	0	0	5	0	0	0
Social Assistance	5	3	3	0	0	0	0	0
<b>Services</b>								
Personal and Household Goods Repair and Maintenance	28	17	17	0	0	0	0	0
Services to Buildings and Dwellings	17	10	0	10	0	0	0	0
Waste Management and Remediation Services	4	2	0	0	0	0	0	2
Real Estate and Rental and Leasing	1	0	0	0	0	0	0	0
Personal Care Services	10	6	6	0	0	0	0	0
Dry Cleaning and Laundry Services	3	2	2	0	0	0	0	0
Auto Repair and Maintenance	10	6	0	0	6	0	0	0
Veterinary Services	2	1	0	0	0	1	0	0
Photographic Services	2	1	0	1	0	0	0	0
Educational Services	27	16	16	0	0	0	0	0
Accounting	2	1	0	0	0	0	1	0
Architectural, Engineering, and Related	1	1	0	0	0	0	0	1
Specialized Design Services	1	1	0	0	0	0	1	0
Death Care Services	2	1	0	0	0	1	0	0
Legal Services	1	0	0	0	0	0	0	0
<b>Government</b>								
	57	34	0	0	5	0	2	22
<b>Total HH Generated Per 1,000 Market-Rate Units</b>	367	206	102	27	31	4	10	33
<b>Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]</b>		16.3	10.2	2.7	3.1	0.4	1.0	0.0

[1] Assumes 1.67 workers per worker household in Pleasanton based on 2010-2014 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.

Sources: American Community Survey, and Economic & Planning Systems, Inc.

**Table B-4**  
**Household Generation per 1,000 Market Rate Units - 3 Bedroom**  
**Pleasanton Housing Impact Fee, EPS #151111**

Industry	Total Employees	HH [1]	Very Low (50%)	Low (60%)	Low (80%)	Median	Moderate	Above Mod
<b>Retail</b>								
Unspecified Retail	4	3	3	0	0	0	0	0
Food & Beverage Stores	28	15	0	0	15	0	0	0
Food Services and Drinking Places	98	52	52	0	0	0	0	0
Health and Personal Care Stores	4	2	0	0	0	2	0	0
General Merchandise	8	4	0	4	0	0	0	0
Furniture and Home Furnishings Stores	6	3	0	3	0	0	0	0
Building Material and Garden Equipment and Supplies Dealer	5	3	0	0	3	0	0	0
Electronics and Appliance Stores	13	7	0	7	0	0	0	0
Clothing and Clothing Accessories Stores	10	5	5	0	0	0	0	0
Motor Vehicle and Parts Dealers	14	7	0	0	0	0	7	0
Gasoline Stations	4	2	2	0	0	0	0	0
Sporting Goods, Hobby, and Musical Instrument Stores	0	0	0	0	0	0	0	0
Miscellaneous Store Retailers	9	5	5	0	0	0	0	0
Nonstore Retailers	1	0	0	0	0	0	0	0
<b>Arts, Entertainment, &amp; Recreation</b>								
	16	8	0	8	0	0	0	0
<b>Medical/Health</b>								
Ambulatory Health Care Services	4	2	0	0	0	0	0	2
General Medical and Surgical Hospitals	3	2	0	0	0	0	0	2
Nursing and Residential Care Facilities	12	7	0	0	7	0	0	0
Social Assistance	9	5	5	0	0	0	0	0
<b>Services</b>								
Personal and Household Goods Repair and Maintenance	35	20	20	0	0	0	0	0
Services to Buildings and Dwellings	22	13	0	13	0	0	0	0
Waste Management and Remediation Services	4	2	0	0	0	0	0	2
Real Estate and Rental and Leasing	1	1	0	0	0	0	1	0
Personal Care Services	14	8	8	0	0	0	0	0
Dry Cleaning and Laundry Services	5	2	2	0	0	0	0	0
Auto Repair and Maintenance	12	7	0	0	7	0	0	0
Veterinary Services	3	2	0	0	0	2	0	0
Photographic Services	1	1	0	1	0	0	0	0
Educational Services	38	22	22	0	0	0	0	0
Accounting	3	2	0	0	0	0	2	0
Architectural, Engineering, and Related	1	1	0	0	0	0	0	1
Specialized Design Services	2	1	0	0	0	0	1	0
Death Care Services	2	1	0	0	0	1	0	0
Legal Services	1	1	0	0	0	0	0	1
<b>Government</b>								
	57	34	0	0	5	0	2	27
<b>Total HH Generated Per 1,000 Market-Rate Units</b>	<b>446</b>	<b>250</b>	<b>126</b>	<b>36</b>	<b>37</b>	<b>5</b>	<b>12</b>	<b>35</b>
<b>Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]</b>	<b>20.3</b>	<b>12.6</b>	<b>3.5</b>	<b>3.7</b>	<b>0.5</b>	<b>1.2</b>	<b>0.0</b>	

[1] Assumes 1.67 workers per worker household in Pleasanton based on 2010-2014 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.

Sources: American Community Survey and Economic & Planning Systems, Inc.

