## Draft Report

The Economics of Land Use


Prepared by:
Economic \& Planning Systems, Inc.

February 20, 2013
Economic \& Planning Systems, Inc.
2501 Ninth Street, Suite 200
Berkeley, CA 94710-2257
5108419190 tel
5108419208 fax

Berkeley
Denver
Los Angeles
Sacramento
Prepared for:

City of Santa Rosa

2013

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

www.epsys.com

## Table of Contents

Executive Summary ..... 1

1. Affordability Gap Analysis ..... 7
Product Type ..... 7
Development Cost Assumptions ..... 10
Revenue Assumptions ..... 11
Affordability Gap Results ..... 11
2. Demand-Based Nexus Fee Calculation ..... 13
Market-Rate Household Income Levels ..... 13
Household Expenditures and Job Creation by Income Level ..... 13
Demand for Public-Sector Workers ..... 17
Combined Demand for Income-Qualified Workers ..... 17
Fee Calculation ..... 18
Appendix A: Data from Comparable TransactionsAPPENDIX B: Household Expenditures and Employment GenerationAppendix C: Income Levels for Worker Households
APPENDIX D: Schedule of Maximum Fees by Unit Price

## List of Figures and Tables

Figure 1 Illustration of Nexus-Based Housing Fee Methodology ..... 2
Table 1 Summary of Housing Impact Fees or Unit Equivalents per Market-Rate Unit ..... 6
Table 2 Financing Gap Analysis -- For-Sale Product Type ..... 8
Table 3 Financing Gap Analysis -- Rental Product Type ..... 9
Table 4 Income Required to Purchase Homes at Various Prices ..... 14
Table 5 Santa Rosa Affordable Housing Income Limits ..... 19
Table 6 Maximum Impact Fee Calculations - \$200,000 Unit ..... 20
Table 7 Maximum Impact Fee Calculations - \$400,000 Unit ..... 21
Table 8 Maximum Impact Fee Calculations - \$600,000 Unit. ..... 22
Table 9 Maximum Impact Fee Calculations - \$800,000 Unit. ..... 23
Table 10 Maximum Impact Fee Calculations - \$1,000,000 Unit ..... 24
Table 11 Maximum Impact Fee Calculations - \$1,200,000 Unit ..... 25

## EXECUTIVE SUMMARY

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

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

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

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

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

Figure 1
Illustration of Nexus-Based Housing Fee Methodology

Step \#1
Affordability Gap Analysis
(Subsidy Required to Construct
Affordable Units)

equals


Step \#2
Affordable Housing Demand (Generated by Market Rate Housing)

Market Rat
Home Price
Home Price


Total Demand for Affordable Units for Workers

Step \#3
Compute Impact Fee per Market Rate Unit


## multiplied

by


## Maximum

 Supportable Nexus Based Housing Fee (per market rate unit)1. The costs to construct housing units affordable to many households exceed those units' values based on the rents or prices that the households can afford to pay. The estimated subsidy required to construct affordable housing units in Santa Rosa ranges from roughly $\$ 8,400$ for a Median Income household to $\mathbf{\$ 1 4 1 , 8 0 0}$ for a Very Low Income household earning 50 percent of AMI. Households with above-median incomes do not appear to require subsidies, as affordable prices for such households can support the costs of construction.

An "affordability gap analysis" evaluates whether or not the costs to construct affordable units exceed the values of units that are affordable to lower- and moderate-income households. For each affordable housing income level - households with incomes at 50, 60, 80, 100, and 120 percent of Area Median Income (AMI) - this analysis estimates the subsidy required to construct affordable housing units.

The affordability gap analysis assumes that the average affordable unit for all income levels will be a 2-bedroom unit in a multifamily development. The estimated costs to construct the prototypical affordable unit are based on recent Santa Rosa (and other Sonoma County) development projects and transactions, as well as other development cost data sources. The costs of land acquisition are included in these development cost calculations.

A household's ability to pay is estimated based on standard percentages of income available for housing costs at each household income level. Income available for housing costs is then converted into a monthly affordable rent and a capitalized unit value or an affordable mortgage payment and supportable home price. This unit value is then compared to the costs of development to determine the subsidy, if any, required to make the unit affordable to each income level.
2. The demand for affordable housing generated by the expenditures of new households in Santa Rosa increases along with the market-rate home value (and related owner income). For example, a unit that sells for $\$ 400,000$ is estimated to create demand for 0.153 affordable housing units, while an $\$ 800,000$ unit creates demand for $\mathbf{0 . 2 6 1}$ affordable units.

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

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

This analysis evaluates the demand for affordable housing generated by a range of unit sale prices. For each unit price level, the demand-based nexus fee calculation involves the following steps:
A. Market-Rate Household Income Levels. The required income levels of households occupying new market-rate housing are derived based on the unit's mortgage, property taxes, insurance, and other fees, assuming standard housing cost expenses as a proportion of overall household income. For example, a typical household purchasing a $\$ 400,000$ market-rate home would have an income of roughly $\$ 97,000$, if they spend 30 percent of their income on housing costs.
B. Household Expenditures. Based on the household income computed in Step A, Consumer Expenditure Survey data is used to evaluate the typical spending patterns of the household. This analysis provides an estimate of how much the household spends on specific categories of expenditures, such as "Food at Home." As the households' income increases with the value of the market-rate units, the total spending on goods and services also increases. The Consumer Expenditure Survey also indicates that these relationships are not linear (e.g., a household with twice the income does not necessarily spend twice as much on food).
C. Job Creation and Worker Households. Having estimated the households' spending on various items, that spending is then converted into an estimation of jobs created. For each expenditure category, data regarding average worker wages and the ratio between gross business receipts and wages are used to translate these household expenditures into the total number of private-sector workers. For selected public-sector jobs that typically grow in proportion to the local population size (e.g., teachers), the demand for new workers is estimated by relating current levels of employment in such categories to the current population and applying this ratio to future development. Because each new worker does not represent an independent household (Santa Rosa has an average of 1.56 workers per working household), the total number of new households created is somewhat less than the number of new jobs created. EPS has further adjusted the household formation rates to reflect the fact that a certain proportion of workers will not form their own households, particularly those of younger ages. ${ }^{\mathbf{1}}$
D. Worker Households by Income Category. Each worker household generated is assigned to an income category-represented as a proportion of AMI ranging from 50 to 120 percent-based on its estimated gross wages. This provides the total number of households generated at each income level by construction of market-rate units at various price points. The results indicate that residents of lower-priced units generate fewer worker households requiring affordable housing than do residents of higher-priced units.

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

[^0]3. This analysis calculates the fees that could be charged to fully mitigate the impact that new market-rate housing has on Santa Rosa's affordable housing demand at various representative price points. These fees could range from $\mathbf{\$ 8 , 9 3 0}$ for $\mathbf{\$ 2 0 0}, 000$ unit to $\mathbf{\$ 3 1 , 5 5 0}$ for $\mathbf{\$ 1 , 2 0 0 , 0 0 0}$ units.

The nexus fee is calculated by applying the number of affordable units needed by income qualified households to the affordability gap for each housing income category. This calculation is made for several different home prices. Table 1 summarizes the maximum nexus-based fees calculated for representative home prices. The City may also consider whether to allow developers to provide affordable units within their projects, rather than paying the nexus-based fee. Table 1 illustrates the proportions of affordable units that correspond to the fee calculation and demands created by the market-rate units. For instance, a project offering $\$ 600,000$ units would effectively mitigate the demand being created by the market-rate units if it provided 0.225 affordable units for each market-rate unit.

Table 1
Summary of Housing Impact Fees or Unit Equivalents per Market-Rate Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Market-Rate Unit Price | Maximum Impact Fee | Percent of Price | Affordable Units Generated/100 Market-Rate Units |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Low (50\%) | Low (60\%) | Low (80\%) | Med (100\%) |
| \$200,000 | \$8,930 | 4.5\% | 10.2 | 4.3 | 1.0 | 4.1 | 0.7 |
| \$400,000 | \$13,650 | 3.4\% | 15.3 | 6.5 | 1.8 | 5.8 | 1.2 |
| \$600,000 | \$21,089 | 3.5\% | 22.5 | 10.1 | 3.4 | 7.4 | 1.6 |
| \$800,000 | \$24,515 | 3.1\% | 26.1 | 11.4 | 4.5 | 8.5 | 1.7 |
| \$1,000,000 | \$26,564 | 2.7\% | 28.3 | 11.9 | 5.5 | 9.3 | 1.7 |
| \$1,200,000 | \$31,550 | 2.6\% | 33.5 | 14.2 | 6.5 | 10.8 | 2.0 |

Source: Economic \& Planning Systems, Inc.

## 1. Affordability Gap Analysis

For any nexus-based affordable housing fee calculation, it is necessary to estimate the subsidy required to construct affordable housing units. Table 2 shows the subsidy needed to produce multifamily for-sale housing that is affordable to low- through moderate-income households ( 60 through 120 percent of AMI), while Table 3 calculates the subsidies for rental housing affordable to very low- through moderate-income households ( 50 through 120 percent of AMI).

## Product Type

While the nexus fees calculated herein are based on demands created by for-sale housing that may be single-family or multifamily, the analysis assumes that new lower-income worker households would actually be housed in multifamily developments in Santa Rosa. According to City staff, at this time in Santa Rosa the subsidies available are most efficiently used to develop multifamily affordable units. As a result, the subsidy required to construct affordable units of this multifamily product type is used to determine the fee that applies to all types of development. EPS has assumed that these projects will have an average density of 30 units per acre and will adhere to Santa Rosa Code that requires 2.5 parking spaces per unit, assumed to be surface parking.

In order to determine the average household size of future affordable housing units, EPS used two estimates from the US Census American Community Survey. The Census indicates that the average household size is 2.71 people and the average family size in Santa Rosa is 3.44 people. Each of these figures rounds to an average of three people per unit, so EPS uses this assumption to determine the applicable income limits for the new units.

California State law (California Health and Safety Code Section 50052.5) assumes that a 2bedroom unit is occupied by a 3-person household, and this assumption is used in this analysis. Typically, a 2-bedroom unit in the Bay Area has a gross size of about 1,100 square feet (accounting for shared lobbies, hallways, etc.) and a net size of 950 square feet.

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

Table 2
Financing Gap Analysis -- For-Sale Product Type
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | Low | 2 Stories Multifamily With Surface Parking |

[1] The land costs represented are based on the weighted average listed price for multifamily land in the Santa Rosa market area, as shown in Appendix A.
[2] Includes costs for labor and materials.
[3] Includes costs for architecture and engineering; entitlement and fees; project management, marketing, commissions, and general administration; financing and charges; insurance; and contingency.
[4] A review of total development costs for four Burbank Housing developments (Fife Creek Commons, Windsor Redwoods, Amorosa Village I and Amorosa Village II) comprising 263 family rental units constructed in 2011 and 2012 indicate average costs per unit at nearly $\$ 370,000$ or over $\$ 350 / \mathrm{SF}$. The costs shown here are thus considered optimistic and yield a more modest subsidy requirement.
[5] Based on HUD 2012 income limits for Sonoma County.
[6] Assumes housing costs to be $30 \%$ of gross household income for low-income and moderate-income households.
[7] Homeowner association fees and insurance costs provided by Sonoma County CDC based on recent for-sale affordable housing projects.
[8] Exceeds basic 1.00\% tax rate to include allowance for special assessment districts.
[9] Income available for mortgage payments consists of total income available for housing less property taxes, insurance and HOA fees.
[10] Reflects CalHFA mortgage rates, as discussed with Sonoma County CDC.
[11] Assumes a 5\% down payment.
Sources: Sonoma County housing developers; Sonoma County Community Development Commission; Economic \& Planning Systems, Inc.

Table 3
Financing Gap Analysis -- Rental Product Type
Santa Rosa Housing Impact Fee, EPS \#121110

| Item | 2 Stories Multifamily With Surface Parking |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \hline \text { Very Low } \\ & \text { Income } \\ & \text { (50\% AMI) } \end{aligned}$ | Low Income $(60 \% \mathrm{AMI})$ | Low Income ( $80 \%$ AMI) | Median Income (100\% AMI) | Moderate Income $(120 \% \mathrm{AMI})$ |

## Development Program Assumptions

| Density/Acre | 30 | 30 | 30 | 30 |
| :--- | ---: | ---: | ---: | ---: |
| Average Gross Unit Size | 1,100 | 1,100 | 1,100 | 1,100 |
| Average Net Unit Size | 950 | 950 | 950 | 900 |
| Average Number of Bedrooms | 2 | 2 | 2 | 9 |
| Average Number of Persons per Household | 3 | 3 | 3 | 3 |
| Parking Spaces/Unit | 2.50 | 2.50 | 2.50 | 3 |

## Cost Assumptions [1]

| Land/Acre [2] |  |  | \$379,146 | \$379,146 | \$379,146 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Land/Unit | \$59,168 | \$59,168 | \$12,638 | \$12,638 | \$12,638 |
| Direct Construction Costs/Gross SF [3] |  |  | \$140 | \$140 | \$140 |
| Direct Construction Costs/Unit |  |  | \$154,000 | \$154,000 | \$154,000 |
| Parking Construction Costs/Space |  |  | \$3,000 | \$3,000 | \$3,000 |
| Parking Construction Costs/Unit |  |  | \$7,500 | \$7,500 | \$7,500 |
| Subtotal, Direct Costs/Unit | \$212,147 | \$212,147 | \$161,500 | \$161,500 | \$161,500 |
| Indirect Costs as a \% of Direct Costs [4] |  |  | 35\% | 35\% | 35\% |
| Indirect Costs/Unit | \$102,801 | \$102,801 | \$56,525 | \$56,525 | \$56,525 |
| Total Cost/Unit | \$374,116 | \$374,116 | \$230,663 | \$230,663 | \$230,663 |
| Less Value of 4\% Tax Credits [5] | 40\% | 40\% | 0\% | 0\% | 0\% |
| Net Development Costs per Unit | \$224,469 | \$224,469 | \$230,663 | \$230,663 | \$230,663 |
| Maximum Supported Unit Value |  |  |  |  |  |
| Household Income [6] | \$37,200 | \$44,640 | \$58,500 | \$74,350 | \$89,200 |
| Income Available for Housing Costs/Year [7] | \$11,160 | \$13,392 | \$17,550 | \$22,305 | \$26,760 |
| Operating Expenses per Unit/Year [8] | \$6,200 | \$6,200 | \$6,200 | \$8,968 | \$8,968 |
| Net Operating Income | \$4,960 | \$7,192 | \$11,350 | \$13,337 | \$17,792 |
| Capitalization Rate [9] | 6.0\% | 6.0\% | 6.0\% | 6.0\% | 6.0\% |
| Total Supportable Unit Value | \$82,667 | \$119,867 | \$189,167 | \$222,284 | \$296,534 |
| Financing Gap | \$141,803 | \$104,603 | \$41,497 | \$8,379 | \$0 |

[^1]
## Development Cost Assumptions

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

This analysis assumes that the City will use the proceeds of the nexus-based fees as subsidies for affordable housing developers. EPS has gathered development cost information from six recent affordable housing projects in Sonoma County, as shown on Appendix A Table A-1. For units required for households earning 50 to 60 percent of Area Median Income, subsidies known as "4\% Low Income Housing Tax Credits (LIHTC)" are typically available to offset roughly 40 percent of the total costs of development. Table 3 uses the "weighted average" cost information from the six recent affordable housing projects as the assumed base costs of development for these units at 50 to 60 percent of AMI, and then reduces those costs by 40 percent to yield the net costs to the developer.

For units serving households earning 80 to 120 percent of AMI, no such tax credit subsidies are available. However, it is generally recognized that the costs for LIHTC-eligible projects are significantly higher than the costs for market-rate projects built by for-profit builders. ${ }^{2}$ EPS has investigated the prices of appropriately zoned land served by infrastructure, as shown on
Appendix Table A-2. For this analysis, EPS has assumed that land costs for projects eligible for tax credits would reflect the recent land purchases for such projects, while land purchases for projects at higher incomes levels would actually be significantly lower, consistent with typical market-rate transactions. EPS has further estimated the costs of direct and indirect development costs for multifamily housing based on reviews of recent Bay Area project pro formas, with adjustments for location factors. In addition, EPS has reviewed all these cost estimates with Sonoma County housing developers to ensure that they are reasonably representative of expectations. ${ }^{3}$ As shown on Table 3, the total costs for apartment development for households earning 80 to 120 percent of AMI are estimated to be roughly 40 percent below the total costs for LIHTC-eligible projects at 50 and 60 percent of AMI - a differential that EPS believes represents a conservative assumption but is reflective of the actual known costs of affordable projects (shown on Appendix Table A-1) and the expected costs of market-rate development as vetted with locally active developers.

[^2]Table 2 shows the same types of calculations for for-sale multifamily housing, to determine if it would be more cost-effective to provide for-sale units rather than rental units for the low-income workers generated in the City. As shown, the for-sale unit costs are similar to those for the 80 to 120 percent AMI rental units on Table 3, but are slightly higher due to higher levels of finish and liability insurance required for condominium development, and also include a modest profit margin for the developers. For-sale projects are not eligible for LIHTC funding, so no offsetting subsidy is shown here, but likewise the analysis does not assume a major difference in costs associated with nonprofit builders.

## Revenue Assumptions

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

- Income Levels- This analysis estimates the subsidy required to produce units for households earning 50, 60, 80, 100, and 120 percent of Area Median Income for a three-person household. In 2012, AMI for these households was $\$ 74,350$, as shown in the California Department of Housing and Community Development's (HCD's) income limits chart.
- Percentage of Gross Household Income Available for Housing Costs—HCD standards on overpaying for rent indicate that households earning less than 80 percent of AMI should pay no more than 30 percent of their gross income on housing costs. For this analysis, EPS has assumed that all households shall spend 30 percent of their gross income on housing costs, including rent in rental projects or mortgage payments, homeowner association fees, insurance, and property taxes for for-sale units.
- Operating Costs for Rental Units-The analysis assumes that apartment operators incur annual operating costs of $\$ 6,200$ per unit, which include the cost of utilities, for units affordable at 80 percent of AMI or below. EPS has assumed the units for median income households and above would have similar operating costs but would be built by for-profit builders and thus also subject to property taxes.


## Affordability Gap Results

Table 2 shows the estimated subsidies for construction of affordable for-sale units for low and moderate-income households. As shown, a unit for a household at 60 percent of AMI is expected to require a subsidy of roughly $\$ 125,000$, and units for higher-income households require lower subsidies (or none, for units at 120 percent of AMI). Table 3 shows the subsidies for construction of for-rent apartments for households at various income levels. For any equivalent income level (e.g., 60 percent of AMI), a comparison of Tables $\mathbf{2}$ and $\mathbf{3}$ indicates the affordability gap for low-income rental units is estimated to be less than if the same unit were offered for-sale. This is generally due to slightly higher development costs for for-sale units (including the need for immediate rather than longer-term profit returns) and the fact that forsale projects are not eligible for LIHTC funding.

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

## 2. Demand-Based Nexus Fee Calculation

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

## Market-Rate Household Income Levels

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

The income required to purchase a unit at a particular price point is based on assumptions of the standard down payment, financing terms, property taxes, and other costs related to owning a home. These housing costs typically account for 30 percent of a household's income, and therefore, by knowing these costs, the required income to purchase each unit can be estimated. As shown, required household incomes range from approximately $\$ 53,600$ for a $\$ 200,000$ unit to roughly $\$ 268,800$ for a $\$ 1,200,000$ unit.

## Household Expenditures and Job Creation by Income Level

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

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

Table 4
Income Required to Purchase Homes at Various Prices
Santa Rosa Housing Impact Fee, EPS \#121110

| Assumed <br> Base <br> Price | Down Payment at 20\% | Beginning <br> Mortgage <br> Principal | Annual Mortgage Payment [1] | Annual Taxes at 1.25\% [2] | Annual HOA + Insurance Fees [3] | Total Annual Housing Costs | Required Household Income [4] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$200,000 | \$40,000 | \$160,000 | \$10,408 | \$2,500 | \$3,180 | \$16,088 | \$53,600 |
| \$400,000 | \$80,000 | \$320,000 | \$20,816 | \$5,000 | \$3,180 | \$28,996 | \$96,700 |
| \$600,000 | \$120,000 | \$480,000 | \$31,225 | \$7,500 | \$3,180 | \$41,905 | \$139,700 |
| \$800,000 | \$160,000 | \$640,000 | \$41,633 | \$10,000 | \$3,180 | \$54,813 | \$182,700 |
| \$1,000,000 | \$200,000 | \$800,000 | \$52,041 | \$12,500 | \$3,180 | \$67,721 | \$225,700 |
| \$1,200,000 | \$240,000 | \$960,000 | \$62,449 | \$15,000 | \$3,180 | \$80,629 | \$268,800 |

[1] Assumes 5.0\% interest for 30 years, reflecting higher than current rates but well below historical averages.
[2] Tax rate allows for some special assessments above $1.00 \%$ basic tax rate.
$\stackrel{\rightharpoonup}{\perp} \quad[3]$ A Redfin.com survey of Sonoma County homes for sale in 44 different projects on May 5, 2012 indicates an average HOA fee of $\$ 265 / \mathrm{month}$ for units listed at $\$ 300,000$ or less. Some of these projects may include insurance costs in the HOA fees, while others may not. To be conservative, EPS has assumed that the average HOA fee does include insurance. See Appendix A.
[4] Assumes households spend $30 \%$ of total household income on total annual housing costs.
Source: Redfin.com; Economic \& Planning Systems, Inc.

Repairs." Interestingly, household expenditures by category are not uniformly proportional to household income levels. For example, households earning around \$53,600 (adequate to purchase a $\$ 200,000$ unit) spend roughly 11.6 percent of their income on food and drink (at home and eating out), while households earning $\$ 268,800$ who can afford to purchase a $\$ 1,200,000$ unit spend only about 6.4 percent of their income on food and drink. Because of these and other differences in proportionate spending, the expenditure profile varies at different income levels.

The homebuyer household's typical expenditures were converted to the number of jobs created by their spending. The first step in this process is to determine how much of an industry's gross receipts are used to pay wages and employee compensation. EPS relied on data from the Economic Census, ${ }^{4}$ which provides employment, gross sales, and payroll data by industry for Santa Rosa. In certain instances, Santa Rosa data was not available for every Economic Census industry-in those cases, EPS relied on statewide Economic Census data for that industry.

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

After determining the amount of the household's expenditures that were used for employee wages, EPS estimated the number of employees those aggregate wages represent. EPS calculated the number of workers supported by that spending using the average wage per worker (also from the 2007 Economic Census). These wages ranged from a low of roughly $\$ 14,500$ per year for workers in the food services industry to a high of more than $\$ 86,000$ average salary for legal services. ${ }^{5}$

This methodology recognizes that a range of occupations and incomes exist in a given industry sector. For instance, the methodology used to generate Tables B-1 to B-5 in Appendix B distinguishes between the typical incomes of workers in different types of retail stores (e.g., "food and beverage stores" versus "general merchandise stores"), rather than assuming all retail sector workers earn the same income. However, the average wage is used for each subcategory of industry employment and represents a reasonable proxy for the range of incomes in

[^3]that group: while some employees will have higher wages and require lower subsidies, others will have lower incomes and require higher subsidies. Using the average approximates the total housing subsidy needed by workers in that industry.

To calculate the number of households supported by the expenditures of market-rate housing units, EPS estimated the employees' household formation rates. Importantly, employees generated from the increase in housing units do not all form households; some employees, in the retail and food services industries in particular, are young workers and do not form households. Data from the Bureau of Labor Statistics indicates that 12.5 percent of retail/restaurant workers are age $16-19$, but an average of only 1.9 percent of workers in other industries. EPS applied these discounts to household formation to get a more accurate calculation of households formed by the employees and the average total incomes of those households.

To get the overall households' income rather than the individual workers', the wages of workers forming households were multiplied by the average of approximately 1.56 workers per working household in Santa Rosa. ${ }^{6}$ This assumption implies the workers in a given household will have roughly equivalent pay per hour. While certainly there will often be some variation in wages per employee within a household, on average this assumption is reasonable because it implies comparable levels of education and training among all workers in a household. The average household incomes then are allocated to various income categories to estimate the number of affordable housing units demanded in each income category ( 50 through 120 percent of AMI).

A simplified example of these calculations follows:

| A. | Number of Households (prototype project) | 1,000 |
| :--- | :--- | ---: |
| B. | Average Household Income (in the project) | $\$ 125,000$ |
| C. | Aggregate Household Income (A x B) | $\$ 125$ million |
| D. | Average Income Spent on Retail (Consumer Expenditure Survey) | $\$ 40,000$ |
| E. | Aggregate Retail Spending (A x D) | $\$ 40$ million |
| F. | Retail Gross Receipts: Payroll Ratio (Economic Census) | $8: 1$ |
| G. | Estimated Retail Payroll (E $\div$ F) | $\$ 5$ million |
| H. | Average Retail Wage (Economic Census) | $\$ 25,000$ |
| I. | Estimated Total Retail Jobs (G $\div \mathrm{H}$ ) | 200 |
| J. | Percent Age 20+ (Bureau of Labor Statistics) | $87.5 \%$ |
| K. | Total Retail Workers Forming Households | 175 |
| J. | Average Workers/Household (Census Data) | 1.56 |
| K. | Estimated Households Created (K $\div$ J) | 112 |
| L. | Average Household Income (H $\times$ J) | $\$ 39,000$ |
| M. | Income Category | Low-Income (up to $60 \%$ of AMI) |

[^4]In this simplified example, 1,000 new market-rate units sold to households earning $\$ 125,000$ per year would create demand for 112 housing units for retail workers with household incomes below 60 percent of AMI. Actual calculations and impact distinctions by type of household expenditure for various home values are shown in the series of tables presented in Appendix B.

## Demand for Public-Sector Workers

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

Data from the 2010 Occupational Employment Survey for the Santa Rosa-Petaluma MSA was used to determine the number of these public-sector employees needed to serve new marketrate development. This data was generated by the California Employment Development Department (EDD) and provides employment and wage information for a variety of occupational categories. EPS reviewed the data and sampled occupations that were public sector-related, as shown in Table B-6 in Appendix B.

Based on the ratio of the selected public-sector jobs to the total households in the MSA, EPS estimates that approximately 60 government jobs or 38.4 households with a government employee are required per 1,000 total households. These figures are conservative (i.e., low) because numerous types of public-sector jobs are not included in this analysis (such as federal postal workers, City health and human services workers, etc.). Also, please note that EPS has no basis to distinguish differences in the number of public-sector workers demanded by households based on different income levels or in different sizes of units, so the same numbers of public-sector jobs are assumed to be generated by units of all sizes and prices.

## Combined Demand for Income-Qualified Workers

The total number of income-qualified households required to support the expenditure and publicsector service needs of new market-rate units were determined based on the affordable housing income limits from HCD for a 3-person household. Table 5 summarizes the HCD income limits used to compute the total number of income-qualified households generated by construction of market-rate units. ${ }^{7}$ The number of income-qualified households required to provide goods and services to new housing units is summarized on Tables $\mathbf{6}$ through $\mathbf{1 2}$ and detailed in Appendix C.

The nexus methodology used herein computes the total number of income-qualified households generated by market-rate units and calculates the impact fee based on the estimated cost to subsidize the production of units to meet that affordable housing demand. This methodology

[^5]does not suggest that all lower income service workers serving City residents will reside in the City, but it does assume that new development should mitigate for the new affordable housing demand it creates, even if some of those lower income households reside outside the City.

## Fee Calculation

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

Tables 6 through 12 show the impact fee calculation by home price. The total impact fees required for a representative project of 100 units is calculated by multiplying the number of affordable units required per income level by the cost of subsidizing such housing. All incomequalified households are assumed to be housed in multifamily rental units and the subsidies needed are calculated as the affordability gaps shown in Table 3. The resulting maximum impact fee for market-rate units ranges from $\$ 8,930$ for a $\$ 200,000$ unit to $\$ 31,550$ for a \$1,200,000 unit.

In Appendix D, EPS has provided a graduated schedule of fees for more discrete unit price categories by interpolating between the figures calculated herein.

Table 5
Santa Rosa Affordable Housing Income Limits
Santa Rosa Housing Impact Fee, EPS \#121110
$\left.\begin{array}{lrrr}\hline & & \begin{array}{c}\mathbf{2 0 0 7} \\ \text { Percentage of } \\ \text { County Median }\end{array} & \begin{array}{c}\text { Max Income Threshold } \\ \text { 3-person household }\end{array}\end{array} \begin{array}{c}\text { 2010 } \\ \text { Max Income Threshold } \\ \text { 3-person household }\end{array} \quad \begin{array}{c}\text { Max Income Threshold } \\ \text { 3-person household }\end{array}\right]$
*Note: Data for Santa Rosa-Petaluma, CA MSA
$\stackrel{\rightharpoonup}{\bullet}$ Sources: US Department of Housing and Urban Development; California Department of Housing and Community Development; EPS

Table 6
Maximum Impact Fee Calculations -- \$200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Item | Affordable Units <br> Required Per 100 <br> Market-Rate Units <br> (A) | Financing Gap per Affordable Unit [1](B) | Total Impact Fee Required |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Per 100 Market-Rate Per Market Rate Unit Units |  |
|  |  |  | $(C=A * B)$ | ( $\mathrm{D}=\mathrm{C} / 100$ ) |
| Affordable Units - Very Low Income (50\%) | 4.3 | \$141,803 | \$608,372 |  |
| Affordable Units - Low Income (60\%) | 1.0 | \$104,603 | \$108,148 |  |
| Affordable Units - Low Income (80\%) | 4.1 | \$41,497 | \$170,456 |  |
| Affordable Units - Median Income | 0.7 | \$8,379 | \$6,067 |  |
| Total | 10.2 |  | \$893,043 | \$8,930 |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.
Source: Economic \& Planning Systems, Inc.

Table 7
Maximum Impact Fee Calculations -- \$400,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  | Total Impact Fee Required |
| :--- | :---: | :---: | :---: |
| Item | Affordable Units <br> Required Per 100 <br> Market-Rate Units | Financing Gap per <br> Affordable Unit [1] | Per 100 Market-Rate Per Market Rate Unit <br> Units |
|  | $(\mathrm{A})$ | $(\mathrm{B})$ | $(\mathrm{C}=\mathrm{A} * \mathrm{~B})$ |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.
Source: Economic \& Planning Systems, Inc.

Table 8
Maximum Impact Fee Calculations -- \$600,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Item | Affordable Units Required Per 100 Market-Rate Units <br> (A) | Financing Gap per Affordable Unit [1] <br> (B) | Total Impact Fee Required |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Per 100 Market-Rate Per Market Rate Unit Units$(C=A * B) \quad(D=C / 100)$ |  |
|  |  |  |  |  |
| Affordable Units - Very Low Income (50\%) | 10.1 | \$141,803 | \$1,428,953 |  |
| Affordable Units - Low Income (60\%) | 3.4 | \$104,603 | \$360,199 |  |
| Affordable Units - Low Income (80\%) | 7.4 | \$41,497 | \$306,504 |  |
| Affordable Units - Median Income | 1.6 | \$8,379 | \$13,246 |  |
| Total | 22.5 |  | \$2,108,902 | \$21,089 |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.

Source: Economic \& Planning Systems, Inc.

Table 9
Maximum Impact Fee Calculations -- \$800,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  | Total Impact Fee Required |
| :--- | ---: | ---: | ---: |
| Item | Affordable Units <br> Required Per 100 <br> Market-Rate Units | Financing Gap per <br> Affordable Unit [1] | Per 100 Market-Rate Per Market Rate Unit <br> Units |
|  | $(\mathrm{C})$ | $(\mathrm{B})$ | $(\mathrm{C}=\mathrm{A} * \mathrm{~B})$ |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.

Source: Economic \& Planning Systems, Inc.

Table 10
Maximum Impact Fee Calculations -- \$1,000,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  | Total Impact Fee Required |
| :--- | ---: | ---: | ---: |
| Affordable Units <br> Required Per 100 <br> Market-Rate Units | Financing Gap per <br> Affordable Unit [1] | Per 100 Market-Rate Per Market Rate Unit <br> Units |  |
|  | $(\mathrm{A})$ | $(\mathrm{B})$ | $(\mathrm{C}=\mathrm{A} * \mathrm{~B})$ |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.
Source: Economic \& Planning Systems, Inc.

Table 11
Maximum Impact Fee Calculations -- \$1,200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Item | Affordable Units Required Per 100 Market-Rate Units <br> (A) | Financing Gap per Affordable Unit [1] <br> (B) | Total Impact Fee Required |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Per 100 Market-Rate Per Market Rate Unit Units$(C=A * B) \quad(D=C / 100)$ |  |
|  |  |  |  |  |
| Affordable Units - Very Low Income (50\%) | 14.2 | \$141,803 | \$2,009,991 |  |
| Affordable Units - Low Income (60\%) | 6.5 | \$104,603 | \$679,137 |  |
| Affordable Units - Low Income (80\%) | 10.8 | \$41,497 | \$448,959 |  |
| Affordable Units - Median Income | $\underline{2.0}$ | \$8,379 | \$16,873 |  |
| Total | 33.5 |  | \$3,154,960 | \$31,550 |

[1] Subsidies are based on financing gap for rental units, as shown on Table 3.
Source: Economic \& Planning Systems, Inc.

## ApPENDICES:

Appendix A: Data from Comparable Transactions
Appendix B: Household Expenditures and Employment Generation

Appendix C: Income Levels for Worker Households Appendix D: Summary of Current and Maximum Fees by Unit Price

## APPENDIX A:

## Data from Comparable Transactions

HD

Table A-1
Summary of Affordable Housing Development Costs
Santa Rosa Housing Impact Fee, EPS \#121110

| Project | Location | \# of units | Total Cost | Land Costs | Direct Costs | Indirect Costs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fife Creek Commons per unit | Unincorporated | 48 | $\begin{array}{r} \$ 20,546,000 \\ \$ 428,042 \end{array}$ | $\begin{array}{r} \$ 1,742,000 \\ \$ 36,292 \end{array}$ | $\begin{array}{r} \$ 13,016,000 \\ \$ 271,167 \end{array}$ | $\begin{array}{r} \$ 5,788,000 \\ \$ 120,583 \end{array}$ |
| Windsor Redwoods per unit | Windsor | 65 | $\begin{array}{r} \$ 23,540,000 \\ \$ 362,154 \end{array}$ | $\begin{array}{r} \$ 2,713,000 \\ \$ 41,738 \end{array}$ | $\begin{array}{r} \$ 13,851,000 \\ \$ 213,092 \end{array}$ | $\begin{array}{r} \$ 6,976,000 \\ \$ 107,323 \end{array}$ |
| Amorosa Village I per unit | Santa Rosa | 97 | $\begin{array}{r} \$ 34,965,000 \\ \$ 360,464 \end{array}$ | $\begin{array}{r} \$ 7,470,000 \\ \$ 77,010 \end{array}$ | $\begin{array}{r} \$ 18,751,000 \\ \$ 193,309 \end{array}$ | $\begin{array}{r} \$ 8,744,000 \\ \$ 90,144 \end{array}$ |
| Amorosa Village II per unit | Santa Rosa | 53 | $\begin{array}{r} \$ 17,916,000 \\ \$ 338,038 \end{array}$ | $\begin{array}{r} \$ 4,093,000 \\ \$ 7, .226 \end{array}$ | $\begin{array}{r} \$ 8,428,000 \\ \$ 159,019 \end{array}$ | $\begin{array}{r} \$ 5,395,000 \\ \$ 101,792 \end{array}$ |
| Petaluma Avenue Homes per unit | Sebastopol | 45 | $\begin{array}{r} \$ 16,595,994 \\ \$ 368,800 \end{array}$ | $\begin{array}{r} \$ 2,220,000 \\ \$ 49,333 \end{array}$ | $\begin{array}{r} \$ 9,853,626 \\ \$ 218,969 \end{array}$ | $\begin{array}{r} \$ 4,522,368 \\ \$ 100,497 \end{array}$ |
| Valley Oak Homes per unit | Sonoma | 43 | $\begin{array}{r} \$ 17,751,592 \\ \$ 412,828 \end{array}$ | $\begin{array}{r} \$ 2,530,000 \\ \$ 58,837 \end{array}$ | $\begin{array}{r} \$ 10,563,933 \\ \$ 245,673 \end{array}$ | $\begin{array}{r} \$ 4,657,659 \\ \$ 108,318 \end{array}$ |
| Total <br> Weighted Avg/Unit |  | 351 | $\begin{array}{r} \$ 131,314,586 \\ \$ 374,116 \end{array}$ | $\begin{array}{r} \$ 20,768,000 \\ \$ 59,168 \end{array}$ | $\begin{array}{r} \$ 74,463,559 \\ \$ 212,147 \end{array}$ | $\begin{array}{r} \$ 36,083,027 \\ \$ 102,801 \end{array}$ |

Sources: Affordable Housing Associates; Burbank Housing; Economic \& Planning Systems, Inc.

Table A-2
Santa Rosa Multifamily Listings
Santa Rosa Housing Impact Fee, EPS \#121110

| Property Address | Acres | Listed Price | \$/Acre | Source |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| 201 Farmers Lane | 1.21 | $\$ 499,000$ | $\$ 412,397$ | Loopnet |
| 500 Kawana Springs Road | 2.70 | $\$ 2,500,000$ | $\$ 925,926$ | Loopnet |
| Dutton Meadow \& Bellevue Avenı | 3.79 | $\$ 460,000$ | $\$ 121,372$ | Loopnet |
| 1569 Sebastopol Road | 3.91 | $\$ 2,115,000$ | $\$ 540,921$ | Loopnet |
| 2542 Old Stony Point Road | 4.39 | $\$ 280,000$ | $\$ 63,781$ | Loopnet |
| 3731 Airway Drive | 4.49 | $\$ 1,850,000$ | $\$ 412,027$ | Loopnet |
| 310 Bellevue Avenue | 9.72 | 3750000 | $\$ 385,802$ | Loopnet |
|  |  |  |  |  |
| Average |  |  | $\$ 408,889$ |  |
| Weighted Average |  |  |  |  |

$\stackrel{>}{\sim}$
Source: Loopnet Multifamily Land Sale listings on 1/2/13; Economic \& Planning Systems, Inc

Table A-3
Survey of Home Ownership Association Fees in Sonoma County Santa Rosa Housing Impact Fee, EPS \#121110

| Property Name | Year Built | Monthly HOA | Unit List Price |
| :---: | :---: | :---: | :---: |
| Chianti | 1983 | \$219 | \$199,950 |
| Bernice | 1986 | \$381 | \$175,000 |
| College View | 1980 | \$322 | \$125,000 |
| Avram | 1972 | \$295 | \$94,900 |
| Tokay | 2007 | \$107 | \$270,000 |
| Tokay 2 | 2007 | \$107 | \$269,900 |
| McBride | 1980 | \$280 | \$157,900 |
| Sonoma | 1984 | \$90 | \$157,900 |
| Camino Collegio | 1980 | \$330 | \$119,900 |
| Coffey | 1971 | \$265 | \$79,900 |
| Bodega Ave | 1986 | \$265 | \$205,000 |
| Occidental Rd | 1986 | \$260 | \$119,000 |
| La Mancha | 1975 | \$326 | \$239,000 |
| Acorn 1 | 1982 | \$364 | \$176,000 |
| Acorn 2 | 1982 | \$364 | \$179,000 |
| Acorn 3 | 1984 | \$396 | \$182,000 |
| City Center | 2007 | \$251 | \$171,900 |
| Shade Ln | 1982 | \$368 | \$287,000 |
| Oakmont | 1973 | \$185 | \$269,000 |
| Windmill | 1981 | \$215 | \$215,000 |
| Windmill 2 | 1981 | \$215 | \$209,000 |
| Neotomas | 1975 | \$275 | \$144,900 |
| Southeast | 1975 | \$257 | \$199,900 |
| Chanate | 2007 | \$100 | \$289,200 |
| Los Alamos | 1975 | \$440 | \$149,000 |
| Sosaa Circle | 1986 | \$375 | \$148,900 |
| Stonefield | 1992 | \$490 | \$229,000 |
| Martina | 2006 | \$145 | \$145,000 |
| Meadowgreen | 1972 | \$180 | \$217,500 |
| Racquet Club | 1979 | \$334 | \$265,000 |
| La Esplanada | 2003 | \$210 | \$80,000 |
| Oakmont | 1981 | \$205 | \$238,000 |
| Woodbine | 1985 | \$200 | \$147,500 |
| Country Club | 1979 | \$279 | \$125,900 |
| Campoy | 2007 | \$145 | \$140,000 |
| White Oak | 1971 | \$200 | \$219,900 |
| Southwest | 1973 | \$330 | \$89,500 |
| Meadowbrook | 1989 | \$268 | \$199,500 |
| Meridian | 1991 | \$299 | \$299,000 |
| Harbor | 1986 | \$330 | \$138,000 |
| Shady Oak | 1974 | \$200 | \$215,000 |
| Average | 1985 | \$265 | \$184,950 |

Sources: Redfin.com; Economic \& Planning Systems, Inc

## Appendix B: <br> Household Expenditures and Employment Generation

Table B-1 Household Expenditures and Employment Generation- For-Sale \$200,000 Unit (3 pages) ..... B-1
Table B-2 Household Expenditures and Employment Generation- For-Sale \$400,000 Unit (3 pages) ..... B-4
Table B-3 Household Expenditures and Employment Generation- For-Sale \$600,000 Unit (3 pages) ..... B-7
Table B-4 Household Expenditures and Employment Generation- For-Sale \$800,000 Unit (3 pages) ..... B-10
Table B-5 Household Expenditures and Employment Generation- For-Sale \$1,000,000 Unit (3 pages) ..... B-13
Table B-6 Household Expenditures and Employment Generation- For-Sale \$1,200,000 Unit (3 pages) ..... B-16
Table B-7 Representative Public Sector Employment and Wages, 2010 ..... B-19

Table B-1
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\left\|\begin{array}{c}\text { \% of Household } \\ \text { Income Spent } \\ \text { per Category [1] }\end{array}\right\|$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business }[2]\end{array}\right\|$ | 2010 Expenditures | 2007 Expenditures $[3]$ | $\qquad$ | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wages | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH }[4] \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a^{*}$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i i^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Food at Home | 6.3\% | 100\% | \$3,393 | \$3,223 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$3,393 | \$3,223 | \$3,222,683.70 | 8.07 | \$399,543 | \$26,541 | 15 | 87.5\% | 1.56 | 8 | \$41,522 |
| Food Away From Home | 4.5\% | 100\% | \$2,404 | \$2,283 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$2,404 | \$2,283 | \$2,282,953 | 3.49 | \$654,713 | \$14,455 | 45 | 87.5\% | 1.56 | 25 | \$22,614 |
| Alcoholic Beverages | 0.8\% | 100\% | \$418 | \$397 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$209 | \$199 | \$209,192 | 8.07 | \$25,935 | \$26,541 | 1 | 87.5\% | 1.56 | 1 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$209 | \$199 | \$209,192 | 3.49 | \$59,993 | \$14,455 | 4 | 87.5\% | 1.56 | 3 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 2.0\% | 100\% | \$1,065 | \$1,011 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$479 | \$455 | \$455,106 | 3.72 | \$122,371 | \$26,783 | 5 | 98.1\% | 1.56 | 3 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$479 | \$455 | \$455,106 | 7.52 | \$60,535 | \$35,469 | 2 | 87.5\% | 1.56 | 1 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$106 | \$101 | \$101,135 | 5.29 | \$19,121 | \$35,283 | 1 | 98.1\% | 1.56 | 0 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.3\% | 100\% | \$138 | \$131 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$138 | \$131 | \$131,003 | 6.95 | \$18,853 | \$37,028 | 1 | 87.5\% | 1.56 | 0 | \$57,929 |
| Water and Other Public Services [6] | 0.9\% | 100\% | \$491 | \$466 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$491 | \$466 | \$466,372 | 4.79 | \$97,337 | \$40,694 | 2 | 98.1\% | 1.56 | 1 | \$63,665 |
| Household Operations Personal Services | 0.5\% | 100\% | \$258 | \$245 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facilities |  | 40\% | \$103 | \$98 | \$98,165 | 2.49 | \$39,375 | \$28,988 | 1 | 98.1\% | 1.56 | 1 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$155 | \$147 | \$147,248 | 2.98 | \$49,354 | \$23,861 | 2 | 98.1\% | 1.56 | 1 | \$37,329 |
| Household Operations Other Household Expenses | 1.1\% | 100\% | \$595 | \$565 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$595 | \$565 | \$565,061 | 2.64 | \$213,691 | \$25,071 | 9 | 98.1\% | 1.56 | 5 | \$39,222 |
| Housekeeping Supplies | 1.0\% | 100\% | \$545 | \$518 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$55 | \$52 | \$51,790 | 7.52 | \$6,889 | \$35,469 | 0 | 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$191 | \$181 | \$181,265 | 8.07 | \$22,473 | \$26,541 | 1 | 87.5\% | 1.56 | 0 | \$41,522 |
| General Merchandise |  | 35\% | \$191 | \$181 | \$181,265 | 12.13 | \$14,940 | \$21,273 | 1 | 87.5\% | 1.56 | 0 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$109 | \$104 | \$103,580 | 6.46 | \$16,042 | \$20,030 | 1 | 87.5\% | 1.56 | 0 | \$31,337 |
| Household Furnishings and Equipment | 2.4\% | 100\% | \$1,271 | \$1,207 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$508 | \$483 | \$482,791 | 6.15 | \$78,469 | \$29,550 | 3 | 87.5\% | 1.56 | 1 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$508 | \$483 | \$482,791 | 9.53 | \$50,685 | \$26,708 | 2 | 87.5\% | 1.56 | 1 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$127 | \$121 | \$120,698 | 12.13 | \$9,948 | \$21,273 | 0 | 87.5\% | 1.56 | 0 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$127 | \$121 | \$120,698 | 6.46 | \$18,694 | \$20,030 | 1 | 87.5\% | 1.56 | 1 | \$31,337 |

Table B-1
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{array}{\|c\|} \hline \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \\ \hline \end{array}$ | $\left\|\begin{array}{c}\text { \% of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 Expenditures | 2007 Expenditures $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wages | \# of Workers | $\begin{array}{\|c} \% \text { Forming } \\ \text { HH }[4] \end{array}$ | Workers/ HH [5] | Total Worker HH | 2007 Avg. <br> HH Income |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\operatorname{Income} \begin{gathered} \text { * } \\ b \end{gathered}$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i i_{j} / \mathrm{k}$ | $m=h^{*} j$ |
| Apparel and Services | 2.7\% | 100\% | \$1,429 | \$1,357 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$572 | \$543 | \$542,878 | 7.80 | \$69,582 | \$16,289 | 4 | 87.5\% | 1.56 | 2 | \$25,484 |
| General Merchandise |  | 40\% | \$572 | \$543 | \$542,878 | 12.13 | \$44,745 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$143 | \$136 | \$135,720 | 6.46 | \$21,020 | \$20,030 | 1 | 87.5\% | 1.56 | 1 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$71 | \$68 | \$67,860 | 3.72 | \$18,246 | \$26,783 | 1 | 87.5\% | 1.56 | 0 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$71 | \$68 | \$67,860 | 3.17 | \$21,434 | \$25,028 | 1 | 87.5\% | 1.56 | 0 | \$39,155 |
| Vehicle Purchases (net outlay) | 4.1\% | 100\% | \$2,197 | \$2,086 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$2,197 | \$2,086 | \$2,086,448 | 8.79 | \$237,464 | \$42,196 | 6 | 87.5\% | 1.56 | 3 | \$66,014 |
| Gasoline and motor oil | 4.2\% | 100\% | \$2,257 | \$2,144 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$2,257 | \$2,144 | \$2,144,089 | 38.48 | \$55,718 | \$18,946 | 3 | 87.5\% | 1.56 | 2 | \$29,640 |
| Vehicle Maintenance and Repairs | 1.3\% | 100\% | \$690 | \$655 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$690 | \$655 | \$655,017 | 3.55 | \$184,679 | \$29,204 | 6 | 98.1\% | 1.56 | 4 | \$45,689 |
| Medical Services | 1.3\% | 100\% | \$677 | \$643 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$271 | \$257 | \$257,116 | 2.55 | \$100,772 | \$54,753 | 2 | 98.1\% | 1.56 | 1 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$203 | \$193 | \$192,837 | 2.63 | \$73,319 | \$58,054 | 1 | 98.1\% | 1.56 |  | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$203 | \$193 | \$192,837 | 2.49 | \$77,350 | \$28,988 | 3 | 98.1\% | 1.56 | 2 | \$45,350 |
| Drugs | 0.8\% | 100\% | \$453 | \$431 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$453 | \$431 | \$430,565 | 7.51 | \$57,348 | \$29,774 | 2 | 87.5\% | 1.56 | 1 | \$46,580 |
| Medical Supplies | 0.2\% | 100\% | \$93 | \$88 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$93 | \$88 | \$88,209 | 7.51 | \$11,749 | \$29,774 | 0 | 87.5\% | 1.56 | 0 | \$46,580 |
| Entertainment Fees and Admissions | 0.9\% | 100\% | \$460 | \$437 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$460 | \$437 | \$436,678 | 3.34 | \$130,758 | \$28,077 | 5 | 87.5\% | 1.56 | 3 | \$43,926 |
| Audio and Visual Equipment and Services | 1.8\% | 100\% | \$956 | \$908 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$956 | \$908 | \$908,290 | 9.53 | \$95,356 | \$26,708 | 4 | 87.5\% | 1.56 | 2 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 1.0\% | 100\% | \$556 | \$528 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$223 | \$211 | \$211,352 | 7.66 | \$27,590 | \$16,640 | 2 | 87.5\% | 1.56 | 1 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$223 | \$211 | \$211,352 | 6.46 | \$32,734 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$111 | \$106 | \$105,676 | 2.81 | \$37,559 | \$34,148 | 1 | 98.1\% | 1.56 | 1 | \$53,423 |

Table B-1
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{array}{\|c} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{array}$ | $\|$\% of Category <br> Expenditure per <br> Type of <br> Business [2] | $\begin{gathered} 2010 \\ \text { Expenditures } \end{gathered}$ | 2007 <br> Expenditures <br> $[3]$ |  | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wages | \# of Workers | \% Forming HH [4] | Workers HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}}{ }_{b} a^{*}$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i i^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.6\% | 100\% | \$296 | \$281 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$252 | \$239 | \$239,038 | 7.66 | \$31,204 | \$16,640 | 2 | 87.5\% | 1.56 | 1 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$44 | \$42 | \$42,183 | 4.55 | \$9,262 | \$22,554 | 0 | 98.1\% | 1.56 | 0 | \$35,285 |
| Personal Care Products and Services | 1.0\% | 100\% | \$520 | \$493 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$260 | \$247 | \$246,723 | 6.46 | \$38,212 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$260 | \$247 | \$246,723 | 2.99 | \$82,404 | \$16,484 | 5 | 98.1\% | 1.56 | 3 | \$25,789 |
| Reading | 0.2\% | 100\% | \$86 | \$82 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$86 | \$82 | \$82,095 | 7.66 | \$10,717 | \$16,640 | 1 | 98.1\% | 1.56 | 0 | \$26,032 |
| Education | 1.1\% | 100\% | \$590 | \$561 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$590 | \$561 | \$560,695 | 4.34 | \$129,227 | \$24,412 | 5 | 87.5\% | 1.56 | 3 | \$38,192 |
| Miscellaneous | 1.8\% | 100\% | \$977 | \$928 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$195 | \$186 | \$185,501 | 1.98 | \$93,605 | \$33,564 | 3 | 98.1\% | 1.56 | 2 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$195 | \$186 | \$185,501 | 2.80 | \$66,155 | \$74,995 | 1 | 98.1\% | 1.56 | 1 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$195 | \$186 | \$185,501 | 3.72 | \$49,928 | \$53,888 | 1 | 98.1\% | 1.56 | 1 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$195 | \$186 | \$185,501 | 3.47 | \$53,387 | \$36,983 | 1 | 98.1\% | 1.56 | 1 | \$57,858 |
| Legal Services [7] |  | 20\% | \$195 | \$186 | \$185,501 | 2.76 | \$67,174 | \$85,734 | 1 | 98.1\% | 1.56 | 0 | \$134,127 |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 161 |  |  | 94 |  |

[1] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at this income level. Note that the sum of the categories included in this analysis is well below the total expenditures of households at this income evel, and thus represents a conservative estimation of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personallife insurance, cash ontributions, and financing charges.
[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
[4] BLS data indicates that $12.5 \%$ of retail/restaurant workers are age 16-19, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
[1] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings."
${ }^{[6]}$ Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the 2007 Economic Census,
7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data
8] Note that average salary reported for architecture, engineering and related industries reflects the full range of employees within the industry, not solely professional and technical staff.
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc.

Table B-2
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$400,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\%$ of Household <br> Income Spent <br> per Category [1]$\|$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \\ \hline \end{array}$ | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i^{*} / \mathrm{l}$ | $m=h * j$ |
| Food at Home | 5.2\% | 100\% | \$5,059 | \$4,805 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$5,059 | \$4,805 | \$4,805,413 | 8.07 | \$595,768 | \$26,541 | 22 | 87.5\% | 1.56 | 13 | \$41,522 |
| Food Away From Home | 3.8\% | 100\% | \$3,654 | \$3,471 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$3,654 | \$3,471 | \$3,470,694 | 3.49 | \$995,338 | \$14,455 | 69 | 87.5\% | 1.56 | 39 | \$22,614 |
| Alcoholic Beverages | 0.6\% | 100\% | \$591 | \$561 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$295 | \$280 | \$295,320 | 8.07 | \$36,613 | \$26,541 | 1 | 87.5\% | 1.56 | 1 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$295 | \$280 | \$295,320 | 3.49 | \$84,693 | \$14,455 | 6 | 87.5\% | 1.56 | 4 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 1.5\% | 100\% | \$1,420 | \$1,348 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$639 | \$607 | \$606,816 | 3.72 | \$163,163 | \$26,783 | 6 | 98.1\% | 1.56 | 4 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$639 | \$607 | \$606,816 | 7.52 | \$80,715 | \$35,469 | 2 | 87.5\% | 1.56 | 1 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$142 | \$135 | \$134,848 | 5.29 | \$25,495 | \$35,283 | 1 | 98.1\% | 1.56 | 0 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.2\% | 100\% | \$210 | \$199 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$210 | \$199 | \$198,991 | 6.95 | \$28,638 | \$37,028 | 1 | 87.5\% | 1.56 | 0 | \$57,929 |
| Water and Other Public Services [6] | 0.7\% | 100\% | \$695 | \$660 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$695 | \$660 | \$660,480 | 4.79 | \$137,849 | \$40,694 | 3 | 98.1\% | 1.56 | 2 | \$63,665 |
| Household Operations Personal Services | 0.6\% | 100\% | \$605 | \$575 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facilities |  | 40\% | \$242 | \$230 | \$229,898 | 2.49 | \$92,215 | \$28,988 | 3 | 98.1\% | 1.56 | 2 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$363 | \$345 | \$344,847 | 2.98 | \$115,585 | \$23,861 | 5 | 98.1\% | 1.56 | 3 | \$37,329 |
| Household Operations Other Household Expenses | 1.0\% | 100\% | \$921 | \$874 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$921 | \$874 | \$874,289 | 2.64 | \$330,633 | \$25,071 | 13 | 98.1\% | 1.56 | 8 | \$39,222 |
| Housekeeping Supplies | 0.9\% | 100\% | \$869 | \$826 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$87 | \$83 | \$82,560 | 7.52 | \$10,982 | \$35,469 | 0 | 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$304 | \$289 | \$288,960 | 8.07 | \$35,825 | \$26,541 | 1 | 87.5\% | 1.56 | 1 | \$41,522 |
| General Merchandise |  | 35\% | \$304 | \$289 | \$288,960 | 12.13 | \$23,816 | \$21,273 | 1 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$174 | \$165 | \$165,120 | 6.46 | \$25,574 | \$20,030 | 1 | 87.5\% | 1.56 | 1 | \$31,337 |
| Household Furnishings and Equipment | 2.1\% | 100\% | \$2,000 | \$1,900 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$800 | \$760 | \$759,975 | 6.15 | \$123,520 | \$29,550 | 4 | 87.5\% | 1.56 | 2 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$800 | \$760 | \$759,975 | 9.53 | \$79,785 | \$26,708 | 3 | 87.5\% | 1.56 | 2 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$200 | \$190 | \$189,994 | 12.13 | \$15,660 | \$21,273 | 1 | 87.5\% | 1.56 | 0 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$200 | \$190 | \$189,994 | 6.46 | \$29,426 | \$20,030 | 1 | 87.5\% | 1.56 | 1 | \$31,337 |

Table B-2
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$400,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\left\|\begin{array}{c}\text { \% of Household } \\ \text { Income Spent } \\ \text { per Category [1] }\end{array}\right\|$ | $\%$ of Category Expenditure per Type of Business [2] | 2010 <br> Expenditures | 2007 Expenditures [3] |  | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wage | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | $k$ | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Apparel and Services | 2.2\% | 100\% | \$2,132 | \$2,025 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$853 | \$810 | \$809,934 | 7.80 | \$103,812 | \$16,289 | 6 | 87.5\% | 1.56 | 4 | \$25,484 |
| General Merchandise |  | 40\% | \$853 | \$810 | \$809,934 | 12.13 | \$66,756 | \$21,273 | 3 | 87.5\% | 1.56 | 2 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$213 | \$202 | \$202,484 | 6.46 | \$31,361 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$107 | \$101 | \$101,242 | 3.72 | \$27,222 | \$26,783 | 1 | 87.5\% | 1.56 | 1 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$107 | \$101 | \$101,242 | 3.17 | \$31,979 | \$25,028 | 1 | 87.5\% | 1.56 | 1 | \$39,155 |
| Vehicle Purchases (net outlay) | 4.3\% | 100\% | \$4,142 | \$3,934 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$4,142 | \$3,934 | \$3,934,300 | 8.79 | \$447,773 | \$42,196 | 11 | 87.5\% | 1.56 | 6 | \$66,014 |
| Gasoline and motor oil | 3.3\% | 100\% | \$3,231 | \$3,068 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$3,231 | \$3,068 | \$3,068,479 | 38.48 | \$79,740 | \$18,946 | 4 | 87.5\% | 1.56 | 2 | \$29,640 |
| Vehicle Maintenance and Repairs | 1.2\% | 100\% | \$1,163 | \$1,105 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$1,163 | \$1,105 | \$1,105,033 | 3.55 | \$311,559 | \$29,204 | 11 | 98.1\% | 1.56 | 7 | \$45,689 |
| Medical Services | 1.2\% | 100\% | \$1,117 | \$1,061 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$447 | \$424 | \$424,231 | 2.55 | \$166,270 | \$54,753 | 3 | 98.1\% | 1.56 | 2 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$335 | \$318 | \$318,173 | 2.63 | \$120,974 | \$58,054 | 2 | 98.1\% | 1.56 | 1 | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$335 | $\underset{\$ 0}{\$ 318}$ | \$318,173 | 2.49 | \$127,624 | \$28,988 | 4 | 98.1\% | 1.56 | 3 | \$45,350 |
| Drugs | 0.6\% | 100\% | \$612 | \$581 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$612 | $\begin{array}{r} \$ 581 \\ \$ 0 \end{array}$ | \$581,095 | 7.51 | \$77,398 | \$29,774 | 3 | 87.5\% | 1.56 | 1 | \$46,580 |
| Medical Supplies | 0.2\% | 100\% | \$171 | \$162 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$171 | \$162 | \$161,945 | 7.51 | \$21,570 | \$29,774 | 1 | 87.5\% | 1.56 | 0 | \$46,580 |
| Entertainment Fees and Admissions | 0.9\% | 100\% | \$849 | \$807 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$849 | \$807 | \$806,547 | 3.34 | \$241,511 | \$28,077 | 9 | 87.5\% | 1.56 | 5 | \$43,926 |
| Audio and Visual Equipment and Services | 1.4\% | 100\% | \$1,376 | \$1,307 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$1,376 | \$1,307 | \$1,307,199 | 9.53 | \$137,235 | \$26,708 | 5 | 87.5\% | 1.56 | 3 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 0.9\% | 100\% | \$829 | \$787 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$332 | \$315 | \$314,998 | 7.66 | \$41,120 | \$16,640 | 2 | 87.5\% | 1.56 | 1 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$332 | \$315 | \$314,998 | 6.46 | \$48,787 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$166 | \$157 | \$157,499 | 2.81 | \$55,978 | \$34,148 | 2 | 98.1\% | 1.56 | 1 | \$53,423 |

Table B-2
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$400,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{array}{\|c\|} \hline \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{array}$ | $\left\|\begin{array}{c}\text { \% of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 Expenditures $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \\ \hline \end{array}$ | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i^{*} j^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.4\% | 100\% | \$421 | \$400 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$358 | \$340 | \$340,084 | 7.66 | \$44,395 | \$16,640 | 3 | 87.5\% | 1.56 | 1 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$63 | \$60 | \$60,015 | 4.55 | \$13,178 | \$22,554 | 1 | 98.1\% | 1.56 | 0 | \$35,285 |
| Personal Care Products and Services | 0.9\% | 100\% | \$869 | \$826 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$435 | \$413 | \$412,800 | 6.46 | \$63,934 | \$20,030 | 3 | 87.5\% | 1.56 | 2 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$435 | \$413 | \$412,800 | 2.99 | \$137,873 | \$16,484 | 8 | 98.1\% | 1.56 | 5 | \$25,789 |
| Reading | 0.1\% | 100\% | \$135 | \$128 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$135 | \$128 | \$128,074 | 7.66 | \$16,719 | \$16,640 | 1 | 98.1\% | 1.56 | 1 | \$26,032 |
| Education | 1.2\% | 100\% | \$1,155 | \$1,097 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$1,155 | \$1,097 | \$1,096,566 | 4.34 | \$252,732 | \$24,412 | 10 | 87.5\% | 1.56 | 6 | \$38,192 |
| Miscellaneous | 1.3\% | 100\% | \$1,215 | \$1,154 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$243 | \$231 | \$230,745 | 1.98 | \$116,435 | \$33,564 | 3 | 98.1\% | 1.56 | 2 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$243 | \$231 | \$230,745 | 2.80 | \$82,290 | \$74,995 | 1 | 98.1\% | 1.56 | 1 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$243 | \$231 | \$230,745 | 3.72 | \$62,106 | \$53,888 | 1 | 98.1\% | 1.56 | 1 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$243 | \$231 | \$230,745 | 3.47 | \$66,408 | \$36,983 | 2 | 98.1\% | 1.56 | 1 | \$57,858 |
| Legal Services [7] |  | 20\% | \$243 | \$231 | \$230,745 | 2.76 | \$83,557 | \$85,734 | 1 | 98.1\% | 1.56 | 1 | \$134,127 |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 252 |  |  | 146 |  |

Per Table 4, the purchase of a $\$ 400,000$ Unit requires a household income of

## \$96,700

[1] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at this income level. Note that the sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represents a conservative esti
2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
[4] BLS data indicates that $12.5 \%$ of retail/restaurant workers are age 16-19, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
[5] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings."
${ }^{6}$ ] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the 2007 Economic Census.
[7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data
[8] Note that average salary reported for architecture, engineering and related industries reflects the full range of employees within the industry, not solely professional and technical staf
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc.

Table B-3
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$600,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | \% of Household Income Spent per Category [1] | $\%$ of Category <br> Expenditure per <br> Type of <br> Business [2] | $\begin{gathered} 2010 \\ \text { Expenditures } \end{gathered}$ | 2007 Expenditures [3] | 2007 Expenditures per 1000 Households | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wage | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers HH [5] | Total Worker | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Food at Home | 4.4\% | 100\% | \$6,189 | \$5,879 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$6,189 | \$5,879 | \$5,878,695 | 8.07 | \$728,832 | \$26,541 | 27 | 87.5\% | 1.56 | 15 | \$41,522 |
| Food Away From Home | 3.8\% | 100\% | \$5,274 | \$5,009 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$5,274 | \$5,009 | \$5,008,857 | 3.49 | \$1,436,458 | \$14,455 | 99 | 87.5\% | 1.56 | 56 | \$22,614 |
| Alcoholic Beverages | 0.6\% | 100\% | \$875 | \$831 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$438 | \$416 | \$437,644 | 8.07 | \$54,258 | \$26,541 | 2 | 87.5\% | 1.56 | 1 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$438 | \$416 | \$437,644 | 3.49 | \$125,509 | \$14,455 | 9 | 87.5\% | 1.56 | 6 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 1.4\% | 100\% | \$1,925 | \$1,828 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$866 | \$823 | \$822,653 | 3.72 | \$221,199 | \$26,783 | 8 | 98.1\% | 1.56 | 5 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$866 | \$823 | \$822,653 | 7.52 | \$109,424 | \$35,469 | 3 | 87.5\% | 1.56 | 2 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$192 | \$183 | \$182,812 | 5.29 | \$34,563 | \$35,283 | 1 | 98.1\% | 1.56 | 1 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.2\% | 100\% | \$230 | \$219 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$230 | \$219 | \$218,500 | 6.95 | \$31,445 | \$37,028 | 1 | 87.5\% | 1.56 | 0 | \$57,929 |
| Water and Other Public Services [6] | 0.6\% | 100\% | \$815 | \$774 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$815 | \$774 | \$774,115 | 4.79 | \$161,566 | \$40,694 | 4 | 98.1\% | 1.56 | 2 | \$63,665 |
| Household Operations Personal Services | 0.7\% | 100\% | \$968 | \$920 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facilities |  | 40\% | \$387 | \$368 | \$367,913 | 2.49 | \$147,575 | \$28,988 | 5 | 98.1\% | 1.56 | 3 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$581 | \$552 | \$551,869 | 2.98 | \$184,974 | \$23,861 | 8 | 98.1\% | 1.56 | 5 | \$37,329 |
| Household Operations Other Household Expenses | 1.0\% | 100\% | \$1,389 | \$1,319 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$1,389 | \$1,319 | \$1,319,325 | 2.64 | \$498,934 | \$25,071 | 20 | 98.1\% | 1.56 | 12 | \$39,222 |
| Housekeeping Supplies | 0.9\% | 100\% | \$1,263 | \$1,200 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$126 | \$120 | \$119,967 | 7.52 | \$15,957 | \$35,469 | 0 | - 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$442 | \$420 | \$419,885 | 8.07 | \$52,057 | \$26,541 | 2 | $287.5 \%$ | 1.56 | 1 | \$41,522 |
| General Merchandise |  | 35\% | \$442 | \$420 | \$419,885 | 12.13 | \$34,607 | \$21,273 | 2 | 2 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$253 | \$240 | \$239,934 | 6.46 | \$37,161 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Household Furnishings and Equipment | 2.3\% | 100\% | \$3,257 | \$3,093 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$1,303 | \$1,237 | \$1,237,335 | 6.15 | \$201,106 | \$29,550 | 7 | 87.5\% | 1.56 | 4 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$1,303 | \$1,237 | \$1,237,335 | 9.53 | \$129,900 | \$26,708 | 5 | 5 87.5\% | 1.56 | 3 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$326 | \$309 | \$309,334 | 12.13 | \$25,496 | \$21,273 |  | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$326 | \$309 | \$309,334 | 6.46 | \$47,910 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |

Table B-3
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$600,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\left\|\begin{array}{c}\text { \% of Household } \\ \text { Income Spent } \\ \text { per Category [1] }\end{array}\right\|$ | $\%$ of Category Expenditure per Type of Business [2] | 2010 <br> Expenditures | 2007 Expenditures $[3]$ |  | Gross Receipts to Wages | 2007 Total Wages | 2007 Avg. Wage | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | $k$ | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Apparel and Services | 3.4\% | 100\% | \$4,748 | \$4,509 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$1,899 | \$1,804 | \$1,803,771 | 7.80 | \$231,195 | \$16,289 | 14 | 87.5\% | 1.56 | 8 | \$25,484 |
| General Merchandise |  | 40\% | \$1,899 | \$1,804 | \$1,803,771 | 12.13 | \$148,669 | \$21,273 | 7 | 87.5\% | 1.56 | 4 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$475 | \$451 | \$450,943 | 6.46 | \$69,842 | \$20,030 | 3 | 87.5\% | 1.56 | 2 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$237 | \$225 | \$225,471 | 3.72 | \$60,626 | \$26,783 | 2 | 87.5\% | 1.56 | 1 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$237 | \$225 | \$225,471 | 3.17 | \$71,218 | \$25,028 | 3 | 87.5\% | 1.56 | 2 | \$39,155 |
| Vehicle Purchases (net outlay) | 4.6\% | 100\% | \$6,360 | \$6,041 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$6,360 | \$6,041 | \$6,041,010 | 8.79 | \$687,544 | \$42,196 | 16 | 87.5\% | 1.56 | 9 | \$66,014 |
| Gasoline and motor oil | 2.5\% | 100\% | \$3,539 | \$3,362 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$3,539 | \$3,362 | \$3,361,781 | 38.48 | \$87,361 | \$18,946 | 5 | 87.5\% | 1.56 | 3 | \$29,640 |
| Vehicle Maintenance and Repairs | 1.0\% | 100\% | \$1,413 | \$1,342 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$1,413 | \$1,342 | \$1,342,215 | 3.55 | \$378,431 | \$29,204 | 13 | 98.1\% | 1.56 | 8 | \$45,689 |
| Medical Services | 0.9\% | 100\% | \$1,308 | \$1,242 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$523 | \$497 | \$496,932 | 2.55 | \$194,764 | \$54,753 | 4 | 98.1\% | 1.56 | 2 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$392 | \$373 | \$372,699 | 2.63 | \$141,705 | \$58,054 | 2 | 98.1\% | 1.56 | 2 | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$392 | $\begin{array}{r} \$ 373 \\ \$ 0 \end{array}$ | \$372,699 | 2.49 | \$149,495 | \$28,988 | 5 | 98.1\% | 1.56 | 3 | \$45,350 |
| Drugs | 0.5\% | 100\% | \$679 | \$645 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$679 | $\begin{array}{r} \$ 645 \\ \$ 0 \end{array}$ | \$645,096 | 7.51 | \$85,922 | \$29,774 | 3 | 87.5\% | 1.56 | 2 | \$46,580 |
| Medical Supplies | 0.2\% | 100\% | \$226 | \$214 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$226 | \$214 | \$214,338 | 7.51 | \$28,548 | \$29,774 | 1 | 87.5\% | 1.56 | 1 | \$46,580 |
| Entertainment Fees and Admissions | 1.0\% | 100\% | \$1,436 | \$1,364 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$1,436 | \$1,364 | \$1,364,065 | 3.34 | \$408,453 | \$28,077 | 15 | 87.5\% | 1.56 | 8 | \$43,926 |
| Audio and Visual Equipment and Services | 1.2\% | 100\% | \$1,716 | \$1,629 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$1,716 | \$1,629 | \$1,629,387 | 9.53 | \$171,059 | \$26,708 | 6 | 87.5\% | 1.56 | 4 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 0.9\% | 100\% | \$1,265 | \$1,202 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$506 | \$481 | \$480,700 | 7.66 | \$62,751 | \$16,640 | 4 | 87.5\% | 1.56 | 2 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$506 | \$481 | \$480,700 | 6.46 | \$74,451 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$253 | \$240 | \$240,350 | 2.81 | \$85,425 | \$34,148 | 3 | 98.1\% | 1.56 | 2 | \$53,423 |

Table B-3
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$600,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{gathered} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{gathered}$ | $\left\|\begin{array}{c}\text { \% of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \\ \hline \end{array}$ | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i^{*} j^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.8\% | 100\% | \$1,161 | \$1,103 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$987 | \$937 | \$937,470 | 7.66 | \$122,378 | \$16,640 | 7 | 87.5\% | 1.56 | 4 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$174 | \$165 | \$165,436 | 4.55 | \$36,326 | \$22,554 | 2 | 98.1\% | 1.56 | 1 | \$35,285 |
| Personal Care Products and Services | 0.9\% | 100\% | \$1,248 | \$1,185 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$624 | \$593 | \$592,552 | 6.46 | \$91,774 | \$20,030 | 5 | 87.5\% | 1.56 | 3 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$624 | \$593 | \$592,552 | 2.99 | \$197,909 | \$16,484 | 12 | 98.1\% | 1.56 | 8 | \$25,789 |
| Reading | 0.1\% | 100\% | \$196 | \$186 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$196 | \$186 | \$186,245 | 7.66 | \$24,313 | \$16,640 | 1 | 98.1\% | 1.56 | 1 | \$26,032 |
| Education | 2.1\% | 100\% | \$2,890 | \$2,745 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$2,890 | \$2,745 | \$2,744,778 | 4.34 | \$632,605 | \$24,412 | 26 | 87.5\% | 1.56 | 14 | \$38,192 |
| Miscellaneous | 0.9\% | 100\% | \$1,229 | \$1,167 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$246 | \$233 | \$233,483 | 1.98 | \$117,817 | \$33,564 | 4 | 98.1\% | 1.56 | 2 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$246 | \$233 | \$233,483 | 2.80 | \$83,267 | \$74,995 | 1 | 98.1\% | 1.56 | 1 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$246 | \$233 | \$233,483 | 3.72 | \$62,843 | \$53,888 | 1 | 98.1\% | 1.56 | 1 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$246 | \$233 | \$233,483 | 3.47 | \$67,196 | \$36,983 | 2 | 98.1\% | 1.56 | 1 | \$57,858 |
| Legal Services [7] |  | 20\% | \$246 | \$233 | \$233,483 | 2.76 | \$84,549 | \$85,734 | 1 | 98.1\% | 1.56 | 1 | \$134,127 |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 379 |  |  | 219 |  |

Per Table 4, the purchase of a $\$ 600,000$ Unit requires a household income of

## \$139,700

[1] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at this income level. Note that the sum of the categories included in this analysis is well below the total expenditures of households at this income level, and thus represents a conservative esti
2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
4] BLS data indicates that $12.5 \%$ of retail/restaurant workers are age 16-19, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
[5] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings."
${ }^{6}$ ] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the 2007 Economic Census.
[7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data
[8] Note that average salary reported for architecture, engineering and related industries reflects the full range of employees within the industry, not solely professional and technical staf
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc.

Table B-4
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$800,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\left.\begin{array}{\|c\|} \hline \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{array} \right\rvert\,$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \\ \hline \end{array}$ | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Food at Home | 3.7\% | 100\% | \$6,720 | \$6,383 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$6,720 | \$6,383 | \$6,382,633 | 8.07 | \$791,309 | \$26,541 | 30 | 87.5\% | 1.56 | 17 | \$41,522 |
| Food Away From Home | 3.3\% | 100\% | \$6,097 | \$5,791 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$6,097 | \$5,791 | \$5,791,070 | 3.49 | \$1,660,783 | \$14,455 | 115 | 87.5\% | 1.56 | 64 | \$22,614 |
| Alcoholic Beverages | 0.6\% | 100\% | \$1,087 | \$1,032 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$544 | \$516 | \$543,539 | 8.07 | \$67,387 | \$26,541 | 3 | 87.5\% | 1.56 | 2 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$544 | \$516 | \$543,539 | 3.49 | \$155,878 | \$14,455 | 11 | 87.5\% | 1.56 | 7 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 1.4\% | 100\% | \$2,526 | \$2,399 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$1,137 | \$1,080 | \$1,079,728 | 3.72 | \$290,322 | \$26,783 | 11 | 98.1\% | 1.56 | 7 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$1,137 | \$1,080 | \$1,079,728 | 7.52 | \$143,619 | \$35,469 | 4 | 87.5\% | 1.56 | 2 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$253 | \$240 | \$239,940 | 5.29 | \$45,364 | \$35,283 | 1 | 98.1\% | 1.56 | 1 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.1\% | 100\% | \$264 | \$251 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$264 | \$251 | \$251,054 | 6.95 | \$36,130 | \$37,028 | 1 | 87.5\% | 1.56 | 1 | \$57,929 |
| Water and Other Public Services [6] | 0.5\% | 100\% | \$873 | \$829 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$873 | \$829 | \$829,207 | 4.79 | \$173,064 | \$40,694 | 4 | 98.1\% | 1.56 | 3 | \$63,665 |
| Household Operations Personal Services | 0.6\% | 100\% | \$1,142 | \$1,085 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facililies |  | 40\% | \$457 | \$434 | \$433,854 | 2.49 | \$174,025 | \$28,988 | 6 | 98.1\% | 1.56 | 4 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$685 | \$651 | \$650,781 | 2.98 | \$218,128 | \$23,861 | 9 | 98.1\% | 1.56 | 6 | \$37,329 |
| Household Operations Other Household Expenses | 0.9\% | 100\% | \$1,734 | \$1,647 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$1,734 | \$1,647 | \$1,646,515 | 2.64 | \$622,669 | \$25,071 | 25 | 98.1\% | 1.56 | 16 | \$39,222 |
| Housekeeping Supplies | 0.7\% | 100\% | \$1,359 | \$1,291 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$136 | \$129 | \$129,081 | 7.52 | \$17,170 | \$35,469 | 0 | 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$476 | \$452 | \$451,783 | 8.07 | \$56,011 | \$26,541 | 2 | 87.5\% | 1.56 | 1 | \$41,522 |
| General Merchandise |  | 35\% | \$476 | \$452 | \$451,783 | 12.13 | \$37,237 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$272 | \$258 | \$258,162 | 6.46 | \$39,984 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Household Furnishings and Equipment | 2.2\% | 100\% | \$3,971 | \$3,771 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$1,588 | \$1,509 | \$1,508,562 | 6.15 | \$245,189 | \$29,550 | 8 | 87.5\% | 1.56 | 5 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$1,588 | \$1,509 | \$1,508,562 | 9.53 | \$158,375 | \$26,708 | 6 | 87.5\% | 1.56 | 3 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$397 | \$377 | \$377,140 | 12.13 | \$31,084 | \$21,273 | 1 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$397 | \$377 | \$377,140 | 6.46 | \$58,411 | \$20,030 | 3 | 87.5\% | 1.56 | 2 | \$31,337 |

Table B-4
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$800,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{gathered} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{gathered}$ | \% of Category Expenditure per Type of Business [2] | 2010 <br> Expenditures | 2007 Expenditures [3] | 2007 Expenditures per 1000 Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \end{array}$ | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH }[4] \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \underset{b}{ } \text { a }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | $k$ | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Apparel and Services | 2.7\% | 100\% | \$4,909 | \$4,662 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$1,963 | \$1,865 | \$1,864,835 | 7.80 | \$239,022 | \$16,289 | 15 | 87.5\% | 1.56 | 8 | \$25,484 |
| General Merchandise |  | 40\% | \$1,963 | \$1,865 | \$1,864,835 | 12.13 | \$153,702 | \$21,273 | 7 | 87.5\% | 1.56 | 4 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$491 | \$466 | \$466,209 | 6.46 | \$72,206 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$245 | \$233 | \$233,104 | 3.72 | \$62,678 | \$26,783 | 2 | 87.5\% | 1.56 | 1 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$245 | \$233 | \$233,104 | 3.17 | \$73,629 | \$25,028 | 3 | 87.5\% | 1.56 | 2 | \$39,155 |
| Vehicle Purchases (net outlay) | 3.4\% | 100\% | \$6,282 | \$5,967 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$6,282 | \$5,967 | \$5,966,865 | 8.79 | \$679,105 | \$42,196 | 16 | 87.5\% | 1.56 | 9 | \$66,014 |
| Gasoline and motor oil | 2.0\% | 100\% | \$3,630 | \$3,447 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$3,630 | \$3,447 | \$3,447,429 | 38.48 | \$89,587 | \$18,946 | 5 | 87.5\% | 1.56 | 3 | \$29,640 |
| Vehicle Maintenance and Repairs | 0.9\% | 100\% | \$1,601 | \$1,521 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$1,601 | \$1,521 | \$1,520,663 | 3.55 | \$428,743 | \$29,204 | 15 | 98.1\% | 1.56 | 9 | \$45,689 |
| Medical Services | 0.8\% | 100\% | \$1,488 | \$1,413 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$595 | \$565 | \$565,286 | 2.55 | \$221,554 | \$54,753 | 4 | 98.1\% | 1.56 | 3 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$446 | \$424 | \$423,965 | 2.63 | \$161,197 | \$58,054 | 3 | 98.1\% | 1.56 | 2 | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$446 | $\begin{array}{r} \$ 424 \\ \$ 0 \end{array}$ | \$423,965 | 2.49 | \$170,058 | \$28,988 | 6 | 98.1\% | 1.56 | 4 | \$45,350 |
| Drugs | 0.4\% | 100\% | \$723 | \$686 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$723 | $\begin{array}{r} \$ 686 \\ \$ 0 \end{array}$ | \$686,387 | 7.51 | \$91,422 | \$29,774 | 3 | 87.5\% | 1.56 | 2 | \$46,580 |
| Medical Supplies | 0.1\% | 100\% | \$256 | \$243 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$256 | \$243 | \$243,398 | 7.51 | \$32,419 | \$29,774 | 1 | 87.5\% | 1.56 | 1 | \$46,580 |
| Entertainment Fees and Admissions | 1.1\% | 100\% | \$1,965 | \$1,866 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$1,965 | \$1,866 | \$1,865,934 | 3.34 | \$558,732 | \$28,077 | 20 | 87.5\% | 1.56 | 11 | \$43,926 |
| Audio and Visual Equipment and Services | 1.0\% | 100\% | \$1,800 | \$1,710 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$1,800 | \$1,710 | \$1,709,584 | 9.53 | \$179,479 | \$26,708 | 7 | 87.5\% | 1.56 | 4 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 0.7\% | 100\% | \$1,333 | \$1,266 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$533 | \$506 | \$506,240 | 7.66 | \$66,085 | \$16,640 | 4 | 87.5\% | 1.56 | 2 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$533 | \$506 | \$506,240 | 6.46 | \$78,406 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$267 | \$253 | \$253,120 | 2.81 | \$89,963 | \$34,148 | 3 | 98.1\% | 1.56 | 2 | \$53,423 |

Table B-4
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$800,000 Uni
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | \% of Household Income Spent per Category [1] | $\left\|\begin{array}{c}\text { \% of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business }[2]\end{array}\right\|$ | 2010 <br> Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 Expenditures per 1000 Households | Gross Receipts to Wages | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i \ddagger j / k$ | $m=h * j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.7\% | 100\% | \$1,361 | \$1,292 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$1,157 | \$1,099 | \$1,098,574 | 7.66 | \$143,409 | \$16,640 | 9 | 87.5\% | 1.56 | 5 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$204 | \$194 | \$193,866 | 4.55 | \$42,568 | \$22,554 | 2 | 98.1\% | 1.56 | 1 | \$35,285 |
| Personal Care Products and Services | 0.8\% | 100\% | \$1,373 | \$1,304 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$687 | \$652 | \$652,219 | 6.46 | \$101,015 | \$20,030 | 5 | 87.5\% | 1.56 | 3 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$687 | \$652 | \$652,219 | 2.99 | \$217,837 | \$16,484 | 13 | 98.1\% | 1.56 | 8 | \$25,789 |
| Reading | 0.1\% | 100\% | \$240 | \$228 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$240 | \$228 | \$228,065 | 7.66 | \$29,772 | \$16,640 | 2 | 98.1\% | 1.56 | 1 | \$26,032 |
| Education | 2.2\% | 100\% | \$4,077 | \$3,872 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$4,077 | \$3,872 | \$3,872,186 | 4.34 | \$892,446 | \$24,412 | 37 | 87.5\% | 1.56 | 20 | \$38,192 |
| Miscellaneous | 1.0\% | 100\% | \$1,753 | \$1,665 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$351 | \$333 | \$333,045 | 1.98 | \$168,057 | \$33,564 | 5 | 98.1\% | 1.56 | 3 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$351 | \$333 | \$333,045 | 2.80 | \$118,774 | \$74,995 | 2 | 98.1\% | 1.56 | 1 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$351 | \$333 | \$333,045 | 3.72 | \$89,640 | \$53,888 | 2 | 98.1\% | 1.56 | 1 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$351 | \$333 | \$333,045 | 3.47 | \$95,850 | \$36,983 | 3 | 98.1\% | 1.56 | 2 | \$57,858 |
| Legal Services [7] |  | 20\% | \$351 | \$333 | \$333,045 | 2.76 | \$120,603 | \$85,734 | $\underline{1}$ | 98.1\% | 1.56 | 1 | \$134,127 |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 443 |  |  | 256 |  |

rket Rate Household

## \$182,700

[1] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at this income level. Note that the sum of the categories included in this analysis is well below the total expenditures of households at this come level, and thus represents a conservative estimation of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ife insurance, cash contributions, and financing charges. Also, EPS has averaged the proportionate spending by category for households earning $\$ 120-\$ 150 \mathrm{~K}$ and $\$ 150 \mathrm{~K}+$, recognizing that the income required for this $\$ 800,000$ home price is at the lower end of he top income range provided by the Consumer Expenditure Survey.
[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
[4] BLS data indicates that $12.5 \%$ of retailrestaurant workers are age $16-19$, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
5] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings.
[6] Part of the Utilities, Fuels, and Pubic Services category, which also includes naturar gas, electriciy, and telephone services. Natural gas, electnciy, and telephone services not estimated because data was not available in the 2007 Economic Census.
7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data
[8] Note that average salary reported for architecture, engineering and related industries reflects the full range of employees within the industry, not solely professional and technical stafi
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc

Table B-5
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,000,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\left\|\begin{array}{c} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{array}\right\|$ | $\left\|\begin{array}{c}\text { \% of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{gathered} \text { Gross } \\ \text { Receipts } \\ \text { to Wages } \end{gathered}$ | 2007 Total Wages | $\begin{array}{\|c\|} \hline 2007 \text { Avg. } \\ \text { Wage } \end{array}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i^{*} j / k$ | $m=h * j$ |
| Food at Home | 2.9\% | 100\% | \$6,604 | \$6,272 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$6,604 | \$6,272 | \$6,272,030 | 8.07 | \$777,597 | \$26,541 | 29 | 87.5\% | 1.56 | 16 | \$41,522 |
| Food Away From Home | 2.9\% | 100\% | \$6,544 | \$6,216 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$6,544 | \$6,216 | \$6,215,762 | 3.49 | \$1,782,578 | \$14,455 | 123 | 87.5\% | 1.56 | 69 | \$22,614 |
| Alcoholic Beverages | 0.6\% | 100\% | \$1,272 | \$1,208 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$636 | \$604 | \$635,872 | 8.07 | \$78,834 | \$26,541 | 3 | 87.5\% | 1.56 | 2 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$636 | \$604 | \$635,872 | 3.49 | \$182,358 | \$14,455 | 13 | 87.5\% | 1.56 | 8 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 1.4\% | 100\% | \$3,132 | \$2,975 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$1,409 | \$1,339 | \$1,338,621 | 3.72 | \$359,934 | \$26,783 | 13 | 98.1\% | 1.56 | 8 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$1,409 | \$1,339 | \$1,338,621 | 7.52 | \$178,055 | \$35,469 | 5 | 87.5\% | 1.56 | 3 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$313 | \$297 | \$297,471 | 5.29 | \$56,242 | \$35,283 | 2 | 98.1\% | 1.56 | 1 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.1\% | 100\% | \$281 | \$267 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$281 | \$267 | \$267,274 | 6.95 | \$38,464 | \$37,028 | 1 | 87.5\% | 1.56 | 1 | \$57,929 |
| Water and Other Public Services [6] | 0.4\% | 100\% | \$840 | \$798 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$840 | \$798 | \$798,071 | 4.79 | \$166,566 | \$40,694 | 4 | 98.1\% | 1.56 | 3 | \$63,665 |
| Household Operations Personal Services | 0.6\% | 100\% | \$1,257 | \$1,194 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facilities |  | 40\% | \$503 | \$478 | \$477,530 | 2.49 | \$191,544 | \$28,988 | 7 | 98.1\% | 1.56 | 4 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$754 | \$716 | \$716,294 | 2.98 | \$240,086 | \$23,861 | 10 | 98.1\% | 1.56 | 6 | \$37,329 |
| Household Operations Other Household Expenses | 0.9\% | 100\% | \$2,039 | \$1,937 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$2,039 | \$1,937 | \$1,936,564 | 2.64 | \$732,358 | \$25,071 | 29 | 98.1\% | 1.56 | 18 | \$39,222 |
| Housekeeping Supplies | 0.6\% | 100\% | \$1,317 | \$1,251 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$132 | \$125 | \$125,103 | 7.52 | \$16,640 | \$35,469 | 0 | 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$461 | \$438 | \$437,860 | 8.07 | \$54,285 | \$26,541 | 2 | 87.5\% | 1.56 | 1 | \$41,522 |
| General Merchandise |  | 35\% | \$461 | \$438 | \$437,860 | 12.13 | \$36,089 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$263 | \$250 | \$250,206 | 6.46 | \$38,752 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Household Furnishings and Equipment | 2.0\% | 100\% | \$4,549 | \$4,320 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$1,820 | \$1,728 | \$1,728,184 | 6.15 | \$280,885 | \$29,550 | 10 | 87.5\% | 1.56 | 5 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$1,820 | \$1,728 | \$1,728,184 | 9.53 | \$181,432 | \$26,708 | 7 | 87.5\% | 1.56 | 4 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$455 | \$432 | \$432,046 | 12.13 | \$35,610 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$455 | \$432 | \$432,046 | 6.46 | \$66,915 | \$20,030 | 3 | 87.5\% | 1.56 | 2 | \$31,337 |

Table B-5
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,000,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{gathered} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{gathered}$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 Expenditures $[3]$ | 2007 Expenditures per 1000 Households | Gross Receipts to Wages | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i i^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Apparel and Services | 2.0\% | 100\% | \$4,457 | \$4,233 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$1,783 | \$1,693 | \$1,693,298 | 7.80 | \$217,035 | \$16,289 | 13 | 87.5\% | 1.56 | 7 | \$25,484 |
| General Merchandise |  | 40\% | \$1,783 | \$1,693 | \$1,693,298 | 12.13 | \$139,564 | \$21,273 | 7 | 87.5\% | 1.56 | 4 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$446 | \$423 | \$423,325 | 6.46 | \$65,564 | \$20,030 | 3 | 87.5\% | 1.56 | 2 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$223 | \$212 | \$211,662 | 3.72 | \$56,913 | \$26,783 | 2 | 87.5\% | 1.56 | 1 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$223 | \$212 | \$211,662 | 3.17 | \$66,856 | \$25,028 | 3 | 87.5\% | 1.56 | 1 | \$39,155 |
| Vehicle Purchases (net outlay) | 2.3\% | 100\% | \$5,246 | \$4,983 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$5,246 | \$4,983 | \$4,982,550 | 8.79 | \$567,077 | \$42,196 | 13 | 87.5\% | 1.56 | 8 | \$66,014 |
| Gasoline and motor oil | 1.4\% | 100\% | \$3,249 | \$3,086 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$3,249 | \$3,086 | \$3,086,311 | 38.48 | \$80,203 | \$18,946 | 4 | 87.5\% | 1.56 | 2 | \$29,640 |
| Vehicle Maintenance and Repairs | 0.7\% | 100\% | \$1,673 | \$1,589 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$1,673 | \$1,589 | \$1,588,639 | 3.55 | \$447,909 | \$29,204 | 15 | 98.1\% | 1.56 | 10 | \$45,689 |
| Medical Services | 0.7\% | 100\% | \$1,563 | \$1,485 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$625 | \$594 | \$593,817 | 2.55 | \$232,736 | \$54,753 | 4 | 98.1\% | 1.56 | 3 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$469 | \$445 | \$445,363 | 2.63 | \$169,333 | \$58,054 | 3 | 98.1\% | 1.56 | 2 | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$469 | $\begin{array}{r} \$ 445 \\ \$ 0 \end{array}$ | \$445,363 | 2.49 | \$178,641 | \$28,988 | 6 | 98.1\% | 1.56 | 4 | \$45,350 |
| Drugs | 0.3\% | 100\% | \$688 | \$654 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$688 | $\begin{array}{r} \$ 654 \\ \$ 0 \end{array}$ | \$653,649 | 7.51 | \$87,061 | \$29,774 | 3 | 87.5\% | 1.56 | 2 | \$46,580 |
| Medical Supplies | 0.1\% | 100\% | \$269 | \$255 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$269 | \$255 | \$255,083 | 7.51 | \$33,975 | \$29,774 | 1 | 87.5\% | 1.56 | 1 | \$46,580 |
| Entertainment Fees and Admissions | 1.1\% | 100\% | \$2,534 | \$2,406 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$2,534 | \$2,406 | \$2,406,404 | 3.34 | \$720,569 | \$28,077 | 26 | 87.5\% | 1.56 | 14 | \$43,926 |
| Audio and Visual Equipment and Services | 0.7\% | 100\% | \$1,676 | \$1,591 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$1,676 | \$1,591 | \$1,591,453 | 9.53 | \$167,077 | \$26,708 | 6 | 87.5\% | 1.56 | 3 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 0.6\% | 100\% | \$1,248 | \$1,185 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$499 | \$474 | \$474,153 | 7.66 | \$61,896 | \$16,640 | 4 | 87.5\% | 1.56 | 2 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$499 | \$474 | \$474,153 | 6.46 | \$73,437 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$250 | \$237 | \$237,077 | 2.81 | \$84,261 | \$34,148 | 2 | 98.1\% | 1.56 | 2 | \$53,423 |

Table B-5
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,000,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | \% of Household Income Spent per Category [1] | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 Expenditures $[3]$ | 2007 Expenditures per 1000 Households | Gross Receipts to Wages | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\%$ Forming $\mathrm{HH}[4]$ | Workers/ HH [5] | $\begin{gathered} \hline \text { Total } \\ \text { Worker } \\ \text { HH } \end{gathered}$ | $\begin{array}{\|l} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i \ddagger j / k$ | $m=h^{*} j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.7\% | 100\% | \$1,486 | \$1,411 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$1,263 | \$1,200 | \$1,199,685 | 7.66 | \$156,608 | \$16,640 | 9 | 87.5\% | 1.56 | 5 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$223 | \$212 | \$211,709 | 4.55 | \$46,486 | \$22,554 | 2 | 98.1\% | 1.56 | 1 | \$35,285 |
| Personal Care Products and Services | 0.6\% | 100\% | \$1,377 | \$1,308 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$689 | \$654 | \$654,118 | 6.46 | \$101,310 | \$20,030 | 5 | 87.5\% | 1.56 | 3 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$689 | \$654 | \$654,118 | 2.99 | \$218,471 | \$16,484 | 13 | 98.1\% | 1.56 | 8 | \$25,789 |
| Reading | 0.1\% | 100\% | \$276 | \$263 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$276 | \$263 | \$262,585 | 7.66 | \$34,278 | \$16,640 | 2 | 98.1\% | 1.56 | 1 | \$26,032 |
| Education | 2.4\% | 100\% | \$5,404 | \$5,133 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$5,404 | \$5,133 | \$5,132,599 | 4.34 | \$1,182,941 | \$24,412 | 48 | 87.5\% | 1.56 | 27 | \$38,192 |
| Miscellaneous | 1.0\% | 100\% | \$2,346 | \$2,228 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$469 | \$446 | \$445,644 | 1.98 | \$224,875 | \$33,564 | 7 | 98.1\% | 1.56 | 4 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$469 | \$446 | \$445,644 | 2.80 | \$158,930 | \$74,995 | 2 | 98.1\% | 1.56 | 1 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$469 | \$446 | \$445,644 | 3.72 | \$119,947 | \$53,888 | 2 | 98.1\% | 1.56 | 1 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$469 | \$446 | \$445,644 | 3.47 | \$128,256 | \$36,983 | 3 | 98.1\% | 1.56 | 2 | \$57,858 |
| Legal Services [7] |  | 20\% | \$469 | \$446 | \$445,644 | 2.76 | \$161,377 | \$85,734 | $\underline{2}$ | 98.1\% | 1.56 | 1 | \$134,127 |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 482 |  |  | 279 |  |

Per Table 4, the purchase of a $\$ 1,000,000$ Unit requires a household income of $\$ \mathbf{\$ 2 5 , 7 0 0}$
[1] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at this income level. Note that the sum of the categories included in this analysis is well below the total expenditures of households at this nome level, and thus represents a conservative estim
isurance, cash contributions, and financing charges.
2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
4] BLS data indicates that $12.5 \%$ of retail/restaurant workers are age $16-19$, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
[5] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings."
[6] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the 2007 Economic Census.
7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data.
[8] Note that average salary reported for architecture, engineering and related industries reflects the full range of employees within the industry, not solely professional and technical staff
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc.

## Table B-6

Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{gathered} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{gathered}$ | \% of Category Expenditure per Type of Business [2] | 2010 <br> Expenditures | 2007 Expenditures $[3]$ | 2007 Expenditures per 1000 Households | Gross Receipts to Wages | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{array}{\|c\|} \hline 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\text { Income }} \underset{b}{ } \text { a }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i i^{*} / \mathrm{k}$ | $m=h * j$ |
| Food at Home | 2.9\% | 100\% | \$7,865 | \$7,470 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 100\% | \$7,865 | \$7,470 | \$7,469,746 | 8.07 | \$926,088 | \$26,541 | 35 | 87.5\% | 1.56 | 20 | \$41,522 |
| Food Away From Home | 2.9\% | 100\% | \$7,794 | \$7,403 |  |  |  |  |  |  |  |  |  |
| Food Services and Drinking Places |  | 100\% | \$7,794 | \$7,403 | \$7,402,733 | 3.49 | \$2,122,982 | \$14,455 | 147 | 87.5\% | 1.56 | 82 | \$22,614 |
| Alcoholic Beverages | 0.6\% | 100\% | \$1,515 | \$1,439 |  |  |  |  |  |  |  |  |  |
| Food \& Beverage Stores |  | 50\% | \$757 | \$719 | \$757,299 | 8.07 | \$93,889 | \$26,541 | 4 | 87.5\% | 1.56 | 2 | \$41,522 |
| Food Services and Drinking Places |  | 50\% | \$757 | \$719 | \$757,299 | 3.49 | \$217,181 | \$14,455 | 15 | 87.5\% | 1.56 | 10 | \$22,614 |
| Housing Maintenance, Repairs, Insurance, Other expenses | 1.4\% | 100\% | \$3,730 | \$3,543 |  |  |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance [7] |  | 45\% | \$1,679 | \$1,594 | \$1,594,246 | 3.72 | \$428,668 | \$26,783 | 16 | 98.1\% | 1.56 | 10 | \$41,901 |
| Building Material and Garden Equipment and Supplies Dealer |  | 45\% | \$1,679 | \$1,594 | \$1,594,246 | 7.52 | \$212,057 | \$35,469 | 6 | 87.5\% | 1.56 | 3 | \$55,489 |
| Real Estate and Rental and Leasing |  | 10\% | \$373 | \$354 | \$354,277 | 5.29 | \$66,981 | \$35,283 | 2 | 98.1\% | 1.56 | 1 | \$55,199 |
| Fuel Oil and Other Fuels [6] | 0.1\% | 100\% | \$335 | \$318 |  |  |  |  |  |  |  |  |  |
| Nonstore Retailers |  | 100\% | \$335 | \$318 | \$318,313 | 6.95 | \$45,810 | \$37,028 | 1 | 87.5\% | 1.56 | 1 | \$57,929 |
| Water and Other Public Services [6] | 0.4\% | 100\% | \$1,001 | \$950 |  |  |  |  |  |  |  |  |  |
| Waste Management and Remediation Services |  | 100\% | \$1,001 | \$950 | \$950,472 | 4.79 | \$198,374 | \$40,694 | 5 | 98.1\% | 1.56 | 3 | \$63,665 |
| Household Operations Personal Services | 0.6\% | 100\% | \$1,497 | \$1,422 |  |  |  |  |  |  |  |  |  |
| Nursing and Residential Care Facilities |  | 40\% | \$599 | \$569 | \$568,719 | 2.49 | \$228,122 | \$28,988 | 8 | 98.1\% | 1.56 | 5 | \$45,350 |
| Social Assistance [7] |  | 60\% | \$898 | \$853 | \$853,079 | 2.98 | \$285,933 | \$23,861 | 12 | 98.1\% | 1.56 | 8 | \$37,329 |
| Household Operations Other Household Expenses | 0.9\% | 100\% | \$2,428 | \$2,306 |  |  |  |  |  |  |  |  |  |
| Services to Buildings and Dwellings [7] |  | 100\% | \$2,428 | \$2,306 | \$2,306,373 | 2.64 | \$872,210 | \$25,071 | 35 | 98.1\% | 1.56 | 22 | \$39,222 |
| Housekeeping Supplies | 0.6\% | 100\% | \$1,569 | \$1,490 |  |  |  |  |  |  |  |  |  |
| Building Materials and Garden Equipment and Supplies Dealers |  | 10\% | \$157 | \$149 | \$148,993 | 7.52 | \$19,818 | \$35,469 | 1 | 87.5\% | 1.56 | 0 | \$55,489 |
| Food \& Beverage Stores |  | 35\% | \$549 | \$521 | \$521,475 | 8.07 | \$64,652 | \$26,541 | 2 | 87.5\% | 1.56 | 1 | \$41,522 |
| General Merchandise |  | 35\% | \$549 | \$521 | \$521,475 | 12.13 | \$42,981 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 20\% | \$314 | \$298 | \$297,986 | 6.46 | \$46,152 | \$20,030 | 2 | 87.5\% | 1.56 | 1 | \$31,337 |
| Household Furnishings and Equipment | 2.0\% | 100\% | \$5,418 | \$5,146 |  |  |  |  |  |  |  |  |  |
| Furniture and Home Furnishings Stores |  | 40\% | \$2,167 | \$2,058 | \$2,058,201 | 6.15 | \$334,523 | \$29,550 | 11 | 87.5\% | 1.56 | 6 | \$46,230 |
| Electronics and Appliance Stores |  | 40\% | \$2,167 | \$2,058 | \$2,058,201 | 9.53 | \$216,078 | \$26,708 | 8 | 87.5\% | 1.56 | 5 | \$41,784 |
| General Merchandise Stores |  | 10\% | \$542 | \$515 | \$514,550 | 12.13 | \$42,410 | \$21,273 | 2 | 87.5\% | 1.56 | 1 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$542 | \$515 | \$514,550 | 6.46 | \$79,693 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |

## Table B-6

Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{array}{\|c} \hline \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \\ \hline \end{array}$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 <br> Expenditures <br> $[3]$ | 2007 <br> Expenditures <br> per 1000 <br> Households | $\begin{array}{\|c\|} \hline \text { Gross } \\ \text { Receeipts } \\ \text { to Wages } \\ \hline \end{array}$ | 2007 Total Wages | 2007 Avg. Wage | \# of Workers | $\left\|\begin{array}{c} \% \text { Forming } \\ \text { HH [4] } \end{array}\right\|$ | Workers/ HH [5] | Total Worker HH | $\begin{gathered} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c^{*} \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | $h$ | $i=g / h$ | j | k | $1=i i^{\prime} / \mathrm{k}$ | $m=h * j$ |
| Apparel and Services | 2.0\% | 100\% | \$5,308 | \$5,042 |  |  |  |  |  |  |  |  |  |
| Clothing and Clothing Accessories Stores |  | 40\% | \$2,123 | \$2,017 | \$2,016,653 | 7.80 | \$258,481 | \$16,289 | 16 | 87.5\% | 1.56 | 9 | \$25,484 |
| General Merchandise |  | 40\% | \$2,123 | \$2,017 | \$2,016,653 | 12.13 | \$166,215 | \$21,273 | 8 | 8 87.5\% | 1.56 | 4 | \$33,281 |
| Miscellaneous Store Retailers |  | 10\% | \$531 | \$504 | \$504,163 | 6.46 | \$78,085 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Personal and Household Goods Repair and Maintenance [7] |  | 5\% | \$265 | \$252 | \$252,082 | 3.72 | \$67,781 | \$26,783 | 3 | 37.5\% | 1.56 | 1 | \$41,901 |
| Dry Cleaning and Laundry Services [7] |  | 5\% | \$265 | \$252 | \$252,082 | 3.17 | \$79,623 | \$25,028 | 3 | 3 87.5\% | 1.56 | 2 | \$39,155 |
| Vehicle Purchases (net outlay) | 2.3\% | 100\% | \$6,248 | \$5,934 |  |  |  |  |  |  |  |  |  |
| Motor Vehicle and Parts Dealers |  | 100\% | \$6,248 | \$5,934 | \$5,934,025 | 8.79 | \$675,367 | \$42,196 | 16 | 87.5\% | 1.56 | 9 | \$66,014 |
| Gasoline and motor oil | 1.4\% | 100\% | \$3,870 | \$3,676 |  |  |  |  |  |  |  |  |  |
| Gasoline Stations |  | 100\% | \$3,870 | \$3,676 | \$3,675,678 | 38.48 | \$95,519 | \$18,946 | 5 | 5 87.5\% | 1.56 | 3 | \$29,640 |
| Vehicle Maintenance and Repairs | 0.7\% | 100\% | \$1,992 | \$1,892 |  |  |  |  |  |  |  |  |  |
| Repair and Maintenance [7] |  | 100\% | \$1,992 | \$1,892 | \$1,892,008 | 3.55 | \$533,442 | \$29,204 | 18 | -98.1\% | 1.56 | 11 | \$45,689 |
| Medical Services | 0.7\% | 100\% | \$1,861 | \$1,768 |  |  |  |  |  |  |  |  |  |
| Ambulatory Health Care Services |  | 40\% | \$745 | \$707 | \$707,213 | 2.55 | \$277,180 | \$54,753 | 5 | 5 98.1\% | 1.56 | 3 | \$85,658 |
| General Medical and Surgical Hospitals [7] |  | 30\% | \$558 | \$530 | \$530,410 | 2.63 | \$201,669 | \$58,054 | 3 | 3 98.1\% | 1.56 | 2 | \$90,823 |
| Nursing and Residential Care Facilities |  | 30\% | \$558 | $\begin{array}{r} \$ 530 \\ \$ 0 \end{array}$ | \$530,410 | 2.49 | \$212,755 | \$28,988 | 7 | 98.1\% | 1.56 | 5 | \$45,350 |
| Drugs | 0.3\% | 100\% | \$820 | \$778 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$820 | $\begin{array}{r} \$ 778 \\ \$ 0 \end{array}$ | \$778,471 | 7.51 | \$103,687 | \$29,774 | 3 | 87.5\% | 1.56 | 2 | \$46,580 |
| Medical Supplies | 0.1\% | 100\% | \$320 | \$304 |  |  |  |  |  |  |  |  |  |
| Health and Personal Care Stores |  | 100\% | \$320 | \$304 | \$303,793 | 7.51 | \$40,463 | \$29,774 | 1 | 87.5\% | 1.56 | 1 | \$46,580 |
| Entertainment Fees and Admissions | 1.1\% | 100\% | \$3,017 | \$2,866 |  |  |  |  |  |  |  |  |  |
| Arts, Entertainment, \& Recreation |  | 100\% | \$3,017 | \$2,866 | \$2,865,934 | 3.34 | \$858,170 | \$28,077 | 31 | 87.5\% | 1.56 | 17 | \$43,926 |
| Audio and Visual Equipment and Services | 0.7\% | 100\% | \$1,996 | \$1,895 |  |  |  |  |  |  |  |  |  |
| Electronics and Appliance Stores |  | 100\% | \$1,996 | \$1,895 | \$1,895,359 | 9.53 | \$198,982 | \$26,708 | 7 | 87.5\% | 1.56 | 4 | \$41,784 |
| Pets, Toys, Hobbies, and Playground Equip. | 0.6\% | 100\% | \$1,486 | \$1,412 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 40\% | \$595 | \$565 | \$564,698 | 7.66 | \$73,716 | \$16,640 | 4 | 87.5\% | 1.56 | 2 | \$26,032 |
| Miscellaneous Store Retailers |  | 40\% | \$595 | \$565 | \$564,698 | 6.46 | \$87,460 | \$20,030 | 4 | 87.5\% | 1.56 | 2 | \$31,337 |
| Veterinary Services [7] |  | 20\% | \$297 | \$282 | \$282,349 | 2.81 | \$100,352 | \$34,148 | 3 | 3 98.1\% | 1.56 | 2 | \$53,423 |

Table B-6
Estimated Average Annual Household Expenditures and Associated Employment Generation - \$1,200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Expenditure Categoryl Business Type | $\begin{gathered} \% \text { of Household } \\ \text { Income Spent } \\ \text { per Category [1] } \end{gathered}$ | $\left\|\begin{array}{c}\% \text { of Category } \\ \text { Expenditure per } \\ \text { Type of } \\ \text { Business [2] }\end{array}\right\|$ | 2010 <br> Expenditures | 2007 Expenditures [3] | 2007 <br> Expenditures <br> per 1000 <br> Households | Gross Receipts to Wages | 2007 Total Wages | $\begin{gathered} 2007 \text { Avg. } \\ \text { Wage } \end{gathered}$ | \# of Workers | $\%$ Forming $\mathrm{HH}[4]$ | Workers/ HH [5] | Total Worker HH | $\begin{array}{\|c} 2007 \text { Avg. } \\ \text { HH } \\ \text { Income } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calculation | a | $b$ | $c=\underset{b}{\operatorname{Income}} \text { * } a \text { * }$ | $\begin{gathered} d=c * \text { (inflation } \\ \text { adjustment) } \end{gathered}$ | $e=d * 1000$ | $f$ | $g=e / f$ | h | $i=g / h$ | j | k | $1=i^{\prime} / \mathrm{j}$ | $m=h^{*} j$ |
| Other Entertainment Supplies, Equipment, and Services | 0.7\% | 100\% | \$1,770 | \$1,681 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 85\% | \$1,504 | \$1,429 | \$1,428,779 | 7.66 | \$186,514 | \$16,640 | 11 | 87.5\% | 1.56 | 6 | \$26,032 |
| Photographic Services [7] |  | 15\% | \$265 | \$252 | \$252,137 | 4.55 | \$55,363 | \$22,554 | 2 | 98.1\% | 1.56 | 2 | \$35,285 |
| Personal Care Products and Services | 0.6\% | 100\% | \$1,640 | \$1,558 |  |  |  |  |  |  |  |  |  |
| Unspecified Retail |  | 50\% | \$820 | \$779 | \$779,029 | 6.46 | \$120,656 | \$20,030 | 6 | 87.5\% | 1.56 | 3 | \$31,337 |
| Personal Care Services [7] |  | 50\% | \$820 | \$779 | \$779,029 | 2.99 | \$260,191 | \$16,484 | 16 | 98.1\% | 1.56 | 10 | \$25,789 |
| Reading | 0.1\% | 100\% | \$329 | \$313 |  |  |  |  |  |  |  |  |  |
| Sporting Goods, Hobby, and Musical Instrument Stores |  | 100\% | \$329 | \$313 | \$312,729 | 7.66 | \$40,824 | \$16,640 | 2 | 98.1\% | 1.56 | 2 | \$26,032 |
| Education | 2.4\% | 100\% | \$6,436 | \$6,113 |  |  |  |  |  |  |  |  |  |
| Educational Services |  | 100\% | \$6,436 | \$6,113 | \$6,112,727 | 4.34 | \$1,408,837 | \$24,412 | 58 | 87.5\% | 1.56 | 32 | \$38,192 |
| Miscellaneous | 1.0\% | 100\% | \$2,794 | \$2,654 |  |  |  |  |  |  |  |  |  |
| Accounting [7] |  | 20\% | \$559 | \$531 | \$530,745 | 1.98 | \$267,817 | \$33,564 | 8 | 98.1\% | 1.56 | 5 | \$52,510 |
| Architectural, Engineering, and Related [7,8] |  | 20\% | \$559 | \$531 | \$530,745 | 2.80 | \$189,279 | \$74,995 | 3 | 98.1\% | 1.56 | 2 | \$117,326 |
| Specialized Design Services [7] |  | 20\% | \$559 | \$531 | \$530,745 | 3.72 | \$142,852 | \$53,888 | 3 | 98.1\% | 1.56 | 2 | \$84,305 |
| Death Care Services [7] |  | 20\% | \$559 | \$531 | \$530,745 | 3.47 | \$152,748 | \$36,983 | 4 | 98.1\% | 1.56 | 3 | \$57,858 |
| Legal Services [7] |  | 20\% | \$559 | \$531 | \$530,745 | 2.76 | \$192,194 | \$85,734 | $\underline{2}$ | 198.1\% | 1.56 | $\underline{3}$ |  |
| Total per 1,000 Market Rate Households |  |  |  |  |  |  |  |  | 574 |  |  | 333 |  |

Per Table 4, the purchase of a $\$ 1,200,000$ Unit requires a household income of $\quad \$ 268,800$
11] Percent of income spent per category is based on the 2010 Consumer Expenditure Survey data for households at the most representative income level. Note that the sum of the categories included in this analysis is well below the total expenditures of ouseholds at this income level, and thus represents a conservative estimation of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personallife insurance, cash contributions, and financing charges.
[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2010 expenditures converted to 2007 dollars using the Consumer Price Index for the San Francisco Metropolitan Statistical Area from the Bureau of Labor Statistics.
4] BLS data indicates that $12.5 \%$ of retail/restaurant workers are age 16-19, but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.
[5] Based on 2011 ACS Census data for City of Santa Rosa, calculated as the number of "employed persons" divided by the number of "households with earnings.
${ }^{6}$ ] Part of the Utilities, Fuels, and Public Services category, which also includes natural gas, electricity, and telephone services. Natural gas, electricity, and telephone services not estimated because data was not available in the 2007 Economic Census.
7] Sonoma County data not available from 2007 Economic Census. Gross receipts to wages and 2007 average wage thus based on statewide data
限
Source: 2010 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2007 Economic Census, U.S. Census Bureau; Census 2010; Economic \& Planning Systems, Inc.

Table B-7
Representative Government Employment and Wages, 2010 [1]
Santa Rosa Housing Impact Fee, EPS \#121110

| Item | 2010 Estimated Govt. Empl. | 2010 County Total HH | Govt. Empl/ 1,000 County HH | Govt. <br> Employee <br> HH [2] | 2011 Avg. Wage | Govt. Employee HH Income [2] | Income Category [3] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Protective Service Occupations | 3,420 | 185,825 | 18 | 11.8 | \$60,293 | \$94,326 | Above Med |
| Preschool Teachers, Except Special Education | 410 | 185,825 | 2 | 1.4 | \$33,004 | \$51,633 | Low (80\%) |
| Kindergarten Teachers, Except Special Education | 380 | 185,825 | 2 | 1.3 | \$59,392 | \$92,916 | Above Med |
| Elementary School Teachers, Except Special Education | 1,930 | 185,825 | 10 | 6.6 | \$60,032 | \$93,918 | Above Med |
| Middle School Teachers, Except Special and Vocational Education | 1,120 | 185,825 | 6 | 3.9 | \$60,758 | \$95,053 | Above Med |
| Secondary School Teachers, Except Special and Vocational Education | 760 | 185,825 | 4 | 2.6 | \$57,645 | \$90,183 | Above Med |
| Special Education Teachers, Preschool, Kindergarten, and Elementary School | 210 | 185,825 | 1 | 0.7 | \$65,539 | \$102,533 | Above Med |
| Special Education Teachers, Middle School | 100 | 185,825 | 1 | 0.3 | \$67,804 | \$106,077 | Above Med |
| Special Education Teachers, Secondary School | 60 | 185,825 | 0 | 0.2 | \$58,967 | \$92,251 | Above Med |
| Teachers and Instructors, All Other | 1,530 | 185,825 | 8 | 5.3 | \$35,655 | \$55,781 | Low (80\%) |
| Bus Drivers, Transit and Intercity | 830 | 185,825 | 4 | 2.9 | \$34,529 | \$54,019 | Low (80\%) |
| Bus Drivers, School | 410 | 185,825 | $\underline{2}$ | 1.4 | \$36,278 | \$56,755 | Low (80\%) |
| Total |  |  | 60 | 38.4 |  |  |  |

[1] Not a comprehensive list of government employment. Rather a sampling of government jobs for which employment and wage data was available for the County from the Employment Development Department (EDD).
[2] Assumes 1.56 workers per worker household based on the 2011 ACS Census.
[3] See Table 5.
Sources: 2011 Occupational Employment Statistics, CA Employment Development Department; Economic \& Planning Systems, Inc.

## ApPENDIX C:

## Income Levels for Worker Households

Table C-1 Income Levels for Worker Households—Worker Household
Generation per 1,000 Market-Rate Units-

For-Sale \$200,000 unit
Table C-2 Income Levels for Worker Households—Worker Household Generation per 1,000 Market-Rate Units-For-Sale \$400,000 unit. C-2
Table C-3 Income Levels for Worker Households—Worker Household Generation per 1,000 Market-Rate Units-For-Sale \$600,000 unit. C-3
Table C-4 Income Levels for Worker Households—Worker Household Generation per 1,000 Market-Rate Units-For-Sale \$800,000 unit C-4

Table C-5 Income Levels for Worker Households—Worker Household
Generation per 1,000 Market-Rate Units-
For-Sale \$1,000,000 unit
C-5
Table C-6 Income Levels for Worker Households—Worker Household Generation per 1,000 Market-Rate Units- For-Sale \$1,200,000 unit ..... C-6

Table C-1
Household Generation per 1,000 Market Rate Units - \$200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing
Source: Economic \& Planning Systems, Inc.

Table C-2
Household Generation per 1,000 Market Rate Units - \$400,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

| Industry | Total Employees | HH [1] | Low (50\%) | Low (60\%) | Low (80\%) | Med | Above Med |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retail |  |  |  |  |  |  |  |
| Unspecified Retail | 3 | 2 | 2 | 0 | 0 | 0 | 0 |
| Food \& Beverage Stores | 25 | 14 | 0 | 0 | 14 | 0 | 0 |
| Food Services and Drinking Places | 75 | 42 | 42 | 0 | 0 | 0 | 0 |
| Health and Personal Care Stores | 3 | 2 | 0 | 0 | 2 | 0 | 0 |
| General Merchandise | 5 | 3 | 3 | 0 | 0 | 0 | 0 |
| Furniture and Home Furnishings Stores | 4 | 2 | 0 | 0 | 2 | 0 | 0 |
| Building Material and Garden Equipment and Supplies Dealer | 3 | 1 | 0 | 0 | 0 | 1 | 0 |
| Electronics and Appliance Stores | 8 | 5 | 0 | 0 | 5 | 0 | 0 |
| Clothing and Clothing Accessories Stores | 6 | 4 | 4 | 0 | 0 | 0 | 0 |
| Motor Vehicle and Parts Dealers | 11 | 6 | 0 | 0 | 0 | 6 | 0 |
| Gasoline Stations | 4 | 2 | 2 | 0 | 0 | 0 | 0 |
| Sporting Goods, Hobby, and Musical Instrument Stores | 6 | 4 | 4 | 0 | 0 | 0 | 0 |
| Miscellaneous Store Retailers | 7 | 4 | 4 | 0 | 0 | 0 | 0 |
| Nonstore Retailers | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Arts, Entertainment, \& Recreation | 9 | 5 | 0 | 0 | 5 | 0 | 0 |
| Medical/Health |  |  |  |  |  |  |  |
| Ambulatory Health Care Services | 3 | 2 | 0 | 0 | 0 | 0 | 2 |
| General Medical and Surgical Hospitals | 2 | 1 | 0 | 0 | 0 | 0 | 1 |
| Nursing and Residential Care Facilities | 8 | 5 | 0 | 0 | 5 | 0 | 0 |
| Social Assistance | 5 | 3 | 0 | 3 | 0 | 0 | 0 |
| Services |  |  |  |  |  |  |  |
| Personal and Household Goods Repair and Maintenance | 7 | 4 | 0 | 0 | 4 | 0 | 0 |
| Services to Buildings and Dwellings | 13 | 8 | 0 | 8 | 0 | 0 | 0 |
| Waste Management and Remediation Services | 3 | 2 | 0 | 0 | 0 | 2 | 0 |
| Real Estate and Rental and Leasing | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Personal Care Services | 8 | 5 | 5 | 0 | 0 | 0 | 0 |
| Dry Cleaning and Laundry Services | 1 | 1 | 0 | 1 | 0 | 0 | 0 |
| Auto Repair and Maintenance | 11 | 7 | 0 | 0 | 7 | 0 | 0 |
| Veterinary Services | 2 | 1 | 0 | 0 | 1 | 0 | 0 |
| Photographic Services | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Educational Services | 10 | 6 | 0 | 6 | 0 | 0 | 0 |
| Accounting | 3 | 2 | 0 | 0 | 2 | 0 | 0 |
| Architectural, Engineering, and Related | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Specialized Design Services | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Death Care Services | 2 | 1 | 0 | 0 | 0 | 1 | 0 |
| Legal Services | 1 | 1 | 0 | 0 | 0 | 0 | 1 |
| Government | 60 | 38 | 0 | $\underline{0}$ | 11 | $\underline{0}$ | $\underline{27}$ |
| Total HH Generated Per 1,000 Market-Rate Units | 313 | 185 | 65 | 18 | 58 | 12 | 33 |
| Total Income-Qualified HH Generated Per 100 Market-Rate U |  |  | 7 | 2 | 6 | 1 | 3 |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20.
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.
Source: Economic \& Planning Systems, Inc.

Table C-3
Household Generation per 1,000 Market Rate Units - \$600,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | :--- | :--- | :--- | :--- | :--- |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20.
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.
Source: Economic \& Planning Systems, Inc.

Table C-4
Household Generation per 1,000 Market Rate Units - \$800,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | :--- | :--- | :--- | :--- | :--- |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20.
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.
Source: Economic \& Planning Systems, Inc.

Table C-5
Household Generation per 1,000 Market Rate Units - \$1,000,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | :--- | ---: | :--- |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20.
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing.
Source: Economic \& Planning Systems, Inc.

Table C-6
Household Generation per 1,000 Market Rate Units - \$1,200,000 Unit
Santa Rosa Housing Impact Fee, EPS \#121110

|  | Total |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

[1] Assumes 1.56 workers per worker household based on the 2010 Census. Includes a $12.5 \%$ discount for retail and $1.9 \%$ discount for other industries to account for workers under age 20.
[2] Excludes above moderate-income households because these incomes are adequate to acquire market-rate housing
Source: Economic \& Planning Systems, Inc.

## ApPENDIX D <br> Schedule of Maximum Fees by Unit Price

EPS

Appendix D
Schedule of Maximum Fees by Unit Price Santa Rosa Housing Impact Fee, EPS \#121110

| Unit Price | EPS Maximum Fee |
| :---: | :---: |
| \$200,000 | \$8,930 |
| \$220,000 | \$9,402 |
| \$240,000 | \$9,874 |
| \$260,000 | \$10,346 |
| \$280,000 | \$10,818 |
| \$300,000 | \$11,290 |
| \$320,000 | \$11,762 |
| \$340,000 | \$12,234 |
| \$360,000 | \$12,706 |
| \$380,000 | \$13,178 |
| \$400,000 | \$13,650 |
| \$420,000 | \$14,393 |
| \$440,000 | \$15,137 |
| \$460,000 | \$15,881 |
| \$480,000 | \$16,625 |
| \$500,000 | \$17,369 |
| \$520,000 | \$18,113 |
| \$540,000 | \$18,857 |
| \$560,000 | \$19,601 |
| \$580,000 | \$20,345 |
| \$600,000 | \$21,089 |
| \$620,000 | \$21,432 |
| \$640,000 | \$21,774 |
| \$660,000 | \$22,117 |
| \$680,000 | \$22,459 |
| \$700,000 | \$22,802 |
| \$720,000 | \$23,145 |
| \$740,000 | \$23,487 |
| \$760,000 | \$23,830 |
| \$780,000 | \$24,172 |
| \$800,000 | \$24,515 |
| \$820,000 | \$24,720 |
| \$840,000 | \$24,925 |
| \$860,000 | \$25,130 |
| \$880,000 | \$25,334 |
| \$900,000 | \$25,539 |
| \$920,000 | \$25,744 |
| \$940,000 | \$25,949 |
| \$960,000 | \$26,154 |
| \$980,000 | \$26,359 |
| \$1,000,000 | \$26,564 |
| \$1,020,000 | \$27,062 |
| \$1,040,000 | \$27,561 |
| \$1,060,000 | \$28,059 |
| \$1,080,000 | \$28,558 |
| \$1,100,000 | \$29,057 |
| \$1,120,000 | \$29,555 |
| \$1,140,000 | \$30,054 |
| \$1,160,000 | \$30,552 |
| \$1,180,000 | \$31,051 |
| \$1,200,000 | \$31,550 |
| \$1,200,001+ | 2.6\% of unit value |

Sources: Economic \& Planning Systems, Inc.


[^0]:    ${ }^{1}$ BLS data indicates that $12.5 \%$ of retail/restaurant workers are age 16 to 19 , but an average of only $1.9 \%$ of workers in other industries. EPS has assumed that such young workers do not form their own households.

[^1]:    [1] Costs for 50-60\% AMI units are based on recent affordable housing projects as shown in Appendix A. For units at 80-120\% of AMI, EPS has assumed lower development costs consistent with for-profit builders on cost bases.
    [2] The land costs represented are based on the weighted average listed price for multifamily land in the Santa Rosa market area, as shown in Appendix A.
    [3] Includes costs for labor and materials. Assumes Direct Construction Costs for rentals are $\$ 10 /$ SF less than for-sale developments.
    [4] Includes costs for architecture and engineering; entitlement and fees; project management, marketing, commissions, and general administration; financing and charges; insurance; and contingency.
    [5] Projects at $50-60 \%$ AMI are assumed to receive $4 \%$ Low Income Housing Tax Credits which cover an estimated $40 \%$ of total development costs, per CDC staff.
    [6] Based on HCD 2012 income limits for Sonoma County.
    [7] Assumes housing costs to be $30 \%$ of gross household income.
    [8] Operating expenses provided by Sonoma County CDC, and include costs of tenants' utilities. Units for median- and moderate-income households are assumed to be built as for-profit projects and thus subject to property tax.
    [9] Reflects average investor interest for apartment capitalization rates from RealShare/Jones Lang LaSalle's Apartments Outlook 2012 Survey.
    Sources: Sonoma County housing developers; Sonoma County Community Development Commission; Economic \& Planning Systems, Inc.

[^2]:    2 In recognition of this persistent dynamic, the California Department of Housing and Community Development has commissioned a 2012 consulting study to determine the causes of these significant differences in development costs for affordable housing vs. market-rate housing.
    ${ }^{3}$ In addition to discussing the cost assumptions with Sonoma County developers in a stakeholder meeting in spring 2012 as part of a similar study for the County, EPS has reviewed the development cost assumptions provided to the City in an analysis by local developer Hugh Futrell dated April 4, 2010 and found our current assumptions to reflect lower costs than were included by Mr. Futrell.

[^3]:    4 Note that the Consumer Expenditure Survey data is based on information current as of 2010. The latest data available for the Economic Census was published in 2007. Because the data sources were from different years, EPS converted the 2010 expenditures to 2007 dollars using the Consumer Price Index (CPI) for the San Francisco Metropolitan Statistical Area (MSA) from the Bureau of Labor Statistics.

    5 Note that the average salary reported for architectural and engineering services reflects the full range of workers employed by that industry sector, including administrative staff and entry-level employees, as well as the professional and technical architects and engineers.

[^4]:    6 Workers per working household based on the U.S. Census 2011 American Community Survey . The average workers per working household estimate is calculated by taking the total number of employed residents age 18 to 64 and dividing it by the number of households with earnings. This methodology seeks to provide a conservative estimate of household formation by excluding households without workers or earnings (such as those with retired persons).

[^5]:    7 To correspond to the available data regarding employee wages, the 2007 Sonoma County affordable housing income limits from HCD were used to determine the number of income-qualified households, based on household expenditures, while 2011 income limits were used for public-sector employment.

