

RESIDENTIAL NEXUS ANALYSIS

Inclusionary Housing Ordinance

Walnut Creek, California

Prepared for

City of Walnut Creek

Keyser Marston Associates, Inc.

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TABLE OF CONTENTS

	<u>Page</u>
SUMMARY AND RECOMMENDATIONS	2
APPENDIX I: RESIDENTIAL NEXUS ANALYSIS	
Introduction and Overview	10
A: Market Rate Units and Gross Household Income	16
B: The IMPLAN Model	22
C. The KMA Jobs Housing Nexus Model	26
D. Mitigation Costs	47
ADDENDUM: NOTES ON SPECIFIC ASSUMPTIONS	55
APPENDIX II: RESIDENTIAL VALUES – MARKET AND AFFORDABLE	60

SUMMARY AND RECOMMENDATIONS

INTRODUCTION

This Summary and Recommendations provides an overview of the analysis and a discussion of the findings and recommendations of a residential nexus analysis conducted to support revisions to the Inclusionary Housing Ordinance of the City of Walnut Creek. The materials have been prepared by Keyser Marston Associates (KMA) for the City pursuant to a contractual agreement. The residential nexus analysis addresses market rate residential projects in Walnut Creek and the various types of units that are subject to the City's Inclusionary Housing Ordinance; the analysis quantifies the linkages between new market rate units and the demand for affordable housing in Walnut Creek.

The City of Walnut Creek's existing Inclusionary Housing Ordinance requires all projects of two or more units to provide units at affordable prices or rent levels. For ownership units, the developer can choose to provide 10% of units at prices affordable to Moderate income households or 6% to Low income households, or 4.5% to Very Low income households. For rental units, the developer can choose between providing 10% of units at rents affordable to Low income households, or 6% of units at rents affordable to Very Low income households. The program allows for payment of an in-lieu fee as an alternative to the on-site requirement for projects with 26 units or fewer. The current in-lieu fee for projects with fewer than 10 units ranges from \$2.00 to \$9.00 per square foot for ownership units and \$1.60 to \$7.20 per square foot for rental units. For projects with between 10 and 26 units, the in-lieu fee is equal to the 10% of the total number of units times \$185,000 for ownership units or \$111,600 for rental units.

This analysis will demonstrate the percentage of affordable units supported and will also quantify impact fee levels supported from a nexus perspective. In response to a recent California Court of Appeals decision, this analysis will enable the City to restructure the program as it applies to rental projects so that rental projects are charged an impact fee.

The Nexus Concept

At its most simplified level, the underlying nexus concept is that the newly constructed units represent new households in Walnut Creek. These households represent new income in Walnut Creek that will consume goods and services, either through purchases of goods and services or by "consuming" governmental services. New consumption translates to new jobs; a portion of the jobs are at lower compensation levels, low compensation jobs translate to lower income households that cannot afford market rate units in Walnut Creek and therefore need affordable housing.

Impact Methodology and Models Used

The analysis is performed using two models. The IMPLAN model is a commercially available model developed over 30 years ago to quantify the impacts of changes in a local economy,

including the employment impacts of changes in personal income. The IMPLAN model is “inputted” with net new personal income in Walnut Creek and moves through a series of adjustments to disposable income, a distribution of expenditures, and ultimately produces a quantification of jobs generated by industry. The KMA jobs housing nexus model, which was developed nearly 20 years ago to analyze the income structure of job growth, is used to determine the household income of new employee households, identifying how many are at lower income and housing affordability levels.

Organization of this Document

- Following this Summary and Recommendations Report is the technical nexus analysis report (Appendix I) and a detailed discussion of market rate and affordable residential values (Appendix II). The Summary and Recommendations Report is not intended as a stand alone document and should not be printed or distributed without the appendices explaining all the analysis and underlying assumptions.
- Appendix I contains the full Residential Nexus Analysis Report and all the tables that are a part of the analysis.
- Appendix II – Residential Values – Market and Affordable. This is a background section that establishes the market values of various types of attached and detached residential units or “projects” based on surveys of new units selling in Walnut Creek. This appendix also contains a discussion of affordable sales prices and rent levels at various affordability levels, per the current Area Median Income (AMI), and contains a calculation of affordability gaps.

This report has been prepared using the best and most recent data available. Local data and sources were used wherever possible. See Appendices I and II for more information.

Analysis Summary

The Prototypes

Four residential prototypes were identified for Walnut Creek based on market surveys, the City’s development pipeline, KMA’s prior work in Walnut Creek and consultation with City staff. The four prototypes are summarized below:

- A single family detached unit, at an average of 8 units to the acre, a mix of three and four bedrooms, 2,400 square feet, selling for \$780,000, or \$325 per square foot on average.

- A small-lot or zero-lot line attached unit or townhome unit, at an average of 20 units to the acre, three bedrooms, 1,800 square feet selling for \$625,000, or at an average of \$347 per square foot.
- Condominium unit, built at an average of 50 units per acre, a mix of one, two and three bedrooms, 1,200 square feet, selling for approximately \$540,000, or at \$450 per square foot. This product is assumed to be located in the Downtown.
- Rental apartment unit in a project with an average density of 85 units per acre, located in the Downtown. Unit size averages 800 square feet, a mix of studios, one and two bedroom units, renting for \$2,470 per month. It is noted that the rent required is higher than current rent levels in Walnut Creek. Based on our analysis, rents will have to approximate the level used in this analysis for new construction (without government assistance) to be feasible.

Household Income

From the sales price or rent level of the four prototypes, the household income of the purchaser or renter is readily estimated using standard housing policy and lending standards. Home purchasers are assumed to spend 35% of their household income on total housing expenses and renters 30%. Using somewhat conservative lending terms, household income for each prototype unit is estimated as follows:

	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Gross Household Income	\$172,000	\$138,000	\$120,000	\$98,800

As would be expected, the higher priced units translate to higher household income, with rental units being affordable to households at a considerably lower income level.

Jobs Generated

The next steps in the nexus analysis are conducted within the IMPLAN model. Gross household income is adjusted to disposable income, or income after state and federal taxes, Social Security and Medicare deductions, and personal savings.

To simplify the presentation of results, the analysis is run for building modules of 100 housing units. This avoids awkward fractions, especially at the detailed level by job industry. The IMPLAN model output provides jobs by industry; the total numbers of jobs generated are shown in the table following. The geographic area of job generation is Contra Costa County.

Jobs Generated per 100 Units				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Gross Household Income	\$172,000	\$138,000	\$120,000	\$98,800
Total Jobs Generated, 100 units	66.6	56.3	48.9	40.7

The IMPLAN model quantifies jobs generated at establishments that serve new residents directly (i.e. supermarkets, banks or schools), jobs generated by increased demand at firms which service or supply these establishments (wholesalers, janitorial contractors, accounting firms, or any jobs down the service/supply chain from direct jobs), and jobs generated when the new employees spend their wages in the local economy and generate additional jobs.

In the full nexus report, jobs generated by the larger industry categories are indicated in the tables. Jobs in Eating and Drinking establishments represent the single greatest concentration. However if all retail categories were aggregated, even without the eating and drinking, they would be the single largest group of jobs. Medical related services represent another major job category.

Compensation Levels of Jobs and Household Income

The output of the IMPLAN model – the numbers of jobs by industry – are then “input” into the Keyser Marston Associates jobs housing nexus analysis model to quantify the compensation level of new jobs and the income of the worker households. The KMA model sorts the jobs by industry into jobs by occupation, based on national data, and then attaches wage distribution data to the occupations, using recent Contra Costa County data from the California Employment Development Department (EDD). The KMA model also converts the number of employees to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced.

The output of the model is the number of new worker households by income level (expressed in relation to the Area Median Income, or AMI) attributable to the new residential units and new households in Walnut Creek.

New Worker Households by Income Level per 100 Market Rate Units				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Less than 50% AMI	15.6	13.3	11.6	9.8
50% to 80% AMI	10.0	8.4	7.3	6.1
80% to 120% AMI	9.0	7.4	6.5	5.3
Total, Less than 120% AMI	34.6	29.2	25.4	21.1
Greater than 120% AMI	7.5	6.4	5.6	4.6
Total, New Households	42.1	35.5	30.9	25.7

Comparison of Analysis Results to Inclusionary Percentages

The analysis findings identify how many very low, low and moderate income households are generated for every 100 market rate units. These findings are adjusted to percentages for purposes of comparison to current on-site inclusionary requirements. The percentages are calculated including both market rate and affordable units (for example, 25 affordable units per 100 market rate units translates to 125 units; 25 affordable units out of 125 units equals 20%).

Each tier is cumulative, or inclusive of the tiers above it.

Cumulative Inclusionary Percentage Supported by Nexus Analysis				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Very Low Income	13.5%	11.7%	10.4%	8.9%
Low Income	20.4%	17.8%	15.9%	13.7%
Moderate	25.7%	22.6%	20.2%	n/a

The conclusion of the analysis is that the market rate for-sale, or ownership, units analyzed support percentages up through Moderate Income (120% AMI) in the range of 20% to 25%, all of which are higher than the City's current 10% at Moderate requirement. Needless to say, higher priced units than the \$780,000 unit analyzed would produce even higher on-site percentage requirements.

The results for the rental units also support the current program. The analysis finding for very low and low combined is 13.7%, while the current program requires 10% of units be affordable to household at low income or 6% at very low income. It is recalled that the recent Court decision precludes jurisdictions from requiring affordable on-site units that limit initial rents and on-going rent levels. Instead cities may require an impact fee.

Impact Fee Levels Supported by the Nexus Analysis

The last step in the analysis puts a dollar amount on the cost of mitigating the affordable housing impacts. The conclusions of the nexus analysis, expressed as the number of worker households by income affordability category, are linked to the cost of delivering housing to the households in need.

Each income or affordability tier is associated with a subsidy needed to produce and deliver a unit at the specified affordability level. These subsidies are equal to affordability gaps, or the difference between the cost of development and the sales price or unit value supported by the rent that can be paid by a household at the specified income level.

Development costs and market values are based on surveys of recently built residential units and projects in Walnut Creek. Appendix II presents the survey materials, methodology and

findings as well as affordable rent, unit value and sales price calculations. The affordability gaps used in the analysis incorporate a policy to match households at various income levels with types of residential units. Specifically, it is assumed that households under 50% Area Median Income (AMI) and in the 50% to 80% AMI range will be housed in two-bedroom rental apartments. The moderate income households, or those in the 80% to 120% tier, are assumed to be housed in modest two-bedroom townhome units.

Affordable sales prices and rent levels are calculated by the City. Sales prices are calculated assuming a household earns 110% of median income and spends 35% of household income on housing expenses. Rents are calculated assuming a Low Income household earns 80% of median income and a Very Low Income household earns 50% of median income, and all rental households spend 30% of income on housing. For this analysis, gross rents are used to calculate unit value supported (a utility allowance is not netted out). Using gross rents at the upper end of the income range results in lower (more conservative) estimates of affordability gaps. Lower affordability gaps result in more conservative estimates of total nexus costs.

When the affordability gap conclusions for each income tier are linked to the number of affordable units required as a result of market rate development (as indicated in the inset table on the previous page) and divided by 100 units, the result is a Total Nexus Cost per new market rate residential unit. The results per unit are:

<i>Nexus Per Market Rate Unit</i>					
<i>Income Category</i>	<i>Affordability Gap</i>	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Very Low Income	\$240,000	\$37,000	\$32,000	\$28,000	\$23,000
Low Income	\$151,000	\$15,000	\$13,000	\$11,000	\$9,000
Moderate	\$175,000	\$16,000	\$13,000	\$11,000	n/a
Total Nexus Costs		\$68,000	\$58,000	\$50,000	\$32,000

For ownership or for-sale units, the Residential Nexus Analysis supports maximum fee levels of at least \$50,000 per market rate unit. The per unit costs indicated in the first table above result in a predictable higher cost per unit associated with the bigger or more expensive housing unit and the higher income (and expenditures) of the more affluent households.

For rental units, the supported nexus fee level is \$32,000 per market rate unit.

The Total Nexus Costs, or Mitigation Costs, indicated above, may also be expressed on a per square foot level. The square foot areas of the prototype units used throughout the analysis become the basis for the calculation. Again, see Appendix II for more discussion of the prototypes. The results per square foot are as follows:

Total Nexus Cost Per Sq. Ft.					
<i>Income Category</i>	<i>Affordability Gap</i>	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
<i>Prototype Size (Sq Ft)</i>		<i>2,400 SF</i>	<i>1,800 SF</i>	<i>1,200 SF</i>	<i>800 SF</i>
Very Low Income	\$240,000	\$15.42	\$17.78	\$23.33	\$28.75
Low Income	\$151,000	\$6.25	\$7.22	\$9.17	\$11.25
Moderate	\$175,000	\$6.67	\$7.22	\$9.17	n/a
Total Nexus Costs		\$28.33	\$32.22	\$41.67	\$40.00

The calculated fee levels indicated above, per unit or per square foot, are maximum fees supported by the nexus analysis. They are not recommended fee levels.

This analysis has been prepared solely to demonstrate support for inclusionary measures and impact fees from the nexus perspective.

Considerations in Selecting Fee Levels

There are several economic or real estate considerations that may be taken into account in recommending and enacting affordable housing requirements. The first concern is that fee levels or on-site requirements not be so onerous that they constrain the development of new units.

The Walnut Creek inclusionary program was adopted in 2004 and during the period that followed the City experienced a robust level of construction activity, demonstrating that the inclusionary program did not substantially constrain new development in a healthy market and economic cycle. In the current recession, all development is constrained. With the existing program in place for a number of years now, market adjustments in land values required by the program have long been absorbed and developers who assemble sites know that the inclusionary requirements must be taken into account in their project economics. In the future, if the City pursues higher levels of inclusionary requirements over the current program, it would be advisable to reexamine the constraint potential at that time.

As discussed, the nexus analysis establishes the maximum supportable fee from a legal nexus perspective. The KMA methodology employs a series of conservative assumptions designed to ensure that the analysis does not overstate the impact of residential housing construction on the demand for new affordable housing. Selecting a fee below the maximum level supported allows for changes to the many numbers, relationships and assumptions employed in the analysis, due to changes in the economy, for example, without changing the fundamental conclusions of the analysis.

APPENDIX I: RESIDENTIAL NEXUS ANALYSIS

INTRODUCTION AND OVERVIEW

Keyser Marston Associates (KMA) has prepared this residential nexus analysis for the City of Walnut Creek per a contractual agreement. This report has been prepared to support the City's Inclusionary Housing Ordinance as applied to for-sale residential development projects and to quantify impact fees supported which may be applied to for-rent residential projects. This residential nexus analysis addresses market rate residential projects and the various types of units that are subject to the Inclusionary Housing Ordinance, and quantifies the linkages between new market rate units and the demand for affordable housing generated by the residents of new units.

The Walnut Creek Context and Purpose of Report

The City of Walnut Creek's existing Inclusionary Housing Ordinance requires all projects of two or more units to provide units at affordable prices or rent levels. For ownership units, the developer can choose to provide 10% of units at prices affordable to Moderate income households or 6% to Low income households or 4.5% to Very Low income households. For rental units, the developer can choose between providing 10% of units at rents affordable to Low income households or 6% of units at rents affordable to Very Low income households. The program allows for payment of an in-lieu fee as an alternative to the on-site requirement for projects with 26 units or fewer. The current in-lieu fee for projects with fewer than 10 units ranges from \$2.00 to \$9.00 per square foot for ownership units and \$1.60 to \$7.20 per square foot for rental units. For projects with between 10 and 26 units, the in-lieu fee is equal to 10% of the total units in the project times \$185,000 for ownership units or \$111,600 for rental units.

This analysis will demonstrate the percentage of affordable units supported and will also quantify impact fee levels supported from a nexus perspective. In response to a recent California Court of Appeals decision, this analysis will also enable the City to restructure the program as it applies to rental projects so that rental projects are charged an impact fee.

The Nexus Concept

At its most simplified level, the underlying nexus concept is that the newly constructed units represent new households in Walnut Creek. These households represent new income in Walnut Creek that will consume goods and services, either through purchases of goods and services or "consumption" of governmental services. New consumption translates to jobs; a portion of the jobs are at lower compensation levels, low compensation jobs relate to lower income households that cannot afford market rate units in Walnut Creek and therefore need affordable housing.

Use of This Study

An impact analysis of this nature has been prepared for the limited purpose of determining nexus support to the City of Walnut Creek's Inclusionary Housing Ordinance affecting new residential construction. It has not been prepared as a document to guide policy design in the broader context. We caution against the use of this study, or any impact study for that matter, for purposes beyond the intended use. All impact studies are limited and imperfect, but can be helpful for understanding the externalities created by new development.

The nexus analysis presented in this report is an impact analysis only and the nexus amounts are not recommended fee levels. The analysis has been prepared solely to demonstrate support for inclusionary measures and impact fees from the nexus perspective.

Impact Methodology and Models Used

The methodology or analysis procedure for this nexus analysis starts with the sales price (or rental rate) of a new market rate residential unit, and moves through a series of linkages to the gross income of the household that purchased or rented the unit, the disposable income of the new household, the annual expenditures on goods and services, the jobs associated with the purchases and delivery of services, the income of the workers doing those jobs, the household income of the workers and, ultimately, the affordability level of the housing needed by the worker households. The steps of the analysis from household income to jobs generated were performed using the IMPLAN model, a model widely used for the past 35 years to quantify the impacts of changes in a local economy, including employment impacts from changes in personal income. From job generation by industry, KMA used its own jobs housing nexus model to quantify the income of worker households by affordability level.

To illustrate the linkages by looking at a simplified example, we can take an average household that buys a house at a certain price. From that price, we estimate the gross income of the household (from mortgage rates and lending practices) and the disposable income of the household. The disposable income, on average, will be used to "purchase" or consume a range of goods and services, such as purchases at the supermarket or services at the bank. Purchases in the local economy in turn generate employment. The jobs generated are at different compensation levels. Some of the jobs are low paying and as a result, even when there is more than one worker in the household, there are some lower and middle-income households who cannot afford market rate housing in Walnut Creek.

The IMPLAN model quantifies jobs generated at establishments that serve new residents directly (e.g., supermarkets, banks or schools), jobs generated by increased demand at firms which service or supply these establishments, and jobs generated when the new employees spend their wages in the local economy and generate additional jobs. The IMPLAN model estimates the total impact combined.

Net New Underlying Assumption

An underlying assumption of the analysis is that households that purchase or rent new units represent net new households in Walnut Creek. If purchasers or renters have relocated from elsewhere in the city, vacancies have been created that will be filled. An adjustment to new construction of units would be warranted if Walnut Creek were experiencing demolitions or loss of existing housing inventory. However, the rate of housing unit removal is so low as to not warrant an adjustment or offset.

On an individual project basis, if existing units are removed to redevelop a site to higher density, then there could be a need for recognition of the existing households in that all new units might not represent net new households, depending on the program design and number of units removed relative to new units.

Since the analysis addresses net new households in Walnut Creek and the impacts generated by their consumption expenditures, it quantifies net new demands for affordable units to accommodate new worker households. As such, the impact results do not address nor in any way include existing deficiencies in the supply of affordable housing.

Geographic Area of Impact

The analysis quantifies impacts occurring within Contra Costa County. While the majority of impacts will occur within the City of Walnut Creek since it is a large city with a broad range of retail and service outlets, hospitals and other institutions, some impacts will be experienced elsewhere in the County and beyond. The IMPLAN model computes the jobs generated within the County and sorts out those that occur beyond the county boundaries. The KMA Jobs Housing Nexus Model analyzes the income structure of jobs and their worker households, without assumptions as to where the worker households live.

In summary, the KMA nexus analysis quantifies all the job impacts occurring within Contra Costa County and related workers households. Job impacts, like most types of impacts, occur irrespective of political boundaries. And like other types of impact analyses, such as traffic, impacts beyond city boundaries are experienced, are relevant, and are important. See Addendum for further discussion.

Disclaimers

This report has been prepared using the best and most recent data available at the time of the analysis. Local data and sources were used wherever possible. Major sources include the U.S. Census Bureau: 2006-2008 American Community Survey, California Employment Development Department and the IMPLAN model. While we believe all sources utilized are sufficiently sound and accurate for the purposes of this analysis, we cannot guarantee their accuracy. Keyser Marston Associates, Inc. assumes no liability for information from these and other sources.

A. MARKET RATE UNITS AND GROSS HOUSEHOLD INCOME

This section describes the prototypical market rate units that are subject to affordable housing requirements under the City of Walnut Creek's Inclusionary Housing Ordinance and the income of the purchaser and renter households. Household income is the input to the IMPLAN model described in Section B of this report. These are the starting points of the chain of linkages that connect new market rate units to incremental demand for affordable residential units.

This section provides a summary of the prototypes and household income. More description and supporting tables are provided in Appendix II.

Recent Housing Market Activity and Prototypical Units

In identifying residential prototypes, KMA undertook a survey of residential units sold or recently marketed throughout the City, reviewed the City's development project pipeline, and received input from City staff on the characteristics of typical units being built in Walnut Creek. KMA accessed readily available data on real estate sales values and apartment rents, which included new for-sale projects as well as resales of newer units.

Three for-sale prototypes and one rental prototype were identified. These prototypes represent both projects currently being proposed and developed and projects that have potential for development in the foreseeable future.

For-Sale Project Prototypes

The for-sale prototypes are as follows:

- A single family detached home at an average of 8 units per acre. These units average three and a half bedrooms in size with a square foot area of 2,400 square feet. Sales price in today's market for a product like this is estimated at \$780,000.
- A small-lot, zero-lot, or townhome unit at an average density of approximately 20 units per acre. It is assumed that this prototype averages three bedrooms and 1,800 square feet. Market values for these units are estimated at about \$625,000 according to the survey, or about \$347 per square foot.
- A condominium, or stacked flats configuration developed at 50 units to the acre on average, with wood frame construction built over a structured parking garage. This unit is assumed to be located in downtown Walnut Creek. The average unit size is 2.2 bedrooms and 1,200 square feet. The estimated unit value is \$540,000, or approximately \$450 per square foot.

The nexus analysis for the for-sale prototypes will illustrate how the analysis results are affected as the price of the unit increases.

Rental Project Prototypes

With the rapid escalation in values for all types of ownership units from the early part of the decade until 2007, land prices escalated as well. Apartment rents, on the other hand, declined significantly between 2000 and about 2004, and while rents have recovered since their 2004 lows, they are again being impacted by the current recession. As a result, rental projects have been difficult to work financially. In Walnut Creek, there have been only a few new rental projects recently, including the Windsor and the Mercer, which was intended to be condominiums but the developers decided to rent a portion of the units until the for-sale market recovers. In addition, the Montecito, built in 2005, was intended to be a rental, but the developers chose to sell the units instead to take advantage of the booming for-sale market at that time. There are a few rental projects in the pipeline now, including a large project located at the BART station. Going forward, rental projects in Walnut Creek are most feasible at high densities in downtown locations where rent levels are stronger.

For the purposes of the nexus analysis, the prototype is as follows:

- An apartment building at 85 units per acre in a four-story over structured parking garage configuration. An additional level of parking is located underground. This prototype assumes an average of 1.2 bedrooms and 800 square feet. A project of this configuration would require a rent level of approximately \$2,470 per month, or \$3.09 per square foot to be feasible.

The required rent level is higher than levels achievable in the current market. With an economic recovery and job growth in the region, it is anticipated that rents will rise to levels sufficient to make rental development feasible in downtown Walnut Creek.

Summary

In summary, the prototypes tested in the nexus analysis are as follows:

	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Downtown Condominium</i>	<i>Apartments</i>
Avg. Unit Size	2,400 sf	1,800 sf	1,200 sf	800 sf
Avg. No. of Bedrooms	3.5 bedrooms	3 bedrooms	2.2 bedrooms	1.2 bedrooms
Avg. Rent/Sales Price	\$780,000	\$625,000	\$540,000	\$2,470/mo.
Avg. Rent/Sales Price per sf	\$325	\$347	\$450	\$3.09

Income of Housing Unit Purchasers or Renter

The next step in the analysis is to determine the income of the purchasing or renting households in the prototypical units. The gross household income of the purchasers or renters is the input to the IMPLAN model.

For Sale Units

To make the determination for ownership units, terms for the purchase of residential units used in the analysis are slightly less favorable than what can be achieved at the current time since current terms are not likely to endure. The selected terms for the analysis are: 20% down payment, 30 year fixed rate mortgage, 6.0% interest rate. The tables at the end of this section provide the details.

The single family detached unit includes as an expense an allowance for maintenance and insurance. The attached unit prototypes, townhomes and condominiums, include as expenses monthly homeowners' association (HOA) dues, per industry practice. All ownership product types include an estimate of property taxes as well. A key assumption is that housing costs run, on average, at about 35% of gross income. In recent years lending institutions have been more willing to accept higher than 35% for all debt as a share of income, but most households have other forms of debt, such as auto loans, student loans, and credit card debt. Looking ahead, most analysts see a return to more conservative lending practices than those of the last few years.

Apartment Units

The standard for relating annual rent to household income is 30%, excluding utilities. While leasing agents and landlords may permit rental payments to represent a slightly higher share of total income, 30% represents an average. This is based on that fact that renters are also likely to have other debt, and that many do not choose to spend more than 30% of their income on rent, since, unlike an ownership situation, the unit is not viewed as an investment with value enhancement potential. The resulting relationship is that annual household income is 3.3 times annual rent.

The estimated gross household incomes of the purchasers or renters of the prototype units are calculated in tables A-1 through A-4, and summarized below.

	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Gross Household Income	\$172,000	\$138,000	\$120,000	\$98,800

The nexus analysis is conducted on 100-unit building modules for ease of presentation, and to avoid awkward fractions. Tables A-5 and A-6 summarize the conclusions of this section and calculate the total gross household income for the 100-unit building modules. This is the input into the IMPLAN model.

**TABLE A-1
 PROTOTYPE 1: SFD
 SALES PRICE TO INCOME RATIO
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK**

		Prototype 1 Single Family Detached
Sales Price	\$325 /SF 2,400 SF	\$780,000
Mortgage Payment		
Downpayment @ 20%	20%	\$156,000
Loan Amount		\$624,000
Interest Rate		6.00%
Term of Mortgage		30 years
Annual Mortgage Payment		\$44,894
Other Costs		
Maintenance & Insurance	\$450 per month	\$5,400
Property Taxes	1.25% of sales price	\$9,800
Total Annual Housing Cost		<hr/> \$60,094
% of Income Spent on Hsg		35%
Annual Income Required		\$172,000
Sales Price to Income Ratio		4.5

**TABLE A-2
 PROTOTYPE 2: SMALL-LOT / TOWNHOME
 SALES PRICE TO INCOME RATIO
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK**

			Prototype 2 Townhome
Sales Price	\$347 /SF	1,800 SF	\$625,000
Mortgage Payment			
Downpayment @ 20%		20%	\$125,000
Loan Amount			\$500,000
Interest Rate			6.00%
Term of Mortgage			30 years
Annual Mortgage Payment			\$35,973
Other Costs			
HOA Dues / Maintenance	\$375 per month		\$4,500
Property Taxes	1.25% of sales price		\$7,800
Total Annual Housing Cost			\$48,273
% of Income Spent on Hsg			35%
Annual Income Required			\$138,000
Sales Price to Income Ratio			4.5

**TABLE A-3
 PROTOTYPE 3: DOWNTOWN CONDOMINIUM
 ANNUAL RENT TO INCOME RATIO
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK**

			Prototype 3 Downtown Condominium
Sales Price	\$450 /SF	1,200 SF	\$540,000
Mortgage Payment			
Downpayment @ 20%		20%	\$108,000
Loan Amount			\$432,000
Interest Rate			6.00%
Term of Mortgage			30 years
Annual Mortgage Payment			\$31,081
Other Costs			
HOA Dues / Maintenance	\$350 per month		\$4,200
Property Taxes	1.25% of sales price		\$6,800
Total Annual Housing Cost			\$42,081
% of Income Spent on Hsg			35%
Annual Income Required			\$120,000
Sales Price to Income Ratio			4.5

**TABLE A-4
 PROTOTYPE 4: DOWNTOWN RENTAL
 ANNUAL RENT TO INCOME RATIO
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK**

	Prototype 4 Downtown Rental		
Market Rent			
Monthly	\$3.09 /SF	800 SF	\$2,470
Annual			\$29,640
% of Income Spent on Rent (excludes utilities)			30%
Annual Household Income Required			\$98,800
Annual Rent to Income Ratio			3.3

**TABLE A-5
FOR SALE PROTOTYPES SUMMARY
SALES PRICE TO INCOME RATIO
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

	<u>Per Unit</u>	<u>Per Sq.Ft.</u>	<u>100 Unit Building Module</u>
PROTOTYPE 1: SFD			
Units			100 Units
Building Sq.Ft. (net salable area)	2,400		240,000
Sales Price	\$780,000	\$325	\$78,000,000
Sales Price to Income Ratio	4.5		4.5
Gross Household Income	\$172,000		\$17,200,000
PROTOTYPE 2: SMALL-LOT / TOWNHOME			
Units			100 Units
Building Sq.Ft. (net salable area)	1,800		180,000
Sales Price	\$625,000	\$347	\$62,500,000
Sales Price to Income Ratio	4.5		4.5
Gross Household Income	\$138,000		\$13,800,000
PROTOTYPE 3: DOWNTOWN CONDOMINIUM			
Units			100 Units
Building Sq.Ft. (net salable area)	1,200		120,000
Sales Price	\$540,000	\$450	\$54,000,000
Sales Price to Income Ratio	4.5		4.5
Gross Household Income	\$120,000		\$12,000,000

Source: See Tables A-1 through A-3.

**TABLE A-6
RESIDENTIAL HOUSEHOLD SUMMARY - RENTAL
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

	<u>Per Unit</u>	<u>Per Sq.Ft.</u>	<u>100 Unit Building Module</u>
PROTOTYPE 4: DOWNTOWN RENTAL			
Units			100 Units
Building Sq.Ft. (net rentable area)	800		80,000
Rent			
Monthly	\$2,470	\$3.09 /SF	\$247,000
Annual	\$29,640	\$37.05 /SF	\$2,964,000
Rent to Income Ratio	3.3		3.3
Gross Household Income	\$98,800	\$123.50	\$9,880,000

Source: See Table A-4.

B. THE IMPLAN MODEL

Consumer spending by residents of new housing units will create jobs, particularly in sectors such as restaurants, health care, and retail, which are closely connected to the expenditures of residents. The widely used economic analysis tool, IMPLAN (IMpact Analysis for PLANning), was used to quantify these new jobs by industry sector.

IMPLAN Model Description

The IMPLAN model is an economic analysis software package now commercially available through the Minnesota IMPLAN Group. IMPLAN was originally developed by the U.S. Forest Service, the Federal Emergency Management Agency, and the U.S. Department of the Interior Bureau of Land Management and has been in use since 1979 and refined over time. It has become a widely used tool for analyzing economic impacts from a broad range of applications from major construction projects to natural resource programs.

IMPLAN is based on an input-output accounting of commodity flows within an economy from producers to intermediate and final consumers. The model establishes a matrix of supply chain relationships between industries and also between households and the producers of household goods and services. Assumptions about the portion of inputs or supplies for a given industry likely to be met by local suppliers, and the portion supplied from outside the region or study area are derived internally within the model using data on the industrial structure of the region.

The output or result of the model is generated by tracking changes in purchases for final use (final demand) as they filter through the supply chain. Industries that produce goods and services for final demand or consumption must purchase inputs from other producers, which in turn, purchase goods and services. The model tracks these relationships through the economy to the point where leakages from the region stop the cycle. This allows the user to identify how a change in demand for one industry will affect a list of over 400 other industry sectors. The projected response of an economy to a change in final demand can be viewed in terms of economic output, employment, or income.

Data sets are available for each county and state, so the model can be tailored to the specific economic conditions of the region being analyzed. This analysis utilizes the data set for Contra Costa County. As will be discussed, much of the employment impact is in local-serving sectors, such as retail, eating and drinking establishments, and medical services. A significant portion of these jobs will be located in Walnut Creek or nearby. In addition, the employment impacts will extend throughout the County and beyond based on where jobs are located that serve Walnut Creek residents. In fact, Walnut Creek is part of the larger regional economy and impacts will likewise extend throughout the region, particularly into Alameda County. However, consistent with the conservative approach taken in the nexus analysis, only the impacts that occur within Contra Costa County are included in the analysis.

Application of the IMPLAN Model to Estimate Job Growth

The IMPLAN model was applied to link gross household income to household expenditures to job growth occurring in Contra Costa County. Employment generated by the household income of residents is analyzed in modules of 100 residential units to ease the presentation of facilitate communication of the results and avoid awkward fractions. The IMPLAN model first converts household income to disposable income by accounting for State and Federal income taxes, Social Security and Medicare (FICA) taxes, and personal savings. The model then distributes spending among various types of goods and services (industry sectors) based on data from the Consumer Expenditure Survey and the Bureau of Economic Analysis Benchmark input-output study, to estimate employment generated.

Job creation, driven by increased demand for products and services, was projected for each of the industries that will serve the new households. The employment generated by this new household spending is summarized below.

Jobs Generated per 100 Units				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Gross Household Income	\$172,000	\$138,000	\$120,000	\$98,800
Total Jobs Generated, 100 units	66.6	56.3	48.9	40.7

Table B-1 provides a detailed summary of employment generated by industry. The table shows industries sorted by projected employment. Expenditure patterns vary by income level, and the IMPLAN results are calculated according to the income bracket. In the case of the Walnut Creek prototypes, rental households are in one income category, condominium, townhome or small-lot households are in a second, and single family households are in a third. Estimated employment is shown for each IMPLAN industry sector representing 1% or more of total employment. The jobs that are generated within the County are heavily retail jobs, jobs in restaurants and other eating establishments, and in services that are provided locally such as health care and real estate.

The jobs counted in the IMPLAN model cover all jobs, full and part time, similar to the U.S. Census and all reporting agencies (unless otherwise indicated).

**TABLE B-1
 IMPLAN MODEL OUTPUT
 EMPLOYMENT GENERATED
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK**

Per 100 Market Rate Units

Page 1 of 2

Gross Income of New Residents (in 100 Market Rate Units)¹

Employment Generated by Industry²

	PROTOTYPE 1: SFD		PROTOTYPE 2: SMALL-LOT / TOWNHOME		PROTOTYPE 3: DOWNTOWN CONDOMINIUM		PROTOTYPE 4: DOWNTOWN RENTAL	
		<i>% of Jobs</i>				<i>% of Jobs</i>		<i>% of Jobs</i>
	\$17,200,000		\$13,800,000		\$12,000,000		\$9,880,000	
Food services and drinking places	5.8	9%	5.4		4.7	10%	4.1	10%
Real estate establishments	3.6	5%	3.6		3.2	6%	3.3	8%
Offices of physicians, dentists, and other health practitioners	3.2	5%	2.8		2.5	5%	2.3	6%
Retail Stores - Food and beverage	2.4	4%	2.3		2.0	4%	1.6	4%
Private hospitals	2.5	4%	2.0		1.7	3%	1.4	4%
Retail Stores - General merchandise	2.2	3%	2.1		1.8	4%	1.4	4%
Private household operations	3.2	5%	2.5		2.2	4%	1.2	3%
Wholesale trade businesses	1.1	2%	1.4		1.2	3%	1.1	3%
Securities, commodity contracts, investments, and other activities	1.4	2%	1.3		1.1	2%	1.0	3%
Retail Nonstores - Direct and electronic sales	1.5	2%	1.4		1.2	2%	0.9	2%
Retail Stores - Motor vehicle and parts	1.4	2%	1.3		1.1	2%	0.9	2%
Retail Stores - Clothing and clothing accessories	1.3	2%	1.2		1.0	2%	0.8	2%
Nursing and residential care facilities	1.9	3%	1.4		1.2	3%	0.8	2%
Retail Stores - Miscellaneous	1.2	2%	1.1		0.9	2%	0.8	2%
Monetary authorities and depository credit intermediation activities	1.0	1%	0.9		0.8	2%	0.7	2%
Employment services	1.1	2%	0.9		0.8	2%	0.7	2%
Retail Stores - Building material and garden supply	1.1	2%	1.0		0.9	2%	0.7	2%
Medical and diagnostic labs and outpatient and other services	0.9	1%	0.8		0.7	1%	0.6	2%
Insurance carriers	1.1	2%	0.9		0.8	2%	0.6	2%
Automotive repair and maintenance, except car washes	1.1	2%	0.8		0.7	1%	0.6	1%
Services to buildings and dwellings	1.0	2%	0.8		0.7	1%	0.6	1%

**TABLE B-1
IMPLAN MODEL OUTPUT
EMPLOYMENT GENERATED
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

Per 100 Market Rate Units

Page 2 of 2

	PROTOTYPE 1: SFD		PROTOTYPE 2: SMALL-LOT / TOWNHOME		PROTOTYPE 3: DOWNTOWN CONDOMINIUM		PROTOTYPE 4: DOWNTOWN RENTAL	
		% of Jobs			% of Jobs		% of Jobs	
Retail Stores - Health and personal care	0.9	1%	0.8	0.7	1%	0.6	1%	
Child day care services	1.5	2%	0.8	0.7	1%	0.6	1%	
Personal care services	0.9	1%	0.8	0.7	1%	0.5	1%	
Other private educational services	1.1	2%	0.8	0.7	1%	0.5	1%	
Individual and family services	1.2	2%	0.7	0.6	1%	0.5	1%	
Civic, social, professional, and similar organizations	0.9	1%	0.7	0.6	1%	0.5	1%	
Legal services	0.7	1%	0.7	0.6	1%	0.5	1%	
Retail Stores - Sporting goods, hobby, book and music	0.7	1%	0.7	0.6	1%	0.5	1%	
Home health care services	0.7	1%	0.5	0.5	1%	0.5	1%	
Nondepository credit intermediation and related activities	0.8	1%	0.6	0.6	1%	0.5	1%	
Private elementary and secondary schools	1.6	2%	0.9	0.7	2%	0.4	1%	
Grantmaking, giving, and social advocacy organizations	0.8	1%	0.4	0.4	1%	0.3	1%	
Community food, housing, and other relief services	0.8	1%	0.4	0.4	1%	0.3	1%	
Private junior colleges, colleges, universities & professional schools	0.7	1%	0.5	0.4	1%	0.3	1%	
All Other	13.6	20%	11.1	9.7	20%	8.1	20%	
Total Employment Generated	66.6	100%	56.3	48.9	100%	40.7	100%	

¹ The IMPLAN model tracks how increases in consumer spending creates jobs in the local economy. See Tables A-6 and A-7 for estimates of the gross income of residents of the prototypical 100 unit buildings. The model produces results by income category. For this analysis, there are three household income categories: \$75,000 - \$100,000 (rental prototype), \$100,000 - \$150,000 (the small-lot/townhome and the condominium prototypes) and greater than \$150,000 (the single family detached prototype). Expenditures patterns, and therefore, occupation distribution, varies by income category.

² For Industries representing more than 1% of total employment for any of the three IMPLAN income categories (see note 1).

C. THE KMA JOBS HOUSING NEXUS MODEL

This section presents a summary of the analysis linking the employment growth associated with residential development, or the output of the IMPLAN model (see Section B), to the estimated number of lower income housing units required in each of three income categories, for each of the four residential prototype units.

Analysis Approach and Framework

The analysis approach is to examine the employment growth for industries related to consumer spending by residents in the 100-unit modules. Then, through a series of linkage steps, the number of employees is converted to households and housing units by affordability level. The findings are expressed in terms of numbers of affordable households per 100 market rate units.

The analysis addresses the affordable unit demand associated with rental, condominium, townhome or small-lot and single family detached units in Contra Costa County. The table below shows the 2009 Contra Costa County Area Median Income (AMI), as well as the income limits for the three categories that were evaluated: 50%, 80% and 120% of AMI. To correspond with the wage and income data used later in the analysis, the 2009 income limits are employed. The median income limits calculated by HCD for 2010 are just slightly higher than the median income limits for 2009. The income categories are consistent with those included in the City's Inclusionary Housing Ordinance.

2009 Income Limits for Contra Costa County						
	Household Size (Persons)					
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
50% of AMI	\$31,250	\$35,700	\$40,200	\$44,650	\$48,200	\$51,800
80% of AMI	\$46,350	\$53,000	\$59,600	\$66,250	\$71,550	\$76,850
<i>Area Median Income</i>	<i>\$62,500</i>	<i>\$71,450</i>	<i>\$80,350</i>	<i>\$89,300</i>	<i>\$96,450</i>	<i>\$103,600</i>
120% of AMI	\$75,000	\$85,700	\$96,450	\$107,150	\$115,700	\$124,300

The analysis is conducted using a model that KMA developed and has applied to similar evaluations in many other jurisdictions. The model inputs are all local data to the extent possible, and are fully documented in the following description.

Analysis Steps

Tables C-1 and C-2 at the end of this section present a summary of the nexus analysis steps for the prototype units. Following is a description of each step of the analysis.

Step 1 – Estimate of Total New Employees

Table C-1 commences with the total number of employees associated with the new market rate units. The employees were estimated based on household expenditures of new residents using the IMPLAN model (see Section B).

Step 2 – Adjustment from Employees to Employee Households

This step (Table C-1) converts the number of employees to the number of employee households, recognizing that there is, on average, more than one worker per household, and thus the number of housing units in demand for new workers is reduced. The workers-per-worker-household ratio eliminates from the equation all non-working households, such as retired persons, students, and those on public assistance. The County average of 1.58 workers per worker household (from the U. S. Census Bureau: 2006-2008 American Community Survey) is used for this step in the analysis. The number of jobs is divided by 1.58 to determine the number of worker households. (Average workers related to all households is a lower ratio because all households are counted in the denominator, not just worker households; using average workers per total households would produce greater demand for housing units.) The 1.58 ratio covers all workers, full and part time.

Step 3 – Occupational Distribution of Employees

The occupational breakdown of employees is the first step to arrive at income level. The output from the IMPLAN model provides the number of employees by industry sector. The IMPLAN output is paired with data from the Department of Labor, Bureau of Labor Statistics May 2008 Occupational Employment Survey (OES) to estimate the occupational composition of employees for each industry sector.

Pairing of OES and IMPLAN data was accomplished by matching IMPLAN industry sector codes with the four-digit North American Industry Classification System Code (NAICS) used in the OES. Each IMPLAN industry sector is associated with one or more NAICS codes, with matching NAICS codes ranging from two to five digits. Employment for IMPLAN sectors with multiple matching NAICS codes was distributed among the matching codes based on the distribution of employment among those industries at the national level. Employment for IMPLAN sectors where matching NAICS codes were only at the two- or three-digit level of detail was distributed using a similar approach, among all of the corresponding four-digit NAICS codes falling under the broader two- or three-digit categories.

National-level employment totals for each industry within the OES were pro-rated to match the employment distribution projected using the IMPLAN model, which varies by income category. Occupational composition within each industry was held constant. The result is the estimated occupational mix of employees. Table C-3 presents a summary of the results for rental

households. Table C-4 presents a summary for condominium and townhome/small-lot households, and Table C-5 for single family households.

As shown on Table C-1, new jobs will be distributed across a variety of occupational categories. The three largest occupational categories are office and administrative support (18-19%), sales (15-18%), and food preparation and serving (10-13%). Step 3 of Table C-1 indicates both the percentage of total employee households and the number of employee households by occupation associated with 100-unit market rate units.

Step 4 – Estimates of Employee Households Meeting the Lower Income Definitions

In this step, occupation is translated to income based on recent Contra Costa County wage and salary information from the California Employment Development Department. The wage and salary information summarized in Tables C-6 (renter households), C-7 (condominium and townhome or small-lot households) and C-8 (single family households) provided the income inputs to the model. This step in the analysis calculates the number of employee households that fall into each income category for each household size.

Individual *employee* income data was used to calculate the number of *households* that fall into the income categories by assuming that multiple earner households are, on average, formed of individuals with similar incomes. Employee households not falling into one of the major occupation categories per Tables C-3, C-4 or C-5 are assumed to have the same income distribution as the major occupation categories.

Step 5 – Estimate of Household Size Distribution

In this step, household size distribution was input into the model in order to estimate the income and household size combinations that meet the income definitions for Contra Costa County. The household size distribution utilized in the analysis is that of worker households in Contra Costa County derived using American Community Survey (ACS) data. The model employs a distribution of the number of workers per household by household size. For example, four-person worker households can have one, two, three, or four workers in the household. The model uses ACS data to develop a distribution of the number of the workers per worker household, by household size.

Step 6 – Estimate of Households that Meet Size and Income Criteria

For this step KMA built a cross-matrix of household size and income to establish probability factors for the two criteria in combination. For each occupational group a probability factor was calculated for each income level and household size/number of workers combination, and multiplied by the number of households. Table C-2 shows the result after completing Steps 4, 5, and 6. The calculated number of households that meet size and income criteria shown are for

the under 50% of AMI category generated by 100 market rate prototype units. The methodology was repeated for each income tier, resulting in a total count of worker households per 100 units.

Summary Findings

Table C-9 indicates the results of the analysis for the residential prototype units. The table presents the number of households generated in each affordability category and the total number over 120% of Area Median Income.

According to Table C-9, approximately 80% of new worker households generated by the expenditures of new residents have incomes below 120% of AMI, with most of these households earning less than 80% of AMI. The finding that the jobs associated with consumer spending tend to be low-paying jobs where the workers will require housing affordable at the lower income levels is not surprising. As noted above, direct consumer spending results in employment that is concentrated in lower paid occupations including food preparation, administrative, and retail sales.

The findings in Table C-9 are presented below. The table shows the total demand for affordable housing units associated with 100 market rate units.

<i>New Worker Households by Income Level per 100 Market Rate Units</i>				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Under 50% AMI	15.6	13.3	11.6	9.8
50% to 80% AMI	10.0	8.4	7.3	6.1
80% to 120% AMI	9.0	7.4	6.5	5.3
Total, Less than 120% AMI	34.6	29.2	25.4	21.1
Greater than 120% AMI	7.5	6.4	5.6	4.6
Total, New Households	42.1	35.5	30.9	25.7

Comparison of Analysis Results to Inclusionary Program

The analysis findings identify how many lower income households are generated for every 100 market rate units. These findings are adjusted to percentages for purposes of comparison to inclusionary requirements. The percentages are calculated including both market rate and affordable units (for example, 25 affordable units per 100 market rate units translates to a project of 125 units; 25 affordable units out of 125 units equals 20%).

The inset table below presents the results of the analysis, drawn from Table C-10, which contains greater detail. Each tier is cumulative, or inclusive of the tiers above.

Cumulative Inclusionary Percentage Supported by Nexus Analysis				
	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Very Low Income	13.5%	11.7%	10.4%	8.9%
Low Income	20.4%	17.8%	15.9%	13.7%
Moderate	25.7%	22.6%	20.2%	n/a

The findings of the analysis are presented for each of the prototypes. The single family detached unit results in Total Impacts of 25.7% up through Moderate Income (120% AMI). The small-lot or townhome unit supports an inclusionary program up to 22.6%. The nexus analysis supports an inclusionary program for condominium units of up to 20.2%. For ownership units, the conclusion is therefore that the current Inclusionary Housing Ordinance (either 10% up through Moderate Income or 6% through Low or 4.5% through Very Low) is supported by the analysis.

The results for the rental units also support the current program. The analysis finding for very low and low combined is 13.7%, while the current program requires 10% at low or 6% at very low. It is recalled that the recent Court decision, however, precludes jurisdictions from requiring affordable on-site units that limit initial rents and on-going rent levels. Instead cities may require an impact fee.

Conclusion

For ownership units, the analysis has demonstrated that the percentage requirements embodied in the current City of Walnut Creek Inclusionary Housing Ordinance are supported by the residential nexus analysis. The new households that buy new units in Walnut Creek generate impacts, through their expenditures on goods and services, which results in demand for additional affordable units in amounts higher than the current Inclusionary Housing Ordinance requires.

For rental units, the City's current program should be revised for consistency with the *Palmer* ruling regarding onsite rental units.

The nexus analysis presented in this report is an impact analysis only and not recommended fee levels. The analysis has been prepared solely to demonstrate support for inclusionary measures and impact fees from the nexus perspective.

**TABLE C-1
NET NEW HOUSEHOLDS AND OCCUPATION DISTRIBUTION
EMPLOYEE HOUSEHOLDS GENERATED
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

	PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
Step 1 - Employees ¹	66.6	56.3	48.9	40.7
Step 2 - Adjustment for Number of Households (1.58)	42.1	35.5	30.9	25.7
Step 3 - Occupation Distribution ²				
Management Occupations	4.3%	4.3%	4.3%	4.3%
Business and Financial Operations	4.1%	4.2%	4.2%	4.0%
Computer and Mathematical	1.5%	1.5%	1.5%	1.3%
Architecture and Engineering	0.4%	0.4%	0.4%	0.4%
Life, Physical, and Social Science	0.4%	0.4%	0.4%	0.4%
Community and Social Services	1.9%	1.5%	1.5%	1.4%
Legal	0.7%	0.8%	0.8%	0.8%
Education, Training, and Library	4.5%	3.2%	3.2%	2.5%
Arts, Design, Entertainment, Sports, and Media	1.4%	1.4%	1.4%	1.5%
Healthcare Practitioners and Technical	6.2%	6.1%	6.1%	6.0%
Healthcare Support	3.8%	3.5%	3.5%	3.3%
Protective Service	1.1%	1.0%	1.0%	1.0%
Food Preparation and Serving Related	10.0%	10.6%	10.6%	13.1%
Building and Grounds Cleaning and Maint.	7.3%	6.9%	6.9%	5.3%
Personal Care and Service	4.5%	3.9%	3.9%	3.6%
Sales and Related	15.3%	16.7%	16.7%	17.5%
Office and Administrative Support	18.3%	18.9%	18.9%	19.1%
Farming, Fishing, and Forestry	0.1%	0.1%	0.1%	0.1%
Construction and Extraction	1.1%	1.1%	1.1%	1.0%
Installation, Maintenance, and Repair	4.2%	4.4%	4.4%	4.6%
Production	2.0%	2.0%	2.0%	2.0%
Transportation and Material Moving	4.9%	5.1%	5.1%	5.5%
Other / Not Identified	<u>2.0%</u>	<u>2.0%</u>	<u>2.0%</u>	<u>1.3%</u>
Totals	100%	100%	100%	100%
Management Occupations	1.8	1.5	1.3	1.1
Business and Financial Operations	1.7	1.5	1.3	1.0
Computer and Mathematical	0.6	0.5	0.5	0.3
Architecture and Engineering	0.2	0.2	0.1	0.1
Life, Physical, and Social Science	0.2	0.1	0.1	0.1
Community and Social Services	0.8	0.5	0.4	0.4
Legal	0.3	0.3	0.2	0.2
Education, Training, and Library	1.9	1.2	1.0	0.6
Arts, Design, Entertainment, Sports, and Media	0.6	0.5	0.4	0.4
Healthcare Practitioners and Technical	2.6	2.2	1.9	1.5
Healthcare Support	1.6	1.2	1.1	0.9
Protective Service	0.4	0.4	0.3	0.3
Food Preparation and Serving Related	4.2	3.8	3.3	3.4
Building and Grounds Cleaning and Maint.	3.1	2.4	2.1	1.4
Personal Care and Service	1.9	1.4	1.2	0.9
Sales and Related	6.4	5.9	5.2	4.5
Office and Administrative Support	7.7	6.7	5.9	4.9
Farming, Fishing, and Forestry	0.0	0.0	0.0	0.0
Construction and Extraction	0.5	0.4	0.3	0.3
Installation, Maintenance, and Repair	1.8	1.6	1.4	1.2
Production	0.8	0.7	0.6	0.5
Transportation and Material Moving	2.1	1.8	1.6	1.4
Other / Not Identified	<u>0.9</u>	<u>0.7</u>	<u>0.6</u>	<u>0.3</u>
Totals	42.1	35.5	30.9	25.7

Notes:
¹ Estimated employment generated by household expenditures within 100 prototypical market rate units. Employment estimates are based on the IMPLAN Group's economic model, IMPLAN, for Contra Costa County. Estimates vary by household income level. For this analysis, there are three household income categories: \$75,000 - \$100,000 (rental prototype), \$100,000 - \$150,000 (the townhome/small-lot and the condominium prototypes) and greater than \$150,000 (the single family detached prototype). Expenditures patterns, and therefore, occupation distribution, varies by income category.
² See Tables C-3 through C-8 for additional information on Major Occupation Categories.

TABLE C-2

**VERY LOW INCOME EMPLOYEE HOUSEHOLDS¹ GENERATED
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
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Step 4, 5, & 6 - Very Low Income Households (under 50% AMI) within Major Occupation Categories ²

Management	0.05	0.05	0.04	0.04
Business and Financial Operations	0.02	0.02	0.02	0.01
Computer and Mathematical	-	-	-	-
Architecture and Engineering	-	-	-	-
Life, Physical and Social Science	-	-	-	-
Community and Social Services	-	-	-	-
Legal	-	-	-	-
Education Training and Library	0.46	0.27	0.24	0.14
Arts, Design, Entertainment, Sports, & Media	-	-	-	-
Healthcare Practitioners and Technical	0.00	0.00	0.00	0.00
Healthcare Support	0.69	0.53	0.46	0.34
Protective Service	-	-	-	-
Food Preparation and Serving Related	2.99	2.67	2.32	2.40
Building Grounds and Maintenance	1.41	1.12	0.97	0.63
Personal Care and Service	1.05	0.76	0.66	0.51
Sales and Related	3.82	3.50	3.04	2.49
Office and Admin	1.96	1.73	1.50	1.26
Farm, Fishing, and Forestry	-	-	-	-
Construction and Extraction	-	-	-	-
Installation Maintenance and Repair	0.20	0.18	0.16	0.14
Production	-	-	-	-
Transportation and Material Moving	0.96	0.85	0.74	0.69
Very Low Income Households - Major Occupations	13.60	11.67	10.15	8.67
Very Low Inc. Households ¹ - all other occupations	1.96	1.62	1.41	1.09
Total Very Low Income Households¹	15.56	13.29	11.56	9.76

¹ Includes households earning from zero through 50% of Contra Costa County Area Median Income.

² See Tables C-3 through C-8 for additional information on Major Occupation Categories.

**TABLE C-3
 2008 NATIONAL HOUSEHOLDS EARNING \$75-\$100,000 RESIDENT SERVICES WORKER
 DISTRIBUTION BY OCCUPATION
 EMPLOYMENT IMPACTS WITHIN CONTRA COSTA COUNTY
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK, CA**

2008 National Households Earning \$75-\$100,000 Resident Services Occupation Distribution ¹
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Major Occupations (2% or more)

Management occupations	4.3%
Business and financial operations occupations	4.0%
Education, training, and library occupations	2.5%
Healthcare practitioners and technical occupations	6.0%
Healthcare support occupations	3.3%
Food preparation and serving related occupations	13.1%
Building and grounds cleaning and maintenance occupations	5.3%
Personal care and service occupations	3.6%
Sales and related occupations	17.5%
Office and administrative support occupations	19.1%
Installation, maintenance, and repair occupations	4.6%
Transportation and material moving occupations	5.5%
All Other Households Earning \$75-\$100,000 Resident Services Related Occupations	<u>11.2%</u>
INDUSTRY TOTAL	100.0%

¹ Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.

**TABLE C-4
 2008 NATIONAL HOUSEHOLDS EARNING \$100-\$150,000 RESIDENT SERVICES WORKER DISTRIBUTION BY
 OCCUPATION
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK, CA**

Major Occupations (2% or more)	2008 National Households Earning \$100- \$150,000 Resident Services Occupation Distribution ¹
Management occupations	4.3%
Business and financial operations occupations	4.2%
Education, training, and library occupations	3.2%
Healthcare practitioners and technical occupations	6.1%
Healthcare support occupations	3.5%
Food preparation and serving related occupations	10.6%
Building and grounds cleaning and maintenance occupations	6.9%
Personal care and service occupations	3.9%
Sales and related occupations	16.7%
Office and administrative support occupations	18.9%
Installation, maintenance, and repair occupations	4.4%
Transportation and material moving occupations	5.1%
All Other Households Earning \$100-\$150,000 Resident Services Related Occupations	<u>12.2%</u>
INDUSTRY TOTAL	100.0%

¹ Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.

**TABLE C-5
2008 NATIONAL HOUSEHOLDS EARNING \$150,000 OR MORE RESIDENT SERVICES WORKER DISTRIBUTION
BY OCCUPATION
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

Major Occupations (2% or more)	2008 National Households Earning \$150,000 or More Resident Services Occupation Distribution ¹
Management occupations	4.3%
Business and financial operations occupations	4.1%
Education, training, and library occupations	4.5%
Healthcare practitioners and technical occupations	6.2%
Healthcare support occupations	3.8%
Food preparation and serving related occupations	10.0%
Building and grounds cleaning and maintenance occupations	7.3%
Personal care and service occupations	4.5%
Sales and related occupations	15.3%
Office and administrative support occupations	18.3%
Installation, maintenance, and repair occupations	4.2%
Transportation and material moving occupations	4.9%
All Other Households Earning \$150,000 or More Resident Service	<u>12.6%</u>
INDUSTRY TOTAL	100.0%

¹ Distribution of employment by industry is per the IMPLAN model and the distribution of occupational employment within those industries is based on the Bureau of Labor Statistics Occupational Employment Survey.

TABLE C-6
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$75-\$100,000 RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$75-\$100,000 Resident Services Workers
<i>Management occupations</i>			
Chief executives	\$194,200	4.2%	0.2%
General and operations managers	\$127,600	30.1%	1.3%
Sales managers	\$122,700	5.8%	0.3%
Financial managers	\$130,100	10.0%	0.4%
Food service managers	\$51,700	5.1%	0.2%
Medical and health services managers	\$108,900	4.4%	0.2%
Property, real estate, and community association managers	\$58,100	13.2%	0.6%
All other Management Occupations (Avg. All Categories)	<u>\$118,000</u>	<u>27.2%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$113,900	100.0%	4.3%
<i>Business and financial operations occupations</i>			
Claims adjusters, examiners, and investigators	\$67,400	6.5%	0.3%
Management analysts	\$89,700	6.0%	0.2%
Business operations specialists, all other	\$78,600	14.3%	0.6%
Accountants and auditors	\$75,700	18.6%	0.7%
Financial analysts	\$104,300	8.8%	0.4%
Personal financial advisors	\$75,400	9.2%	0.4%
Loan officers	\$72,300	7.9%	0.3%
All Other Business and financial operations occupations (Avg. All Categories)	<u>\$79,800</u>	<u>28.7%</u>	<u>1.1%</u>
Weighted Mean Annual Wage	\$79,800	100.0%	4.0%
<i>Education, training, and library occupations</i>			
Vocational education teachers, postsecondary	\$65,400	4.2%	0.1%
Preschool teachers, except special education	\$33,500	14.1%	0.3%
Elementary school teachers, except special education	\$63,000	8.7%	0.2%
Secondary school teachers, except special and vocational education	\$63,900	6.0%	0.1%
Self-enrichment education teachers	\$43,600	9.2%	0.2%
Teachers and instructors, all other	\$49,100	8.6%	0.2%
Teacher assistants	\$31,300	15.1%	0.4%
All Other Education, training, and library occupations (Avg. All Categories)	<u>\$45,200</u>	<u>34.0%</u>	<u>0.8%</u>
Weighted Mean Annual Wage	\$45,200	100.0%	2.5%
<i>Healthcare practitioners and technical occupations</i>			
Physicians and surgeons, all other	\$180,400	4.9%	0.3%
Registered nurses	\$98,000	27.2%	1.6%
Dental hygienists	\$99,800	4.9%	0.3%
Licensed practical and licensed vocational nurses	\$58,100	8.8%	0.5%
All Other Healthcare practitioners and technical occupations (Avg. All Categories)	<u>\$99,300</u>	<u>54.1%</u>	<u>3.3%</u>
Weighted Mean Annual Wage	\$99,300	100.0%	6.0%
<i>Healthcare support occupations</i>			
Home health aides	\$23,700	19.8%	0.7%
Nursing aides, orderlies, and attendants	\$31,300	25.5%	0.9%
Dental assistants	\$41,100	14.8%	0.5%
Medical assistants	\$35,600	20.7%	0.7%
Healthcare support workers, all other	\$38,900	4.4%	0.1%
All Other Healthcare support occupations (Avg. All Categories)	<u>\$32,700</u>	<u>14.8%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$32,700	100.0%	3.3%

TABLE C-6
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$75-\$100,000 RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$75-\$100,000 Resident Services Workers
<i>Food preparation and serving related occupations</i>			
First-line supervisors/managers of food preparation and serving workers	\$30,500	6.9%	0.9%
Cooks, fast food	\$19,600	5.4%	0.7%
Cooks, restaurant	\$25,900	8.2%	1.1%
Food preparation workers	\$22,600	7.2%	0.9%
Bartenders	\$21,400	4.7%	0.6%
Combined food preparation and serving workers, including fast food	\$20,600	24.5%	3.2%
Counter attendants, cafeteria, food concession, and coffee shop	\$20,400	4.3%	0.6%
Waiters and waitresses	\$20,700	21.7%	2.8%
Dishwashers	\$19,800	4.6%	0.6%
All Other Food preparation and serving related occupations (Avg. All Categories)	<u>\$22,000</u>	<u>12.5%</u>	<u>1.6%</u>
Weighted Mean Annual Wage	\$22,000	100.0%	13.1%
<i>Building and grounds cleaning and maintenance occupations</i>			
Janitors and cleaners, except maids and housekeeping cleaners	\$29,400	50.0%	2.7%
Maids and housekeeping cleaners	\$25,900	11.0%	0.6%
Landscaping and groundskeeping workers	\$32,300	27.1%	1.4%
All Other Building and grounds cleaning and maintenance occupations (Avg. All Categories)	<u>\$29,900</u>	<u>11.9%</u>	<u>0.6%</u>
Weighted Mean Annual Wage	\$29,900	100.0%	5.3%
<i>Personal care and service occupations</i>			
Nonfarm animal caretakers	\$26,000	5.7%	0.2%
Amusement and recreation attendants	\$20,900	8.1%	0.3%
Hairdressers, hairstylists, and cosmetologists	\$27,900	18.7%	0.7%
Child care workers	\$24,600	12.8%	0.5%
Personal and home care aides	\$25,000	16.5%	0.6%
Fitness trainers and aerobics instructors	\$41,800	7.0%	0.3%
Recreation workers	\$27,800	5.5%	0.2%
All Other Personal care and service occupations (Avg. All Categories)	<u>\$27,100</u>	<u>25.7%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$27,100	100.0%	3.6%
<i>Sales and related occupations</i>			
First-line supervisors/managers of retail sales workers	\$41,300	8.6%	1.5%
Cashiers	\$24,500	25.5%	4.5%
Counter and rental clerks	\$24,400	4.2%	0.7%
Retail salespersons	\$27,100	35.9%	6.3%
Sales representatives, wholesale and manufacturing, except technical and scientific products	\$66,700	4.9%	0.8%
All Other Sales and related occupations (Avg. All Categories)	<u>\$30,100</u>	<u>20.9%</u>	<u>3.6%</u>
Weighted Mean Annual Wage	\$30,100	100.0%	17.5%
<i>Office and administrative support occupations</i>			
First-line supervisors/managers of office and administrative support workers	\$58,800	5.8%	1.1%
Bookkeeping, accounting, and auditing clerks	\$42,300	7.9%	1.5%
Customer service representatives	\$40,600	9.8%	1.9%
Receptionists and information clerks	\$32,600	6.9%	1.3%
Stock clerks and order fillers	\$28,000	10.6%	2.0%
Executive secretaries and administrative assistants	\$49,900	6.3%	1.2%
Secretaries, except legal, medical, and executive	\$41,200	7.8%	1.5%
Office clerks, general	\$36,100	12.6%	2.4%
All Other Office and administrative support occupations (Avg. All Categories)	<u>\$39,700</u>	<u>32.4%</u>	<u>6.2%</u>
Weighted Mean Annual Wage	\$39,700	100.0%	19.1%

TABLE C-6
 AVERAGE ANNUAL COMPENSATION, 2009
 HOUSEHOLDS EARNING \$75-\$100,000 RESIDENT SERVICES WORKER OCCUPATIONS
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$75-\$100,000 Resident Services Workers
<i>Installation, maintenance, and repair occupations</i>			
First-line supervisors/managers of mechanics, installers, and repairers	\$74,800	7.6%	0.4%
Automotive body and related repairers	\$52,400	5.5%	0.3%
Automotive service technicians and mechanics	\$51,400	20.3%	0.9%
Maintenance and repair workers, general	\$45,800	32.5%	1.5%
All Other Installation, maintenance, and repair occupations (Avg. All Categories)	<u>\$51,400</u>	<u>34.1%</u>	<u>1.6%</u>
Weighted Mean Annual Wage	\$51,400	100.0%	4.6%
<i>Transportation and material moving occupations</i>			
Driver/sales workers	\$26,700	8.4%	0.5%
Truck drivers, heavy and tractor-trailer	\$43,000	10.7%	0.6%
Truck drivers, light or delivery services	\$33,800	13.0%	0.7%
Parking lot attendants	\$23,600	4.0%	0.2%
Cleaners of vehicles and equipment	\$23,100	8.0%	0.4%
Laborers and freight, stock, and material movers, hand	\$28,700	23.3%	1.3%
Packers and packagers, hand	\$21,600	8.8%	0.5%
All Other Transportation and material moving occupations (Avg. All Categories)	<u>\$29,700</u>	<u>23.9%</u>	<u>1.3%</u>
Weighted Mean Annual Wage	\$29,700	100.0%	5.5%
			88.8%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2008 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2008 Occupational Employment Survey data for Contra Costa and Alameda Counties, updated by the California Employment Development Department to 2009 wage levels.

³ Including occupations representing 4% or more of the major occupation group

TABLE C-7
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$100-\$150,000 RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$100-\$150,000 Resident Services Workers
<i>Page 1 of 3</i>			
<i>Management occupations</i>			
Chief executives	\$194,200	4.2%	0.2%
General and operations managers	\$127,600	29.8%	1.3%
Sales managers	\$122,700	5.3%	0.2%
Financial managers	\$130,100	10.1%	0.4%
Medical and health services managers	\$108,900	4.7%	0.2%
Property, real estate, and community association managers	\$58,100	12.5%	0.5%
All other Management Occupations (Avg. All Categories)	<u>\$117,400</u>	<u>33.4%</u>	<u>1.5%</u>
Weighted Mean Annual Wage	\$117,400	100.0%	4.3%
<i>Business and financial operations occupations</i>			
Claims adjusters, examiners, and investigators	\$67,400	7.2%	0.3%
Management analysts	\$89,700	6.2%	0.3%
Business operations specialists, all other	\$78,600	14.0%	0.6%
Accountants and auditors	\$75,700	18.6%	0.8%
Financial analysts	\$104,300	8.8%	0.4%
Personal financial advisors	\$75,400	8.6%	0.4%
Loan officers	\$72,300	8.6%	0.4%
All Other Business and financial operations occupations (Avg. All Categories)	<u>\$79,700</u>	<u>28.0%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$79,700	100.0%	4.2%
<i>Education, training, and library occupations</i>			
Vocational education teachers, postsecondary	\$65,400	4.5%	0.1%
Preschool teachers, except special education	\$33,500	18.3%	0.6%
Elementary school teachers, except special education	\$63,000	8.9%	0.3%
Secondary school teachers, except special and vocational education	\$63,900	6.2%	0.2%
Self-enrichment education teachers	\$43,600	8.7%	0.3%
Teachers and instructors, all other	\$49,100	8.7%	0.3%
Teacher assistants	\$31,300	16.4%	0.5%
All Other Education, training, and library occupations (Avg. All Categories)	<u>\$44,400</u>	<u>28.4%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$44,400	100.0%	3.2%
<i>Healthcare practitioners and technical occupations</i>			
Physicians and surgeons, all other	\$180,400	4.2%	0.3%
Registered nurses	\$98,000	30.0%	1.8%
Licensed practical and licensed vocational nurses	\$58,100	9.7%	0.6%
All Other Healthcare practitioners and technical occupations (Avg. All Categories)	<u>\$96,900</u>	<u>56.0%</u>	<u>3.4%</u>
Weighted Mean Annual Wage	\$96,900	100.0%	6.1%
<i>Healthcare support occupations</i>			
Home health aides	\$23,700	23.4%	0.8%
Nursing aides, orderlies, and attendants	\$31,300	30.6%	1.1%
Dental assistants	\$41,100	11.0%	0.4%
Medical assistants	\$35,600	16.2%	0.6%
Healthcare support workers, all other	\$38,900	4.5%	0.2%
All Other Healthcare support occupations (Avg. All Categories)	<u>\$31,700</u>	<u>14.3%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$31,700	100.0%	3.5%

TABLE C-7
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$100-\$150,000 RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$100-\$150,000 Resident Services Workers
<i>Page 2 of 3</i>			
<i>Food preparation and serving related occupations</i>			
First-line supervisors/managers of food preparation and serving workers	\$30,500	7.0%	0.7%
Cooks, fast food	\$19,600	5.2%	0.5%
Cooks, restaurant	\$25,900	7.8%	0.8%
Food preparation workers	\$22,600	7.8%	0.8%
Bartenders	\$21,400	4.6%	0.5%
Combined food preparation and serving workers, including fast food	\$20,600	24.3%	2.6%
Counter attendants, cafeteria, food concession, and coffee shop	\$20,400	4.5%	0.5%
Waiters and waitresses	\$20,700	21.0%	2.2%
Dishwashers	\$19,800	4.5%	0.5%
All Other Food preparation and serving related occupations (Avg. All Categories)	<u>\$22,000</u>	<u>13.3%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$22,000	100.0%	10.6%
<i>Building and grounds cleaning and maintenance occupations</i>			
Janitors and cleaners, except maids and housekeeping cleaners	\$29,400	49.3%	3.4%
Maids and housekeeping cleaners	\$25,900	10.1%	0.7%
Landscaping and groundskeeping workers	\$32,300	28.1%	1.9%
All Other Building and grounds cleaning and maintenance occupations (Avg. All Cate)	<u>\$29,900</u>	<u>12.5%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$29,900	100.0%	6.9%
<i>Personal care and service occupations</i>			
Nonfarm animal caretakers	\$26,000	4.5%	0.2%
Amusement and recreation attendants	\$20,900	6.2%	0.2%
Hairdressers, hairstylists, and cosmetologists	\$27,900	19.3%	0.7%
Child care workers	\$24,600	17.6%	0.7%
Personal and home care aides	\$25,000	16.9%	0.7%
Fitness trainers and aerobics instructors	\$41,800	7.0%	0.3%
Recreation workers	\$27,800	5.3%	0.2%
All Other Personal care and service occupations (Avg. All Categories)	<u>\$27,100</u>	<u>23.1%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$27,100	100.0%	3.9%
<i>Sales and related occupations</i>			
First-line supervisors/managers of retail sales workers	\$41,300	8.7%	1.5%
Cashiers	\$24,500	26.0%	4.4%
Retail salespersons	\$27,100	36.8%	6.1%
All Other Sales and related occupations (Avg. All Categories)	<u>\$27,900</u>	<u>28.5%</u>	<u>4.8%</u>
Weighted Mean Annual Wage	\$27,900	100.0%	16.7%

**TABLE C-7
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$100-\$150,000 RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$100-\$150,000 Resident Services Workers
<i>Office and administrative support occupations</i>			
First-line supervisors/managers of office and administrative support workers	\$58,800	5.6%	1.1%
Bookkeeping, accounting, and auditing clerks	\$42,300	7.9%	1.5%
Customer service representatives	\$40,600	10.2%	1.9%
Receptionists and information clerks	\$32,600	6.5%	1.2%
Stock clerks and order fillers	\$28,000	10.4%	2.0%
Executive secretaries and administrative assistants	\$49,900	6.3%	1.2%
Secretaries, except legal, medical, and executive	\$41,200	7.9%	1.5%
Office clerks, general	\$36,100	12.5%	2.4%
All Other Office and administrative support occupations (Avg. All Categories)	<u>\$39,700</u>	<u>32.8%</u>	<u>6.2%</u>
Weighted Mean Annual Wage	\$39,700	100.0%	18.9%
<i>Installation, maintenance, and repair occupations</i>			
First-line supervisors/managers of mechanics, installers, and repairers	\$74,800	7.5%	0.3%
Automotive body and related repairers	\$52,400	5.6%	0.2%
Automotive service technicians and mechanics	\$51,400	19.5%	0.9%
Maintenance and repair workers, general	\$45,800	32.8%	1.5%
All Other Installation, maintenance, and repair occupations (Avg. All Categories)	<u>\$51,400</u>	<u>34.6%</u>	<u>1.5%</u>
Weighted Mean Annual Wage	\$51,400	100.0%	4.4%
<i>Transportation and material moving occupations</i>			
Driver/sales workers	\$26,700	7.7%	0.4%
Truck drivers, heavy and tractor-trailer	\$43,000	12.0%	0.6%
Truck drivers, light or delivery services	\$33,800	13.0%	0.7%
Cleaners of vehicles and equipment	\$23,100	8.0%	0.4%
Laborers and freight, stock, and material movers, hand	\$28,700	23.0%	1.2%
Packers and packagers, hand	\$21,600	9.2%	0.5%
All Other Transportation and material moving occupations (Avg. All Categories)	<u>\$30,200</u>	<u>27.0%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$30,200	100.0%	5.1%
			87.8%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2008 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2008 Occupational Employment Survey data for Contra Costa and Alameda Counties) updated by the California Employment Development Department to 2009 wage levels.

³ Including occupations representing 4% or more of the major occupation group

TABLE C-8
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$150,000 OR MORE RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$150,000 or More Resident Services Workers
<i>Page 1 of 3</i>			
<i>Management occupations</i>			
Chief executives	\$194,200	4.3%	0.2%
General and operations managers	\$127,600	29.8%	1.3%
Sales managers	\$122,700	4.8%	0.2%
Administrative services managers	\$85,700	4.1%	0.2%
Financial managers	\$130,100	9.7%	0.4%
Medical and health services managers	\$108,900	5.0%	0.2%
Property, real estate, and community association managers	\$58,100	10.7%	0.5%
All other Management Occupations (Avg. All Categories)	<u>\$117,000</u>	<u>31.6%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$117,000	100.0%	4.3%
<i>Business and financial operations occupations</i>			
Claims adjusters, examiners, and investigators	\$67,400	7.7%	0.3%
Management analysts	\$89,700	6.2%	0.3%
Business operations specialists, all other	\$78,600	14.6%	0.6%
Accountants and auditors	\$75,700	18.3%	0.8%
Financial analysts	\$104,300	8.6%	0.4%
Personal financial advisors	\$75,400	8.1%	0.3%
Loan officers	\$72,300	8.3%	0.3%
All Other Business and financial operations occupations (Avg. All Categories)	<u>\$79,600</u>	<u>28.2%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$79,600	100.0%	4.1%
<i>Education, training, and library occupations</i>			
Preschool teachers, except special education	\$33,500	19.5%	0.9%
Elementary school teachers, except special education	\$63,000	10.0%	0.4%
Middle school teachers, except special and vocational education	\$59,900	4.2%	0.2%
Secondary school teachers, except special and vocational education	\$63,900	6.9%	0.3%
Self-enrichment education teachers	\$43,600	7.3%	0.3%
Teachers and instructors, all other	\$49,100	7.9%	0.4%
Teacher assistants	\$31,300	17.1%	0.8%
All Other Education, training, and library occupations (Avg. All Categories)	<u>\$44,100</u>	<u>27.0%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$44,100	100.0%	4.5%
<i>Healthcare practitioners and technical occupations</i>			
Registered nurses	\$98,000	31.07%	1.9%
Licensed practical and licensed vocational nurses	\$58,100	10.2%	0.6%
All Other Healthcare practitioners and technical occupations (Avg. All Categories)	<u>\$88,100</u>	<u>58.7%</u>	<u>3.7%</u>
Weighted Mean Annual Wage	\$88,100	100.0%	6.2%

TABLE C-8
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$150,000 OR MORE RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$150,000 or More Resident Services Workers
<i>Page 2 of 3</i>			
<i>Healthcare support occupations</i>			
Home health aides	\$23,700	25.8%	1.0%
Nursing aides, orderlies, and attendants	\$31,300	31.9%	1.2%
Dental assistants	\$41,100	9.7%	0.4%
Medical assistants	\$35,600	14.6%	0.5%
Healthcare support workers, all other	\$38,900	4.4%	0.2%
All Other Healthcare support occupations (Avg. All Categories)	<u>\$31,200</u>	<u>13.6%</u>	<u>0.5%</u>
Weighted Mean Annual Wage	\$31,200	100.0%	3.8%
<i>Food preparation and serving related occupations</i>			
First-line supervisors/managers of food preparation and serving workers	\$30,500	6.9%	0.7%
Cooks, fast food	\$19,600	5.1%	0.5%
Cooks, restaurant	\$25,900	7.7%	0.8%
Food preparation workers	\$22,600	8.0%	0.8%
Bartenders	\$21,400	4.7%	0.5%
Combined food preparation and serving workers, including fast food	\$20,600	23.9%	2.4%
Counter attendants, cafeteria, food concession, and coffee shop	\$20,400	4.5%	0.5%
Waiters and waitresses	\$20,700	20.7%	2.1%
Dishwashers	\$19,800	4.5%	0.4%
All Other Food preparation and serving related occupations (Avg. All Categories)	<u>\$22,000</u>	<u>14.0%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$22,000	100.0%	10.0%
<i>Building and grounds cleaning and maintenance occupations</i>			
Janitors and cleaners, except maids and housekeeping cleaners	\$29,400	49.4%	3.6%
Maids and housekeeping cleaners	\$25,900	9.9%	0.7%
Landscaping and groundskeeping workers	\$32,300	28.0%	2.0%
All Other Building and grounds cleaning and maintenance occupations (Avg. All Categories)	<u>\$29,900</u>	<u>12.6%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$29,900	100.0%	7.3%
<i>Personal care and service occupations</i>			
Nonfarm animal caretakers	\$26,000	4.6%	0.2%
Amusement and recreation attendants	\$20,900	6.1%	0.3%
Hairdressers, hairstylists, and cosmetologists	\$27,900	16.1%	0.7%
Child care workers	\$24,600	21.2%	0.9%
Personal and home care aides	\$25,000	18.6%	0.8%
Fitness trainers and aerobics instructors	\$41,800	6.8%	0.3%
Recreation workers	\$27,800	5.4%	0.2%
All Other Personal care and service occupations (Avg. All Categories)	<u>\$26,900</u>	<u>21.1%</u>	<u>0.9%</u>
Weighted Mean Annual Wage	\$26,900	100.0%	4.5%
<i>Sales and related occupations</i>			
First-line supervisors/managers of retail sales workers	\$41,300	8.8%	1.3%
Cashiers	\$24,500	26.2%	4.0%
Counter and rental clerks	\$24,400	4.2%	0.6%
Retail salespersons	\$27,100	36.7%	5.6%
All Other Sales and related occupations (Avg. All Categories)	<u>\$27,700</u>	<u>24.1%</u>	<u>3.7%</u>
Weighted Mean Annual Wage	\$27,700	100.0%	15.3%

Sources: U.S. Bureau of Labor Statistics, California Employment Development Department, Minnesota IMPLAN Group
 Prepared by: Keyser Marston Associates, Inc.
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**TABLE C-8
AVERAGE ANNUAL COMPENSATION, 2009
HOUSEHOLDS EARNING \$150,000 OR MORE RESIDENT SERVICES WORKER OCCUPATIONS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

Occupation ³	2009 Avg. Compensation ¹	% of Total Occupation Group ²	% of Total Households Earning \$150,000 or More Resident Services Workers
<i>Page 3 of 3</i>			
<i>Office and administrative support occupations</i>			
First-line supervisors/managers of office and administrative support workers	\$58,800	5.7%	1.0%
Bookkeeping, accounting, and auditing clerks	\$42,300	7.9%	1.4%
Customer service representatives	\$40,600	10.1%	1.8%
Receptionists and information clerks	\$32,600	6.6%	1.2%
Stock clerks and order fillers	\$28,000	9.7%	1.8%
Executive secretaries and administrative assistants	\$49,900	6.5%	1.2%
Secretaries, except legal, medical, and executive	\$41,200	8.2%	1.5%
Office clerks, general	\$36,100	12.8%	2.3%
All Other Office and administrative support occupations (Avg. All Categories)	<u>\$39,800</u>	<u>32.5%</u>	<u>6.0%</u>
Weighted Mean Annual Wage	\$39,800	100.0%	18.3%
<i>Installation, maintenance, and repair occupations</i>			
First-line supervisors/managers of mechanics, installers, and repairers	\$74,800	7.6%	0.3%
Automotive body and related repairers	\$52,400	6.3%	0.3%
Automotive service technicians and mechanics	\$51,400	21.0%	0.9%
Maintenance and repair workers, general	\$45,800	31.3%	1.3%
All Other Installation, maintenance, and repair occupations (Avg. All Categories)	<u>\$51,500</u>	<u>33.8%</u>	<u>1.4%</u>
Weighted Mean Annual Wage	\$51,500	100.0%	4.2%
<i>Transportation and material moving occupations</i>			
Bus drivers, school	\$34,000	4.5%	0.2%
Driver/sales workers	\$26,700	7.2%	0.4%
Truck drivers, heavy and tractor-trailer	\$43,000	12.4%	0.6%
Truck drivers, light or delivery services	\$33,800	12.3%	0.6%
Cleaners of vehicles and equipment	\$23,100	8.6%	0.4%
Laborers and freight, stock, and material movers, hand	\$28,700	21.7%	1.1%
Packers and packagers, hand	\$21,600	8.7%	0.4%
All Other Transportation and material moving occupations (Avg. All Categories)	<u>\$30,600</u>	<u>24.6%</u>	<u>1.2%</u>
Weighted Mean Annual Wage	\$30,600	100.0%	4.9%
			87.4%

¹ The methodology utilized by the California Employment Development Department (EDD) assumes that hourly paid employees are employed full-time. Annual compensation is calculated by EDD by multiplying hourly wages by 40 hours per work week by 52 weeks.

² Occupation percentages are based on the 2008 National Industry - Specific Occupational Employment survey compiled by the Bureau of Labor Statistics. Wages are based on the 2008 Occupational Employment Survey data for Contra Costa and Alameda Counties, updated by the California Employment Development Department to 2009 wage levels.

³ Including occupations representing 4% or more of the major occupation group

**TABLE C-9
IMPACT ANALYSIS SUMMARY
EMPLOYEE HOUSEHOLDS GENERATED
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

**RESIDENTIAL UNIT DEMAND IMPACTS
PER 100 MARKET RATE UNITS**

Number of New Households	PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
Under 50% Area Median Income	15.6	13.3	11.6	9.8
50% to 80% Area Median Income	10.0	8.4	7.3	6.1
80% to 120% Area Median Income	9.0	7.4	6.5	5.3
Subtotal through 120% of Median	34.6	29.2	25.4	21.1
Over 120% of Area Median Income	7.5	6.4	5.6	4.6
Total Employee Households	42.1	35.5	30.9	25.7

**TABLE C-10
INCLUSIONARY REQUIREMENT SUPPORTED
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

SUPPORTED INCLUSIONARY REQUIREMENT

	PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
Supported Inclusionary Requirement Per 100 Market Rate Units - Cumulative Through ¹				
50% OF MEDIAN INCOME	15.6 Units	13.3 Units	11.6 Units	9.8 Units
80% OF MEDIAN INCOME	25.6 Units	21.7 Units	18.9 Units	15.8 Units
120% OF MEDIAN INCOME	34.6 Units	29.2 Units	25.4 Units	21.1 Units
Supported Inclusionary Percentage - Cumulative Through ²				
50% OF MEDIAN INCOME	13.5%	11.7%	10.4%	8.9%
80% OF MEDIAN INCOME	20.4%	17.8%	15.9%	13.7%
120% OF MEDIAN INCOME	25.7%	22.6%	20.2%	17.4%

Notes:

¹ See Table C-9

² Calculated by dividing the supported number of affordable units by the total number of units (supported affordable units + 100 market rate units).

D. MITIGATION COSTS

This section takes the conclusions of the previous section on the number of households in the lower income categories associated with the market rate units and identifies the total cost of assistance required to make housing affordable. This section puts a cost on the units for each income level to produce the “total nexus cost.” This is done for each of the four prototype units.

A key component of the analysis is the size of the gap between what households can afford and the cost of producing new housing in Walnut Creek, known as the ‘affordability gap.’

Affordability gaps are calculated for each of the three categories of area median income: Very Low (under 50% of median), Low (50% to 80%), and Moderate (80% to 120%). A detailed description of calculation of affordability gaps is contained in Appendix II. A brief summary is included below.

City Assisted Prototypes

For estimating the affordability gap, there is a need to match a household of each income level with a unit type and size according to governmental regulations and City practices and policies. The analysis assumes that the City will provide moderate income households earning between 80% and 120% of Area Median Income with ownership units. The prototype affordable ownership unit should reflect a modest unit appropriate for housing the average worker household, which in the case of Walnut Creek is a two-bedroom townhome unit located outside of the downtown. This is a modification of the market rate townhome prototype, which is a three bedroom unit with higher end finishes. As shown in Appendix II, the market rate sales price for a modest two-bedroom, 1,100 square foot townhome unit is estimated at \$450,000.

The analysis assumes that households earning less than 80% of Area Median Income will be assisted in rental units. For rental units, a two bedroom unit is assumed; this is a modification of the rental unit prototype, which is a mix of studios, one- and two-bedroom units. A total development cost of \$375,000 is estimated for the two-bedroom rental unit.

Development Costs

For the purposes of the affordability gap, total development costs are all inclusive: land, construction, fees, financing, indirect costs and modest industry profit. Total development costs (including profit), under normal market conditions, are therefore equal to the market rate sales price for ownership units, and the unit value for rental units. Development costs assumed for the purposes of the affordability gap are shown below. More detail can be found in Appendix II.

<i>Development Costs</i>		
<i>Income Group</i>	<i>Unit Tenure / Type</i>	<i>Total Development Costs</i>
Under 50% AMI	Rental	\$375,000
50% to 80% AMI	Rental	\$375,000
80% to 120% AMI	Ownership	\$450,000

Affordability Gap

The affordability gap is the difference between the cost of developing a residential unit and the amount a household can afford to pay for the unit. Maximum affordable housing costs were calculated by the City. A three-person household is assumed to be accommodated in a two-bedroom unit. Maximum sales prices and rent levels are shown below. More detail on the calculations can be found in Appendix II.

Maximum Sales Prices and Rent Levels			
<i>Income Group</i>	<i>Unit Tenure</i>	<i>Household Size</i>	<i>Maximum Housing Costs</i>
Under 50% AMI	Rental	3 persons	\$1,005 / month
50% to 80% AMI	Rental	3 persons	\$1,490 / month
80% to 120% AMI	Ownership	3 persons	\$275,000

Appendix II includes a full discussion of affordable rent levels, the calculation of unit value supported by the restricted rent levels, and affordability gaps.

For rental units, two additional assumptions are necessary to calculate unit value. Apartment buildings have operating costs to cover management, property taxes, and certain other expenses. An additional allowance for vacancy during turnover is also in order. Based on KMA's experience reviewing operating budgets for apartment projects, the operating expense and vacancy allowance is estimated at \$8,000 per unit per year for market rate units. Operating expenses are lower for affordable units, as the analysis assumes the units are exempt from property taxes. Finally, the annual net operating income (after operating expenses) from an apartment unit is an annual figure, which must be converted to a one time capital cost. To make the conversion, a 6.5% capitalization rate is used.

For ownership units, the Affordability Gap is the difference between the total development cost and the affordable purchase price. For rental units, the affordability gap is the difference between total development costs and the unit value supported by the restricted rent levels.

The affordability gap conclusions used in the analysis are:

- \$240,000 for households in the under 50% of median income category.
- \$151,000 for households in the 50% to 80% of median income category.
- \$175,000 for households in the 80% to 120% of median income category.

The affordability gaps used in the analysis are the difference between total development cost and affordable price or unit value. No other sources of funding and financing are assumed to be available to cover a portion of the total assistance needed. There are other forms of assistance used by cities but none are assured to be available. The federal tax credit program coupled with low interest financing from the State of California is by far the most effective and widely used

means of funding and financing affordable rental units. Both the tax credits and the lower interest loans, which rely on bond issuance at the state level, are competitively allocated and not at all guaranteed. Overall, the total sources of other funds available from federal, state and local sources are far less than needed to provide affordable housing meeting the City's needs. Hence, any units provided through the inclusionary housing program will not duplicate units that could be obtained by using other funding sources.

Total Linkage Costs

The last step in the linkage fee analysis marries the findings on the numbers of households in each of the lower income ranges associated with the four prototypes to the affordability gaps, or the costs of delivering housing to them in Walnut Creek.

Table D-1 summarizes the analysis. The Affordability Gaps are drawn from the prior discussion. The "Nexus Cost per Market Rate Unit" shows the results of the following calculation: the affordability gap times the number of affordable units demanded per market rate unit. (Demand for affordable units for each of the income ranges is drawn from Table C-9 in the previous section and is adjusted to a per-unit basis from the 100 unit building module.)

The total nexus costs for the four prototypes are as follows:

Nexus Per Market Rate Unit					
<i>Income Category</i>	<i>Affordability Gap</i>	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Very Low Income	\$240,000	\$37,000	\$32,000	\$28,000	\$23,000
Low Income	\$151,000	\$15,000	\$13,000	\$11,000	\$9,000
Moderate	\$175,000	\$16,000	\$13,000	\$11,000	n/a
Total Nexus Costs		\$68,000	\$58,000	\$50,000	\$32,000

The Total Nexus Costs, or Mitigation Costs, indicated above, may also be expressed on a per square foot level. The square foot area of the prototype unit used throughout the analysis becomes the basis for the calculation. Again, see Appendix II for more discussion of the prototypes. The results per square foot are as follows:

Total Nexus Cost Per Sq. Ft.					
<i>Income Category</i>	<i>Affordability Gap</i>	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
<i>Prototype Size (Sq Ft)</i>		<i>2,400 SF</i>	<i>1,800 SF</i>	<i>1,200 SF</i>	<i>800 SF</i>
Very Low Income	\$240,000	\$15.42	\$17.78	\$23.33	\$28.75
Low Income	\$151,000	\$6.25	\$7.22	\$9.17	\$11.25
Moderate	\$175,000	\$6.67	\$7.22	\$9.17	n/a
Total Nexus Costs		\$28.33	\$32.22	\$41.67	\$40.00

These costs express the total linkage or nexus costs for the four prototype developments in the City of Walnut Creek. These total nexus costs represent the ceiling for any requirement placed on market rate development. The totals are not recommended levels for fees; they represent only the maximums established by this analysis, below which fees or other requirements may be set.

Reference is made to a section entitled Considerations in Selecting Fee Levels in the Summary and Recommendations Report.

Non-Duplication of Commercial Linkage Fee

Walnut Creek established its Commercial Development Project Housing Impact Fee in 2005 to help mitigate the impacts of new jobs associated with the development of new commercial buildings on the demand for affordable housing in Walnut Creek.

To briefly summarize the Jobs Housing Nexus Analysis, the logic begins with jobs located in new workplace buildings such as office buildings, retail spaces and hotels. The nexus analysis then identifies the compensation structure of the new jobs depending on the building type, the income of the new worker households, and the housing affordability level of the new worker households, concluding with the number of new worker households in the lower income affordability levels.

Some of the jobs that are counted in the Jobs Housing Nexus Analysis are also counted in the Residential Nexus Analysis. The overlap potential exists in jobs generated by the expenditures of Walnut Creek residents, such as expenditures for food, personal services, restaurant meals and entertainment. Many jobs counted in the residential nexus are not addressed in the jobs housing analysis at all. For example, school and government employees are counted in the residential nexus analysis but are not counted in the jobs housing analysis which is limited to private sector office buildings, retail, hotel and certain medical projects.

Theoretically, there is a set of conditions in which 100% of the jobs counted for purposes of the commercial linkage fee are also counted for purposes of the residential nexus analysis. For example, a small retail store or restaurant might be located on the ground floor of a new condominium building and entirely dependant upon customers from the condominiums in the floors above. The commercial space on the ground floor pays the commercial housing impact fee and the condominiums are subject to the Inclusionary Program. In this special case, the two programs mitigate the affordable housing demand of the very same workers. The combined requirements of the two programs to provide inclusionary units and/or fund construction of affordable units must not exceed 100% of the demand for affordable units generated by employees in the new commercial space.

Complete overlap between jobs counted in the Jobs Housing Nexus Analysis and jobs counted in the Residential Nexus Analysis could occur only in a very narrow set of circumstances. The

following analysis demonstrates that the combined mitigation requirements do not exceed the nexus even if every job counted in the Residential Nexus Analysis is also counted in the Jobs Housing Nexus Analysis.

Commercial Fee Requirement as a Percent of Nexus

The Jobs Housing Nexus Analysis report was prepared by KMA in 2004. To evaluate the combined programs today, KMA updated the affordability gap figures to reflect today's development costs. The total updated nexus costs per square foot are shown on Table D-2 and summarized below. The total nexus cost is the maximum mitigation amount, or maximum fee that could be charged, supported by the analysis. The current fee charged by the City of Walnut Creek is indicated below and shown as a percent of the total updated nexus cost.

	Office	Hotel	Retail
Total Nexus Cost (Per Sq.Ft.)	\$40.30	\$33.19	\$41.49
Current Fee (Per Sq.Ft.)		\$5.00	
Percent of Nexus Cost	12%	15%	12%

The conclusion is that the current fee levels represent 12% to 15% of the nexus cost. So, the jobs-housing fee mitigates approximately 12% to 15% of the demand for affordable units generated by the new commercial space.

Current In-Lieu Fee as a Percent of Nexus

The City of Walnut Creek's existing Inclusionary Housing Ordinance requires all projects of two or more units to provide units at affordable prices or rent levels. For ownership units, the developer can choose to provide 10% of units at prices affordable to Moderate income households or 6% to Low income households, or 4.5% to Very Low income households. For rental units, the developer can choose between providing 10% of units at rents affordable to Low income households, or 6% of units at rents affordable to Very Low income households.

	<i>Single Family</i>	<i>Small-Lot or Townhome</i>	<i>Condominium</i>	<i>Apartments</i>
Supported Nexus Percentage*	25.7%	22.6%	20.2%	13.7%
Current Requirement	10%	10%	10%	10%
Percent of Nexus	39%	44%	50%	73%

**Includes up through moderate income households for ownership units, and up through low income households for rental units.*

The conclusion is that the Inclusionary Program is requiring 39% to 73% of the maximum supported by the analysis.

Combined Requirements within Nexus

The Commercial Housing Impact fee is at 12% to 15% of the supported nexus amount and the Inclusionary Housing Program requirement is at 39% to 73% of the supported nexus amount; therefore, the combined affordable housing mitigations would not exceed the nexus even if there were 100% overlap in the jobs counted in the two nexus analyses.

To return to the example of a restaurant on the ground floor of a new condominium building, say there are a total of 30 new restaurant employees of which 20 are in lower income households. The 20 employees in lower income households are counted (or double counted) in both the Commercial Housing and Residential Nexus analyses. If the commercial housing impact fee mitigates the affordable housing demand of two of the employees (12% x 20) and the Inclusionary Program mitigates the housing demand for another ten employees (50% x 20), then together the two programs mitigate the housing demand of 12 out of 20 lower income employees. The combined requirements of the two programs satisfy the nexus test by not mitigating more than 100% of the housing demand. Extending this logic, the affordable housing demand mitigated by the Inclusionary Program and the Commercial Housing Impact fee as a percent of their respective nexus analyses can be added together to test whether the combined requirements would exceed 100% of nexus even if the two analyses counted (or double counted) all the same demand for affordable housing.

**TABLE D-1
SUPPORTED FEE / NEXUS SUMMARY PER UNIT
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

TOTAL NEXUS COST PER MARKET RATE UNIT

		Nexus Cost Per Market Rate Unit			
		PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
	<u>Affordability Gap ¹</u>				
Household Income Level					
Under 50% Area Median Income	\$240,000	\$37,000	\$32,000	\$28,000	\$23,000
50% to 80% Area Median Income	\$151,000	\$15,000	\$13,000	\$11,000	\$9,000
80% to 120% Area Median Income	\$175,000	\$16,000	\$13,000	\$11,000	n/a
Total Supported Fee / Nexus		\$68,000	\$58,000	\$50,000	\$32,000

TOTAL NEXUS COST PER SQUARE FOOT

		Nexus Cost Per Square Foot			
		PROTOTYPE 1: SFD	PROTOTYPE 2: SMALL-LOT / TOWNHOME	PROTOTYPE 3: DOWNTOWN CONDOMINIUM	PROTOTYPE 4: DOWNTOWN RENTAL
	<u>Affordability Gap ¹</u>				
	Unit Size (SF)	2,400 SF	1,800 SF	1,200 SF	800 SF
Household Income Level					
Under 50% Area Median Income	\$240,000	\$15.42	\$17.78	\$23.33	\$28.75
50% to 80% Area Median Income	\$151,000	\$6.25	\$7.22	\$9.17	\$11.25
80% to 120% Area Median Income	\$175,000	\$6.67	\$7.22	\$9.17	n/a
Total Supported Fee / Nexus		\$28.33	\$32.22	\$41.67	\$40.00

¹ Household earning less than 80% of Area Median Income are presumed to receive assistance for rental housing.

Household earning between 80% and 120% of Area Median Income are presumed to receive assistance for ownership housing.

**TABLE D-2
TOTAL UPDATED JOBS-HOUSING NEXUS COST
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

AFTER 15.10% COMMUTE ADJUSTMENT

INCOME CATEGORY	Number of Households ¹			Affordability Gap ²	Nexus Cost Per Sq. Ft.		
	Office	Hotel	Rtl./Ent.		Office	Hotel	Rtl./Ent.
Under 50% of Median Income ³	2.45	9.02	11.14	\$240,000	\$5.87	\$21.65	\$26.74
50% to 80% of Median Income ³	9.40	5.43	6.86	\$151,000	\$14.20	\$8.20	\$10.36
80% to 120% of Median Income ⁴	<u>11.56</u>	<u>1.91</u>	<u>2.50</u>	\$175,000	\$20.24	\$3.34	\$4.38
Total	23.41	16.36	20.51		\$40.30	\$33.19	\$41.49

¹ Per 100,000 sq. ft. of building area

² Assume two-bedroom unit.

³ Assumes households are housed in rental units

⁴ Assumes households are housed in ownership units.

NOTES ON SPECIFIC ASSUMPTIONS

Geographic Area of Impact

The analysis quantifies impacts occurring within Contra Costa County. While the majority of impacts will occur within the city since Walnut Creek is a city with a broad range of retail and service outlets, hospitals and other institutions, some impacts will be experienced elsewhere in Contra Costa County and beyond. The IMPLAN model computes the jobs generated within the County and sorts out those that occur beyond the county boundaries. The KMA Jobs Housing Nexus Model analyzes the income structure of jobs and their worker households, without assumptions as to where the worker households live.

In summary, the nexus analysis quantifies all the jobs impacts occurring within Contra Costa County and related workers households. Job impacts, like most types of impacts, occur irrespective of political boundaries. And like other types of impact analyses, such as traffic, impacts beyond city boundaries are experienced, are relevant, and are important.

For clarification, counting all impacts associated with new housing units, does not result in double counting, even if all jurisdictions were to adopt similar programs. The impact of a new housing unit is only counted once, in the jurisdiction in which it occurs. Obviously, within a metropolitan region, there is much commuting among jurisdictions, and cities house each others' workers in a very complex web of relationships. The important point is that impacts of residential development are only counted once. For jurisdictions that have housing impact programs on both residential and non residential development, such as Walnut Creek, KMA provides an analysis to demonstrate that double counting has not occurred (see "Non-Duplication of Commercial Linkage Fee" in Section D).

Affordability Gaps

The use of the affordability gap for establishing a maximum fee supported from the nexus analysis is grounded in the concept that a jurisdiction will be responsible for delivering affordable units to mitigate impacts. The nexus analysis has established that units will be needed at one or more different affordability levels and, per local policy, the type of unit to be delivered depends on the income/affordability level. Most commonly, very low and low income households are assumed accommodated in rental units and moderate income households in a multi-family for-sale unit.

The units assisted by the public sector for affordable households are usually small in square foot area (for the number of bedrooms) and modest in finishes and amenities. As a result, in some communities these units are similar in physical configuration to what the market is delivering at market rate; in other communities (particularly very high income communities), they may be smaller and more modest than what the market is delivering. Parking, for example, is usually the minimum permitted by the code. In some communities where there is a wide range

in land cost per acre or per unit, it may be assumed that affordable units are built on land parcels in the lower portion of the cost range. KMA tries to develop a total development cost summary that represents the lower half of the average range, but not so low as to be unrealistic.

If the affordability gap is the difference between total development cost and the affordable sales price, the question sometimes arises as to how total development cost is defined. KMA defines total development costs as including land costs, construction costs, site improvements, architectural and engineering, financing and all other indirect costs, and an allowance for an industry profit (non-profit developers receive a development fee instead).

In a healthy and stable economy, when projects are feasible, the sales price is therefore the same as the total development cost inclusive of profit. In some economic cycles sales prices might enable larger than standard profits, as was the case in the 2002 to 2004 period, for example, when sales prices escalated ahead of construction and land costs, and sales prices were achieved that enabled higher than standard profit margins. In other market cycles, sales prices are so depressed that they are not high enough to cover total development costs and there is no profit. Projects are not feasible during these periods.

Non profit developers usually experience the same land and construction costs but do have differences in their financing costs, other indirect expenses and fee structures. The end result, on average, is a total cost that is comparable to that experienced by for profit developers. No prevailing wage requirement is assumed for either case. It is sometimes thought that the cost structure for non-profits is higher than for for-profit developers; for purposes of an affordability gap average, we take the position that costs are essentially the same.

Development of market rate rental units has been constrained for a number of years now in many California cities. Current market rent levels are not strong enough to cover the costs of new development and until recently, most multi-family land has been developed into condominiums where profits have been possible. As a result, total development cost summaries for rental units are drawn from current construction costs and the full complement of indirect costs that would be necessary to build an apartment structure. Affordability gaps are the difference between the value of the unit at restricted or affordable rent levels and the development costs.

With rental projects there is an additional issue of whether additional sources of assistance should be assumed in the analysis. Most rental projects built for lower income households have in recent years been developed using federal tax credits, state low interest financing from bond funds, and other resources. There is a difficulty in assuming that all projects for the lower income households will be developed using these outside sources, because these sources are not reliably available. Accessing these sources is also highly competitive due to the limited supply. Finally, the value of tax credits to the project can fluctuate widely. To address this situation, determining the affordability gap while assuming no outside sources is a sound and legitimate approach.

Excess Capacity of Labor Force

At the time this analysis has been conducted, the nation, regional and local economy are all experiencing a severe recession. Unemployment in California averages over 10%. In this context, the question has been raised as to whether there is excess capacity in the labor force to the extent that consumption impacts generated by new households will be in part, absorbed by existing jobs and workers, thus resulting in fewer net new jobs.

In response, an impact analysis of this nature is a one time impact requirement to address impacts generated over the life of the project. The current recession is a temporary condition; a healthy economy will return and the impacts will be experienced. In addition, because the nexus analysis is based on reduced housing prices, the impacts analyzed are less than would have been shown had the analysis been prepared when housing prices were at their peak, and the economy was healthier.

Finally, the economic cycle self adjusts. Development of new residential units is not likely to occur until conditions improve or there is confidence that improved conditions are imminent. When this occurs, the improved economic condition of the households in the local area will absorb the current underutilized capacity of existing workers, employed and unemployed. By the time new units become occupied, current conditions will have likely improved.

The Burden of Paying for Affordable Housing

Walnut Creek's inclusionary program does not place all burdens for the creation of affordable housing on new residential construction. The burden of affordable housing is borne by many sectors of the economy and society. A most important source in recent years of funding for affordable housing development comes from the federal government in the form of tax credits (which result in reduced income tax payment by tax credit investors in exchange for equity funding). Additionally there are other federal grant and loan programs administered by the Department of Housing and Urban Development and other federal agencies. The State of California also plays a major role with a number of special financing and funding programs. Much of the state money is funded by voter approved bond measures paid for by all Californians.

Local governments have increasingly played a greater role in affordable housing. Local redevelopment agencies in particular provide the single largest source in all of California. In addition, private sector lenders play an important role, some voluntarily and others less so with the requirements of the Community Reinvestment Act. Then there is the non-profit sector, both sponsors and developers that build much of the affordable housing.

In summary, all levels of government and many private parties, for profit and non-profit contribute to supplying affordable housing. Residential developers are not being asked to bear the burden alone any more than they are assumed to be the only source of demand or cause for

needing affordable housing in our communities. Based on past experience, the inclusionary program will fund only a small percentage of the affordable housing needed in the City of Walnut Creek.

Existing Relationships of Number of Jobs v Housing Units

The question has been raised about the existing number of residences in the county relative to the number of jobs. The nexus study assumed 1.58 workers per worker household (worker households are a subset of all households and exclude students, retired persons and other non-working households). In Contra Costa County in year 2000, which was a peak economy for jobs, the relationship was 1.08 jobs per household (all households). For year 2010, ABAG projected (in 2009) that the recessionary conditions would result in 0.96 jobs per household. Had these lower figures been used, the nexus study would have found a greater need for affordable housing.

In nearby cities studied in recent KMA nexus analyses, the resulting impacts range from 0.3 to 0.6 jobs per household depending on the income of the household. These are local population serving jobs that are clearly only a share of all jobs in the County.

Nexus Findings and RHNA

The nexus findings on jobs relative to number of households and the affordability needs of new worker households are also consistent with the ABAG's Regional Housing Needs Allocation (RHNA) assignments. In fact, the nexus findings for affordable housing impacts relative to new market rate units are considerably lower than the RHNA relationships.

In Walnut Creek, the nexus analysis suggested that 20% to 26% of all new housing should be affordable. The RHNA assignment for Walnut Creek overall is that almost 60% of all units constructed should be affordable to moderate income or below with the remainder built for above moderate income affordability. This relationship implies a far higher share of affordable units than that implied by the nexus findings.

The reasons that the RHNA affordable housing requirements are higher are many and will not be enumerated here. One major reason is that ABAG's econometric models take into account all jobs, not just the portion that serves local population which is the vast majority of the impacts computed in the IMPLAN model. It should also be noted that local population jobs are disproportionately lower compensation jobs vis a vis the economy as whole because they are heavily retail and service jobs in which lower paying occupations predominate. ABAG's econometric models also take into account demographic changes and other sources of demand for affordable housing.

In summary, the RHNA assignments create a far greater affordable housing responsibility for jurisdictions than any nexus impact findings for virtually all jurisdictions in the Bay Area.

APPENDIX II: RESIDENTIAL VALUES – MARKET AND AFFORDABLE

INTRODUCTION

This appendix section provides the building blocks for the values used in other sections of this report, by establishing both market values and affordable values for various types of residential units or projects potentially developed in the City of Walnut Creek.

Market values are based on a survey of newly developed residential units or projects in the City of Walnut Creek covering a range of residential types: single family detached, small-lot or zero-lot single family detached or attached townhomes, stacked condominiums, and rental apartments. Affordable values are calculated by City staff, starting from the Contra Costa County Area Median Income and amounts “affordable” for housing per state and local policies. The difference between market and affordable values for any given residential unit type, assuming a fixed unit size and occupying household, is referred to as the affordability gap. The affordability gaps play a major role in the calculation of the maximum nexus costs.

A. MARKET VALUES

Market Surveys and Timing Issues

The surveys summarized in Appendix II Tables 1 and 2 were conducted in winter/spring 2010. At the time of this writing, there remains uncertainty about how fast the housing recovery will occur, although it is likely that a return to the peak values of a few years ago will take many years.

Home prices have fallen significantly in the last several years. Since the market’s peak in 2006, appraisals of the same homes over time indicate that home values in Walnut Creek have declined about 30%. Since 2007, when there were a significant number of new units selling in Walnut Creek (see Table 1), home values have fallen 25%.

For purposes of this analysis, the objective is to not use the very bottom but the values that might reasonably be expected over the next several years. As a result, the values used in these analyses are significantly below those at the peak of the market, but slightly stronger than average values today, which have been severely impacted by the recent economy.

Market Prototypes

The market prototypes, for analysis and program design purposes, were developed based on recently built units in Walnut Creek, an examination of the development pipeline, discussion with City Staff, and prior work conducted by KMA for the City. The results are presented in Appendix II Table 3 and are as follows:

- For new single family detached units, the average unit size is assumed to be 2,400 square feet, an even mix of three and four bedroom units, built at a density of 8 units to the acre. The unit value is estimated at \$780,000, or \$325 per square foot.
- For the small-lot or zero-lot line detached or attached townhome units, the average unit size is assumed to be 1,800 square feet, built at a density of 20 units to the acre, with three bedrooms and attached parking. The unit value is estimated at \$625,000 or \$347 per square foot. This prototype is a combination of few development types, which in Walnut Creek share a similar range of densities, unit sizes and sales prices.
- For the stacked condominium units located in the Downtown, the average unit size is assumed to be 1,200 square feet, built at a density of 50 units to the acre, with a mix of one, two and three-bedroom units. The building is assumed to have four stories over podium parking, with additional below-grade parking. There are two parking spaces assumed per unit. The unit value is estimated at \$540,000 or \$450 per square foot.
- A high density rental apartment unit with an average unit size of 800 square feet and a mix of studios, one and two-bedroom units located in the Downtown. The building is assumed to have four stories over podium parking with additional parking located below-grade. The density is estimated at 85 units to the acre, and parking is estimated at 1.5 spaces per unit. The estimated feasible rent is \$2,470 per month, or \$3.09 per square foot. The capitalized unit value is approximately \$333,000 after operating expenses and a vacancy allowance are taken into account.

The nexus analysis is run for each of the prototypes. For the purposes of the nexus analysis, the values of the market rate prototypes selected for the nexus analysis should be at the lower end of the range for new construction. For some of the prototypes, the values are probably below the levels required to make projects feasible today. At these values, there will be no new construction until either the market recovers or the recession is prolonged to the point that land prices and construction costs decline sufficiently to make projects feasible at these values. These prototypes have been selected for use in the analysis to be conservative and to demonstrate that even using these conservative analysis starting points, the affordability requirements in the City of Walnut Creek's current Inclusionary Housing Ordinance and the in-lieu fees shown can be supported.

In addition to the market rate prototypes, KMA created two prototypes for the purposes of the mitigation cost analysis designed to reflect City-assisted units appropriate for housing the worker households quantified in the nexus analysis. Based on the average household size of worker households in Contra Costa County, and the typical housing type assisted by the City, KMA selected a two-bedroom rental unit to serve as the affordable rental unit prototype. Total development costs for this unit are estimated at \$375,000. For the affordable ownership unit, KMA selected a modest two-bedroom townhome unit located outside of the downtown; the market rate sales price for this unit is estimated at \$450,000.

B. AFFORDABLE VALUES

Affordable sales prices and rent levels are a function of the income level for which the unit is aimed to be affordable; the calculations were performed by the City.

The Area Median Income is the starting point of the affordable rent/sales price calculation. The California Department of Housing and Community Development (HCD) publishes the Area Median Income for each county annually. The Contra Costa County Area Median Income (AMI) in 2009 for a four person household is \$89,300. Appendix II Table 4 presents the income limits for very low, low, median and moderate incomes, for a range of household sizes.

The full set of data for a range of household sizes is provided in Appendix II, Tables 5 and 6. The analyses in the subsequent sections of this appendix use a number of different affordability levels or percent of AMI, depending on the application, as will be explained when used.

For purposes of calculating affordable rents and sales prices, current standards for relating number of bedrooms to household size are used. Studio units are for one person households, one bedroom units are for two person households, and so forth.

Affordable Sales Prices

The maximum affordable for sale unit price is calculated by the City of Walnut Creek. The affordability gap for the two-bedroom townhome unit is employed in the nexus model. The affordable sales prices are presented in Appendix II Table 5 for all unit sizes, and shown below for the two bedroom unit:

Moderate income at 110% AMI	2 bedroom unit	\$275,000
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The affordable sales prices shown in Appendix II Table 5 establish the prices at which the developer must sell the units regardless of the size of, and actual income of, the household to whom the units are sold. For example, a moderate income household can range from 80% to 120% of median income.

Affordable Rent Levels

For rentals, affordable rent is based on 30% of household income available for housing expenses, a standard used consistently throughout state and local programs. For the purposes of the nexus analysis, the top income of the qualifying range is used to determine maximum rental housing costs. For Low Income units, the range is 50% to 80% AMI; therefore, rents are calculated at 80% AMI. Affordable rents are shown for Very Low Income households (earning up to 50% of AMI) and Low Income households (earning up to 80% of AMI). Note that the rent levels are gross rent and utilities have not been netted out. Using gross rents at the upper end of the income range results in lower (more conservative) estimates of affordability gaps. Lower affordability gaps result in more conservative estimates of total nexus costs. The affordable

rents are presented in Appendix II Table 6 for a range of units sizes and summarized below for two-bedroom units:

Very Low income	2 bedroom unit	\$1,005 per month
Low Income	2 bedroom unit	\$1,490 per month

As with the sales prices, the rent levels so defined (by unit size and income category), along with the utility allowance schedule, determine the maximum amount that may be charged for a particular affordable unit.

C. AFFORDABILITY GAPS

The affordability gaps are the differences between total development costs of the units and the affordable values. In normal market conditions, the market value or sales price of the unit closely approximates total developments costs inclusive of profit. In the nexus study, the affordability gap is the amount of subsidy dollars required to bridge the difference between the two values.

For the purposes of the nexus analysis, the affordability gaps are based on minimal units that the City would be likely to assist. Estimates of development costs are taken from the market analysis described previously and pro formas received by the City from developers. Values are on the low end since profit levels are in many cases below what would be needed for feasibility. However, we believe that the estimates are appropriately conservative figures for use in the analysis.

For rental units, it is necessary to convert the net annual income to the value of the unit, which, when development is feasible, is at least as much or more than the cost to develop the unit. Rental unit value relative to net annual income is determined by the annual income net of operating expenses and vacancy allowance, converted to value at a capitalization rate. Affordable units are assumed to be exempt from property taxes, resulting in lower annual operating expenses than for market rate units. A capitalization rate of 6.5% is assumed. A few years ago capitalization rates were lower, resulting in higher values for the same income. KMA calculated the affordability gaps at Very Low Income and Low Income levels. For two-bedroom apartments units, the affordability gaps calculations are show in Appendix II Table 7.

The affordability gap conclusions are presented in Appendix II Table 8 and summarized below.

Affordability Gaps			
<i>Unit Type</i>	<i>Affordable Sale Price/ Unit Value</i>	<i>Development Cost</i>	<i>Affordability Gap</i>
2BR Rental-Very Low Income	\$135,000	\$375,000	\$240,000
2BR Rental-Low Income	\$224,000	\$375,000	\$151,000
2BR Townhome – Moderate Income	\$275,000	\$450,000	\$175,000

APPENDIX II TABLE I
 ASKING PRICES AND RESALE PRICES, NEW AND NEWER UNITS
 HOUSING NEXUS STUDY
 CITY OF WALNUT CREEK

<u>Project</u>	<u>Bd.</u>	<u>Ba.</u>	<u>SF</u>	<u>Base Price</u>	<u>\$/SF</u>	<u>Notes</u>
<u>NEW CONSTRUCTION, ASKING PRICES FOR INITIAL SALE</u>						
555 YVR						
	1	1	750	\$389,000	\$519	Condominium
	1+	1	1,000	\$499,000	\$499	Location: Ygnacio Valley Rd & N Main St.
	2	2	1,150	\$589,000	\$512	87 units planned; 87 released; 27 sold HOA dues: \$325

Source: Hanley Wood (survey date: 1/31/10)

RECENTLY BUILT UNITS; ASKING PRICES FOR INITIAL SALE AND SUBSEQUENT RESALE PRICES

THE MONTECITO

			<u>Resales in 2009/10</u>			
	1	1	634	\$190,000	\$300	Built as rental in 2002.
	1	1	681	\$200,000	\$294	Converted to condo in 2005.
	1	1	681	\$315,000	\$463	
	1	1	681	\$255,000	\$374	
	1	1	681	\$275,000	\$404	
	1	1	711	\$252,000	\$354	
	1	1	741	\$242,000	\$327	
	1	1	885	\$299,000	\$338	
	1	1	885	\$299,500	\$338	
	2	2	796	\$400,000	\$503	
	2	2	965	\$340,000	\$352	
	2	2	965	\$390,000	\$404	
			<u>Initial Asking Prices</u>			
	1	1	710	\$434,000	\$611	Asking prices 2/2007.
	1	1	710	\$462,000	\$651	
	1	1	710	\$373,000	\$525	
	1	1	710	\$399,000	\$562	
	1+	1	886	\$522,000	\$589	\$383 HOA dues.
	1+	1	886	\$521,000	\$588	
	1+	1	866	\$429,000	\$495	
	2	2	960	\$563,000	\$586	
	2	2	960	\$549,000	\$572	
	2	2	960	\$644,000	\$671	
	2	2	960	\$595,000	\$620	
	2	2	960	\$609,000	\$634	
	2+	2	1,128	\$724,000	\$642	

IRON HORSE PLACE CONDOMINIUMS

			<u>Resales in 2009/10</u>			
	2	2	1,285	\$430,000	\$335	Condominiums Built in 2006.
	2	2	1,688	\$522,000	\$309	
	2	2	1,177	\$419,000	\$356	
	2	2	1,285	\$450,000	\$350	

REGENT ON THE PARK

			<u>Resales in 2009/10</u>			
	2	2	1,246	\$630,000	\$506	Condominium
	2	2	1,246	\$700,000	\$562	
	2	2	1,246	\$565,000	\$453	
	3	2	1,311	\$800,000	\$610	
	3	2	1,311	\$850,000	\$648	
	3	2	1,311	\$896,000	\$683	

APPENDIX II TABLE I
 ASKING PRICES AND RESALE PRICES, NEW AND NEWER UNITS
 HOUSING NEXUS STUDY
 CITY OF WALNUT CREEK

<u>Project</u>	<u>Bd.</u>	<u>Ba.</u>	<u>SF</u>	<u>Base Price</u>	<u>\$/SF</u>	<u>Notes</u>
REGENT ON THE PARK (Cont'd)						
				<u>Initial Asking Prices</u>		
	1	1	1,035	\$415,000	\$401	Asking prices from 1/2003. \$436 HOA dues.
	2	2	1,163	\$525,000	\$451	
	2	2	1,209	\$525,000	\$434	
	2+	2	1,345	\$500,000	\$372	
	3	2	1,427	\$575,000	\$403	
	3+	2	1,630	\$525,000	\$322	
THE MERCER						
	1	1.5	886	<u>Resales in 2009/10</u>		
				\$360,000	\$406	Condominiums (some units rented).
				<u>Initial Asking Prices</u>		
	1	1.5	650	\$520,000	\$800	Asking prices from 2/2007 \$450 HOA dues.
	1+	1.5	800	\$620,000	\$775	
	2	2	1,000	\$771,000	\$771	
	2+	2	1,075	\$925,000	\$860	
	3	2.5	1,300	\$1,100,000	\$846	
CITY OAKS CONDOS						
				<u>Initial Asking Prices</u>		
	1	1	777	\$405,000	\$521	Condominiums Asking prices from 2/2007 \$299 HOA dues.
	2	2	945	\$435,000	\$460	
	2	2	1,001	\$417,000	\$417	
	2	2	1,010	\$496,000	\$491	
OAK COURT TOWNHOMES						
				<u>Resales in 2009/10</u>		
	3	2.5	1,414	\$470,000	\$332	Townhomes Built in 2006.
	3	2.5	1,458	\$505,000	\$346	
	3	2.5	1,412	\$472,500	\$335	
	3	2.5	1,458	\$485,000	\$333	
	3	2.5	1,401	\$480,000	\$343	
	3	2.5	1,401	\$485,000	\$346	
	3	2.5	1,436	\$480,000	\$334	
CITRUS WALK TOWNHOMES						
				<u>Initial Asking Prices</u>		
	2	1	849	\$549,900	\$648	Townhomes Asking prices from 2/2007 \$147 HOA dues.
	3	2	1,400	\$719,900	\$514	
	4	2.5	1,566	\$722,900	\$462	
	4	3	1,818	\$799,900	\$440	
COUNTRY GATE						
				<u>Resales in 2009/10</u>		
	4	3.5	2,391	\$720,000	\$301	Single family detached.
				<u>Initial Asking Prices</u>		
	3	3.5	2,401	\$688,800	\$287	Asking prices from 2/2005
	3	3.5	2,414	\$693,800	\$287	
	3	3.5	2,492	\$700,000	\$281	
KINROSS TERRACE						
				<u>Average Initial Sales Price</u>		
	3	2	2,445	\$1,210,000	\$495	Single Family Detached Late 2006 - Early 2007
	3	2.5	2,594	\$1,300,000	\$501	
	4	2.5	2,239	\$930,000	\$415	Does not include sales price of affordable unit.
	4	3.5	2,837	\$1,230,000	\$434	
	4	3	3,098	\$1,550,000	\$500	

Sources: Hanley Wood Market Intelligence, DataQuick.

**APPENDIX II TABLE 2
ASKING RENTS AT NEWER RENTAL PROJECTS
HOUSING NEXUS STUDY
CITY OF WALNUT CREEK**

<u>Project</u>	<u>SF</u>	<u>Low Rent</u>	<u>High Rent</u>	<u>Low \$/SF</u>	<u>High \$/SF</u>	<u>Notes</u>	
THE WINDSOR						Built 2009. 2383 North Main Street	
1 bedroom/1 bath	742	\$1,645	\$1,850	\$2.22	\$2.49		
1 bedroom/1 bath	759	\$1,705	\$2,205	\$2.25	\$2.91		
1 bedroom/1 bath	832	\$2,175		\$2.61			
1 bedroom/1.5 bath	749	\$2,250		\$3.00			
1 bedroom/1.5 bath	791	\$1,775	\$2,250	\$2.24	\$2.84		
1 bedroom/1.5 bath	890	\$1,905	\$2,250	\$2.14	\$2.53		
Avg 1-bedroom	794	\$1,909	\$2,139	\$2.40	\$2.69		
2 bedroom/2 bath	1,028	\$2,195	\$2,295	\$2.14	\$2.23		
2 bedroom/2 bath	1,059	\$2,195	\$3,075	\$2.07	\$2.90		
2 bedroom/2 bath	1,080	\$2,495	\$3,075	\$2.31	\$2.85		
2 bedroom/2 bath	1,088	\$2,525	\$3,075	\$2.32	\$2.83		
Avg 2-bedroom	1,064	\$2,353	\$2,880	\$2.21	\$2.71		
AVALON WALNUT CREEK							Built 2010. At Pleasant Hill BART. Unincorporated Contra Costa County.
Studio	525	\$1,295		\$2.47			
Studio	530	\$1,295		\$2.44			
Avg Studio	528	\$1,295		\$2.45			
1 bedroom/1 bath	709	\$1,760		\$2.48			
1 bedroom/1 bath	863	\$1,870		\$2.17			
Avg 1-bedroom	786	\$1,815		\$2.31			
2 bedroom/2 bath	1,115	\$2,570		\$2.30			
2 bedroom/2 bath	1,205	\$2,570		\$2.13			
2 bedroom/2 bath	1,214	\$2,575		\$2.12			
2 bedroom/2.5 bath	1,649	\$2,700		\$1.64			
Avg 2-bedroom	1,296	\$2,604		\$2.01			
3 bedroom/2 bath	1,305	\$2,820		\$2.16			
3 bedroom/2 bath	1,305	\$2,820		\$2.16			
Avg 3-bedroom	1,305	\$2,820		\$2.16			
THE MERCER						Built 2007. Built as condominiums, then rented.	
1 bedroom/1.5 bath	884	\$2,005		\$2.27			
1 bedroom/1.5 bath	893	\$2,170		\$2.43			
1 bedroom/1.5 bath + den	1,054	\$2,375		\$2.25			
1 bedroom/1.5 bath + den	1,056	\$2,190		\$2.07			
1 bedroom/1.5 bath + den	1,065	\$2,275		\$2.14			
Avg 1-bedroom	990	\$2,203		\$2.22			
2 bedroom/2 bath	1,223	\$2,650		\$2.17			
2 bedroom/2 bath	1,232	\$2,850		\$2.31			
2 bedroom/2 bath + den	1,391	\$2,770		\$1.99			
2 bedroom/2 bath + den	1,400	\$2,985		\$2.13			
Avg 2-bedroom	1,312	\$2,814		\$2.15			
3 bedroom/2.5 bath	1,679	\$3,060		\$1.82			
3 bedroom/2.5 bath	1,714	\$3,335		\$1.95			
Avg 3-bedroom	1,697	\$3,198		\$1.88			

**APPENDIX II TABLE 2
ASKING RENTS AT NEWER RENTAL PROJECTS
HOUSING NEXUS STUDY
CITY OF WALNUT CREEK**

Project	SF	Low Rent	High Rent	Low \$/SF	High \$/SF	Notes
ARCHSTONE WALNUT CREEK						
1 bedroom/1 bath	681	\$1,315	--	\$1.93		Built 1987 Remodeled 2008 1445 Treat Blvd.
1 bedroom/1 bath	697	\$1,280	\$1,330	\$1.84	\$1.91	
1 bedroom/1 bath	717	\$1,330	\$1,435	\$1.85	\$2.00	
1 bedroom/1 bath	796	\$1,480	--	\$1.86		
Avg 1-bedroom	723	\$1,351	\$1,383	\$1.87	\$1.91	
2 bedroom/2 bath	958	\$1,940		\$2.03		
PARK LAKE						
1 bedroom/1 bath	718	\$1,315		\$1.83		Built 1983 Remodeled 2007 260 Park Lake Circle
2 bedroom/2 bath	1,006	\$1,830		\$1.82		
IVY HILL						
1 bedroom/1 bath	665	\$1,515	--	\$2.28		Built 2002 1700 Botelho Drive
1 bedroom/1 bath	739	\$1,725	--	\$2.33		
1 bedroom/1.5 bath	888	\$1,750	--	\$1.97		
Avg 1-bedroom	764	\$1,663		\$2.18		
2 bedroom/2 bath	897	\$2,195	--	\$2.45		
2 bedroom/2 bath	1,022	\$2,295	--	\$2.25		
Avg 2-bedroom	960	\$2,245		\$2.34		

Sources: Move.com, Apartment Guide.

**APPENDIX II TABLE 3
RESIDENTIAL PROTOTYPES
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK**

	<u>Single Family Detached</u>	<u>Small Lot/Zero Lot Line to Townhome</u>	<u>Condominium</u>	<u>Rental</u>
Example Projects	1563 Geary Road Sunny Cove Cobble Lane Overlook Homes	1539 Geary Country Gate Almond Lofts/Bungalows Sunnyvale Ave. Townhomes	The Village VillageWalk The Mercer Regent on the Park Iron Horse Place Condos	BART Transit Village Windsor Apartments Ivy Hill The Riviera
Density	8 dua	20 dua	50 dua	85 dua
Building Type	Two-story homes	Three-story attached	Four stories over podium	Four stories over podium
Unit Mix	50% 3BR 50% 4BR	100% 3BR	20% 1BR 40% 2BR 40% 3BR	10% Studio 60% 1BR 30% 2BR
Unit Size	2,400 sf	1,800 sf	1,200 sf	800 sf
Average No. of Bedrooms	3.5 BR	3.0 BR	2.2 BR	1.2 BR
Construction Type	Woodframe	Woodframe	Woodframe	Woodframe
Parking Type	Attached garage	Attached garage	Structured, partially below grade	Structured, partially below grade
Average Parking Spaces	2-car garage	2-car garage	2 spaces per unit	1.5 spaces per unit
Market Sales Price/Rent per square foot	\$780,000 \$325	\$625,000 \$347	\$540,000 \$450	\$2,470 \$3.09

**APPENDIX II TABLE 4
 2009 INCOME LIMITS FOR CONTRA COSTA COUNTY
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK, CA**

Household Size	1 person	2 persons	3 persons	4 persons	5 persons	6 persons
Very Low	\$31,250	\$35,700	\$40,200	\$44,650	\$48,200	\$51,800
Low	\$46,350	\$53,000	\$59,600	\$66,250	\$71,550	\$76,850
Median	\$62,500	\$71,450	\$80,350	\$89,300	\$96,450	\$103,600
Moderate	\$75,000	\$85,700	\$96,450	\$107,150	\$115,700	\$124,300

Source: California Department of Housing and Community Development, April 2, 2009.

**APPENDIX II TABLE 5
AFFORDABLE SALES PRICES
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

Number of Bedrooms	1 bedroom	2 bedrooms	3 bedrooms	4 bedrooms
Household Size	2 persons	3 persons	4 persons	5 persons
Median Income	\$71,450	\$80,350	\$89,300	\$96,450
110% of Median	\$78,600	\$88,385	\$98,230	\$106,095
Maximum Affordable Sales Price	\$242,000	\$275,000	\$308,000	\$339,000

Sources: City of Walnut Creek.

**APPENDIX II TABLE 6
 2009 AFFORDABLE RENT LEVELS
 RESIDENTIAL NEXUS ANALYSIS
 CITY OF WALNUT CREEK, CA**

Number of Bedrooms	Studio	1 bedroom	2 bedrooms	3 bedrooms
Household Size	1 person	2 persons	3 persons	4 persons
Median Income	\$62,500	\$71,450	\$80,350	\$89,300
<u>Low Income Units</u>				
Maximum Affordable Rent	\$1,159	\$1,325	\$1,490	\$1,656
<u>Very Low Income Units</u>				
Maximum Affordable Rent	\$781	\$893	\$1,005	\$1,116

Sources: City of Walnut Creek.

**APPENDIX II TABLE 7
UNIT VALUES SUPPORTED BY AFFORDABLE RENTS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

Two-Bedroom Unit - Three Person Household

<u>Income Level</u>	<u>Rent</u>		<u>Less</u>	<u>NOI</u>	<u>Unit</u>	<u>Affordability</u>
	<u>Month</u>	<u>Year</u>	<u>Op Exp¹</u>		<u>Value</u>	
					<u>Supported²</u>	<u>Gap Per Unit³</u>
Feasible New 2 BR Units	\$2,698	\$32,375	(\$8,000)	\$24,375	\$375,000	
Affordable Units						
Very Low Income	\$1,005	\$12,060	(\$3,300) ⁴	\$8,760	\$135,000	(\$240,000)
Low Income	\$1,490	\$17,880	(\$3,300)	\$14,580	\$224,000	(\$151,000)

¹ General operating expenses estimated by KMA.

² Net operating income capitalized at 6.5%.

³ Gap is the difference between value supported at market rents and value supported at affordable rents.

⁴ Affordables units are assumed to be exempt from property taxes.

Totals may not sum due to rounding.

**APPENDIX II TABLE 8
AFFORDABILITY GAPS
RESIDENTIAL NEXUS ANALYSIS
CITY OF WALNUT CREEK, CA**

<u>Housing Type</u>	<u>Income Category</u>	<u>Total Development Cost¹</u>	<u>Affordable Sales Price/ Value²</u>	<u>Affordability Gap</u>
2 BR Townhome ³	Moderate Income	\$450,000	\$275,000	(\$175,000)
2 BR Rental	Low Income	\$375,000	\$224,000	(\$151,000)
2 BR Rental	Very Low Income	\$375,000	\$135,000	(\$240,000)

1. Includes profit.

2. See Appendix II Tables 5 and 7.

3. Assumes a location outside of the downtown.