Administrative Draft Report

Nexus-Based Affordable Housing Fee Analysis for Ownership Housing

The Economics of Land Use

Prepared for:

Mono County

Prepared by:

Economic & Planning Systems, Inc.

June 29, 2018

EPS #181044

Economic & Planning Systems, Inc.
One Kaiser Plaza, Suite 1410
Oakland, CA 94612
510 841 9190 tel
510 740 2080 fax

Oakland
Sacramento
Denver
Los Angeles

www.epsys.com

Table of Contents

List of Figures and Tables

EXECUTIVE SUMMARY

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

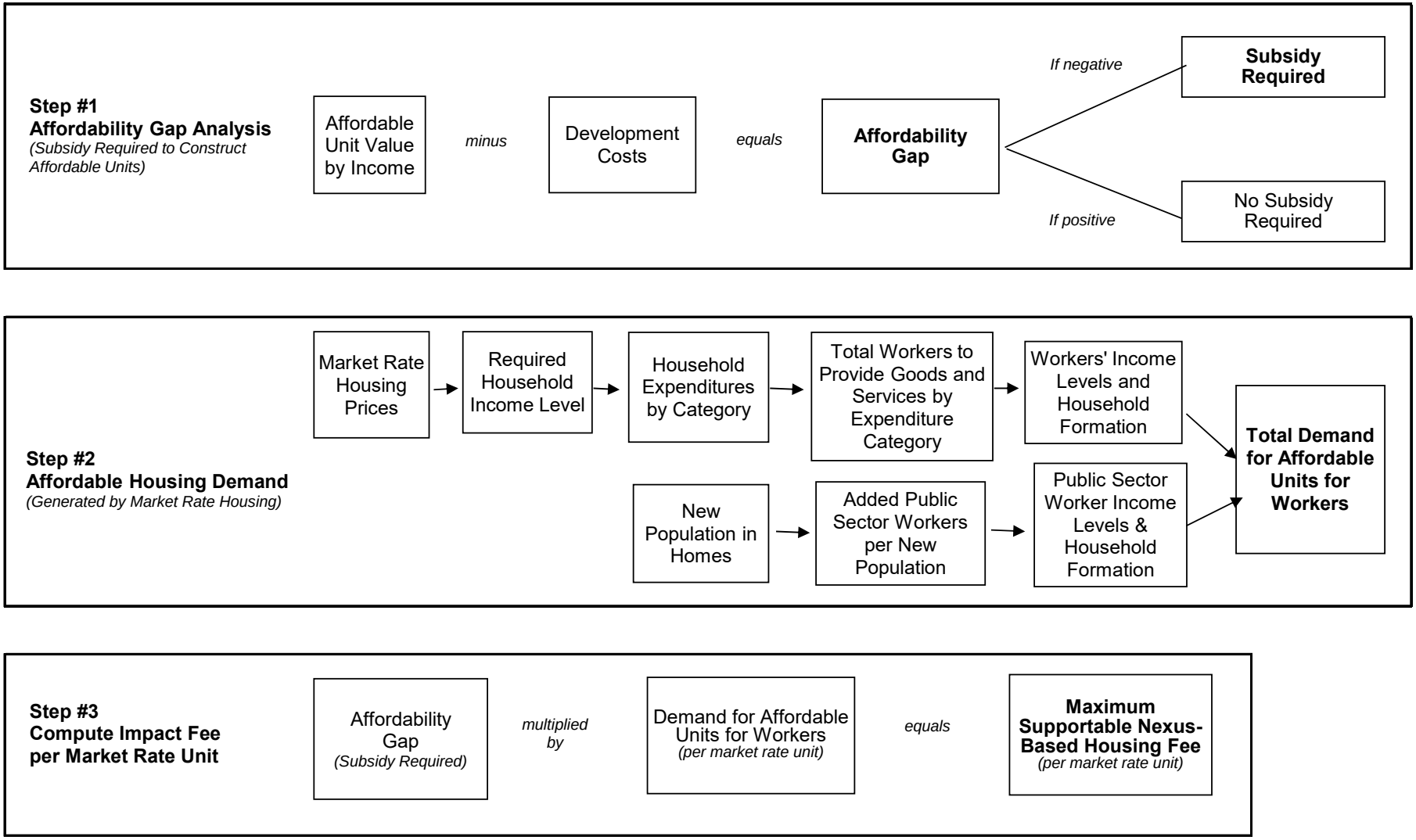
The technical approach used herein quantifies the impacts that the introduction of market-rate ownership units have on the local economy and the demand for additional affordable housing. As new households occupying market rate housing are added to the community, local employment expands to provide the 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 ownership housing units to mitigate the impact on the affordable housing supply. Fee revenue may be collected by the County and used 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 County 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 appendices. The findings regarding each of these steps are presented below.

Figure 1 Illustration of Nexus-Based Housing Fee Methodology



Step #1. The cost to construct housing units affordable to many households exceeds the value of those units based on the prices the households can afford to pay. The estimated subsidy required to construct affordable housing units in Mono County ranges from roughly $254,300 for Very Low-Income households earning up to 50 percent of AMI to $48,000 for Moderate Income households earning up to 120 percent of AMI.

An "affordability gap analysis" evaluates whether or not the cost to construct affordable units exceeds the value of units that are affordable to lower- and moderate-income households. For each affordable housing income level—households with incomes at 50, 80, 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 in a two-story building, which is assumed to be occupied by three people on average. The average density assumed is 26 dwelling units per acre, consistent the Mono County General Plan, which indicates that multifamily residential development projects containing density bonuses may not exceed 26 units/acre.[1] The estimated costs to acquire land and construct the prototypical affordable unit are based on recent Mono County transactions, County staff input, and other development cost data sources.

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. This unit value is then compared to the costs of development to determine the subsidy required to make the unit affordable to each income level.

Step #2. The demand for affordable housing created by the expenditures of new households in Mono County increases along with the market-rate price (and related household income). For example, a $350,000 home is estimated to create demand for about 0.12 affordable housing units, while a $950,000 home creates demand for 0.30 affordable units.

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

Because more expensive housing units require homeowners to have higher incomes, and higher income households create more jobs through their spending, the nexus impacts and thus the justified fees for for-sale units vary according to the price range of the market-rate units. Typically, occupants of higher-priced homes are required to have higher household incomes than occupants of less expensive homes. Thus, more expensive units create and/or support more jobs as a result of their occupants' spending patterns. Consequently, nexus impacts and the justified fees for market-rate homes vary by value of the home.

[1] Mono County Land Use Element, page II-155.

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

A. Market-Rate Household Income Levels. The expected price of the unit is based on market data regarding the distribution of home prices in the County. The required income levels of households occupying new market-rate housing are derived based on the assumed home prices, typical mortgage assumptions, and using standard housing cost expenses as a proportion of overall household income. For example, a typical household purchasing a $550,000 home will spend approximately $28,600 per year on a mortgage (principle and interest), assuming a 10 percent down payment, a 4 percent interest rate, and a 30-year term. Additional housing expenses include property taxes and insurance, resulting in annual housing-related expenses totaling to $36,900. This household would need to earn an annual income of approximately $122,900, if it spends 30 percent of its 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 along with the price and size of the market-rate units, the total spending on goods and services also increases. The Consumer Expenditure Survey also indicates that these relationships are not linear (e.g., a household with twice the income does not necessarily spend twice as much on food).

C. Job Creation and Worker Households. Having estimated the households' spending on various items, that spending is then converted into an estimation of jobs created. For each expenditure category, data regarding average worker wages and the ratio between gross business receipts and wages are used to translate these household expenditures into the total number of private-sector workers. Because each new worker does not represent an independent household (Mono County has an average of 1.86 workers per working household), the total number of new households created is somewhat less than the number of new jobs created. This analysis assumes that workers form households with others earning similar wages. EPS has further adjusted the household formation rates to reflect the fact that a certain proportion of workers will *not* form their own households, particularly those of younger ages.[2]

D. Worker Households by Income Category. Each worker household generated is assigned to an income category—represented as a proportion of AMI ranging from 50 to 120 percent—based on its estimated gross wages. This provides the total number of households generated at each income level by construction of market-rate units at various sizes and price points. The results indicate that residents of smaller, lower-priced units generate fewer worker households requiring affordable housing than do residents of larger, higher-priced units.

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

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

Step #3. This analysis calculates the fees that could be charged to fully mitigate the impact that new market-rate ownership housing has on Mono County's affordable housing demand at various representative unit values. These fees could range from $19,817 for $350,000 homes to $51,435 for $950,000 homes.

The nexus fee is calculated by applying the number of affordable units needed by income qualified households to the affordability gap for each housing income category. This calculation is made for several different home values. **Table 1** summarizes the maximum nexus-based fees calculated for representative for-sale home values. The County may also consider whether to allow developers to provide affordable units within their developments, rather than paying the nexus-based fee. **Table 1** illustrates the proportions of affordable units that correspond to the fee calculation and demands created by the market-rate units. For instance, a project offering $750,000 homes would effectively mitigate the demand being created by the market-rate units if it provided 0.23 affordable units for each market-rate unit.

It is understood that a lower fee level below the maximum fee may be appropriate given a range of development feasibility and economic development considerations. The lower fee may also be appropriate due to the fact that affordable housing development is not the sole responsibility of rental housing developers, as the County, State, and federal government have other programs and resources that can offset some affordable housing production costs. The County can weigh the implications of charging a nexus-based fee (as calculated in this report) versus the in-lieu fee (calculated separately).

Table 1 Summary of Maximum Supportable Nexus-Based Housing Fees or Unit Requirements In Lieu of Fees

Residential Prices	Maximum Nexus-Based Fees		Unit Requirements by Income Level			
	Fee per Unit	*Fee/Sq.Ft. [1]*	*Very Low (<50% of AMI)*	*Low (<80% of AMI)*	*Moderate (<120% of AMI)*	***Total***
$350,000	$19,817	$16.51	4.3%	5.7%	1.7%	11.7%
$550,000	$29,404	$18.38	6.4%	8.6%	2.4%	17.4%
$750,000	$40,114	$20.06	9.2%	11.2%	2.3%	22.7%
$950,000	$51,435	$21.43	11.7%	14.1%	4.2%	30.0%

[1] Fee/Sq.Ft. is calculated by dividing the maximum fee per unit by the average square footage of various unit types, assumed at 1,200 sq.ft., 1,600 sq.ft., 2,000 sq.ft.,and 2,400 sq.ft. per unit based on a survey of current listings on Trulia by price of home.

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 rental housing that is 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 market-rate ownership housing that may be single family or multifamily, the analysis assumes that new lower-income worker households would actually be housed in affordable units. The assumed prototype reflects multifamily construction at 26 dwelling units to the acre with surface parking—this building prototype is generally cost-effective to construct, as it makes efficient use of land and does not involve overly expensive construction materials or techniques.

California State law (California Health and Safety Code Section 50052.5) assumes that a 2-bedroom unit is occupied by a 3-person household, and this assumption is used in this analysis. Consistent with input from the County, EPS assumes that the typical gross square footage of a 2-bedroom rental unit in County will be approximately 1,150 square feet. Applying an efficiency ratio of 85 percent to account for shared lobbies, hallways, etc., results in net square footage of 975 square feet. This analysis estimates the subsidy that would be required to build for-rent housing for the lower-income worker households.

Table 2 Affordability Gap Analysis -- Rental Product Type

Item	2-Story Multifamily Building with Surface Parking Very Low Income (50% AMI)	Low Income (80% AMI)	Moderate Income (120% AMI)
Development Program Assumptions			
Density/Acre [1]	26	26	26
Gross Unit Size	1,147	1,147	1,147
Net Unit Size [2]	975	975	975
Number of Bedrooms	2	2	2
Number of Persons per 2-Bedroom Unit [3]	3	3	3
Parking Spaces/Unit [4]	2.17	2.17	2.17
Cost Assumptions			
Land/Acre [5]	$519,000	$519,000	$519,000
Land/Unit	$19,962	$19,962	$19,962
Direct Costs			
Direct Construction Costs/Net SF [6]	$167	$167	$167
Direct Construction Costs/Unit	$191,000	$191,000	$191,000
Parking Construction Costs/Unit	$10,850	$10,850	$10,850
Subtotal, Direct Costs/Unit	$201,850	$201,850	$201,850
Indirect Costs as a % of Direct Costs [7]	40%	40%	40%
Indirect Costs/Unit	$80,740	$80,740	$80,740
Profit Margin (% of all costs)	14%	14%	14%
Profit (rounded)	$42,000	$42,000	$42,000
Total Cost/Unit	$344,552	$344,552	$344,552
Total Cost/SF	$300	$300	$300
Maximum Supported Home Price			
Household Income [8]	$36,550	$57,550	$87,700
Revenue to Property Owner/Year [9]	$10,965	$17,265	$26,310
(less) Operating Expenses per Unit/Year [10]	($6,000)	($6,000)	($10,000)
Net Operating Income	$4,965	$11,265	$16,310
Capitalization Rate [11]	5.5%	5.5%	5.5%
Total Supportable Unit Value [12]	$90,273	$204,818	$296,545
Affordability Gap	**($254,279)**	**($139,733)**	**($48,006)**

[1] The Mono County General Plan indicates that multifamily residential development projects containing density bonuses may not exceed 26 units/acre (Land Use Element, page II-155).

[2] An efficiency ratio of 85% is applied to the gross unit size to calculate the net unit size.

[3] This analysis assumes an average unit size for income-qualified worker households is 2-bedrooms. State law (Health and Safety Code Section 50052.5) indicates that a 2-bedroom unit is typically occupied by a 3-person household.

[4] The Mono County General Plan indicates that each residential unit requires two (2) parking spaces, and for every six (6) units, one (1) guest parking space is required (Land Use Element, page II-228).

[5] Land values are based on recently reported CoStar land sale transactions in the County.

[6] Construction cost estimates are based on 2018 Saylor Construction Costs for Zone 3 with a Fresno County index adjustment (Mono County is not available). With Mono County Staff input, the direct costs are rounded up so that total costs per square foot are $300, consistent with what County staff is observing in terms of current construction costs. Assumes construction of a two story apartment, with a 10-foot story height, and 15,000 sq. ft. of gross floor area, with wood siding on stud frame.

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

[8] Based on 2018 income limits for a three-person household in Mono County.

[9] Assumes housing costs (e.g., rent and utilities) to be 30% of gross household income.

[10] Operating expenses are generally based on data reported by CoStar and reflective of properties in Mono County. Estimates are inclusive of utility costs and property taxes, except Very Low and Low properties which are assumed to be exempt from property taxes.

[11] The capitalization rate is used to determine the current value of a property based on estimated future operating income, and is typically a measure of estimated operating risk. The capitalization rate used in this analysis is based on recent CoStar reported transaction data in Mono County.

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

Sources: Mono County; California Housing and Community Development; Saylor Construction Cost Estimates (2018); IRR Monitor Investor Survey; CoStar Group; and Economic & Planning Systems, Inc.

Development Cost Assumptions

Affordable housing development costs include land costs, direct costs (e.g., labor and materials), and indirect or "soft" costs (e.g., architecture, entitlement, marketing, etc.). EPS evaluated land value information based on recently reported CoStar land sale transactions in the County. For direct construction costs, EPS used Saylor Construction Cost estimates (2018) and refined those estimates based on Mono County staff input, to calculate appropriate development cost assumptions for Mono County. These assumptions are shown on **Table 2** and demonstrate that the total cost per unit for rental apartments is about $344,600, or $300 per square foot.

Revenue Assumptions

To calculate the values of the affordable units, assumptions must be made regarding the applicable income level (very low, low, and moderate) and the percentage of household income spent on housing costs. In addition, translating these assumptions into unit prices and values requires estimates of operating expenses 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 up to 50, 80, and 120 percent of AMI for a three-person household. In 2018, AMI in Mono County for these households is $73,100, as shown in the California Department of Housing and Community Development's (HCD's) income limits chart (see **Table 3**).
- *Percentage of Gross Household Income Available for Housing Costs*—HCD standards on overpaying for rent indicate that households should pay no more than 30 percent of their gross income on housing costs. For this analysis, EPS has assumed that all households spend 30 percent of their gross income on rent costs.
- *Operating Costs for Rental Units*—This analysis assumes that apartment operators incur annual operating costs of $6,000 per unit, which include the cost of utilities, for units affordable at 80 percent of AMI or below. EPS has assumed the units for moderate income households would have similar operating costs but would be built by for-profit builders and thus also subject to property taxes, increasing their annual operating cost to $10,000 per unit.

Table 3 Income Limits for Affordable Housing

Income Group and Definition		2018 Maximum Income 3-Person Household
Very Low	>30% to ≤50% AMI	$36,550
Low	>50% to ≤80% AMI	$57,550
Median (Base)	>80% to ≤100% AMI	$73,100
Moderate	>100% AMI to ≤120% AMI	$87,700

Source: Mono County 2018 Income Limits, California Housing and Community Development (HCD).

Affordability Gap Results

Table 2 shows the subsidies required for construction of rental apartments for households at very- low, low, and moderate-income levels. As shown, a unit affordable to a household earning 50 percent of AMI is expected to require a subsidy of roughly $254,300, while a unit affordable to a household at 120 percent of AMI is expected to require a subsidy of about $48,000. A household at 80 percent of AMI falls in between with a required subsidy of $139,700.

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

It is worth noting that the affordability gaps estimated in this analysis are not as large as they might be using other also-valid assumptions. For example, the funding gaps for low income units assume that prices are set at 80 percent of median income, while State law indicates low-income unit prices may be set at 70 percent of median income. This methodology used by EPS yields higher unit values and thus results in lower maximum fees than would result from less conservative assumptions.

2. DEMAND-BASED NEXUS FEE CALCULATION

The maximum supportable nexus-based fees are based on both the affordability gap and the estimated impact that new market-rate units have on the need for affordable units, as reflected in the number of income-qualified local workers required to support the residents of market-rate homes 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 create employment demand for some workers who make moderate or lower incomes and cannot afford market-rate housing; and (c) fees charged to market-rate projects can mitigate the impact of those projects on the increased need for affordable housing.

Market-Rate Household Income Levels

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

An online survey of recent home sales of newly-constructed homes indicates a range of values from as low as $200,000 to well-above $1 million, with a concentration between $350,000 and $950,000. The required income levels of households occupying new market-rate housing are derived based on the assumed home prices, typical mortgage assumptions, and using standard housing cost expenses as a proportion of overall household income. For example, a typical household purchasing a $350,000 home will spend approximately $18,200 per year on a mortgage (principle and interest), assuming a 10 percent down payment, a 4 percent interest rate, and a 30-year term. Additional housing expenses include property taxes and insurance, resulting in annual housing-related expenses totaling to $23,500. This household would need to earn an annual income of approximately $78,200, if it spends 30 percent of its income on housing costs. As shown, the other required household incomes range from approximately $122,900 for a $550,000 home to roughly $212,300 for an $950,000 home. Changes in housing market and financing conditions can have a significant effect on the calculations in this study.

Table 4 Required Income by Home Price - Market-Rate Ownership Homes

	Required Income by Home Price				
Home Price [1]	Down Payment [2]	Annual Mortgage [3]	Property Taxes + Insurance [4]	Annual Housing Costs	Minimum Annual Household Income Required [5]
$350,000	10%	$18,216	$5,250	$23,466	$78,222
$550,000	10%	$28,626	$8,250	$36,876	$122,920
$750,000	10%	$39,035	$11,250	$50,285	$167,618
$950,000	10%	$49,445	$14,250	$63,695	$212,316

[1] Average home prices reflect the range of recently built home prices observed in the past 9 months, according to Trulia.
[2] Down payments vary from 5 to 20 percent, depending on the price of the home and the income qualifications of the buyer.
[3] Annual mortgage reflects down payment assumption, a 30-year mortgage and a 4 percent interest rate.
[4] Property taxes and insurance togethter represent 1.5 percent of the home price.
[5] Assumes housing costs (e.g., rent and utilities) to be 30% of gross household income.

Sources: Mono County; Trulia; Economic & Planning Systems, Inc.

Household Expenditures and Job Creation by Income Level

Having established the income requirements for purchasing homes at various values, the fee calculation then requires an analysis of the household spending patterns at those required income levels. This analysis assumes that all households buying new market-rate units in Mono County are "net new" households to the County. To assume otherwise—for instance, that only those buyers of new housing units relocating from outside Mono County should be counted in the impact analysis—would require assuming that the homes left by those households relocating *within* Mono County would be demolished or left vacant in perpetuity. This would only be the case were the County experiencing a significant loss of population and housing inventory, as has occurred, for instance, in Detroit. On the other hand, the population in Mono County has been relatively stable in the years since 2010.

The Consumer Expenditure Survey from the United States Bureau of Labor Statistics provides data for households at a variety of income levels, detailing the amounts that typical households spend on things like Food at Home, Apparel and Services, and Vehicle Maintenance and Repairs. Interestingly, household expenditures by category are not uniformly proportional to household income levels. For example, households earning around $78,200 (adequate to buy a $350,000 home) spend roughly 11.3 percent of their income on food and drink (at home and eating out), while households earning $167,600 who can afford to buy a $750,000 home spend only about 9.7 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. It is important to note that the $750,000 and $950,000 home buyer categories have been placed in the same

household income and expenditure cohort because the $950,000 home buyer category is on the cusp of the next highest income cohort and EPS believes these households will have similar expenditure patterns. These spending patterns can be viewed in **Tables A-1** to **A-4** in **Appendix A**.

The household's typical expenditures were converted to the number of jobs created by its 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,[3] which provides employment, gross sales, and payroll data by industry for Mono County. In certain instances, where local data was not available for a specific industry, EPS relied on statewide Economic Census data for that industry.

To link the Economic Census data and the Consumer Expenditure Survey data, EPS made determinations as to the industries involved with expenditures in various categories. For example, purchases in the Consumer Expenditure Survey's "Food at Home" category would likely involve the Economic Census's "Food & Beverage Stores" industry, where gross receipts were almost ten 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 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 Economic Census). After accounting for CPI adjustments, these wages ranged from a low of roughly $15,400 per year for workers in the General Merchandise industry to a high of almost $104,000 in Legal Services.

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

To calculate the number of *households* supported by the expenditures of market-rate housing units, EPS estimated the employees' household formation rates. Importantly, employees generated from the increase in housing units do not all form households; some employees, in the

[3] The Economic Census and Consumer Expenditure Survey and were published in 2012 and 2017, respectively, but are current as of 2018. EPS converted all numbers to 2018 dollars using the Consumer Price Index (CPI) for the Eastern Sierra Region Metropolitan Statistical Area (MSA) from the Bureau of Labor Statistics.

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

To get the overall households' income rather than the individual workers', the wages of workers forming households were multiplied by the average of approximately 1.86 workers per working household in Mono County.[4] 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)	$123,000
C.	Aggregate Household Income (A x B)	$123 million
D.	Average Income Spent on Gasoline (Consumer Expenditure Survey)	$3,300
E.	Aggregate Gasoline Spending (A x D)	$3.3 million
F.	Gasoline Gross Receipts: Payroll Ratio (Economic Census)	18:1
G.	Estimated Gas Station Payroll (E ÷ F)	$183,300
H.	Average Gas Station Employee Wage (Economic Census)	$24,800
I.	Estimated Total Jobs (G ÷ H)	7
J.	Percent Age 20+ (Bureau of Labor Statistics)	87.5%
K.	Total Workers Forming Households	6
L.	Average Workers/Household (Census Data)	1.86
M.	Estimated Households Created (K÷L)	3
N.	Average Household Income (H x L)	$46,000
O.	Income Category	Low-Income (up to 80% of AMI)

In this simplified example, 1,000 new market-rate homes sold to households earning $125,000 per year would create demand for about 3 housing units for retail workers with household incomes typically between 50 and 80 percent of AMI. Actual calculations and impact distinctions by type of household expenditure for various home values are shown in the series of tables presented in **Appendix B**.

Combined Demand for Income-Qualified Workers

The total number of income-qualified households required to support the expenditure and public-sector service needs of new market-rate units were determined based on the affordable housing

[4] Workers per working household based on a five-year average (2012-2016) of American Community Survey (ACS) Census data. Although ACS data reported is based on historical figures, these figures can vary somewhat based on ongoing revisions to the ACS data.

income limits from HCD for a 3-person household. **Table 3** summarizes the HCD income limits used to compute the total number of income-qualified households generated by construction of market-rate units.[5] The number of income-qualified households required to provide goods and services to new housing units is detailed in **Appendix B**.

The nexus methodology used herein computes the total number of income-qualified households generated by market-rate homes (as shown in **Table 5**) and calculates the impact fee based on the estimated cost to subsidize the production of units to meet that affordable housing demand.

[5] To correspond to the available data regarding employee wages, the 2018 Mono County affordable housing income limits from HCD were used to determine the number of income-qualified households based on household expenditures.

Table 5 Summary of Worker and Household Generation per 100 Market-Rate Units

Home Price	Minimum Household Income Requirement	Total Workers Generated [1]	Total Worker Households [2]	Total Income Qualified Households [3]	Worker Households by Income Category: Very Low Income Households	Low Income Households	Moderate Income Households
$350,000	$78,222	25.4	12.4	**11.7**	4.3	5.7	1.7
$550,000	$122,920	37.8	18.5	**17.4**	6.4	8.6	2.4
$750,000	$167,618	51.4	25.1	**22.7**	9.2	11.2	2.3
$950,000	$212,316	65.1	31.8	**30.0**	11.7	14.1	4.2

[1] Total workers generated detailed by home price in Tables B-1 through B-4.
[2] Total worker households derived assuming 1.86 workers per household. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.
[3] Total income qualified households reflects the very low-, low-, and moderate-income households eligible for affordable housing based on total household income. See Tables B-1 through B-4 for detail.

Source: Economic & Planning Systems, Inc.

Fee Calculation

The affordability gap analysis quantifies the subsidy required to construct affordable housing at various income levels. Analysis of consumer expenditures that rely on lower wage workers provides an estimate of the total number of income-qualified households generated by new for-sale units. Then for each category of market-rate ownership 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 ownership housing development in Mono County.

Tables 6 through **9** show the impact fee calculation for market-rate homes based on value. The total impact fees required for a representative project of 100 units is calculated by multiplying the number of affordable units required per income level by the cost of subsidizing such housing. All income-qualified households are assumed to be housed in multifamily units and the subsidies needed are calculated as the affordability gaps shown in **Table 2**. The resulting maximum impact fee for market-rate ownership units ranges from $19,817 for a $350,000 home to $51,435 for a $950,000 home (**Table 1**).

These fee estimates result in the maximum fee range between nearly $17 and $21 per square foot. While the County has the option of adopting fees up to the maximum levels calculated, there may be a variety of reasons to adopt the fee level below the maximum, including insufficient wages relative to development costs. Market forces, land use regulations, construction costs, and entitlement costs also affect housing affordability. In addition, revenue generated through this fee program is just one source of potential subsidy funds to help finance affordable housing projects. Imposing a maximum fee on the residential and commercial linkage fee would also result in the double-counting of impacts attributed to new housing and new commercial uses. Finally, adoption of the maximum fees for certain employment categories would represent a very large addition to the costs of development and could hamper the County's economic development and competitiveness objectives. Other California communities have made reductions to the maximum allowable fee when adopting their fee program, for reasons such as those cited above.

Table 6 Nexus-Based Housing Fee Calculations (Home Price of $350,000)

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	4.3	$254,279	$1,105,308	
Affordable Units - Low Income	5.7	$139,733	$793,907	
Affordable Units - Moderate Income	1.7	$48,006	$82,462	
Total	*11.7*		***$1,981,678***	***$19,817***

[1] See Table 5.
[2] See Table 2. EPS has assumed units across all affordabilities will be rental apartments.

Source: Economic & Planning Systems, Inc.

Table 7 Nexus-Based Housing Fee Calculations (Home Price of $550,000)

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	6.4	$254,279	$1,628,433	
Affordable Units - Low Income	8.6	$139,733	$1,196,858	
Affordable Units - Moderate Income	2.4	$48,006	$115,087	
Total	*17.4*		***$2,940,377***	***$29,404***

[1] See Table 5.

[2] See Table 2. EPS has assumed units across all affordabilities will be rental apartments.

Source: Economic & Planning Systems, Inc.

Table 8 Nexus-Based Housing Fee Calculations (Home Price of $750,000)

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	9.2	$254,279	$2,341,469	
Affordable Units - Low Income	11.2	$139,733	$1,558,786	
Affordable Units - Moderate Income	2.3	$48,006	$111,161	
Total	*22.7*		***$4,011,416***	***$40,114***

[1] See Table 5.

[2] See Table 2. EPS has assumed units across all affordabilities will be rental apartments.

Source: Economic & Planning Systems, Inc.

Table 9 Nexus-Based Housing Fee Calculations (Home Price of $950,000)

Item	Affordable Units Required Per 100 Market-Rate Units [1]	Affordability Gap per Affordable Unit [2]	Total Nexus-Based Fee Supported	
			Per 100 Market-Rate Units	Per Market-Rate Unit
	(A)	(B)	(C = A * B)	(D = C / 100)
Affordable Units - Very Low Income	11.7	$254,279	$2,965,860	
Affordable Units - Low Income	14.1	$139,733	$1,974,463	
Affordable Units - Moderate Income	4.2	$48,006	$203,199	
Total	*30.0*		***$5,143,522***	***$51,435***

[1] See Table 5.

[2] See Table 2. EPS has assumed units across all affordabilities will be rental apartments.

Source: Economic & Planning Systems, Inc.

APPENDICES:

Appendix A: Household Expenditures and Employment Generation

Appendix B: Worker Household Generation

APPENDIX A:

Household Expenditures and Employment Generation

Table A-1
Household Expenditures and Employment Generation - Home Price of $350,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Food at Home	6.4%	100%	$4,994										
Food & Beverage Stores		100%	$4,994	$4,994,026	9.71	$514,211	$31,638	16.3	87.5%	1.86	7.7	$58,749	Moderate Income
Food Away From Home	4.9%	100%	$3,834										
Food Services and Drinking Places		100%	$3,834	$3,834,474	3.24	$1,182,781	$15,417	76.7	87.5%	1.86	36.2	$28,628	VLI Households
Alcoholic Beverages	0.8%	100%	$624										
Food & Beverage Stores		50%	$311.87	$311,865	9.71	$32,111	$31,638	1.0	87.5%	1.86	0.5	$58,749	Moderate Income
Food Services and Drinking Places		50%	$311.87	$311,865	3.24	$96,198	$15,417	6.2	87.5%	1.86	2.9	$28,628	VLI Households
Housing Maintenance, Repairs, Insurance, Other expenses	2.0%	100%	$1,596										
Personal and Household Goods Repair and Maintenance		45%	$718	$718,179	3.76	$191,019	$25,662	7.4	98.1%	1.86	3.9	$47,653	LI Households
Building Material and Garden Equipment and Supplies Dealer		45%	$718	$718,179	9.19	$78,140	$26,488	3.0	87.5%	1.86	1.4	$49,186	LI Households
Real Estate and Rental and Leasing		10%	$160	$159,595	3.89	$40,984	$29,091	1.4	98.1%	1.86	0.7	$54,020	LI Households
Fuel oil and Other fuels [8]	0.1%	100%	$88										
Nonstore Retailers [7]		100%	$88	$87,908	13.82	$6,363	$65,041	0.1	87.5%	1.86	0.0	$120,777	Above Mod
Water and Other Public Services [8]	0.9%	100%	$695										
Waste Management and Remediation Services		100%	$695	$694,894	3.36	$207,085	$32,099	6.5	98.1%	1.86	3.4	$59,605	Moderate Income
Household Operations Personal Services	0.6%	100%	$446										
Nursing and Residential Care Facilities		40%	$178	$178,328	2.93	$60,796	$69,714	0.9	98.1%	1.86	0.5	$129,455	Above Mod
Social Assistance		60%	$267	$267,492	2.93	$91,194	$69,714	1.3	98.1%	1.86	0.7	$129,455	Above Mod
Household Operations Other Household Expenses	1.3%	100%	$1,016										
Services to Buildings and Dwellings [7]		100%	$1,016	$1,016,178	2.54	$399,627	$29,308	13.6	98.1%	1.86	7.2	$54,424	LI Households
Housekeeping Supplies	0.9%	100%	$743										
Building Materials and Garden Equipment and Supplies Dealers		10%	$74	$74,303	9.19	$8,084	$26,488	0.3	87.5%	1.86	0.1	$49,186	LI Households
Food & Beverage Stores		35%	$260	$260,062	9.71	$26,777	$31,638	0.8	87.5%	1.86	0.4	$58,749	Moderate Income
General Merchandise		35%	$260	$260,062	13.55	$19,192	$15,405	1.2	87.5%	1.86	0.6	$28,605	VLI Households
Miscellaneous Store Retailers		20%	$149	$148,607	3.43	$43,323	$30,805	1.4	87.5%	1.86	0.7	$57,203	LI Households

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $350,000 home requires a household income of $78,222.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-1
Household Expenditures and Employment Generation - Home Price of $350,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Household Furnishings and Equipment	2.7%	100%	$2,134										
Furniture and Home Furnishings Stores		40%	$854	$853,547	15.21	$56,119	$23,503	2.4	87.5%	1.86	1.1	$43,644	LI Households
Electronics and Appliance Stores [7]		40%	$854	$853,547	10.07	$84,752	$27,985	3.0	87.5%	1.86	1.4	$51,966	LI Households
General Merchandise Stores		10%	$213	$213,387	13.55	$15,748	$15,405	1.0	87.5%	1.86	0.5	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$213	$213,387	3.43	$62,209	$30,805	2.0	87.5%	1.86	1.0	$57,203	LI Households
Apparel and Services	2.7%	100%	$2,104										
Clothing and Clothing Accessories Stores		40%	$841	$841,408	9.19	$91,548	$26,488	3.5	87.5%	1.86	1.6	$49,186	LI Households
General Merchandise		40%	$841	$841,408	13.55	$62,095	$15,405	4.0	87.5%	1.86	1.9	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$210	$210,352	3.43	$61,324	$30,805	2.0	87.5%	1.86	0.9	$57,203	LI Households
Personal and Household Goods Repair and Maintenance		5%	$105	$105,176	3.76	$27,974	$25,662	1.1	87.5%	1.86	0.5	$47,653	LI Households
Drycleaning and Laundry Services		5%	$105	$105,176	3.76	$27,974	$25,662	1.1	87.5%	1.86	0.5	$47,653	LI Households
Vehicle Purchases (net outlay)	6.0%	100%	$4,665										
Motor Vehicle and Parts Dealers		100%	$4,665	$4,665,417	9.19	$507,614	$26,488	19.2	87.5%	1.86	9.0	$49,186	LI Households
Gasoline and motor oil	3.3%	100%	$2,565										
Gasoline Stations		100%	$2,565	$2,565,037	17.81	$143,991	$24,814	5.8	87.5%	1.86	2.7	$46,078	LI Households
Vehicle Maintenance and Repairs	1.4%	100%	$1,061										
Repair and Maintenance		100%	$1,061	$1,061,178	3.76	$282,249	$25,662	11.0	98.1%	1.86	5.8	$47,653	LI Households
Medical Services	1.3%	100%	$1,025										
Ambulatory Health Care Services		40%	$410	$409,820	2.93	$139,716	$69,714	2.0	98.1%	1.86	1.1	$129,455	Above Mod
General Medical and Surgical Hospitals		30%	$307	$307,365	2.93	$104,787	$69,714	1.5	98.1%	1.86	0.8	$129,455	Above Mod
Nursing and Residential Care Facilities		30%	$307	$307,365	2.93	$104,787	$69,714	1.5	98.1%	1.86	0.8	$129,455	Above Mod
Drugs	0.7%	100%	$533										
Health and Personal Care Stores		100%	$533	$532,682	8.37	$63,663	$28,665	2.2	87.5%	1.86	1.0	$53,228	LI Households
Medical Supplies	0.2%	100%	$184										
Health and Personal Care Stores		100%	$184	$184,189	8.37	$22,013	$28,665	0.8	87.5%	1.86	0.4	$53,228	LI Households
Entertainment Fees and Admissions	1.0%	100%	$759										
Arts, Entertainment, & Recreation		100%	$759	$758,732	3.14	$241,549	$34,993	6.9	87.5%	1.86	3.3	$64,979	Moderate Income

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $350,000 home requires a household income of $78,222.
[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.
[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers are 16-19 in other industries. EPS has assumed that such young workers do not form their own households.
[6] Based on US Census, ACS Data (2012-2016) for Mono County.
[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.
[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.
[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-1
Household Expenditures and Employment Generation - Home Price of $350,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Entertainment Audio and Visual Equipment and Services	1.7%	100%	$1,298										
Electronics and Appliance Stores [7]		100%	$1,298	$1,297,693	10.07	$128,852	$27,985	4.6	87.5%	1.86	2.2	$51,966	LI Households
Entertainment Pets, Toys, Hobbies, and Playground Equip.	1.3%	100%	$982										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	$393	$392,657	9.19	$42,722	$26,488	1.6	87.5%	1.86	0.8	$49,186	LI Households
Miscellaneous Store Retailers		40%	$393	$392,657	3.43	$114,471	$30,805	3.7	87.5%	1.86	1.8	$57,203	LI Households
Veterinary Services [7]		20%	$196	$196,328	2.94	$66,858	$39,702	1.7	98.1%	1.86	0.9	$73,725	Moderate Income
Other Entertainment Supplies, Equipment, and Services	0.7%	100%	$573										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	$487	$487,472	9.19	$53,039	$26,488	2.0	87.5%	1.86	0.9	$49,186	LI Households
Photographic Services [7]		15%	$86	$86,025	4.40	$19,549	$28,098	0.7	98.1%	1.86	0.4	$52,177	LI Households
Personal Care Products and Services	1.1%	100%	$826										
Miscellaneous Store Retailers		50%	$413	$412,855	3.43	$120,360	$30,805	3.9	87.5%	1.86	1.8	$57,203	LI Households
Personal Care Services		50%	$413	$412,855	3.76	$109,810	$25,662	4.3	98.1%	1.86	2.3	$47,653	LI Households
Reading	0.2%	100%	$119										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	$119	$119,304	9.19	$12,981	$26,488	0.5	87.5%	1.86	0.2	$49,186	LI Households
Education	1.4%	100%	$1,059										
Educational Services		100%	$1,059	$1,059,085	3.09	$343,037	$30,600	11.2	98.1%	1.86	5.9	$56,823	LI Households
Tobacco Products and Smoking Supplies	0.5%	100%	$408										
Miscellaneous Store Retailers		100%	$408	$408,145	3.43	$118,987	$30,805	3.9	87.5%	1.86	1.8	$57,203	LI Households
Miscellaneous	1.4%	100%	$1,117										
Accounting		20%	$223	$223,329	2.54	$87,859	$42,533	2.1	98.1%	1.86	1.1	$78,982	Moderate Income
Architectural, Engineering, and Related [9]		20%	$223	$223,329	1.98	$112,511	$57,799	1.9	98.1%	1.86	1.0	$107,330	Above Mod
Specialized Design Services [7]		20%	$223	$223,329	3.29	$67,984	$68,790	1.0	98.1%	1.86	0.5	$127,739	Above Mod
Death Care Services [7]		20%	$223	$223,329	3.41	$65,556	$44,794	1.5	98.1%	1.86	0.8	$83,179	Above Mod
Legal Services [7]		20%	$223	$223,329	2.99	$74,661	$104,045	0.7	98.1%	1.86	0.4	$193,205	Above Mod
Total per 1,000 Market Rate Households								**254.4**			**124.0**		

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $350,000 home requires a household income of $78,222.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-2
Household Expenditures and Employment Generation - Home Price of $550,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Food at Home	5.4%	100%	$6,596										
Food & Beverage Stores		100%	$6,596	$6,595,840	9.71	$679,142	$31,638	21.5	87.5%	1.86	10.1	$58,749	Moderate Income
Food Away From Home	4.6%	100%	$5,697										
Food Services and Drinking Places		100%	$5,697	$5,696,839	3.24	$1,757,245	$15,417	114.0	87.5%	1.86	53.7	$28,628	VLI Households
Alcoholic Beverages	0.7%	100%	$872										
Food & Beverage Stores		50%	$436	$435,843	9.71	$44,877	$31,638	1.4	87.5%	1.86	0.7	$58,749	Moderate Income
Food Services and Drinking Places		50%	$436	$435,843	3.24	$134,440	$15,417	8.7	87.5%	1.86	4.1	$28,628	VLI Households
Housing Maintenance, Repairs, Insurance, Other expenses	2.1%	100%	$2,551										
Personal and Household Goods Repair and Maintenance		45%	$1,148	$1,147,918	3.76	$305,319	$25,662	11.9	98.1%	1.86	6.3	$47,653	LI Households
Building Material and Garden Equipment and Supplies Dealer		45%	$1,148	$1,147,918	9.19	$124,898	$26,488	4.7	87.5%	1.86	2.2	$49,186	LI Households
Real Estate and Rental and Leasing		10%	$255	$255,093	3.89	$65,507	$29,091	2.3	98.1%	1.86	1.2	$54,020	LI Households
Fuel oil and Other fuels [8]	0.1%	100%	$134										
Nonstore Retailers [7]		100%	$134	$134,197	13.82	$9,713	$65,041	0.1	87.5%	1.86	0.1	$120,777	Above Mod
Water and Other Public Services [8]	0.7%	100%	$856										
Waste Management and Remediation Services		100%	$856	$856,248	3.36	$255,170	$32,099	7.9	98.1%	1.86	4.2	$59,605	Moderate Income
Household Operations Personal Services	0.9%	100%	$1,094										
Nursing and Residential Care Facilities		40%	$438	$437,506	2.93	$149,155	$69,714	2.1	98.1%	1.86	1.1	$129,455	Above Mod
Social Assistance		60%	$656	$656,259	2.93	$223,733	$69,714	3.2	98.1%	1.86	1.7	$129,455	Above Mod
Household Operations Other Household Expenses	1.2%	100%	$1,419										
Services to Buildings and Dwellings [7]		100%	$1,419	$1,419,163	2.54	$558,107	$29,308	19.0	98.1%	1.86	10.1	$54,424	LI Households
Housekeeping Supplies	0.9%	100%	$1,163										
Building Materials and Garden Equipment and Supplies Dealers		10%	$116	$116,264	9.19	$12,650	$26,488	0.5	87.5%	1.86	0.2	$49,186	LI Households
Food & Beverage Stores		35%	$407	$406,926	9.71	$41,899	$31,638	1.3	87.5%	1.86	0.6	$58,749	Moderate Income
General Merchandise		35%	$407	$406,926	13.55	$30,031	$15,405	1.9	87.5%	1.86	0.9	$28,605	VLI Households
Miscellaneous Store Retailers		20%	$233	$232,529	3.43	$67,789	$30,805	2.2	87.5%	1.86	1.0	$57,203	LI Households

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.
[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $550,000 home requires a household income of $122,920.
[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.
[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers are 16-19 in other industries. EPS has assumed that such young workers do not form their own households.
[6] Based on US Census, ACS Data (2012-2016) for Mono County.
[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.
[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.
[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-2
Household Expenditures and Employment Generation - Home Price of $550,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Household Furnishings and Equipment	2.8%	100%	$3,476										
Furniture and Home Furnishings Stores		40%	$1,390	$1,390,423	15.21	$91,417	$23,503	3.9	87.5%	1.86	1.8	$43,644	LI Households
Electronics and Appliance Stores [7]		40%	$1,390	$1,390,423	10.07	$138,060	$27,985	4.9	87.5%	1.86	2.3	$51,966	LI Households
General Merchandise Stores		10%	$348	$347,606	13.55	$25,653	$15,405	1.7	87.5%	1.86	0.8	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$348	$347,606	3.43	$101,338	$30,805	3.3	87.5%	1.86	1.6	$57,203	LI Households
Apparel and Services	2.4%	100%	$2,917										
Clothing and Clothing Accessories Stores		40%	$1,167	$1,166,682	9.19	$126,939	$26,488	4.8	87.5%	1.86	2.3	$49,186	LI Households
General Merchandise		40%	$1,167	$1,166,682	13.55	$86,100	$15,405	5.6	87.5%	1.86	2.6	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$292	$291,671	3.43	$85,031	$30,805	2.8	87.5%	1.86	1.3	$57,203	LI Households
Personal and Household Goods Repair and Maintenance		5%	$146	$145,835	3.76	$38,789	$25,662	1.5	87.5%	1.86	0.7	$47,653	LI Households
Drycleaning and Laundry Services		5%	$146	$145,835	3.76	$38,789	$25,662	1.5	87.5%	1.86	0.7	$47,653	LI Households
Vehicle Purchases (net outlay)	5.6%	100%	$6,844										
Motor Vehicle and Parts Dealers		100%	$6,844	$6,844,045	9.19	$744,657	$26,488	28.1	87.5%	1.86	13.2	$49,186	LI Households
Gasoline and motor oil	2.7%	100%	$3,304										
Gasoline Stations		100%	$3,304	$3,303,858	17.81	$185,465	$24,814	7.5	87.5%	1.86	3.5	$46,078	LI Households
Vehicle Maintenance and Repairs	1.2%	100%	$1,492										
Repair and Maintenance		100%	$1,492	$1,491,605	3.76	$396,732	$25,662	15.5	98.1%	1.86	8.2	$47,653	LI Households
Medical Services	1.3%	100%	$1,614										
Ambulatory Health Care Services		40%	$646	$645,571	2.93	$220,089	$69,714	3.2	98.1%	1.86	1.7	$129,455	Above Mod
General Medical and Surgical Hospitals		30%	$484	$484,178	2.93	$165,067	$69,714	2.4	98.1%	1.86	1.3	$129,455	Above Mod
Nursing and Residential Care Facilities		30%	$484	$484,178	2.93	$165,067	$69,714	2.4	98.1%	1.86	1.3	$129,455	Above Mod
Drugs	0.6%	100%	$701										
Health and Personal Care Stores		100%	$701	$700,674	8.37	$83,740	$28,665	2.9	87.5%	1.86	1.4	$53,228	LI Households
Medical Supplies	0.2%	100%	$259										
Health and Personal Care Stores		100%	$259	$258,893	8.37	$30,941	$28,665	1.1	87.5%	1.86	0.5	$53,228	LI Households
Entertainment Fees and Admissions	1.0%	100%	$1,281										
Arts, Entertainment, & Recreation		100%	$1,281	$1,281,403	3.14	$407,946	$34,993	11.7	87.5%	1.86	5.5	$64,979	Moderate Income

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.
[2] Where multiple business types are likely to provide goods and services in the expenditure category, EPS has estimated the proportion accruing to each business type.
[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $550,000 home requires a household income of $122,920.
[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.
[5] BLS data indicates that 12.5% of retail/restaurant workers are age 16-19, but an average of only 1.9% of workers are 16-19 in other industries. EPS has assumed that such young workers do not form their own households.
[6] Based on US Census, ACS Data (2012-2016) for Mono County.
[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.
[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.
[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-2
Household Expenditures and Employment Generation - Home Price of $550,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Entertainment Audio and Visual Equipment and Services	1.4%	100%	$1,689										
Electronics and Appliance Stores [7]		100%	$1,689	$1,688,744	10.07	$167,681	$27,985	6.0	87.5%	1.86	2.8	$51,966	LI Households
Entertainment Pets, Toys, Hobbies, and Playground Equip.	1.1%	100%	$1,351										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	$541	$540,588	9.19	$58,818	$26,488	2.2	87.5%	1.86	1.0	$49,186	LI Households
Miscellaneous Store Retailers		40%	$541	$540,588	3.43	$157,598	$30,805	5.1	87.5%	1.86	2.4	$57,203	LI Households
Veterinary Services [7]		20%	$270	$270,294	2.94	$92,046	$39,702	2.3	98.1%	1.86	1.2	$73,725	Moderate Income
Other Entertainment Supplies, Equipment, and Services	0.7%	100%	$844										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	$718	$717,716	9.19	$78,090	$26,488	2.9	87.5%	1.86	1.4	$49,186	LI Households
Photographic Services [7]		15%	$127	$126,656	4.40	$28,782	$28,098	1.0	98.1%	1.86	0.5	$52,177	LI Households
Personal Care Products and Services	1.0%	100%	$1,256										
Miscellaneous Store Retailers		50%	$628	$628,232	3.43	$183,149	$30,805	5.9	87.5%	1.86	2.8	$57,203	LI Households
Personal Care Services		50%	$628	$628,232	3.76	$167,095	$25,662	6.5	98.1%	1.86	3.4	$47,653	LI Households
Reading	0.1%	100%	$175										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	$175	$174,575	9.19	$18,994	$26,488	0.7	87.5%	1.86	0.3	$49,186	LI Households
Education	1.8%	100%	$2,186										
Educational Services		100%	$2,186	$2,186,342	3.09	$708,154	$30,600	23.1	98.1%	1.86	12.2	$56,823	LI Households
Tobacco Products and Smoking Supplies	0.4%	100%	$447										
Miscellaneous Store Retailers		100%	$447	$446,531	3.43	$130,177	$30,805	4.2	87.5%	1.86	2.0	$57,203	LI Households
Miscellaneous	1.4%	100%	$1,686										
Accounting		20%	$337	$337,274	2.54	$132,686	$42,533	3.1	98.1%	1.86	1.6	$78,982	Moderate Income
Architectural, Engineering, and Related [9]		20%	$337	$337,274	1.98	$169,915	$57,799	2.9	98.1%	1.86	1.6	$107,330	Above Mod
Specialized Design Services [7]		20%	$337	$337,274	3.29	$102,670	$68,790	1.5	98.1%	1.86	0.8	$127,739	Above Mod
Death Care Services [7]		20%	$337	$337,274	3.41	$99,003	$44,794	2.2	98.1%	1.86	1.2	$83,179	Above Mod
Legal Services [7]		20%	$337	$337,274	2.99	$112,753	$104,045	1.1	98.1%	1.86	0.6	$193,205	Above Mod
Total per 1,000 Market Rate Households								**378.4**			**184.8**		

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $550,000 home requires a household income of $122,920.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-3
Household Expenditures and Employment Generation - Home Price of $750,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Food at Home	4.8%	100%	$8,036										
Food & Beverage Stores		100%	$8,036	$8,035,794	9.71	$827,407	$31,638	26.2	87.5%	1.86	12.3	$58,749	Moderate Income
Food Away From Home	4.9%	100%	$8,172										
Food Services and Drinking Places		100%	$8,172	$8,172,156	3.24	$2,520,780	$15,417	163.5	87.5%	1.86	77.0	$28,628	VLI Households
Alcoholic Beverages	0.8%	100%	$1,398										
Food & Beverage Stores		50%	$699	$699,155	9.71	$71,989	$31,638	2.3	87.5%	1.86	1.1	$58,749	Moderate Income
Food Services and Drinking Places		50%	$699	$699,155	3.24	$215,661	$15,417	14.0	87.5%	1.86	6.6	$28,628	VLI Households
Housing Maintenance, Repairs, Insurance, Other expenses	1.9%	100%	$3,193										
Personal and Household Goods Repair and Maintenance		45%	$1,437	$1,436,646	3.76	$382,114	$25,662	14.9	98.1%	1.86	7.9	$47,653	LI Households
Building Material and Garden Equipment and Supplies Dealer		45%	$1,437	$1,436,646	9.19	$156,312	$26,488	5.9	87.5%	1.86	2.8	$49,186	LI Households
Real Estate and Rental and Leasing		10%	$319	$319,255	3.89	$81,984	$29,091	2.8	98.1%	1.86	1.5	$54,020	LI Households
Fuel oil and Other fuels [8]	0.1%	100%	$164										
Nonstore Retailers [7]		100%	$164	$163,874	13.82	$11,861	$65,041	0.2	87.5%	1.86	0.1	$120,777	Above Mod
Water and Other Public Services [8]	0.6%	100%	$1,062										
Waste Management and Remediation Services		100%	$1,062	$1,062,189	3.36	$316,542	$32,099	9.9	98.1%	1.86	5.2	$59,605	Moderate Income
Household Operations Personal Services	0.8%	100%	$1,392										
Nursing and Residential Care Facilities		40%	$557	$556,932	2.93	$189,870	$69,714	2.7	98.1%	1.86	1.4	$129,455	Above Mod
Social Assistance		60%	$835	$835,397	2.93	$284,805	$69,714	4.1	98.1%	1.86	2.2	$129,455	Above Mod
Household Operations Other Household Expenses	1.2%	100%	$2,041										
Services to Buildings and Dwellings [7]		100%	$2,041	$2,040,647	2.54	$802,515	$29,308	27.4	98.1%	1.86	14.5	$54,424	LI Households
Housekeeping Supplies	0.9%	100%	$1,470										
Building Materials and Garden Equipment and Supplies Dealers		10%	$147	$147,008	9.19	$15,995	$26,488	0.6	87.5%	1.86	0.3	$49,186	LI Households
Food & Beverage Stores		35%	$515	$514,528	9.71	$52,978	$31,638	1.7	87.5%	1.86	0.8	$58,749	Moderate Income
General Merchandise		35%	$515	$514,528	13.55	$37,972	$15,405	2.5	87.5%	1.86	1.2	$28,605	VLI Households
Miscellaneous Store Retailers		20%	$294	$294,016	3.43	$85,714	$30,805	2.8	87.5%	1.86	1.3	$57,203	LI Households

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $750,000 home requires a household income of $167,618.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-3
Household Expenditures and Employment Generation - Home Price of $750,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Household Furnishings and Equipment	2.7%	100%	$4,512										
Furniture and Home Furnishings Stores		40%	$1,805	$1,804,764	15.21	$118,659	$23,503	5.0	87.5%	1.86	2.4	$43,644	LI Households
Electronics and Appliance Stores [7]		40%	$1,805	$1,804,764	10.07	$179,201	$27,985	6.4	87.5%	1.86	3.0	$51,966	LI Households
General Merchandise Stores		10%	$451	$451,191	13.55	$33,297	$15,405	2.2	87.5%	1.86	1.0	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$451	$451,191	3.43	$131,536	$30,805	4.3	87.5%	1.86	2.0	$57,203	LI Households
Apparel and Services	2.6%	100%	$4,415										
Clothing and Clothing Accessories Stores		40%	$1,766	$1,766,009	9.19	$192,148	$26,488	7.3	87.5%	1.86	3.4	$49,186	LI Households
General Merchandise		40%	$1,766	$1,766,009	13.55	$130,330	$15,405	8.5	87.5%	1.86	4.0	$28,605	VLI Households
Miscellaneous Store Retailers		10%	$442	$441,502	3.43	$128,711	$30,805	4.2	87.5%	1.86	2.0	$57,203	LI Households
Personal and Household Goods Repair and Maintenance		5%	$221	$220,751	3.76	$58,715	$25,662	2.3	87.5%	1.86	1.1	$47,653	LI Households
Drycleaning and Laundry Services		5%	$221	$220,751	3.76	$58,715	$25,662	2.3	87.5%	1.86	1.1	$47,653	LI Households
Vehicle Purchases (net outlay)	4.5%	100%	$7,469										
Motor Vehicle and Parts Dealers		100%	$7,469	$7,468,815	9.19	$812,634	$26,488	30.7	87.5%	1.86	14.5	$49,186	LI Households
Gasoline and motor oil	2.1%	100%	$3,498										
Gasoline Stations		100%	$3,498	$3,497,568	17.81	$196,339	$24,814	7.9	87.5%	1.86	3.7	$46,078	LI Households
Vehicle Maintenance and Repairs	1.0%	100%	$1,740										
Repair and Maintenance		100%	$1,740	$1,740,411	3.76	$462,908	$25,662	18.0	98.1%	1.86	9.5	$47,653	LI Households
Medical Services	1.3%	100%	$2,152										
Ambulatory Health Care Services		40%	$861	$860,756	2.93	$293,450	$69,714	4.2	98.1%	1.86	2.2	$129,455	Above Mod
General Medical and Surgical Hospitals		30%	$645.57	$645,567	2.93	$220,088	$69,714	3.2	98.1%	1.86	1.7	$129,455	Above Mod
Nursing and Residential Care Facilities		30%	$646	$645,567	2.93	$220,088	$69,714	3.2	98.1%	1.86	1.7	$129,455	Above Mod
Drugs	0.5%	100%	$843										
Health and Personal Care Stores		100%	$843	$843,292	8.37	$100,785	$28,665	3.5	87.5%	1.86	1.7	$53,228	LI Households
Medical Supplies	0.2%	100%	$316										
Health and Personal Care Stores		100%	$316	$315,786	8.37	$37,741	$28,665	1.3	87.5%	1.86	0.6	$53,228	LI Households
Entertainment Fees and Admissions	1.4%	100%	$2,394										
Arts, Entertainment, & Recreation		100%	$2,394	$2,393,514	3.14	$761,996	$34,993	21.8	87.5%	1.86	10.3	$64,979	Moderate Income

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $750,000 home requires a household income of $167,618.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-3
Household Expenditures and Employment Generation - Home Price of $750,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Entertainment Audio and Visual Equipment and Services	1.1%	100%	$1,873										
Electronics and Appliance Stores [7]		100%	$1,873	$1,873,185	10.07	$185,995	$27,985	6.6	87.5%	1.86	3.1	$51,966	LI Households
Entertainment Pets, Toys, Hobbies, and Playground Equip.	1.3%	100%	$2,112										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	$845	$844,967	9.19	$91,935	$26,488	3.5	87.5%	1.86	1.6	$49,186	LI Households
Miscellaneous Store Retailers		40%	$845	$844,967	3.43	$246,333	$30,805	8.0	87.5%	1.86	3.8	$57,203	LI Households
Veterinary Services [7]		20%	$422	$422,483	2.94	$143,872	$39,702	3.6	98.1%	1.86	1.9	$73,725	Moderate Income
Other Entertainment Supplies, Equipment, and Services	0.4%	100%	$647										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	$550	$550,054	9.19	$59,848	$26,488	2.3	87.5%	1.86	1.1	$49,186	LI Households
Photographic Services [7]		15%	$97	$97,068	4.40	$22,058	$28,098	0.8	98.1%	1.86	0.4	$52,177	LI Households
Personal Care Products and Services	1.0%	100%	$1,726										
Miscellaneous Store Retailers		50%	$863	$863,029	3.43	$251,599	$30,805	8.2	87.5%	1.86	3.8	$57,203	LI Households
Personal Care Services		50%	$863	$863,029	3.76	$229,545	$25,662	8.9	98.1%	1.86	4.7	$47,653	LI Households
Reading	0.2%	100%	$300										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	$300	$300,236	9.19	$32,667	$26,488	1.2	87.5%	1.86	0.6	$49,186	LI Households
Education	2.2%	100%	$3,606										
Educational Services		100%	$3,606	$3,606,419	3.09	$1,168,116	$30,600	38.2	98.1%	1.86	20.2	$56,823	LI Households
Tobacco Products and Smoking Supplies	0.2%	100%	$304										
Miscellaneous Store Retailers		100%	$303.82	$303,824.32	3.43	$88,574	$30,805	2.9	87.5%	1.86	1.4	$57,203	LI Households
Miscellaneous	1.1%	100%	$1,890										
Accounting		20%	$378	$377,986	2.54	$148,703	$42,533	3.5	98.1%	1.86	1.8	$78,982	Moderate Income
Architectural, Engineering, and Related [9]		20%	$378	$377,986	1.98	$190,426	$57,799	3.3	98.1%	1.86	1.7	$107,330	Above Mod
Specialized Design Services [7]		20%	$378	$377,986	3.29	$115,064	$68,790	1.7	98.1%	1.86	0.9	$127,739	Above Mod
Death Care Services [7]		20%	$378	$377,986	3.41	$110,954	$44,794	2.5	98.1%	1.86	1.3	$83,179	Above Mod
Legal Services [7]		20%	$378	$377,986	2.99	$126,364	$104,045	1.2	98.1%	1.86	0.6	$193,205	Above Mod
Total per 1,000 Market Rate Households								**513.7**			**250.9**		

[1] Percent of income spent per category is based on the nationwide 2016 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $750,000 home requires a household income of $167,618.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-4
Household Expenditures and Employment Generation - Home Price of $950,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Food at Home	4.8%	100%	$10,179										
Food & Beverage Stores		100%	$10,179	$10,178,673	9.71	$1,048,049	$31,638	33.1	87.5%	1.86	15.6	$51,659	LI Households
Food Away From Home	4.9%	100%	$10,351										
Food Services and Drinking Places		100%	$10,351	$10,351,398	3.24	$3,192,988	$15,417	207.1	87.5%	1.86	97.6	$25,173	VLI Households
Alcoholic Beverages	0.8%	100%	$1,771										
Food & Beverage Stores		50%	$886	$885,596	9.71	$91,186	$31,638	2.9	87.5%	1.86	1.4	$51,659	LI Households
Food Services and Drinking Places		50%	$886	$885,596	3.24	$273,171	$15,417	17.7	87.5%	1.86	8.3	$25,173	VLI Households
Housing Maintenance, Repairs, Insurance, Other expenses	1.9%	100%	$4,044										
Personal and Household Goods Repair and Maintenance		45%	$1,820	$1,819,752	3.76	$484,011	$25,662	18.9	98.1%	1.86	10.0	$41,902	LI Households
Building Material and Garden Equipment and Supplies Dealer		45%	$1,820	$1,819,752	9.19	$197,996	$26,488	7.5	87.5%	1.86	3.5	$43,250	LI Households
Real Estate and Rental and Leasing		10%	$404	$404,389	3.89	$103,846	$29,091	3.6	98.1%	1.86	1.9	$47,501	LI Households
Fuel oil and Other fuels [8]	0.1%	100%	$208										
Nonstore Retailers [7]		100%	$208	$207,573	13.82	$15,024	$65,041	0.2	87.5%	1.86	0.1	$106,201	Above Mod
Water and Other Public Services [8]	0.6%	100%	$1,345										
Waste Management and Remediation Services		100%	$1,345	$1,345,439	3.36	$400,954	$32,099	12.5	98.1%	1.86	6.6	$52,412	LI Households
Household Operations Personal Services	0.8%	100%	$1,764										
Nursing and Residential Care Facilities		40%	$705	$705,447	2.93	$240,502	$69,714	3.4	98.1%	1.86	1.8	$113,831	Above Mod
Social Assistance		60%	$1,058	$1,058,170	2.93	$360,753	$69,714	5.2	98.1%	1.86	2.7	$113,831	Above Mod
Household Operations Other Household Expenses	1.2%	100%	$2,585										
Services to Buildings and Dwellings [7]		100%	$2,585	$2,584,819	2.54	$1,016,519	$29,308	34.7	98.1%	1.86	18.3	$47,855	LI Households
Housekeeping Supplies	0.9%	100%	$1,862										
Building Materials and Garden Equipment and Supplies Dealers		10%	$186	$186,210	9.19	$20,260	$26,488	0.8	87.5%	1.86	0.4	$43,250	LI Households
Food & Beverage Stores		35%	$652	$651,735	9.71	$67,106	$31,638	2.1	87.5%	1.86	1.0	$51,659	LI Households
General Merchandise		35%	$652	$651,735	13.55	$48,097	$15,405	3.1	87.5%	1.86	1.5	$25,153	VLI Households
Miscellaneous Store Retailers		20%	$372	$372,420	3.43	$108,572	$30,805	3.5	87.5%	1.86	1.7	$50,299	LI Households

[1] Percent of income spent per category is based on the nationwide 2016 Consumer Expenditure Survey data for households earning between $150,000 and $200,000. The spending patterns of households earning $212,316 more closely matches the patterns of the $150,000 to $200,000 cohort than the above $200,000 cohort. 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $950,000 home requires a household income of $212,316.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-4
Household Expenditures and Employment Generation - Home Price of $950,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Household Furnishings and Equipment	2.7%	100%	$5,715										
Furniture and Home Furnishings Stores		40%	$2,286	$2,286,035	15.21	$150,301	$23,503	6.4	87.5%	1.86	3.0	$38,377	LI Households
Electronics and Appliance Stores [7]		40%	$2,286	$2,286,035	10.07	$226,988	$27,985	8.1	87.5%	1.86	3.8	$45,694	LI Households
General Merchandise Stores		10%	$572	$571,509	13.55	$42,177	$15,405	2.7	87.5%	1.86	1.3	$25,153	VLI Households
Miscellaneous Store Retailers		10%	$572	$571,509	3.43	$166,612	$30,805	5.4	87.5%	1.86	2.5	$50,299	LI Households
Apparel and Services	2.6%	100%	$5,592										
Clothing and Clothing Accessories Stores		40%	$2,237	$2,236,944	9.19	$243,388	$26,488	9.2	87.5%	1.86	4.3	$43,250	LI Households
General Merchandise		40%	$2,237	$2,236,944	13.55	$165,084	$15,405	10.7	87.5%	1.86	5.0	$25,153	VLI Households
Miscellaneous Store Retailers		10%	$559	$559,236	3.43	$163,034	$30,805	5.3	87.5%	1.86	2.5	$50,299	LI Households
Personal and Household Goods Repair and Maintenance		5%	$280	$279,618	3.76	$74,372	$25,662	2.9	87.5%	1.86	1.4	$41,902	LI Households
Drycleaning and Laundry Services		5%	$280	$279,618	3.76	$74,372	$25,662	2.9	87.5%	1.86	1.4	$41,902	LI Households
Vehicle Purchases (net outlay)	4.5%	100%	$9,460										
Motor Vehicle and Parts Dealers		100%	$9,460	$9,460,499	9.19	$1,029,336	$26,488	38.9	87.5%	1.86	18.3	$43,250	LI Households
Gasoline and motor oil	2.1%	100%	$4,430										
Gasoline Stations		100%	$4,430	$4,430,253	17.81	$248,696	$24,814	10.0	87.5%	1.86	4.7	$40,517	LI Households
Vehicle Maintenance and Repairs	1.0%	100%	$2,205										
Repair and Maintenance		100%	$2,205	$2,204,521	3.76	$586,351	$25,662	22.8	98.1%	1.86	12.1	$41,902	LI Households
Medical Services	1.3%	100%	$2,726										
Ambulatory Health Care Services		40%	$1,090	$1,090,291	2.93	$371,704	$69,714	5.3	98.1%	1.86	2.8	$113,831	Above Mod
General Medical and Surgical Hospitals		30%	$818	$817,718	2.93	$278,778	$69,714	4.0	98.1%	1.86	2.1	$113,831	Above Mod
Nursing and Residential Care Facilities		30%	$818	$817,718	2.93	$278,778	$69,714	4.0	98.1%	1.86	2.1	$113,831	Above Mod
Drugs	0.5%	100%	$1,068										
Health and Personal Care Stores		100%	$1,068	$1,068,170	8.37	$127,661	$28,665	4.5	87.5%	1.86	2.1	$46,804	LI Households
Medical Supplies	0.2%	100%	$400										
Health and Personal Care Stores		100%	$400	$399,995	8.37	$47,805	$28,665	1.7	87.5%	1.86	0.8	$46,804	LI Households
Entertainment Fees and Admissions	1.4%	100%	$3,032										
Arts, Entertainment, & Recreation		100%	$3,032	$3,031,784	3.14	$965,194	$34,993	27.6	87.5%	1.86	13.0	$57,137	LI Households

[1] Percent of income spent per category is based on the nationwide 2016 Consumer Expenditure Survey data for households earning between $150,000 and $200,000. The spending patterns of households earning $212,316 more closely matches the patterns of the $150,000 to $200,000 cohort than the above $200,000 cohort. 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $950,000 home requires a household income of $212,316.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

Table A-4
Household Expenditures and Employment Generation - Home Price of $950,000
Mono County Rental Residential Nexus Study; EPS #181044

Item	% of Household Income Spent per Category [1]	% of Category Expenditure per Type of Business [2]	Expenditures [3]	Expenditures per 1,000 HHs	Gross Receipts to Wages	Total Wages per 1,000 Households	2018 Avg. Wages [4]	# of New Workers	% Forming HH [5]	Workers/ HH [6]	Total Worker HH	Avg. Worker HH Income	Income Category
Calculation	*a*	*b*	*c*	*d = c * 1,000*	*e*	*f = d / e*	*g*	*h = f / g*	*i*	*j*	*k= h * i / j*	*l = g * j*	
Entertainment Audio and Visual Equipment and Services	1.1%	100%	$2,373										
Electronics and Appliance Stores [7]		100%	$2,373	$2,372,700	10.07	$235,594	$27,985	8.4	87.5%	1.86	4.0	$45,694	LI Households
Entertainment Pets, Toys, Hobbies, and Playground Equip.	1.3%	100%	$2,676										
Sporting Goods, Hobby, and Musical Instrument Stores		40%	$1,070	$1,070,291	9.19	$116,451	$26,488	4.4	87.5%	1.86	2.1	$43,250	LI Households
Miscellaneous Store Retailers		40%	$1,070	$1,070,291	3.43	$312,022	$30,805	10.1	87.5%	1.86	4.8	$50,299	LI Households
Veterinary Services [7]		20%	$535	$535,145	2.94	$182,238	$39,702	4.6	98.1%	1.86	2.4	$64,827	Moderate Income
Other Entertainment Supplies, Equipment, and Services	0.4%	100%	$820										
Sporting Goods, Hobby, and Musical Instrument Stores		85%	$697	$696,735	9.19	$75,807	$26,488	2.9	87.5%	1.86	1.3	$43,250	LI Households
Photographic Services [7]		15%	$123	$122,953	4.40	$27,941	$28,098	1.0	98.1%	1.86	0.5	$45,880	LI Households
Personal Care Products and Services	1.0%	100%	$2,186										
Miscellaneous Store Retailers		50%	$1,093	$1,093,169	3.43	$318,692	$30,805	10.3	87.5%	1.86	4.9	$50,299	LI Households
Personal Care Services		50%	$1,093	$1,093,169	3.76	$290,757	$25,662	11.3	98.1%	1.86	6.0	$41,902	LI Households
Reading	0.2%	100%	$380										
Sporting Goods, Hobby, and Musical Instrument Stores		100%	$380	$380,299	9.19	$41,378	$26,488	1.6	87.5%	1.86	0.7	$43,250	LI Households
Education	2.2%	100%	$4,568										
Educational Services		100%	$4,568	$4,568,130	3.09	$1,479,614	$30,600	48.4	98.1%	1.86	25.5	$49,965	LI Households
Tobacco Products and Smoking Supplies	0.2%	100%	$385										
Miscellaneous Store Retailers		100%	$385	$384,844	3.43	$112,194	$30,805	3.6	87.5%	1.86	1.7	$50,299	LI Households
Miscellaneous	1.1%	100%	$2,394										
Accounting		20%	$479	$478,782	2.54	$188,357	$42,533	4.4	98.1%	1.86	2.3	$69,449	Moderate Income
Architectural, Engineering, and Related [9]		20%	$479	$478,782	1.98	$241,206	$57,799	4.2	98.1%	1.86	2.2	$94,376	Above Mod
Specialized Design Services [7]		20%	$479	$478,782	3.29	$145,747	$68,790	2.1	98.1%	1.86	1.1	$112,323	Above Mod
Death Care Services [7]		20%	$479	$478,782	3.41	$140,541	$44,794	3.1	98.1%	1.86	1.7	$73,140	Moderate Income
Legal Services [7]		20%	$479	$478,782	2.99	$160,061	$104,045	1.5	98.1%	1.86	0.8	$169,888	Above Mod
Total per 1,000 Market Rate Households								**650.7**			**317.8**		

[1] Percent of income spent per category is based on the nationwide 2016 Consumer Expenditure Survey data for households earning between $150,000 and $200,000. The spending patterns of households earning $212,316 more closely matches the patterns of the $150,000 to $200,000 cohort than the above $200,000 cohort. 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 estimate of job creation and housing impacts. Expenditure categories not incorporated due to data constraints include taxes, housing and lodging, most utilities, tobacco, health insurance, personal/ life insurance, cash contributions, and financing charges.

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

[3] 2016 expenditures are based on the estimated household income distributed based on the percent of income spent per the 2016 U.S. Consumer Expenditure Survey. Per Table 4 a typical new $950,000 home requires a household income of $212,316.

[4] 2016 expenditures converted to 2018 dollars using the CPI adjustment for California from the BLS.

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

[6] Based on US Census, ACS Data (2012-2016) for Mono County.

[7] Mono County data not available from 2012 Economic Census (published September 2016). Gross receipts to wages and 2012 average wage thus based on statewide data.

[8] Part of the Utilities, Fuels, and Public Services category (includes natural gas, electricity, and telephone services). Natural gas, electricity, and telephone services not estimated because data was not available in the 2012 Economic Census.

[9] 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: 2016 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics; 2012 Economic Census, American Community Survey 2012-2016; Economic & Planning Systems, Inc.

APPENDIX B:

Worker Household Generation

Table B-1
Income Levels for Worker Households
Worker Household Generation per 1,000 Market Rate Units - Home Price of $350,000
Mono County Ownership Residential Nexus Study; EPS #181044

Industry	Total Workers	Total Worker Households [1]	Very Low Income Households	Low Income Households	Moderate Income Households	Above Moderate Income Households
Retail						
Unspecified Retail	7.8	3.7	0.0	3.7	0.0	0.0
Food & Beverage Stores	18.1	8.5	0.0	0.0	8.5	0.0
Food Services and Drinking Places	83.0	39.1	39.1	0.0	0.0	0.0
Health and Personal Care Stores	3.0	1.4	1.4	0.0	0.0	0.0
General Merchandise	6.3	3.0	3.0	0.0	0.0	0.0
Furniture and Home Furnishings Stores	2.4	1.1	0.0	1.1	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	3.3	1.5	0.0	1.5	0.0	0.0
Electronics and Appliance Stores	7.6	3.6	0.0	3.6	0.0	0.0
Clothing and Clothing Accessories Stores	3.5	1.6	0.0	1.6	0.0	0.0
Motor Vehicle and Parts Dealers	19.2	9.0	0.0	9.0	0.0	0.0
Gasoline Stations	5.8	2.7	0.0	2.7	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	4.1	1.9	0.0	1.9	0.0	0.0
Miscellaneous Store Retailers	9.1	4.3	0.0	4.3	0.0	0.0
Nonstore Retailers	0.1	0.0	0.0	0.0	0.0	0.0
Arts, Entertainment, & Recreation	6.9	3.3	0.0	0.0	3.3	0.0
Medical/Health						
Ambulatory Health Care Services	2.0	1.1	0.0	0.0	0.0	1.1
General Medical and Surgical Hospitals	1.5	0.8	0.0	0.0	0.0	0.8
Nursing and Residential Care Facilities	2.4	1.3	0.0	0.0	0.0	1.3
Social Assistance	1.3	0.7	0.0	0.0	0.0	0.7
Services						
Personal and Household Goods Repair and Maintenance	8.5	4.4	0.0	4.4	0.0	0.0
Services to Buildings and Dwellings	13.6	7.2	0.0	7.2	0.0	0.0
Waste Management and Remediation Services	6.5	3.4	0.0	0.0	3.4	0.0
Real Estate and Rental and Leasing	1.4	0.7	0.0	0.7	0.0	0.0
Personal Care Services	4.3	2.3	0.0	2.3	0.0	0.0
Dry Cleaning and Laundry Services	1.1	0.5	0.0	0.5	0.0	0.0
Auto Repair and Maintenance	11.0	5.8	0.0	5.8	0.0	0.0
Veterinary Services	1.7	0.9	0.0	0.0	0.9	0.0
Photographic Services	0.7	0.4	0.0	0.4	0.0	0.0
Educational Services	11.2	5.9	0.0	5.9	0.0	0.0
Accounting	2.1	1.1	0.0	0.0	1.1	0.0
Architectural, Engineering, and Related	1.9	1.0	0.0	0.0	0.0	1.0
Specialized Design Services	1.0	0.5	0.0	0.0	0.0	0.5
Death Care Services	1.5	0.8	0.0	0.0	0.0	0.8
Legal Services	0.7	0.4	0.0	0.0	0.0	0.4
Total Workers and Households	**254.4**	**124.0**	**43.5**	**56.8**	**17.2**	**6.5**
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units		**117.5**	43.5	56.8	17.2	
Total Income-Qualified HH Generated Per 100 Market-Rate Units		**11.7**	4.3	5.7	1.7	

[1] Assumes 1.86 workers per worker household in the Mono County based on data from US Census, ACS 2012-2016. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

Source: Economic & Planning Systems, Inc.

Table B-2
Income Levels for Worker Households
Worker Household Generation per 1,000 Market Rate Units - Home Price of $550,000
Mono County Ownership Residential Nexus Study; EPS #181044

Industry	Total Workers	Total Worker Households [1]	Very Low Income Households	Low Income Households	Moderate Income Households	Above Moderate Income Households
Retail						
Unspecified Retail	10.2	4.8	0.0	4.8	0.0	0.0
Food & Beverage Stores	24.2	11.4	0.0	0.0	11.4	0.0
Food Services and Drinking Places	122.7	57.8	57.8	0.0	0.0	0.0
Health and Personal Care Stores	4.0	1.9	1.9	0.0	0.0	0.0
General Merchandise	9.2	4.3	4.3	0.0	0.0	0.0
Furniture and Home Furnishings Stores	3.9	1.8	0.0	1.8	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	5.2	2.4	0.0	2.4	0.0	0.0
Electronics and Appliance Stores	10.9	5.1	0.0	5.1	0.0	0.0
Clothing and Clothing Accessories Stores	4.8	2.3	0.0	2.3	0.0	0.0
Motor Vehicle and Parts Dealers	28.1	13.2	0.0	13.2	0.0	0.0
Gasoline Stations	7.5	3.5	0.0	3.5	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	5.9	2.8	0.0	2.8	0.0	0.0
Miscellaneous Store Retailers	13.4	6.3	0.0	6.3	0.0	0.0
Nonstore Retailers	0.1	0.1	0.0	0.0	0.0	0.1
Arts, Entertainment, & Recreation	11.7	5.5	0.0	0.0	5.5	0.0
Medical/Health						
Ambulatory Health Care Services	3.2	1.7	0.0	0.0	0.0	1.7
General Medical and Surgical Hospitals	2.4	1.3	0.0	0.0	0.0	1.3
Nursing and Residential Care Facilities	4.5	2.4	0.0	0.0	0.0	2.4
Social Assistance	3.2	1.7	0.0	0.0	0.0	1.7
Services						
Personal and Household Goods Repair and Maintenance	13.4	7.0	0.0	7.0	0.0	0.0
Services to Buildings and Dwellings	19.0	10.1	0.0	10.1	0.0	0.0
Waste Management and Remediation Services	7.9	4.2	0.0	0.0	4.2	0.0
Real Estate and Rental and Leasing	2.3	1.2	0.0	1.2	0.0	0.0
Personal Care Services	6.5	3.4	0.0	3.4	0.0	0.0
Dry Cleaning and Laundry Services	1.5	0.7	0.0	0.7	0.0	0.0
Auto Repair and Maintenance	15.5	8.2	0.0	8.2	0.0	0.0
Veterinary Services	2.3	1.2	0.0	0.0	1.2	0.0
Photographic Services	1.0	0.5	0.0	0.5	0.0	0.0
Educational Services	23.1	12.2	0.0	12.2	0.0	0.0
Accounting	3.1	1.6	0.0	0.0	1.6	0.0
Architectural, Engineering, and Related	2.9	1.6	0.0	0.0	0.0	1.6
Specialized Design Services	1.5	0.8	0.0	0.0	0.0	0.8
Death Care Services	2.2	1.2	0.0	0.0	0.0	1.2
Legal Services	1.1	0.6	0.0	0.0	0.0	0.6
Total Workers and Households	**378.4**	**184.8**	**64.0**	**85.7**	**24.0**	**11.1**
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		**173.7**	64.0	85.7	24.0	
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		**17.4**	6.4	8.6	2.4	

[1] Assumes 1.86 workers per worker household in the Mono County based on data from US Census, ACS 2012-2016. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

Source: Economic & Planning Systems, Inc.

Table B-3
Income Levels for Worker Households
Worker Household Generation per 1,000 Market Rate Units - Home Price of $750,000
Mono County Ownership Residential Nexus Study; EPS #181044

Industry	Total Workers	Total Worker Households [1]	Very Low Income Households	Low Income Households	Moderate Income Households	Above Moderate Income Households
Retail						
Unspecified Retail	11.0	5.2	0.0	5.2	0.0	0.0
Food & Beverage Stores	30.1	14.2	0.0	0.0	14.2	0.0
Food Services and Drinking Places	177.5	83.6	83.6	0.0	0.0	0.0
Health and Personal Care Stores	4.8	2.3	2.3	0.0	0.0	0.0
General Merchandise	13.1	6.2	6.2	0.0	0.0	0.0
Furniture and Home Furnishings Stores	5.0	2.4	0.0	2.4	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	6.5	3.1	0.0	3.1	0.0	0.0
Electronics and Appliance Stores	13.0	6.1	0.0	6.1	0.0	0.0
Clothing and Clothing Accessories Stores	7.3	3.4	0.0	3.4	0.0	0.0
Motor Vehicle and Parts Dealers	30.7	14.5	0.0	14.5	0.0	0.0
Gasoline Stations	7.9	3.7	0.0	3.7	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	7.0	3.3	0.0	3.3	0.0	0.0
Miscellaneous Store Retailers	19.2	9.1	0.0	9.1	0.0	0.0
Nonstore Retailers	0.2	0.1	0.0	0.0	0.0	0.1
Arts, Entertainment, & Recreation	21.8	10.3	0.0	0.0	0.0	10.3
Medical/Health						
Ambulatory Health Care Services	4.2	2.2	0.0	0.0	0.0	2.2
General Medical and Surgical Hospitals	3.2	1.7	0.0	0.0	0.0	1.7
Nursing and Residential Care Facilities	5.9	3.1	0.0	0.0	0.0	3.1
Social Assistance	4.1	2.2	0.0	0.0	0.0	2.2
Services						
Personal and Household Goods Repair and Maintenance	17.2	8.9	0.0	8.9	0.0	0.0
Services to Buildings and Dwellings	27.4	14.5	0.0	14.5	0.0	0.0
Waste Management and Remediation Services	9.9	5.2	0.0	0.0	5.2	0.0
Real Estate and Rental and Leasing	2.8	1.5	0.0	1.5	0.0	0.0
Personal Care Services	8.9	4.7	0.0	4.7	0.0	0.0
Dry Cleaning and Laundry Services	2.3	1.1	0.0	1.1	0.0	0.0
Auto Repair and Maintenance	18.0	9.5	0.0	9.5	0.0	0.0
Veterinary Services	3.6	1.9	0.0	0.0	1.9	0.0
Photographic Services	0.8	0.4	0.0	0.4	0.0	0.0
Educational Services	38.2	20.2	0.0	20.2	0.0	0.0
Accounting	3.5	1.8	0.0	0.0	1.8	0.0
Architectural, Engineering, and Related	3.3	1.7	0.0	0.0	0.0	1.7
Specialized Design Services	1.7	0.9	0.0	0.0	0.0	0.9
Death Care Services	2.5	1.3	0.0	0.0	0.0	1.3
Legal Services	1.2	0.6	0.0	0.0	0.0	0.6
Total Workers and Households	**513.7**	**250.9**	**92.1**	**111.6**	**23.2**	**24.1**
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		**226.8**	92.1	111.6	23.2	
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		**22.7**	9.2	11.2	2.3	

[1] Assumes 1.86 workers per worker household in the Mono County based on data from US Census, ACS 2012-2016. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

Source: Economic & Planning Systems, Inc.

Table B-4
Income Levels for Worker Households
Worker Household Generation per 1,000 Market Rate Units - Home Price of $950,000
Mono County Ownership Residential Nexus Study; EPS #181044

Industry	Total Workers	Total Worker Households [1]	Very Low Income Households	Low Income Households	Moderate Income Households	Above Moderate Income Households
Retail						
Unspecified Retail	14.0	6.6	0.0	6.6	0.0	0.0
Food & Beverage Stores	38.1	18.0	0.0	0.0	18.0	0.0
Food Services and Drinking Places	224.8	105.9	105.9	0.0	0.0	0.0
Health and Personal Care Stores	6.1	2.9	2.9	0.0	0.0	0.0
General Merchandise	16.6	7.8	7.8	0.0	0.0	0.0
Furniture and Home Furnishings Stores	6.4	3.0	0.0	3.0	0.0	0.0
Building Material and Garden Equipment and Supplies Dealer	8.2	3.9	0.0	3.9	0.0	0.0
Electronics and Appliance Stores	16.5	7.8	0.0	7.8	0.0	0.0
Clothing and Clothing Accessories Stores	9.2	4.3	0.0	4.3	0.0	0.0
Motor Vehicle and Parts Dealers	38.9	18.3	0.0	18.3	0.0	0.0
Gasoline Stations	10.0	4.7	0.0	4.7	0.0	0.0
Sporting Goods, Hobby, and Musical Instrument Stores	8.8	4.2	0.0	4.2	0.0	0.0
Miscellaneous Store Retailers	24.4	11.5	0.0	11.5	0.0	0.0
Nonstore Retailers	0.2	0.1	0.0	0.0	0.0	0.1
Arts, Entertainment, & Recreation	27.6	13.0	0.0	0.0	13.0	0.0
Medical/Health						
Ambulatory Health Care Services	5.3	2.8	0.0	0.0	0.0	2.8
General Medical and Surgical Hospitals	4.0	2.1	0.0	0.0	0.0	2.1
Nursing and Residential Care Facilities	7.4	3.9	0.0	0.0	0.0	3.9
Social Assistance	5.2	2.7	0.0	0.0	0.0	2.7
Services						
Personal and Household Goods Repair and Maintenance	21.8	11.3	0.0	11.3	0.0	0.0
Services to Buildings and Dwellings	34.7	18.3	0.0	18.3	0.0	0.0
Waste Management and Remediation Services	12.5	6.6	0.0	0.0	6.6	0.0
Real Estate and Rental and Leasing	3.6	1.9	0.0	1.9	0.0	0.0
Personal Care Services	11.3	6.0	0.0	6.0	0.0	0.0
Dry Cleaning and Laundry Services	2.9	1.4	0.0	1.4	0.0	0.0
Auto Repair and Maintenance	22.8	12.1	0.0	12.1	0.0	0.0
Veterinary Services	4.6	2.4	0.0	0.0	2.4	0.0
Photographic Services	1.0	0.5	0.0	0.5	0.0	0.0
Educational Services	48.4	25.5	0.0	25.5	0.0	0.0
Accounting	4.4	2.3	0.0	0.0	2.3	0.0
Architectural, Engineering, and Related	4.2	2.2	0.0	0.0	0.0	2.2
Specialized Design Services	2.1	1.1	0.0	0.0	0.0	1.1
Death Care Services	3.1	1.7	0.0	0.0	0.0	1.7
Legal Services	1.5	0.8	0.0	0.0	0.0	0.8
Total Workers and Households	**650.7**	**317.8**	**116.6**	**141.3**	**42.3**	**17.5**
Total Income-Qualified HH Generated Per 1,000 Market-Rate Units [2]		**300.3**	116.6	141.3	42.3	
Total Income-Qualified HH Generated Per 100 Market-Rate Units [2]		**30.0**	11.7	14.1	4.2	

[1] Assumes 1.86 workers per worker household in the Mono County based on data from US Census, ACS 2012-2016. Includes a 12.5% discount for retail and 1.9% discount for other industries to account for workers under age 20.

Source: Economic & Planning Systems, Inc.