

*The Economics of Land Use*



## Draft Report

# Nonresidential Development Housing Linkage Fee Nexus Study

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City of Pleasanton

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# 1. INTRODUCTION AND EXECUTIVE SUMMARY

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## Background

Incorporated in 1894, the City of Pleasanton (City) adopted its first low income housing fee in the late 1970s. The fee was amended in 1989 to apply to all residential and commercial development. Consistent with Assembly Bill (AB) 1600, the fee has been updated in 1998 and 2003 with the current schedule based on annual CPI adjustments made since the last adoption. However, the City adopted a new Housing Element in 2012. The Housing Element is one of seven mandated elements of the City's General Plan and presents policies and programs related to the City's housing supply. The new element calls for a review of the low income housing fee and inclusionary zoning ordinance.

To address this goal, the City retained EPS to conduct a *Commercial/Housing Nexus Study and Impact Fee* to update and re-affirm an affordable housing impact fee for new, nonresidential development.

## Purpose

Economic & Planning Systems, Inc. (EPS) was retained by the City of Pleasanton to conduct a nexus study that quantifies the relationship between the growth in nonresidential land uses and the demand for and cost of affordable housing for the local workforce. As a development impact fee, the nonresidential linkage fee (fee) can only be charged to new development and must be based on the impact of new development on the need for resources to subsidize the development of new affordable housing. The purpose of this report is to provide the nexus (or reasonable relationship) between new nonresidential development that occurs in the City and the need for additional affordable housing as a result of this new development.

The fee generated by this program will be deposited in the City's Lower Income Housing Fund, to provide assistance for production, acquisition of at-risk units, or rehabilitation of affordable housing.

## Authority

This study serves as the basis for requiring development impact fees under AB 1600 legislation, as codified by the Mitigation Fee Act (California Government Code sections 66000 *et seq.*). This section of the Mitigation Fee Act sets forth the procedural requirements for establishing and collecting development impact fees. These procedures require that a reasonable relationship, or nexus, must exist between a governmental exaction and the purpose of the condition.

### Required Nexus Findings

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the demand for the affordable housing and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of the public benefit attributable to the development on which the fee is imposed.

In 1991, the Ninth Circuit U.S. Court of Appeals upheld the City of Sacramento's nonresidential linkage fee.<sup>1</sup> In that case, the court found that the City's fee program "substantially advanced a legitimate interest." EPS is using a similar methodology to the nexus study reviewed in that case to develop the City's fee program.

## Summary

As new employment-generating development continues to occur in the City, additional affordable housing will be required to house a portion of the new lower wage workforce. The cost to construct new housing units is higher than can be supported by the rents that many workers will be able to pay. The difference between costs and affordable rent levels is considered an "affordability gap." The costs allocated to new nonresidential development through this fee reflect this affordability gap that would need to be filled in order to provide housing for additional workforce demanded by nonresidential development.

**Table 1** summarizes the maximum justifiable fee by employment category and a recommended fee range for adoption. EPS recommends a fee that is less than the maximum justifiable fee and, therefore, presents fees that range from 10 percent to 20 percent of the maximum fee (plus a nominal administrative charge). The lower fee reflects the fact that affordable housing development is not the sole responsibility of nonresidential developers.

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<sup>1</sup> *Commercial Builders of Northern California v. City of Sacramento*, 941 F2d 872 (1991).

**Table 1**  
**Summary of Maximum Allowable Fees and EPS Recommended Fee Levels**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Employment Category	Maximum Fee <i>per sq. ft.</i>	EPS Recommended Fee Range [1]		
		10% <i>per sq. ft.</i>	15% <i>per sq. ft.</i>	20% <i>per sq. ft.</i>
Hotels/Motel	\$23.85	\$2.46	\$3.69	\$4.91
Retail	\$108.24	\$11.15	\$16.72	\$22.30
Office/Light Industrial/R&D	\$4.67	\$0.48	\$0.72	\$0.96

[1] Includes stated share of maximum fee plus 3% administrative costs.

Source: EPS

## Sources

To estimate the fee, EPS relied on numerous sources of data, including the following:

- U.S. Bureau of Labor Statistics (BLS) "July 2011 National Industry-Specific Occupational Employment and Wage Estimates".
- State Department of Housing and Community Development (HCD) annual income limits for 2013.
- U.S. Census Bureau American Community Survey (ACS) 2011 estimate.
- Input from City of Pleasanton's staff.

These and other data sources are identified on the tables provided throughout this report. In addition, EPS generated development and operating cost assumptions by reviewing pro forma materials provided for this and other EPS assignments by various affordable housing developers active in the Bay Area, as well as documents such as the City of Pleasanton's Housing Element.

## Organization of Report

Following this **Introduction and Executive Summary**, this study includes the following chapters:

- **Chapter 2** presents the nexus findings based on the methodology.
- **Chapter 3** provides a general discussion of the City's development trends and employment composition.
- **Chapter 4** describes the methodology used to calculate the fee.

## 2. FINDINGS FOR FEE PROGRAM

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### **Purpose of Fee**

The fee program developed through this Nexus Study would fund the development and preservation of affordable housing projects in the City as required by the increase in local lower wage workers employed by new nonresidential construction projects. The businesses that occupy new nonresidential buildings will demand employees, many of whom will have difficulty finding suitable local housing they can afford.

### **Use of Fee**

The fee will be deposited in the City's Lower Income Housing Fund. The funds are used to provide assistance for production, acquisition of at-risk units, or rehabilitation of affordable housing. The fee also will fund the studies and administration to support the fee program.

### **Relationship between Use of Fee and Type of Development**

The development of new nonresidential land uses in the City will generate need for additional workers. The wages of a significant portion of the new employees will be inadequate to support sufficient rent prices to attract residential developers to provide housing opportunities without further subsidy. The fee will be used to help to fill the "affordability gap" for housing development and increase the number of homes available for the local workforce.

### **Relationship between Demand for Affordable Housing and Type of Project**

The City and EPS have identified three employment categories for which a separate fee has been calculated. The proportion of lower wage workers and the number of square feet per employee for each employment category has been assessed to ensure a proper nexus has been established.

### **Relationship between Amount of Fee and Cost of Public Benefit Attributed to New Development**

EPS estimated the gap between the cost of developing new rental housing and the achievable value of the new rental units based on different income levels. To estimate the maximum fee, this gap was then multiplied by the number of lower wage workers anticipated by the new development projects and the number of households of various income categories those workers are likely to form. As the fee is one of several mechanisms for generating resources for or reducing the cost of housing development, the EPS-recommended fee is 10 to 20 percent of the maximum calculated fee.



### 3. EMPLOYMENT AND HOUSING TRENDS

#### Recent Development Trends

Pleasanton is located in the Tri-Valley region of the San Francisco Bay Area at the crossing of two major freeways, I-680 and I-580. Its 2010 population was 70,300 residents and roughly 51,400 jobs. The City's evolution into a regional hub for single-family ownership housing, office, and retail space has been driven by its strategic location, high quality of life, BART expansion, and effective land use policies.

Pleasanton experienced significant population growth during the 1980s and the 1990s, increasing by 26 percent between 1990 and 2000 alone, as shown in **Table 2**. During the 1980s, the City also stimulated strong job growth with the creation of Hacienda and Bernal Corporate Park, among others, while maintaining an active downtown. For example, the City's job base increased by 63 percent between 1990 and 2000 alone.

**Table 2 Pleasanton Demographic Factors (1990-2010)**

Socio-Economic Factor	Year			1990-2000		1990-2010	
	1990	2000	2010	%Δ	Avg. Annual %Δ	%Δ	Avg. Annual %Δ
<b>Population</b>	50,553	63,654	70,285	26%	2.3%	39%	1.7%
<b>Jobs [1]</b>	32,530	53,013	51,374	63%	5.0%	58%	2.3%
<b>Median Household Income (\$2012)</b>	\$112,001	\$125,411	\$123,116	12%	1.1%	10%	0.5%

[1] Figures taken from the City of Pleasanton's 2007 *Economic Development Strategy Plan* and the City's internal figures.

Source: City of Pleasanton, US Census, and Economic & Planning Systems, Inc.

Over the last ten years, population growth in Pleasanton has slowed relative to historic pace. The vast majority of new housing construction in the City over the last decade has been single family development, reinforcing the single family orientation of Pleasanton's housing stock. As **Table 3** displays, an average of fewer than 50 units of multifamily housing have been constructed annually over the last 10 years.

#### Employment and Income Composition

This report provides information regarding income categories as commonly defined by State and federal agencies that administer affordable housing programs. **Table 4** presents the income categories that are relevant for this fee program. EPS uses acronyms in several of the tables provided and those acronyms are also included in **Table 4** for reference.

**Table 3**  
**Residential Construction Trends in Pleasanton**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

<b>Year</b>	<b>Single-Family</b>	<b>Multifamily</b>	<b>Total</b>
2003	253	0	253
2004	237	108	345
2005	210	0	210
2006	136	41	177
2007	48	10	58
2008	32	3	35
2009	14	0	14
2010	42	0	42
2011	41	0	41
2012	<u>89</u>	<u>293</u>	<u>382</u>
<b>Total</b>	<b>1,102</b>	<b>455</b>	<b>1,557</b>

Source: SOCDS Database from the U.S. Department of Housing and Urban Development; EPS.

**Table 4**  
**Alameda County Income Category Definitions (2013)**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

<b>Affordability Category</b>	<b>Acronym</b>	<b>Percentage of County Median</b>	<b>Maximum Income Threshold 3-person household</b>
Very Low Income [1]	VLI	0% - 50%	\$40,150
Low Income	LI - 60	51% - 60%	\$48,180
Low Income	LI - 80	61% - 80%	\$59,600
Median Income	Median	80% - 100%	\$84,150
Moderate Income	Moderate	101% - 120%	\$101,000

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[1] The "Very Low Income" category also captures a combination of extremely low (0% to 30% of median incomes) and very low income (31% to 50% of median incomes) in Alameda County.

Source: California HCD and EPS.

Pleasanton had 51,400 jobs in 2010, including many jobs oriented towards higher-end incomes. Kaiser Permanente is the largest employer in the City with nearly 3,640 jobs, followed by Safeway and Oracle (see **Table 5**). A large portion of Safeway jobs are office activities rather than retail stores because of its Pleasanton corporate headquarters location. Even with many jobs for higher income workers, the City still has many jobs for more modest wages in its diverse employment base. According to the US Census Bureau’s “On The Map”, 49.6 percent of all jobs located in the City of Pleasanton in 2010 paid less than \$40,000 per year, which equates to the “very low income” level for the County.

**Table 5 Pleasanton Top Employers (2012)**

Rank	Employer	Employment	Year Established
1	Kaiser Permanente	3,638	1983
2	Safeway Inc.	3,300	1996
3	Oracle	1,510	2005
4	Pleasanton Unified School District	1,117	1894
5	Valley Care Medical Center	1,075	1991
6	Macy's	984	1980
7	State Fund Compensation Insurance	650	2007
8	Ross Dress for Less Inc.	631	2004
9	EMC Corporation	574	2004
10	City of Pleasanton	459	1894
11	Workday Inc.	451	2009
12	Thoratec Corporation	432	1999
13	Hendrick Auto	422	1998
14	Roche Molecular Systems, Inc.	416	1998
15	AT&T	367	1984

Source: City of Pleasanton, and Economic & Planning Systems, Inc.

Pleasanton’s desirability can be attributed to a variety of community attributes, including good schools, low crime rate, recreational amenities, and an attractive, pedestrian-friendly Downtown. Pleasanton’s evolution as a higher-end community with a strong market orientation toward single-family, ownership, and in many cases “executive” housing, combined with its robust job market offering a diverse mix of professions and pay levels, contribute to high housing costs. In these types of communities, local workers compete for a limited housing supply with retirees who may have built substantial equity in their prior homes or higher income households who have more flexibility regarding where they choose to live. As a result of this type of demand on the City’s housing supply, it will be difficult for new lower wage workers to find suitable housing in the City without a program designed to bring the cost of housing down to an affordable range.

## 4. METHODOLOGY AND FEE CALCULATION

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### Employment Categories

Employment categories utilized in this analysis are displayed in **Table 6** along with a description of the types of businesses that are included in each category. In general, each employment category is intended to be associated with a particular type of building or land use, to which the fees can be applied. While the prior nexus studies used five land use categories, EPS recommends consolidation of office, light industrial and R&D into one category, resulting in three employment categories. Consolidation of these land uses reflects the notion that their tenant types are generally interchangeable and might occupy the same general type of building space. For example, an R&D business may occupy office space or light industrial space, and a single “flex” commercial building may house businesses of each of these three types. Other employment categories are more discretely associated with a particular type of building, and thus the appropriate fees for such buildings are easier to determine when a building is proposed and constructed.

### Occupational Category and Wage Distribution

EPS used U.S. Bureau of Labor Statistics (BLS) *National Industry-Specific Occupational Employment and Wage Estimates* for 2011 to estimate the wages earned by employees in industry sectors related to the employment categories. This BLS data set includes wage data at both the national and Metropolitan Division (MD). The Oakland-Fremont-Hayward MD is the geography of the East Bay. Wage data for the MD are provided for occupations for all industries in aggregate, while national-level wage data are provided by industry sector. To account for regional wage disparities, EPS calculated wage adjustment factors as displayed in **Table 7**. EPS applied these adjustment factors to the nationwide income level data by industry sector to estimate the wages for the East Bay.

EPS used BLS nationwide data regarding industries and occupation categories to estimate the proportion of occupations likely to be represented under each employment category. For example, EPS evaluated the occupation categories for the lodging industry to determine the proportional distribution of occupations for the employment category “Hotels/Lodging.” North American Industry Classification System (NAICS) sector 721000 (“Accommodation”) shows that nationwide 4.2 percent of the jobs in the lodging industry are taken by managers while 29.2 percent are in the category of buildings and grounds cleaning and maintenance (see **Table 8** and **B-1**). The occupational distribution for all designated employment categories are provided in **Appendix B**.

The wages of each occupation were multiplied by 1.69, the average number of workers per working household in the City according to Census Bureau’s American Community Survey data. The resulting figure is assumed to represent the annual household wage. Also according to the American Community Survey, the average household size in Pleasanton is 2.91 and the average family size is 3.21 people. Rounding these average household and family sizes, EPS compared

**Table 6**  
**Employment Category Descriptions**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Employment Category	Description and Examples
Hotels/Motel	Temporary housing for non-residents. Examples include resorts, hotels, motels, and bed and breakfast inns.
Retail	Businesses selling merchandise, entertainment, or personal services to the general public. Examples include grocery stores, drug stores, clothing stores, general merchandise stores, restaurants and bars, beauty salons, movie theaters, auto sales and rentals, and gas stations.
Office/Light Industrial/R&D	Employers engaged in business activity with limited direct access from the general public, businesses focused on assembling, distributing, or repairing products, and businesses focused on the testing and invention of new materials, products, or processes. Examples include finance, insurance, real estate, law, engineering; and warehouses, auto repair, and self-storage facilities.

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**Table 7****Adjustment Factors for Converting National Wages to Oakland-Fremont-Hayward Metropolitan Division Wages  
City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

<b>Occupation Category</b>	<b>US Average Wage</b>	<b>East Bay Metro Division Avg. Wage</b>	<b>East Bay as % of US Average</b>
Management	\$107,410	\$125,450	116.8%
Business and Financial Operations	\$68,740	\$79,590	115.8%
Computer and Mathematical Science	\$78,730	\$91,050	115.6%
Architecture and Engineering	\$77,120	\$93,760	121.6%
Life, Physical, and Social Science	\$67,470	\$79,730	118.2%
Community and Social Services	\$43,830	\$54,730	124.9%
Legal Occupations	\$98,380	\$113,880	115.8%
Education, Training and Library	\$50,870	\$60,400	118.7%
Arts, Design, Entertainment, Sports, and Media	\$53,850	\$58,230	108.1%
Healthcare Practitioner and Technical	\$72,730	\$99,600	136.9%
Healthcare Support	\$27,370	\$35,280	128.9%
Protective Services	\$42,730	\$55,410	129.7%
Food Preparation and Serving	\$21,430	\$22,990	107.3%
Buildings and Grounds Cleaning and Maintenance	\$25,560	\$32,000	125.2%
Personal Care and Service	\$24,620	\$28,580	116.1%
Sales and Related Occupations	\$37,520	\$44,330	118.2%
Office and Administrative Support	\$34,120	\$42,200	123.7%
Farming, Fishing and Forestry	\$24,300	\$27,600	113.6%
Construction and Extraction	\$44,630	\$60,700	136.0%
Installation, Maintenance, and Repair	\$43,390	\$52,460	120.9%
Production	\$34,220	\$38,670	113.0%
Transportation and Material Moving	\$33,200	\$39,690	119.5%

Sources: BLS *National Industry-Specific Occupational Employment and Wage Estimates*, May 2011

**Table 8**  
**Illustration of Employees' Household Income Calculation**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Item	Source	Example
Employment Category	City of Pleasanton and EPS	Hotels/Lodging
Industry	Bureau of Labor Statistics (BLS)	Accommodation (NAICS Code 721000)
Occupation Category	BLS	Buildings and Grounds Cleaning and Maintenance
Nationwide Median Income for Occupation	BLS (2011)	\$22,270
Regional Wage Adjustment Factor for Occupation	BLS and EPS	125.2%
Median Wage Estimate for East Bay Metro	BLS and EPS	\$27,881
Workers per Household	American Community Survey 2011 est.	1.69
Median Income per Household	Workers per HH Multiplied by Med. Annual Wage	\$47,191
Income Category for 3-person Family	Dept. of Housing and Community Development (HCD)	Low Income - (LI-60)

Source: EPS.



the estimated household wage with the income thresholds for a 3-person household to identify the income category into which each occupation would fall. An example of this calculation is illustrated in **Table 8**. Key assumptions and their sources are summarized in **Appendix A**.

## **Distribution of Workers by Land Use Type**

After identifying income ranges for each occupation and employment category, EPS summed the percentages of occupations by income bracket. These proportions of anticipated household income brackets by employment category are presented in **Table 9**.

As shown, Retail and Hotels/Lodging are expected to generate significant numbers of households at the low- and very-low-income levels, while nearly all jobs in the Office/Light Industrial/R&D uses are expected to yield household incomes at or above Median income levels.

## **Employment Densities**

Commercial operations have varying levels of employment requirements. Retail space, for example, does not require a significant number of employees but do require a significant amount of building square feet. Office space, on the other hand, may not require a significant amount of square footage, but often require a significant number of employees. The number of building square feet or acres of property anticipated for a certain number of employees is termed the "employment density" of each employment category.

Based on its prior assumptions generated with input from City staff for the Pleasanton General Plan Update Fiscal Impact Analysis study, EPS estimated the employment density for each of the employment categories as shown in **Table 10**. Using those employment density assumptions, EPS estimated the number of employees that would be demanded for a 100,000-square foot building.

## **Household Formation**

EPS then estimated the number of households those employees would represent. First, EPS adjusted for the fact that younger workers may not be at the age to form their own households. Data from the Bureau of Labor Statistics indicate that young workers age 16 to 19 represent only about 3.2 percent of the overall workforce. However, the majority of these young workers are in the retail/restaurant industries, where they represent 10.1 percent of the overall industry employment. EPS has assumed that these young workers age 16 to 19 would not form their own households. Second, EPS has assumed that, on average, new households formed in response to growing employment opportunities would have 1.69 wage-earning workers. This assumption is based on the Census Bureau's American Community Survey 2011 data regarding the number of Pleasanton residents who are "workers" in households that have workers. The combination of these adjustments results in the assumption that nearly six households are formed for every ten new employees.

**Table 9**  
**Income Distribution of Worker Households by Employment Category [1]**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

<b>Employment Category</b>	<b>VLI</b>	<b>LI - 60</b>	<b>LI - 80</b>	<b>Median</b>	<b>Moderate</b>	<b>Above Mod</b>
Hotels/Motel	0.0%	56.1%	27.2%	10.3%	1.8%	4.6%
Retail	34.8%	0.9%	55.1%	4.1%	0.2%	4.9%
Office/Light Industrial/R&D	0.0%	0.8%	4.0%	46.4%	6.2%	42.6%

[1] Designation of household income is based on a 3-person household and 1.69 workers per household, both based on American Community Survey data.

Source: BLS, HCD, EPS, and American Community Survey 2011.

**Table 10**  
**Household Generation Rates by Employment Category**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Employment Category	Sq.Ft. per Worker [1]	Total Workers per 100k Sq.Ft.	% of Workers Forming Households [2]	Total Households per 100k Sq.Ft. [3,4]	Households by Income Level [4]					
					VLI	LI - 60	LI - 80	Median	Moderate	Above Mod
Hotels/Motel	2,000	50	96.8%	29	0	16	8	3	1	1
Retail	440	227	89.9%	121	42	1	66	5	0	6
Office/Light Industrial/R&D	400	250	96.8%	143	0	1	6	66	9	61

[1] See **Appendix Table A-1** for sources on employment densities in different land uses.

[2] BLS data indicates that 3.2% of workers are age 16-19 in the U.S., however, the average is higher in the retail and restaurants industry. EPS assumes that 10.1% of workers are age 16-19 based on the National Retail Federation data. This age group is assumed to not form their own households due to a young age.

[3] Assumes 1.69 employees per household based on the Census data for Pleasanton.

[4] Figures are rounded to nearest whole number.

Sources: BLS, National Retail Federation, US Census, and EPS.

## Housing Development Costs and Affordability Gap

EPS has assumed that the average type of housing for Pleasanton's lower-income workers would be a 2-bedroom apartment unit in a three-story walk-up building. This prototype was selected for several reasons. First, the average size of a Pleasanton household is roughly three people, and households of this size are appropriately housed in 2-bedroom units, according to State law (California Health and Safety Code Section 50025.5). Second, the density of walk-up apartments is typically around 30 units per acre, and Pleasanton staff indicated that this density would be appropriate and acceptable in the City. Third, this building prototype is also generally cost-effective to construct, as it makes efficient use of land and does not involve expensive construction materials or techniques. Finally, EPS assumed the units would be rented rather than for-sale because the financing gap for rental units is lower than for for-sale units.

### 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 **Table 11**.

### 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 2013, 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.
- *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.

**Table 11**  
**Housing Affordability Gap**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

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]	\$1,270,166	\$1,270,166	\$1,270,166	\$1,270,166	\$1,270,166
Land/Unit	\$42,339	\$42,339	\$42,339	\$42,339	\$42,339
Direct Construction Costs/Gross SF [3]	\$148	\$148	\$148	\$148	\$148
Direct Construction Costs/Unit	\$162,800	\$162,800	\$162,800	\$162,800	\$162,800
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	\$168,800	\$168,800	\$168,800	\$168,800	\$168,800
Indirect Costs as a % of Direct Costs [4]	35%	35%	35%	35%	35%
Indirect Costs/Unit	\$59,080	\$59,080	\$59,080	\$59,080	\$59,080
<b>Total Cost/Unit</b>	<b>\$270,219</b>	<b>\$270,219</b>	<b>\$270,219</b>	<b>\$270,219</b>	<b>\$270,219</b>
<b>Maximum Supported Unit Value</b>					
Household Income [5]	\$40,150	\$48,180	\$59,600	\$84,150	\$101,000
Income Available for Housing Costs/Year [6]	\$12,045	\$14,454	\$17,880	\$25,245	\$30,300
Operating Expenses per Unit/Year [7]	\$6,200	\$6,200	\$6,200	\$9,308	\$9,308
Net Operating Income	\$5,845	\$8,254	\$11,680	\$15,937	\$20,992
Capitalization Rate [8]	5.5%	5.5%	5.5%	5.5%	5.5%
<b>Total Supportable Unit Value</b>	<b>\$106,273</b>	<b>\$150,073</b>	<b>\$212,364</b>	<b>\$289,772</b>	<b>\$381,682</b>
<b>Financing Gap</b>	<b>\$163,946</b>	<b>\$120,146</b>	<b>\$57,855</b>	<b>\$0</b>	<b>\$0</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] The land costs rate based on recent multifamily land transactions in Pleasanton as shown in Appendix A.

developments.

contingency.

[5] Based on HCD 2013 income limits for Alameda County.

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

[7] 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.

[8] Reflects average investor interest for apartment capitalization rates from RealShare/Jones Lang LaSalle's Apartments Outlook 2012 Survey.

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

## Affordability Gap Results

**Table 11** shows the subsidies for construction of for-rent apartments for households at various income levels. For low- and very-low incomes, the cost of constructing the unit is higher than the value of the unit. This is considered the “affordability gap,” and serves as the basis for calculating the subsidies required to provide housing for the employees who will be working in new nonresidential development in Pleasanton. However, this analysis suggests that rents affordable to median and moderate income households can support the costs of new construction without subsidy.

## Fee Calculation

**Tables 12** through **14** provide the maximum nonresidential housing fee calculations for each of the three employment categories. Assuming a 100,000-square foot nonresidential building prototype for each employment category, the number of new households by income category is multiplied by the per-unit affordability gap to determine the level of subsidy required to provide housing for the new worker households. The adjusted affordability gap is then divided by the size of the assumed building or land to determine a maximum fee per building square foot.

While the City has the option of adopting fees up to the maximum levels calculated, EPS does not recommend the City adopt the entire maximum fee. There are several factors compounding the issue of housing affordability; insufficient wages relative to development costs constitutes just one factor. Market forces, land use regulations, construction costs, and entitlement costs also impact housing affordability. In addition, revenue generated through this fee program is just one source of potential subsidy funds to help finance affordable housing projects. Finally, adoption of the maximum fees for certain employment categories would represent a very large addition to the costs of development, and could hamper the City’s economic development objectives. EPS, therefore, recommends that the linkage fee adopted be 10 to 20 percent of the maximum calculated fee. Other California communities—including Sacramento, Rohnert Park, and the County of Sonoma, among others—have made similar reductions to the maximum allowable fee when adopting their fee program, for reasons such as those cited above.

**Table 12**  
**Fee Calculation - Hotels/Lodging**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
<i>Table references:</i>	<i>Table 10</i>	<i>Table 11</i>	
<b>Aggregate Financing Gap per 100K Sq. Ft</b>			
<b>Affordability Level</b>			
VLI	0	\$163,946	\$0
LI - 60	16	\$120,146	\$1,922,338
LI - 80	8	\$57,855	\$462,842
Median	3	\$0	\$0
Moderate	1	\$0	\$0
Above Moderate	1	\$0	\$0
<b>Total</b>	<b>29</b>	<b>n/a</b>	<b>\$2,385,180</b>
<hr/>			
<b>Fee Calculation</b>		<i>formula</i>	
Total Financing Gap		<i>a</i>	\$2,385,180
Total Building Sq. Ft.		<i>b</i>	100,000
<b>Maximum Fee per Sq. Ft.</b>		<i>c = a / b</i>	<b>\$23.85</b>
Potential Fee Range			
10% of Maximum		<i>d = c * 10%</i>	\$2.39
15% of Maximum		<i>e = c * 15%</i>	\$3.58
20% of Maximum		<i>f = c * 20%</i>	\$4.77
Fee Program Administration			
10% of Maximum		<i>g = d * 3%</i>	\$0.07
15% of Maximum		<i>h = e * 3%</i>	\$0.11
20% of Maximum		<i>i = f * 3%</i>	\$0.14
<b>Potential Fee Range including Administrative Fee</b>			
<b>10% of Maximum</b>		<i>j = d + g</i>	<b>\$2.46</b>
<b>15% of Maximum</b>		<i>k = e + h</i>	<b>\$3.69</b>
<b>20% of Maximum</b>		<i>l = f + i</i>	<b>\$4.91</b>

**Table 13**  
**Fee Calculation - Retail**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
<i>Table references:</i>	<i>Table 10</i>	<i>Table 11</i>	
<b>Aggregate Financing Gap per 100K Sq. Ft</b>			
<b>Affordability Level</b>			
VLI	42	\$163,946	\$6,885,738
LI - 60	1	\$120,146	\$120,146
LI - 80	66	\$57,855	\$3,818,446
Median	5	\$0	\$0
Moderate	0	\$0	\$0
Above Moderate	6	\$0	\$0
<b>Total</b>	<b>120</b>	<b>n/a</b>	<b>\$10,824,331</b>
<hr/>			
<b>Fee Calculation</b>		<i>formula</i>	
Total Financing Gap		<i>a</i>	\$10,824,331
Total Building Sq. Ft.		<i>b</i>	100,000
<b>Maximum Fee per Sq. Ft.</b>		<i>c = a / b</i>	<b>\$108.24</b>
Potential Fee Range			
10% of Maximum		<i>d = c * 10%</i>	\$10.82
15% of Maximum		<i>e = c * 15%</i>	\$16.24
20% of Maximum		<i>f = c * 20%</i>	\$21.65
Fee Program Administration			
10% of Maximum		<i>g = d * 3%</i>	\$0.32
15% of Maximum		<i>h = e * 3%</i>	\$0.49
20% of Maximum		<i>i = f * 3%</i>	\$0.65
<b>Potential Fee Range including Administrative Fee</b>			
<b>10% of Maximum</b>		<i>j = d + g</i>	<b>\$11.15</b>
<b>15% of Maximum</b>		<i>k = e + h</i>	<b>\$16.72</b>
<b>20% of Maximum</b>		<i>l = f + i</i>	<b>\$22.30</b>



**Table 14**  
**Fee Calculation - Office/Light Industrial/R&D**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

Item	Worker Households per 100k sq. ft.	Affordability Gap per household	Total Gap
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Table references:

Table 10

Table 11

**Aggregate Financing Gap per 100K Sq. Ft**

**Affordability Level**

VLI	0	\$163,946	\$0.00
LI - 60	1	\$120,146	\$120,146
LI - 80	6	\$57,855	\$347,131
Median	66	\$0	\$0
Moderate	9	\$0	\$0
Above Moderate	61	\$0	\$0
<b>Total</b>	<b>143</b>	<b>n/a</b>	<b>\$467,278</b>

**Fee Calculation**

*formula*

Total Financing Gap	<i>a</i>	\$467,278
Total Building Sq. Ft.	<i>b</i>	100,000
<b>Maximum Fee per Sq. Ft.</b>	<b><i>c = a / b</i></b>	<b>\$4.67</b>
Potential Fee Range		
10% of Maximum	<i>d = c * 10%</i>	\$0.47
15% of Maximum	<i>e = c * 15%</i>	\$0.70
20% of Maximum	<i>f = c * 20%</i>	\$0.93
Fee Program Administration		
10% of Maximum	<i>g = d * 3%</i>	\$0.01
15% of Maximum	<i>h = e * 3%</i>	\$0.02
20% of Maximum	<i>i = f * 3%</i>	\$0.03
<b>Potential Fee Range including Administrative Fee</b>		
<b>10% of Maximum</b>	<b><i>j = d + g</i></b>	<b>\$0.48</b>
<b>15% of Maximum</b>	<b><i>k = e + h</i></b>	<b>\$0.72</b>
<b>20% of Maximum</b>	<b><i>l = f + i</i></b>	<b>\$0.96</b>



APPENDIX A:  
Assumptions and Sources

**Table A-1**  
**Assumptions and Sources**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

<b>Item</b>	<b>Total</b>	<b>Unit</b>	<b>Source</b>
<b>Demographic Assumptions</b>			
Workers per Household with Workers	1.69 persons		American Community Survey Estimate 2011
Persons per Household	2.91 persons		American Community Survey Estimate 2011
Persons per Family	3.21 persons		American Community Survey Estimate 2011
<b>Employment Density Assumptions</b>			
Hotels/Motel	2,000 sq. ft. per employee		City of Pleasanton/EPS
Retail	440 sq. ft. per employee		City of Pleasanton/EPS
Office/Light Industrial/R&D [1]	400 sq. ft. per employee		City of Pleasanton/EPS

[1] Reflects an average of various employment densities with office uses likely to generate significantly higher employment densities than light industrial uses.

Sources: City of Pleasanton and EPS.



**APPENDIX B:**  
**Occupation Distribution by Employment**

**Table B-1**  
**Occupation and Wage Distribution - Hotels/Lodging**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

**Hotels/Lodging**

Occupation Category	Lodging [1]					Income Category
	US Total Jobs by Occ. in Industry	US Avg. Wage by Occ. in Industry	East Bay Wage Est. [2]	% of Industry Jobs in Occ. Category	HH Income at 1.69 workers/HH	
Management	73,910	\$70,700	\$82,574	4.21%	\$139,763	Above Mod
Business and Financial Operations	24,010	\$49,160	\$56,919	1.37%	\$96,340	Moderate
Computer and Mathematical Science	1,970	\$52,830	\$61,097	0.11%	\$103,411	Above Mod
Architecture and Engineering	370	\$59,500	\$72,338	0.02%	\$122,438	Above Mod
Life, Physical, and Social Science	80	\$55,510	\$65,597	0.00%	\$111,027	Above Mod
Community and Social Services	260	\$35,000	\$43,704	0.01%	\$73,972	Median
Legal Occupations	90	\$83,950	\$97,177	0.01%	\$164,478	Above Mod
Education, Training and Library	560	\$32,350	\$38,410	0.03%	\$65,012	Median
Arts, Design, Entertainment, Sports, and Media	8,030	\$46,210	\$49,969	0.46%	\$84,575	Moderate
Healthcare Practitioner and Technical	380	\$51,360	\$70,335	0.02%	\$119,047	Above Mod
Healthcare Support	6,910	\$35,990	\$46,391	0.39%	\$78,520	Median
Protective Services	39,690	\$28,090	\$36,426	2.26%	\$61,653	Median
Food Preparation and Serving	437,870	\$25,790	\$27,667	24.94%	\$46,829	LI - 60
Buildings and Grounds Cleaning and Maintenance	512,720	\$22,270	\$27,881	29.20%	\$47,191	LI - 60
Personal Care and Service	122,810	\$25,960	\$30,136	6.99%	\$51,007	LI - 80
Sales and Related Occupations	47,770	\$33,940	\$40,100	2.72%	\$67,872	Median
Office and Administrative Support	331,450	\$25,440	\$31,464	18.88%	\$53,256	LI - 80
Farming, Fishing and Forestry	730	\$29,690	\$33,722	0.04%	\$57,077	LI - 80
Construction and Extraction	3,990	\$47,210	\$64,209	0.23%	\$108,678	Above Mod
Installation, Maintenance, and Repair	85,640	\$33,140	\$40,067	4.88%	\$67,817	Median
Production	34,040	\$23,530	\$26,590	1.94%	\$45,005	LI - 60
Transportation and Material Moving	22,710	\$24,860	\$29,720	1.29%	\$50,303	LI - 80
<b>Total or Weighted Average</b>	<b>1,755,990</b>		<b>\$32,805</b>	<b>100.00%</b>	<b>\$55,525</b>	

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[1] Includes NAICS Sector: 721000 - Accommodation.

[2] Adjusted using factors calculated in Table 7.

Source: BLS and EPS.

**Table B-2**  
**Occupation and Wage Distribution - Retail**  
**City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115**

**Retail**

Occupation Category	RETAIL [1]					
	US Total Jobs by Occ. in Industry	US Avg. Wage by Occ. in Industry	East Bay Wage Est. [2]	% of Industry Jobs in Occ. Category	HH Income at 1.69 workers/HH	Income Category
Management	574,310	\$81,478	\$95,162	2.20%	\$161,069	Above Mod
Business and Financial Operations	159,980	\$57,350	\$66,402	0.61%	\$112,390	Above Mod
Computer and Mathematical Science	57,060	\$65,474	\$75,720	0.22%	\$128,161	Above Mod
Architecture and Engineering	4,050	\$72,815	\$88,526	0.02%	\$149,837	Above Mod
Life, Physical, and Social Science	440	\$47,978	\$56,697	0.00%	\$95,963	Moderate
Community and Social Services	1,200	\$37,072	\$46,291	0.00%	\$78,351	Median
Legal Occupations	1,410	\$93,767	\$108,540	0.01%	\$183,711	Above Mod
Education, Training and Library	6,640	\$35,011	\$41,570	0.03%	\$70,360	Median
Arts, Design, Entertainment, Sports, and Media	114,130	\$33,000	\$35,684	0.44%	\$60,398	Median
Healthcare Practitioner and Technical	484,310	\$61,599	\$84,357	1.85%	\$142,780	Above Mod
Healthcare Support	86,210	\$28,888	\$37,237	0.33%	\$63,026	Median
Protective Services	85,900	\$27,665	\$35,875	0.33%	\$60,721	Median
Food Preparation and Serving	9,104,890	\$20,854	\$22,373	34.85%	\$37,867	VLI
Buildings and Grounds Cleaning and Maintenance	209,750	\$22,585	\$28,275	0.80%	\$47,857	LI - 60
Personal Care and Service	683,420	\$27,193	\$31,567	2.62%	\$53,429	LI - 80
Sales and Related Occupations	8,836,260	\$25,934	\$30,641	33.82%	\$51,862	LI - 80
Office and Administrative Support	2,805,310	\$26,163	\$32,358	10.74%	\$54,769	LI - 80
Farming, Fishing and Forestry	17,940	\$23,222	\$26,376	0.07%	\$44,643	LI - 60
Construction and Extraction	42,240	\$38,168	\$51,911	0.16%	\$87,864	Moderate
Installation, Maintenance, and Repair	779,750	\$37,698	\$45,578	2.98%	\$77,143	Median
Production	629,170	\$26,781	\$30,264	2.41%	\$51,224	LI - 80
Transportation and Material Moving	1,444,620	\$24,218	\$28,952	5.53%	\$49,003	LI - 80
<b>Total or Weighted Average</b>	<b>26,128,990</b>		<b>\$31,133</b>	<b>100.00%</b>	<b>\$52,696</b>	

[1] Includes NAICS Sectors: 44 and 45 - Retail Trade; 532000 - Rental and Leasing Services; 722000 - Food Services and Drinking Places, and 812000 - Personal and Laundry Services

[2] Adjusted using factors calculated in Table 7.

Source: BLS and EPS.

Table B-3

Occupation and Wage Distribution - Office/Light Industrial/R&D  
City of Pleasanton Nonresidential Affordable Housing Fee Nexus Study; EPS #121115

<b>Office/Light Industrial/R&amp;D</b>
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Occupation Category	Office/Light Industrial/R&D [1]					
	US Total Jobs by Occ. in Industry	US Avg. Wage by Occ. in Industry	East Bay Wage Est. [2]	% of Industry Jobs in Occ. Category	HH Income at 1.69 workers/HH	Income Category
Management	3,625,340	\$120,692	\$140,963	6.38%	\$238,590	Above Mod
Business and Financial Operations	4,322,980	\$71,333	\$82,593	7.60%	\$139,794	Above Mod
Computer and Mathematical Science	2,836,900	\$81,563	\$94,326	4.99%	\$159,653	Above Mod
Architecture and Engineering	2,015,820	\$76,873	\$93,460	3.55%	\$158,187	Above Mod
Life, Physical, and Social Science	648,970	\$71,340	\$84,303	1.14%	\$142,689	Above Mod
Community and Social Services	49,820	\$44,669	\$55,777	0.09%	\$94,407	Moderate
Legal Occupations	729,830	\$103,021	\$119,252	1.28%	\$201,842	Above Mod
Education, Training and Library	108,810	\$44,975	\$53,401	0.19%	\$90,384	Moderate
Arts, Design, Entertainment, Sports, and Media	1,003,780	\$58,942	\$63,736	1.77%	\$107,878	Above Mod
Healthcare Practitioner and Technical	443,740	\$61,540	\$84,276	0.78%	\$142,643	Above Mod
Healthcare Support	190,170	\$26,485	\$34,139	0.33%	\$57,782	LI - 80
Protective Services	838,490	\$28,142	\$36,494	1.47%	\$61,768	Median
Food Preparation and Serving	206,370	\$22,442	\$24,075	0.36%	\$40,749	LI - 60
Buildings and Grounds Cleaning and Maintenance	2,012,350	\$25,288	\$31,660	3.54%	\$53,586	LI - 80
Personal Care and Service	227,420	\$23,950	\$27,802	0.40%	\$47,057	LI - 60
Sales and Related Occupations	4,578,740	\$58,546	\$69,172	8.05%	\$117,078	Above Mod
Office and Administrative Support	12,044,310	\$35,791	\$44,267	21.19%	\$74,925	Median
Farming, Fishing and Forestry	95,370	\$25,650	\$29,133	0.17%	\$49,310	LI - 80
Construction and Extraction	4,032,520	\$44,573	\$60,623	7.09%	\$102,608	Above Mod
Installation, Maintenance, and Repair	3,347,970	\$44,089	\$53,305	5.89%	\$90,222	Moderate
Production	7,359,040	\$34,558	\$39,051	12.94%	\$66,097	Median
Transportation and Material Moving	6,133,320	\$34,148	\$40,824	10.79%	\$69,097	Median
<b>Total or Weighted Average</b>	<b>56,852,060</b>		<b>\$61,585</b>	<b>100.00%</b>	<b>\$104,237</b>	

[1] Includes NAICS Sectors: 51 - Information; 52 - Finance and Insurance; 53 - Real Estate and Rental and Leasing (excluding 532000 -Rental and Leasing Services); 54 - Professional, Scientific, and Technical Services (excluding 541700 - Scientific Research and Development Services); 55 - Management of Companies and Enterprises; 561000 - Admin. and Support Services; 22 - Construction; 23 - Utilities; 31, 32, and 33 - Manufacturing; 42 - Wholesale Trade; 48 and 49 - Transportation & Warehousing; 541700 - Scientific R&D Services; and 811000 - Repair and Maintenance.

[2] Adjusted using factors calculated in Table 7.

Source: BLS and EPS.