

DRAFT REPORT
Residential Impact Fee
Nexus Study

November 2015

prepared for:
The City of San Mateo



VWA

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I. EXECUTIVE SUMMARY

INTRODUCTION

This report is part of the 21 Elements multi-city nexus study, a collaborative effort to mitigate the impacts of new development on the demand for affordable housing in San Mateo County. In February 2014, 21 cities and the county partnered to hire Strategic Economics and Vernazza Wolfe Associates, Inc. to develop nexus studies for commercial linkage fees and residential impact fees.¹ The project was initiated by 21 Elements, a countywide collaboration among all the cities in San Mateo County on housing issues. The preparation of these fee studies may result in the adoption of new impact fees on either residential, commercial or both types of developments. This draft report describes the methodology, data sources, and analytical steps required for the nexus analysis.

BACKGROUND

The City of San Mateo is potentially interested in adopting an affordable housing impact fee on new residential development. The purpose of this fee would be to mitigate the impact of an increase in affordable housing demand from new worker households associated with new market-rate residential units. When a city or county adopts a development impact fee, it must establish a reasonable relationship or connection between the development project and the fee that is charged. Studies undertaken to demonstrate this connection are called nexus studies. This nexus study quantifies the connection between the development of market rate housing and the demand for affordable housing units.

This residential nexus study measures the income and spending generated by the new market rate households renting or buying new units in the City of San Mateo. This new consumption is then translated into new induced job growth. These induced jobs will be at various wage rates; many will be at lower wages, for example in the retail and personal services sectors. Since low-wage households cannot reasonably afford to pay for market rate rental and for-sale housing in the City of San Mateo, a housing impact fee can be justified to bridge the difference between what these new households can afford to pay and the cost of developing modest housing units to accommodate them.

REPORT ORGANIZATION

This executive summary provides an overview of the housing nexus analysis methodology and results. The subsequent chapters of the report contain more detailed information regarding the methodology, data sources, and the steps of the analysis. The report is organized into seven sections and a glossary of terms. Following this executive summary, Section II provides an introduction to the purpose of the study, and an overview of the methodology. Section III presents the residential prototypes used in the analysis. Section IV describes the methodology and results of the IMPLAN economic impact analysis. Section V covers the housing affordability gap analysis. Section VI presents the maximum fee calculation based on the nexus analysis and affordability gap results. The final section, Section VII, discusses financial feasibility and other policy considerations that jurisdictions typically weigh before implementing a nexus fee.

¹ Participating jurisdictions include: Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo County, San Mateo City, San Mateo County, South San Francisco, and Woodside.

NEXUS FEE IMPLEMENTATION OPTIONS

San Mateo has the option of implementing a new impact fee on single-family attached, rental and condominium housing or continuing its existing inclusionary programs consistent with recent court decisions.² Should the City choose to adopt a residential impact fee program, the recommended residential impact fees range between \$39,900 and \$69,800 for single-family attached units (\$20 to \$35 per square foot); between \$7,500 and \$37,500 for condominium units (\$5 to \$25 per square foot); and between \$8,990 and \$22,464 for apartment units (\$10 to \$25 per square foot). The maximum and recommended fee levels are shown in Figure I-1. These recommended fee ranges are based on the findings of the financial feasibility analysis, a comparison of fees in neighboring jurisdictions, and an analysis of overlap with the potential commercial linkage fees,

Figure I-1. Recommended Housing Nexus Fees by Residential Prototype

Prototype	Maximum Justified Fee per Unit	Maximum Justified Fee per SF	Recommended Fee Range per Unit	Recommended Fee Range per SF
Single-Family Attached	\$84,705	\$42.45	\$39,900 - \$69,800	\$20 - \$35
Condominium	\$67,726	\$45.15	\$7,500 - \$37,500	\$5 - \$25
Apartments	\$72,192	\$80.34	\$8,990 - \$22,464	\$10 - \$25

Sources: Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015

NEXUS ANALYSIS RESULTS

This section describes the steps taken to calculate the nexus-based fee amount per housing unit. More detail on each step can be found in other sections of this report.

Prototypes

The first step in the nexus analysis is developing residential housing prototypes. The prototypes establish the types of market rate housing development that are occurring or are expected to occur in the city that could potentially be subject to the affordable housing impact fee. The fees calculated in this nexus study are only applicable to the housing prototypes defined in this analysis.

Based on historical development trends, market data, broker interviews, and input from city staff, the Consultant Team constructed three housing prototypes that represent the type of development that is likely to occur in San Mateo: for-sale single-family attached and condominiums, and rental apartments. These development prototypes are not intended to represent specific development projects; rather, they are designed to illustrate the type of projects that are likely to be built in the City of San Mateo in the near future. Figure I-2 provides information on the unit type and size, as well as estimated sales prices and average monthly rents for each prototype.

² San Mateo's inclusionary program was adopted as part of a voter initiative, which was approved in 1991 and then extended in 2004. These measures prohibit the payment of fees instead of building onsite. Legal counsel in San Mateo believes that in order to implement a housing impact fee, it would be necessary to place another measure on the ballot.

Figure I-2. Sales Prices and Rental Rates of Residential Prototypes

Prototype	Unit Type	Number of Units	Net Area (SF)	Unit Sales Price/ Monthly Rent	Price or Rent per SF
Single-Family Attached (For-Sale)					
Type V wood frame	3 BD/3 BA	58	1,900	\$1,104,000	\$581
11 units per acre	4 BD/3.5 BA	27	2,200	\$1,222,000	\$555
Tuck-under podium parking					
Net Residential Area			169,600		
Average Net SF per Unit			1,995		
Condominiums (For-Sale)					
Type V wood frame	2 BD/2 BA	20	1,400	\$635,000	\$454
42 units per acre	3 BD/2 BA	20	1,600	\$831,000	\$519
Subterranean parking					
Net Residential Area (Net SF)			60,000		
Average Net SF per Unit			1,500		
Apartments (Rental)					
Type V wood frame	Studio	17	500	\$2,500	\$5.00
44 units per acre	1 BD/1 BA	60	800	\$3,100	\$3.88
Podium parking	2 BD/2 BA	63	1,100	\$3,700	\$3.36
Net Residential Area (Net SF)			125,800		
Average Net SF per Unit			899		

Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

Household Income

The next step is to calculate the annual household incomes of the buyers of new for-sale single-family attached and condominium units, and the renters occupying new apartment units by using the sales prices and rents shown in Figure I-2. Threshold incomes needed to purchase or rent units are based on standards used in the housing industry.³ Figure I-3 shows the estimated household income of buyers of single-family attached units, Figure I-4 does so for buyers of condominium units, and Figure I-5 presents the calculated household incomes of apartment renters. Household incomes are a key input to the IMPLAN3 economic impact analysis described in Section IV of this report.

³ These standards are presented in Section III of this report.

Figure I-3. Estimated Annual Household Incomes of Buyers of Single-Family Attached Units

	Single-Family Attached Unit Type	
	3 BR/3 BA	4 BR/3.5 BA
Number of Households	58	27
Sales Price	\$1,104,000	\$1,222,000
Household Income	\$205,184	\$226,199

Source: Applied Development Economics, Inc., 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

Figure I-4. Estimated Annual Household Incomes of Buyers of Condominium Units

	Condominium Unit Type	
	2 BR/2 BA	3 BR/2 BA
Number of Households	20	20
Sales Price	\$635,000	\$831,000
Household Income	\$128,297	\$163,135

Source: Applied Development Economics, Inc., 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

Figure I-5. Estimated Annual Household Incomes of Renters of Apartment Units

	Apartment Unit Type		
	Studio	1 BR/ 1 BA	2 BR/2 BA
Number of Households	16	60	63
Monthly Rent	\$2,500	\$3,100	\$3,700
Household Income	\$120,000	\$144,000	\$172,000

Source: Applied Development Economics, Inc., 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

Economic Impact Analysis (IMPLAN)

The next step is to determine employment and wage impacts of each prototype based on the incomes of the occupants of new housing units. The buyers and renters of the new market-rate single-family attached units, condominiums and apartments create new spending in the local economy. These new expenditures can be linked to new jobs, many of which pay low wages. The job and wage impacts related to new market-rate housing units are measured using IMPLAN3, an economic impact analysis tool. An economics consulting firm, Applied Development Economics (ADE) undertook the IMPLAN3 analysis.

The results of the IMPLAN analysis indicate that many of the induced jobs generated within San Mateo County are in low-wage sectors like retail and food services (restaurants). However, a significant proportion of induced jobs are also in higher-paying resident-serving categories such as health care and government.

Demand for Affordable Housing

Recognizing that many households have more than one wage-earner, the next step is to calculate the number of worker households by dividing the total number of new workers by the average number of wage-earners per household in the City of San Mateo. However, not all of the worker households require affordable housing. To estimate the affordable housing demand, the average annual household income of worker households is sorted into income categories that are consistent with area median income (AMI) levels defined for San Mateo County and is specific to the average household size in

the jurisdiction. Figure I-6 indicates that of the 39 new worker households associated with a single-family attached development, there are 31 households that need affordable housing. The comparable figures for condominium and apartment developments are, approximately, 12 and approximately 44 households.

Figure I-6. New Worker Households by Income Group for Single-Family Attached, Condominium and Apartment Prototypes

Worker Households by Income Category	Single-Family Attached	Condominium	Apartment
Households Requiring Affordable Housing			
Very Low Income (<=50% AMI)	10.0	3.8	14.6
Low Income (51-80% AMI)	10.0	3.8	13.9
Moderate Income (81-120% AMI)	11.3	4.2	15.2
Subtotal Very Low, Low, Moderate Income	31.3	11.7	43.7
Above Moderate Income Households	7.8	2.9	10.7
Total All Worker Households	39.1	14.7	54.4

Source: Applied Development Economics, Inc., 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

Affordability Gap

The next step is to quantify the total gap between what very low, low, and moderate-income households can afford to pay and the cost of building new, modest rental and for-sale housing units. This housing “affordability gap” number is then multiplied by the number of income-qualified households in each income category for single-family detached, condominium and apartment developments separately in order to estimate the total housing affordability gap for each prototype. Figures I-7 through I-9 present these totals for single-family attached, condominiums and apartment units.

Figure I-7. Total Affordability Gap for Single-Family Attached

Income Level	Households Requiring Affordable Housing	Average Affordability Gap per Household	Affordability Gap for All Households
Very Low-Income (<50% AMI)	10.0	\$280,783	\$2,794,549
Low-Income (50-80% AMI)	10.0	\$240,477	\$2,413,729
Moderate-Income (80-120% AMI)	11.3	\$175,558	\$1,991,613
Total	31.3		\$7,199,891

Sources: Vernazza Wolfe Associates, Inc.; Strategic Economics, 2014.

Figure I-8. Total Affordability Gap for Condominiums

Income Level	Households Requiring Affordable Housing	Average Affordability Gap per Household	Affordability Gap for All Households
Very Low-Income (<50% AMI)	3.8	\$280,783	\$1,074,906
Low-Income (50-80% AMI)	3.8	\$240,477	\$902,981
Moderate-Income (80-120% AMI)	4.2	\$175,558	\$731,145
Total	11.7		\$2,709,032

Sources: Vernazza Wolfe Associates, Inc.; Strategic Economics, 2014.

Figure I-9. Total Affordability Gap for Apartments

Income Level	Households Requiring Affordable Housing	Average Affordability Gap per Household	Affordability Gap for All Households
Very Low-Income (<50% AMI)	14.57	\$280,783	\$4,091,459
Low-Income (50-80% AMI)	13.93	\$240,477	\$3,350,807
Moderate-Income (80-120% AMI)	15.18	\$175,558	\$2,664,635
Total	43.68		\$10,106,902

Sources: Vernazza Wolfe Associates, Inc.; Strategic Economics, 2014.

Maximum Nexus-Based Fee

The final step in calculating the maximum housing impact fee by prototype is to divide the total gap at each income level by the number of units in each prototype. This maximum fee amount represents the ceiling on the fee that could be charged to mitigate affordable housing impacts from new residential development. The maximum single-family attached impact fee per unit is \$84,705, the maximum condominium impact fee per unit is \$67,726, and the maximum apartment fee per unit is \$72,192. The fees are also calculated on a per-square-foot basis by dividing the unit fee by the average size of the unit. On a per-square-foot basis, the maximum impact fee is \$42 for single-family attached, \$45 for condominiums and \$80 for apartments. Figure I-10 presents the results of this final step.

Figure I-10. Maximum Housing Impact Fee by Prototype

Prototype	Single-Family Attached	Condominiums	Apartments
Total Number of Units	85	40	140
Average Unit Size	1,995	1,500	899
Total Affordability Gap	\$7,199,891	\$2,709,032	\$10,106,902
Maximum Fee per Unit	\$84,705	\$67,726	\$72,192
Maximum Fee per SF	\$42	\$45	\$80

Sources: Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

POLICY CONSIDERATIONS

There are a number of policy considerations that should be taken into account when San Mateo considers whether to adopt an affordable housing impact fee on new market-rate development. The Consultant Team explored the impact of various fee scenarios on financial feasibility, examined how the total city fee structure would be affected, and compared it to adopted fees in neighboring jurisdictions. In addition, various other policy considerations were explored, including the role of the potential fee in meeting San Mateo's overall affordable housing strategy and how it would compare to the inclusionary zoning program currently in place.

Financial Feasibility – Development feasibility is just one of several factors to consider in making a decision regarding a potential nexus fee. In order to provide San Mateo with guidance on how proposed fees could impact development decisions, the Consultant Team conducted a financial feasibility analysis that tested the impact of proposed fee options on developer profit for the three prototypes. The fees were tested at four levels. The analysis showed that establishing a fee at the maximum fee level would not have a negative impact on the financial feasibility of the single family attached housing prototype. However, establishing a fee at the maximum-justified fee level would have a negative impact on development feasibility for both condominiums and apartments. For the rental apartment prototype, a lower fee of \$10 per square foot falls within the range of financial feasibility. While none of the fee scenarios was deemed financially feasible with 2014 sales prices for

the condominium prototype, a modest fee level of \$5 per square foot would represent just 1.35 percent of total development costs.

Because the financial feasibility results may change over time depending on market conditions, the analysis assessed the financial feasibility of the residential impact fee scenarios with 2014 rents and prices (which the nexus analysis is based on), and with increased rents and sales prices. According to the analysis, a five percent increase in condominium sales prices would allow a residential impact fee of \$25 per square foot to be financially feasible (Figure I-11). For apartments, a five percent increase in rents would allow a fee of \$40 per square foot to be financially feasible. With an increase in revenues of ten percent, the condominium prototype can support the maximum fee level of \$45 per square foot, and the apartment prototype can support a fee of \$70 per square foot.

Figure I-11: Financial Feasibility Results with Increased Prices and Rents for Condominium and Apartment Prototypes

Revenue Scenario	Condominiums	Apartments
2014 Rents/Prices	\$0	\$10
5% Increase in Rents/ Prices	\$25	\$40
10% Increase in Rents/ Prices	\$45 (maximum fee)	\$70

Sources: Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Comparison to Existing City Fees – Currently, the City of San Mateo’s fees for the three residential prototypes are estimated at \$24,908 for a single-family attached unit, \$30,752 for a condominium unit and \$19,370 for an apartment unit.⁴ Once the nexus-based residential impact fees at various levels are added to existing fees, the total fees increase significantly. The maximum fee would increase total fees by approximately 350 percent for single-family attached and apartment units and over 250 percent for condominium units.

Comparison to Neighboring Jurisdictions – A comparison of the nexus fee scenarios to current housing impact fees charged in nearby cities is an important element of the policy analysis. This comparison is challenging, because most cities in San Mateo County are participating in this multi-city nexus study, and may decide to adopt new fees or update existing fees. In San Mateo and Santa Clara Counties, the impact fee for attached single-family homes is generally between \$17 and \$23 per square foot (Figure I-11). The recommended fees for single-family attached homes in San Mateo (from \$20 to \$35 per square foot) would be comparable to the housing impact fees in nearby cities, except for San Carlos. For condominiums, the higher end of the fee range (\$25 per square foot) would be similar to the fee levels adopted for this prototype in most neighboring cities. For apartments, the recommended fee levels are between \$10 and \$25, which is similar to the existing housing impact fees in all of the nearby communities including Cupertino, Mountain View, San Jose, Sunnyvale, Daly City, East Palo Alto, and San Carlos.

Role of Fee in San Mateo’s Overall Housing Strategy – Affordable housing in San Mateo is funded through the use of a variety of financing sources, including funding provided by the City and San Mateo County, as well as the federal government, e.g., the HOME Program. The City’s existing inclusionary program covers for-sale and rental housing. The inclusionary program was adopted as part of a voter initiative, originally approved in 1991 and then extended in 2004. These measures prohibit the payment of fees instead of building onsite. Legal counsel in San Mateo believes that in order to implement a housing impact fee, it would be necessary to place another measure on the ballot. It should be noted that revenues from a residential impact fee need to be spent on housing that benefits worker households since the funds stem from affordable housing impacts related to new employment.

⁴ The fee estimates presented above represent the best approximations available from the City of San Mateo.

Overlap with Commercial Linkage Fee - In addition to the residential impact fee described in this report, San Mateo is also considering implementing linkage fees on commercial development. There may be a small share of jobs counted in the residential nexus analysis that are also included in this residential impact fee analysis. Thus, the two programs may have some overlap in mitigating the affordable housing demand from the same worker households. In order to reduce the potential for overlap between the two programs, it is advisable to set both the commercial linkage fees and housing impact fees at below 100 percent of the nexus-based maximum. In this way, when combined, the programs would mitigate less than 100 percent of the impact even if there were overlap in the jobs counted in the two nexus analyses.

II. INTRODUCTION AND METHODOLOGY

San Mateo is considering a housing impact fee on new residential development. The purpose of this fee would be to mitigate the impact of an increase in demand for affordable housing due to employment growth associated with potential new residential development. When a city or county adopts a development impact fee, it must establish a reasonable relationship or connection between the development project and the impacts for which the fee is charged. Studies undertaken to demonstrate this connection are called nexus studies. Nexus studies for school impact fees, traffic mitigation fees, and park fees are common. For housing impact fees, a methodology exists that establishes a connection between the development of market rate housing and the need to expand the supply of affordable housing. This study is based on this methodology.

The approach for this nexus study is to estimate the number of new workers that will be required to provide goods and services to the market rate households that are occupying new units in San Mateo. Although growth in employment will provide jobs at various wage rates, many of the new jobs will be at low-wage rates in retail trade and services, consistent with job patterns in the County. Since low-wage households cannot reasonably afford to pay for market rate rental and for-sale housing in San Mateo, a housing impact fee can bridge the difference between what these new households can afford to pay and the costs of developing new housing units for them.

New market rate housing units in San Mateo create a need for low-wage employees to provide goods and services to residents of the new units. If new market rate housing were not built, there would not be an increase in employment nor the accompanying demand for affordable housing from these new workers. Because housing impact fees are directed related to employment growth, the revenues collected from these fees needs to be spent on workforce housing and not on housing for households that do not participate in the labor force, such as retired seniors, unemployed homeless, and full-time student populations.

BACKGROUND

Cities and counties in California have operated inclusionary zoning programs to increase the supply of affordable housing since the 1970s. An inclusionary program requires that builders of new residential projects provide a specified percentage of units, either on-site or off-site, at affordable prices. Some programs have also allowed developers the option of paying fees “in lieu” of providing inclusionary units.

Inclusionary zoning policies have usually been established based on the police power of cities and counties to enact legislation benefitting public health, safety, and welfare. In its recent decision on *California Building Industry Ass’n v. City of San Jose*, the California Supreme Court upheld this power of cities, finding that the objective of increasing affordable housing supply in economically diverse developments was “unquestionably” permitted by the U.S. Constitution.

However, in 2009, in *Palmer/Sixth Street Properties, L.P. v. City of Los Angeles*, the Court of Appeal held that inclusionary *rental* requirements violate the Costa Hawkins Rental Housing Act, which allows landlords to determine the rents of all new units. Affordable rental housing may still be required if a developer agrees by contract to do so, in exchange for financial assistance or regulatory incentives. However, in the absence of these incentives, restricted rents cannot be *required* of a developer. Consequently, communities have completed nexus studies and imposed rental housing impact fees to mitigate the impact of market-rate rental housing on the need for affordable housing. Although a nexus analysis is not required to adopt inclusionary ordinances and in-lieu fees on for-sale housing, conducting a nexus study provides additional support for these requirements.

The nexus analyses presented in this study are designed to define an upper limit for a housing impact fee to be charged on new rental and for-sale housing to mitigate impacts on affordable housing needs. The maximum fee is not necessarily the recommended fee. Subsequent sections of this report address additional policy considerations to consider when adopting housing impact fees.

THE NEXUS CONCEPT

In a balanced housing market, the development of new market rate housing results in population growth. Residents purchasing and renting these new units now spend money in the city. For example, they go out to eat in local restaurants, shop for food and clothing in local stores, and patronize other local businesses, such as hair salons, dry cleaners, and dental offices. This local spending results in the need to hire new workers to respond to the increased demand for goods and services. A nexus study establishes the connection between the households that purchase new housing units (or rent newly constructed rental units) and the number of new workers that will be hired by local businesses to serve the needs of new residents.

Growth in employment will provide jobs at various wage rates. While some jobs will pay salaries that will allow new workers to rent or purchase market rate housing, many new jobs will also be at lower wages. Since low-wage households cannot reasonably afford to pay for market rate rental and for-sale housing in San Mateo, a housing impact fee addresses the demand for affordable housing.

METHODOLOGY

The first step of the nexus analysis is to estimate the market prices or rents of new housing units. Based on these prices or rents, gross household incomes of buyers and renters are calculated. The gross household incomes of buyers and renters are then translated into direct economic impacts (new spending on retail goods and personal services), and induced impacts (new jobs and wage income) using the IMPLAN3 model. The IMPLAN3 analysis provides information on likely incomes of new workers. These incomes can then be used to estimate the demand for affordable housing from new worker households, and the costs of providing these affordable units.

Each step of the nexus analysis is described in greater detail below.

Step 1. Define the residential prototypes that represent new market rate housing development.

Based on a review of recent development trends, pipeline projects, and market data for the city and county, the residential prototypes are defined. The prototypes represent typical new market-rate development projects likely to occur in the city. The prototype definitions include information on the building characteristics, net residential area, unit mix and sizes, and sales prices or rents.

Step 2. Estimate household income of buyers and renters of new market rate units.

The average gross household income required to purchase or rent new market rate units is estimated based on the market value or rents of new units. For ownership units, the calculation assumes typical mortgage terms and assumes that buyers spend 35 percent of their gross incomes on housing costs. For rental units, it is assumed that renter households spend 30 percent of their gross incomes on housing.

Step 3. Estimate economic impacts of new buyers and renters using IMPLAN3.

The IMPLAN3 model uses Bureau of Labor Statistics Consumer Expenditure Survey data to model the spending patterns of different income groups. The model estimates the increase in expenditures from new households, the number of new (induced) workers related to new households, and the occupations and wages of these new workers.

Step 4. Estimate the number of new worker households and annual household incomes.

The number of new induced workers from the IMPLAN3 analysis is divided by the average number of workers per household in the city (defined by the U.S. Census Bureau) to calculate the total number of worker households associated with each housing prototype. The average worker's wage calculated in the IMPLAN3 analysis is multiplied by the number of workers per household in the city to derive gross household income. This step assumes that the all wage-earners in a household have the same income.

Step 5. Estimate the demand for affordable housing from new worker households.

Based on the calculation of new worker household income, the worker households are categorized by target income group (very low income, low income, moderate income, and above moderate income). Worker households with above-moderate incomes are removed from the nexus analysis, because they would not require affordable housing.

Step 6. Estimate the affordability gap of new households requiring affordable housing.

The affordability gap represents the difference between what households can afford to pay for housing and the development cost of a modest housing unit. For very low and low income households, a rental housing gap is used. For moderate income households, the housing affordability gap is calculated separately for renter and owner households, and then the two gaps are combined to derive an average affordability gap for moderate income households.

Step 7. Estimate nexus-based fees for each prototype.

The number of new households requiring affordable housing is multiplied by the average affordability gap per household to estimate the total affordability gap for each prototype. The maximum per-unit and per-square foot fees are then calculated by dividing the aggregate affordability gap by the number of units or net residential area in each prototype.

III. RESIDENTIAL PROTOTYPES

The first step in the nexus analysis is developing residential housing prototypes. The residential prototypes establish the types of residential development that are occurring or are expected to occur in the city and could potentially be subject to the affordable housing impact fee. The housing prototypes are not intended to represent specific development projects; rather, they are designed to illustrate the type of projects that are likely to be built in the City of San Mateo in the near future. The fees calculated in this nexus study are only applicable to the housing prototypes defined in this analysis.

Based on estimated sales prices and rents of new market-rate units, the household incomes of buyers and renters of new units are estimated. This section of the report describes the methodology for establishing the prototypes and calculating the household incomes of buyers and renters of new market-rate units in San Mateo. The estimated household incomes are then used as inputs to the IMPLAN3 analysis to estimate the employment impacts of the market-rate households, which is described in more detail in Section IV of this report.

RECENT HOUSING DEVELOPMENT TRENDS

In order to ensure that the prototypes accurately reflect current market conditions, the Consultant Team analyzed recently built market rate housing development projects in the City of San Mateo, as well as in neighboring comparable cities. San Mateo has recently attracted new single-family attached and apartment development, and the City anticipates condominium development in the future.

Figure III-1 summarizes the market data for recently built single-family attached units in San Mateo. The table shows that units sold for amounts between \$960,000 and \$1.2 million, depending on unit size, which varied between 1,400 and 2,200 square feet. San Mateo has not seen recent condominium developments; however, the City anticipates that such development could take place in the near future. In order to create a condominium prototype representative of San Mateo's market, the Consultant Team has studied condominium development in three nearby and comparable cities, Foster City, Belmont and Redwood City. Figure III-2 presents a summary of recent condominium projects in those cities: unit sizes range from 800 to 1,800 square feet depending on unit type, and their average price ranges between \$330,000 and \$950,000. Data on recent apartment development in San Mateo and Foster City were used to construct an apartment prototype. As shown in Figure III-3, average asking monthly rents range from \$2,500 to \$3,700, depending on unit size.

SAN MATEO RESIDENTIAL PROTOTYPES

Based on historical development trends, market data, broker interviews, and input from city staff, the Consultant Team constructed three housing prototypes that represent the type of development that is likely to occur in San Mateo. These development prototypes are not intended to represent specific development projects; rather, they are designed to illustrate the type of projects that are likely to be built in San Mateo in the near future. The prototypes, as shown in Figure III-4, provide information on the building type, number of units, average size by unit type, and average monthly rents or sales prices by unit type.

For-Sale Single-Family Attached Units

The for-sale single-family attached prototype is a Type V wood-frame building with tuck-under podium parking and a net residential area of 169,600 square feet. The estimated density is 11 units per acre. This building type is representative of recently built single-family attached units in San Mateo. These are a mix of three-bedroom and four-bedroom units of a size per unit of 1,900 and 2,200 square

feet, respectively. The estimated unit sale price is \$1,104,000 for three-bedroom units and \$1,222,000 for four-bedroom units.

For-Sale Condominiums

The for-sale condominium prototype is a Type V wood-frame building with an underground parking garage and net residential area of 60,000 square feet. The estimated average density is 42 units per acre. This building type is representative of recently built condominium projects in the neighboring and comparable markets of Foster City, Belmont and Redwood City, and approximate potential future development in the City of San Mateo. The condominium mix is composed of 20 two-bedroom units and 20 three-bedroom units, with size of, respectively, 1,400 and 1,600 square feet. The average estimated price of newly built condominiums is of \$635,000 for two-bedroom units and \$831,000 for three-bedroom units.

Rental Apartments

The rental apartment prototype is a Type V wood-frame building with podium parking and net residential area of 125,800 square feet. The estimated density is 44 units per acre. This prototype is representative of recent market-rate apartment development in Central San Mateo County, including projects built in Foster City and San Mateo. The apartment unit mix consists of mostly one- and two-bedroom units, with a smaller number of studios. Estimated monthly rents range from \$2,500 to \$3,700 per unit, depending on unit size and number of bedrooms.

Figure III-1. Recently Built Single-Family Attached Units in San Mateo

Project Name and Address	City	Units	Square Feet	Bedrooms	Baths	Average Sale Price
Landsdowne at Bay Meadows - 428 E 28th Ave	San Mateo	N/A	1,351	2	2.5	\$963,439
		57	1,852	3	3 – 3.5	\$1,104,114
		27	2,195	4	3 – 3.5	\$1,221,500

Sources: Shea Homes; Strategic Economics & Vernazza Wolfe Associates, Inc., June 2014.

Figure III-2. Recently Developed, Planned, and Proposed Condominium Projects in the Cities of Belmont, Foster City and Redwood City

Project Name/Address	City	Bedrooms	Average Size (SF)	Units	Sale Price	Sale Price per SF
Foster Square Condos	Foster City	2	1,400	56	\$749,000	\$535
		2.5	1,500	48	\$790,000	\$527
		3	1,800	96	\$953,000	\$529
Belmino LLC 576-600 El Camino Real	Belmont	1	763	8	\$329,771	\$432
		2	1,250	16	\$648,294	\$519
		3	1,450	8	\$849,523	\$586
N/A	Redwood City	2	1,406	20	\$566,204	\$403

Sources: Developer Websites; Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

Figure III-3. Recently Built Apartment Projects in Central San Mateo County

Project	City	Bedrooms	Baths	Units	Average Size	Average Rent	Rent per SF
Plaza at Triton Park	Foster City	1	1	122	700	\$2,900	\$4.14
		2	2	110	1,000	\$4,100	\$4.10
		3	2	15	1,300	\$4,700	\$3.62
Park 20	San Mateo	Studio	1	71	512	\$2,513	\$4.91
		1	1	75	712	\$2,875	\$4.04
		2	2	31	957	\$3,683	\$3.85
Mode by Alta	San Mateo	1	1	39	806	\$3,301	\$4.10
		2	2	56	1,065	\$3,711	\$3.48

Sources: Leasing Websites, December 2014; Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

Figure III-4. San Mateo Prototypes

Prototype	Unit Type	Number of Units	Net Area (SF)	Unit Sales Price/ Monthly Rent	Price or Rent per SF
Single-Family Attached (For-Sale)					
Type V wood frame	3 BD/3 BA	58	1,900	\$1,104,000	\$581
11 units per acre	4 BD/3.5 BA	27	2,200	\$1,222,000	\$555
Tuck-under podium parking					
Net Residential Area			169,600		
Average Net SF per Unit			1,995		
Condominiums (For-Sale)					
Type V wood frame	2 BD/2 BA	20	1,400	\$635,000	\$454
42 units per acre	3 BD/2 BA	20	1,600	\$831,000	\$519
Subterranean parking					
Net Residential Area (Net SF)			60,000		
Average Net SF per Unit			1,500		
Apartments (Rental)					
Type V wood frame	Studio	17	500	\$2,500	\$5.00
44 units per acre	1 BD/1 BA	60	800	\$3,100	\$3.88
Podium parking	2 BD/2 BA	63	1,100	\$3,700	\$3.36
Net Residential Area (Net SF)			125,800		
Average Net SF per Unit			899		

Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

HOUSEHOLD INCOMES OF BUYERS AND RENTERS

Using the sales prices and rents shown in Figure III-4, the next step is to calculate the annual household incomes of the buyers of new for-sale single-family detached and condominium units, and the renters occupying new apartment units. The household income is a key input to the IMPLAN3 economic impact analysis described in Section IV of this report.

Incomes of Single-Family Attached Units Buyers

To calculate the household income of buyers of new single-family detached units, the analysis used typical mortgage terms for San Mateo County: 20 percent down payment, 30 year fixed rate mortgage, and 4.35 percent interest rate. San Mateo's property tax rate was estimated from recent budget documents. Homeowner association (HOA) fees were based on a review of HOA fees at similar new single-family attached developments in San Mateo County. Total housing costs, including monthly payments for mortgage payments, property taxes, insurance and HOA fees, are assumed to be 35 percent of available monthly income. The result of the income estimates for households buying new single-family detached units is shown in Figure III-5. As shown in the

calculations, for single-family attached units, household incomes are estimated to be over \$150,000 for both types of single-family attached units.

Incomes of Condominium Buyers

For buyers of condominium units, the analysis applied the same typical mortgage terms as those used for single-family attached units, and San Mateo's property tax rates. Homeowner association (HOA) fees were based on a review of HOA fees at similar new condominium developments in San Mateo County. Total housing costs, including monthly payments for mortgage payments, property taxes and insurance, are assumed to be 35 percent of available monthly income. The result of the income estimates for households buying new condominium units is shown in Figure III-6. As shown in the calculations, owners of two-bedroom condominium units have a household income of comprised between \$100,000 and \$150,000, while owners of three-bedroom condominium units have a household income over \$150,000.

Incomes of Apartment Renters

For renter households, maximum annual housing costs are assumed to be 30 percent of gross household income, a standard established in California's Health and Safety Code Sections 50052.5 and 50053, although it is acknowledged that many renters in San Mateo County spend a higher share of their gross income on housing. The estimated household income of renters varies by unit type, as indicated in Figure III-7. Studio renter households have an estimated annual income of \$100,000. Two-bedroom and three-bedroom unit renter households have estimated household incomes of \$124,000 and \$148,000, respectively.

Figure III-5. Estimated Annual Household Incomes of Buyers of Single-Family Attached Units

	Single-Family Attached Units	
	3 BD/3 BA	4 BD/3.5 BA
Number of Households	58	27
Sales Price	\$1,104,000	\$1,222,000
Down Payment (a)	\$220,800	\$244,400
Loan Amount	\$883,200	\$977,600
Monthly Debt Service (b)	\$4,397	\$4,867
Annual Debt Service	\$52,760	\$58,399
Annual Property Taxes (c)	\$12,190	\$13,493
Annual HOA Fees (d)	\$3,000	\$3,000
Fire and Hazard Insurance (e)	\$3,864	\$4,277
Annual Housing Costs (f)	\$71,814	\$79,170
Household Income	\$205,184	\$226,199

Notes:

(a) Down payment is estimated at 20% of sales price, based on Freddie Mac data for San Mateo County.

(b) Interest rate is estimated at 4.35% for a 30-year term, based on Freddie Mac data, <http://www.freddiemac.com/pmms/pmms30.htm>.

(c) Property tax rate is 1.1042% based on San Mateo City CAFR.

(d) Homeownership association (HOA) fees are estimated at \$250 per month, based on fees charged at a sample of recently built projects in San Mateo County.

(e) Industry standard

(f) Homeownership housing burden is estimated at 35%, based on California Health & Safety Code Sections 50052.5 and 50053.

Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

Figure III-6. Estimated Annual Household Incomes of Buyers of Condominium Units

	Condominium Units	
	2 BD/2 BA	3 BD/2 BA
Number of Households	20	20
Sales Price	\$635,000	\$831,000
Down Payment (a)	\$127,000	\$166,200
Loan Amount	\$508,000	\$664,800
Monthly Debt Service (b)	\$2,529	\$3,309
Annual Debt Service	\$30,347	\$39,713
Annual Property Taxes (c)	\$6,935	\$9,075
Annual HOA Fees (d)	\$5,400	\$5,400
Fire and Hazard Insurance (e)	\$2,223	\$2,909
Annual Housing Costs (f)	\$44,904	\$57,097
Household Income	\$128,297	\$163,135

Notes:

(a) Down payment is estimated at 20% of sales price, based on Freddie Mac data for San Mateo County.

(b) Interest rate is estimated at 4.35% for a 30-year term, based on Freddie Mac data, <http://www.freddiemac.com/pmms/pmms30.htm>.

(c) Property tax rate is 1.1042% based on San Mateo City CAFR.

(d) Homeownership association (HOA) fees are estimated at \$450 per month, based on review of new condominiums in San Mateo County.

(e) Industry standard

(f) Homeownership housing burden is estimated at 35%, based on California Health & Safety Code Sections 50052.5 and 50053.

Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

Figure III-7. Estimated Annual Household Incomes of Renters of Apartment Units

	Apartment Unit Type		
	Studio	1 BD/1 BA	2 BD/2 BA
Number of Households	17	60	63
Monthly Rent	\$2,500	\$3,100	\$3,700
Annual Housing Costs	\$30,000	\$37,200	\$44,400
Housing Costs as % of Income (a)	30%	30%	30%
Household Income	\$100,000	\$124,000	\$148,000

Notes:

(a) Renter housing burden is estimated at 30%, based on California Health & Safety Code Sections 50052.5 and 50053.
 Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

IV. ECONOMIC IMPACT ANALYSIS (IMPLAN3)

The buyers and renters of the new market-rate single-family detached units, single-family attached units, condominiums and apartments create new spending in the local economy. These new expenditures can be linked to new jobs, many of which pay low wages. The job and wage impacts related to new market-rate housing units are measured using IMPLAN3, an economic impact analysis tool. An economics consulting firm, Applied Development Economics (ADE) undertook the IMPLAN3 analysis with the information on residential prototypes and associated buyers' and renters incomes provided by Strategic Economics and Vernazza Wolfe Associates Inc. In this section of the report, the methodology and results of the IMPLAN3 analysis are described in detail.

THE IMPLAN3 MODEL

The IMPLAN model is an economic dataset that has been used for over 35 years to measure the economic impacts of new investments and spending using the industrial relationships defined through an Input-Output Model. The IMPLAN model can estimate economic impacts resulting from changes in industry output, employment, income, and other measures. The latest version of this model is referred to as IMPLAN3.

For this analysis, the input-output model used data specific to San Mateo County in order to estimate the multiplier effects resulting from the households that could potentially rent or buy new housing units in San Mateo. In this case, all of the multiplier effects derive from new demand for goods and local services (including government) that new households would generate within San Mateo County. It does not account for economic impacts generated during the construction period, or any economic impacts that would occur outside of the county.

The economic impacts estimated by the model generally fall into one of three categories - direct, indirect, or induced. For this analysis, the direct impacts represent the household income brought into the community by new residents. Indirect impacts would normally result from demand for commodities and services provided by suppliers for business operations. (Because the direct impacts come only from household spending, and not from business activity, the indirect effects were not calculated.) Induced impacts represent the potential effects resulting from household spending at local establishments by the new workers hired as a result of increased household expenditures. These impacts affect all sectors of the economy, but primarily affect retail businesses, health services, personal services providers, and government services. The employment estimates provided by the IMPLAN3 model cover all types of jobs, including full and part time jobs.

The first analysis undertaken by the IMPLAN3 model estimated the household demand for retail goods and personal services. It is assumed that buyers and renters of new housing units in San Mateo increase demand for goods and services within San Mateo County. This demand is based on the projected incomes of renters and owners for each prototype. The IMPLAN3 model's calculations are based on changes in household income, which adjusts the gross income to account for the payment of income taxes and savings.⁵

The second analysis estimated the induced impacts, or multiplier effects of new household spending in terms of jobs and wage income. The jobs and income calculations are focused on the induced jobs that would be created through local spending by the new households. The input-output model estimates the job impacts by detailed industry sector. The analysis took the detailed industry impact

⁵ According to IMPLAN Group LLC, when the economic impact is modeled based on household income change, IMPLAN3 will adjust the input for income taxes and savings.

estimates and distributed them by occupational category. The occupational employment data used in the analysis came from the California Employment Development Department (EDD) Labor Market Information Division, and aggregates together data for all of California. After converting the industry level data into occupational employment, the income distribution was calculated using the occupational wage data for the San Francisco-San Mateo-Redwood City Metropolitan Division (MD) that combines San Francisco, Marin, and San Mateo counties. The average wage by occupation was used to make this calculation. The 2014 (first quarter) occupational wage data used in the analysis comes from California's EDD.

It should be noted that the figures used in the IMPLAN3 analysis reflect the demand for retail goods and services by net, new San Mateo County households. The multiplier impacts assume that all of this spending will remain in San Mateo County.⁶

HOUSEHOLD INCOME IMPACTS

Since the IMPLAN3 Model bases its household income impacts on Consumer Expenditure Survey data, income categories are used in the model instead of continuous income information. Because of this feature, the analysis sorted the renters and buyers of new market rate units into income groups, and then calculated the economic impacts based on the total income calculated for each income group.

Figure IV-1 below summarizes the household income data for single-family attached, condominium and apartment households. As shown, all 85 single-family attached buyer households are in the income category of \$150,000 or higher, with a total combined household income of \$18.01 million. Among the 40 condominium buyer households, 20 have an average household income between \$100,000 and \$150,000 and 20 have an average income between over \$150,000. The aggregate household income of the condominium buyer households is \$5.83 million. All of the 140 households in the rental prototype have a household income in the \$100,000-\$150,000 income category. The combined total household income for renter households is \$18.46 million. These total income figures, adjusted to account for taxes and savings, were used as inputs for the IMPLAN3 analysis.

EMPLOYMENT AND WAGE IMPACTS

Based on the incomes of the new buyers and renters, the next step is to determine employment and wage impacts from each prototype. Estimated employment and wages are shown in Figure IV-2 for each IMPLAN3 industry sector, indicating the number of induced jobs, the industry's share of total employment growth by prototype, and the average wage by industry. Figure IV-3 provides the same IMPLAN3 output data, organized by occupation rather than industry, for each prototype. As shown in both figures, many of the induced jobs generated within San Mateo County are in low-wage sectors and occupations related to retail and food services (restaurants). However, a significant proportion of induced jobs are in higher-paying resident-serving categories such as health care and government.

ESTIMATING WORKER-HOUSEHOLDS

Recognizing that many households have more than one wage-earner, the next step is to calculate the number of worker-households by dividing the total number of new workers by the average number of wage-earners per household in San Mateo. According to the U. S. Census Bureau 2008-2012 American Community Survey 3-Year Estimate, the City of San Mateo has an average of 1.63 workers

⁶ Estimating the retail leakage would require a detailed analysis of retail sales totals for existing businesses in San Mateo County and is beyond the scope of this study.

per household. The number of induced jobs is divided by 1.63 to calculate the total number of worker households. Figure IV-4 illustrates this calculation.

ESTIMATING DEMAND FOR AFFORDABLE HOUSING

To estimate the demand for affordable housing, it is first necessary to determine the incomes of the new households. Once the average annual household income of worker households is calculated, the next step is to categorize households into area median income (AMI) levels based on the thresholds set by California Department of Housing and Community Development for San Mateo County. The average household size in San Mateo is 2.6 (rounded to 3.0), according to the US Census American Community Survey 5-Year Estimates 2008-2012. The income threshold for a three-person household in San Mateo County was therefore used to determine the AMI categories of each new worker household.⁷ Figure IV-5 indicates that of the 39.1 new worker households associated with a single-family attached development, there will be 31.3 households that need affordable housing. The comparable figures for condominium and apartment developments are, respectively, 11.7 and 43.7 households.

⁷ The average San Mateo household size is 2.6, according to the US Census, American Community Survey 5 Year Estimates, 2008-2012. This figure was rounded to 3.0 persons.

Figure IV-1. Estimated Incomes by Income Categories for Buyers of Single-Family Attached and Condominium Units, and for Renters of Apartment Units

Income Category	Single-Family Attached Prototype			Condominium Prototype			Apartment Prototype		
	New Households	Aggregate Household Incomes	Average Household Income	New Households	Aggregate Household Incomes	Average Household Income	New Households	Aggregate Household Incomes	Average Household Income
Less than \$10,000	0	\$0	n/a	0	\$0	n/a	0	0	n/a
\$10,000-\$15,000	0	\$0	n/a	0	\$0	n/a	0	0	n/a
\$15,000-\$25,000	0	\$0	n/a	0	\$0	n/a	0	\$0	n/a
\$25,000-\$35,000	0	\$0	n/a	0	\$0	n/a	0	\$0	n/a
\$35,000-\$50,000	0	\$0	n/a	0	\$0	n/a	0	\$0	n/a
\$50,000-\$75,000	0	\$0	n/a	0	\$0	n/a	0	\$0	n/a
\$75,000-\$100,000	0	\$0	n/a	0	\$0	n/a	0	\$0	n/a
\$100,000-\$150,000	0	\$0	n/a	20	\$2,565,940	\$128,297	140	\$18,464,000	\$131,886
Over \$150,000	85	\$18,008,052	\$211,859	20	\$3,262,702	\$163,135	0	\$0	n/a
Total	85	\$18,008,052	\$211,859	40	\$5,828,642	\$145,716	140	\$18,464,000	\$131,886

Sources: Applied Development Economics, Inc., 2015; Vernazza Wolfe Associates, Inc. and Strategic Economics, 2015.

Figure IV-2. Estimated Job and Wage Impacts of Prototypes by Industry

Industry (NAICS code)	Average Wage	Single-Family Attached Prototype		Condominium Prototype		Apartment Prototype	
		Jobs	% Of Jobs	Jobs	% Of Jobs	Jobs	% Of Jobs
11 Forestry, fishing, hunting, and agriculture	\$38,309	0.04	0%	0.01	0%	0.06	0%
21 Mining	\$70,505	0.03	0%	0.01	0%	0.04	0%
22 Utilities	\$74,144	0.11	0%	0.04	0%	0.17	0%
23 Construction	\$68,376	1.41	2%	0.49	2%	1.68	2%
31 Manufacturing	\$66,946	0.17	0%	0.06	0%	0.24	0%
42 Wholesale trade	\$62,797	0.79	1%	0.30	1%	1.11	1%
44 Retail trade	\$54,808	9.84	15%	3.73	16%	14.00	16%
48 Transportation & warehousing	\$49,308	1.44	2%	0.52	2%	1.84	2%
51 Information	\$77,312	0.83	1%	0.32	1%	1.23	1%
52 Finance & insurance	\$71,830	3.16	5%	1.19	5%	4.47	5%
53 Real estate & rental & leasing	\$66,316	3.00	5%	1.18	5%	4.57	5%
54 Professional, scientific & technical services	\$91,389	1.95	3%	0.71	3%	2.54	3%
55 Management of companies & enterprises	\$88,955	0.08	0%	0.03	0%	0.12	0%
56 Admin, support, waste mgt, remediation services	\$54,197	2.64	4%	1.00	4%	3.72	4%
61 Educational services	\$62,584	2.86	4%	0.94	4%	3.03	3%
62 Health care and social assistance	\$68,778	11.34	18%	4.50	19%	17.60	20%
71 Arts, entertainment & recreation	\$49,614	2.20	3%	0.81	3%	2.95	3%
72 Accommodation & food services	\$31,520	9.01	14%	3.52	15%	13.60	15%
81 Other services (except public administration)	\$53,217	6.44	10%	2.45	10%	9.26	10%
91 Government	\$70,961	6.45	10%	2.07	9%	6.47	7%
Total		63.79	100%	23.88	100%	88.70	100%

Note: Average wage is calculated based on the mean occupational wages, and the average statewide distribution of occupations for each industry.

Sources: Applied Development Economics, Inc, 2015; Vernazza Wolfe Associates, Inc. and Strategic Economics, 2015.

Figure IV-3. Estimated Job and Wage Impacts of Prototypes by Occupation

SOC Code	Occupational Title	Average Annual Wage	Single-Family Attached Jobs	Condominium Jobs	Apartment Jobs
11-0000	Management Occupations	\$146,537	2.95	1.10	4.08
13-0000	Business and Financial Operations Occupations	\$95,505	3.09	1.12	4.05
15-0000	Computer and Mathematical Occupations	\$104,996	1.08	0.39	1.41
17-0000	Architecture and Engineering Occupations	\$100,605	0.57	0.20	0.67
19-0000	Life, Physical, and Social Science Occupations	\$96,012	0.54	0.19	0.65
21-0000	Community and Social Services Occupations	\$54,663	1.44	0.53	1.97
23-0000	Legal Occupations	\$140,841	0.41	0.14	0.49
25-0000	Education, Training, and Library Occupations	\$59,459	2.46	0.84	2.87
27-0000	Arts, Design, Entertainment, Sports, Media Occupations	\$70,952	0.97	0.36	1.33
29-0000	Healthcare Practitioners and Technical Occupations	\$111,876	4.08	1.59	6.14
31-0000	Healthcare Support Occupations	\$41,374	1.92	0.76	2.94
33-0000	Protective Service Occupations	\$61,618	1.67	0.56	1.88
35-0000	Food Preparation and Serving-Related Occupations	\$27,076	9.55	3.71	14.24
37-0000	Building and Grounds Cleaning and Maintenance	\$33,575	2.02	0.75	2.80
39-0000	Personal Care and Service Occupations	\$33,716	4.58	1.75	6.63
41-0000	Sales and Related Occupations	\$54,767	8.43	3.20	12.04
43-0000	Office and Administrative Support Occupations	\$46,720	9.84	3.66	13.49
45-0000	Farming, Fishing, and Forestry Occupations	\$34,770	0.07	0.02	0.09
47-0000	Construction and Extraction Occupations	\$63,327	1.23	0.43	1.46
49-0000	Installation, Maintenance, and Repair Occupations	\$58,564	2.30	0.86	3.18
51-0000	Production Occupations	\$41,105	1.22	0.46	1.69
53-0000	Transportation and Material Moving Occupations	\$42,255	3.38	1.25	4.59
	Total all occupations		63.80	23.87	88.69

Sources: Applied Development Economics, 2015; IMPLAN3 input-output model, 2015; California Labor Market Information Division, 2015.

Figure IV-4. Induced Employment Impacts, City of San Mateo

Project Prototype	Single-Family Attached	Condominium	Apartment
Number of Units	85	40	140
Induced Employment (Workers)	64	24	89
Average Number of Workers per Household	1.63	1.63	1.63
New Worker Households	39.14	14.65	54.41

Source: Applied Development Economics, 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

Figure IV-5. New Worker Households by Income Group for Single-Family Attached, Condominium and Apartment Prototypes

Worker Households by Income Category	Income Thresholds (3-Person Household)	Single-Family Attached	Condominium	Apartment
Households Requiring Affordable Housing				
Very Low Income (<=50% AMI)	\$50,900	10.0	3.8	14.6
Low Income (51-80% AMI)	\$81,450	10.0	3.8	13.9
Moderate Income (81-120% AMI)	\$111,250	11.3	4.2	15.2
Subtotal Very Low, Low, Moderate Income		31.3	11.7	43.7
Above Moderate Income Households (>120% AMI)	>\$111,250	7.8	2.9	10.7
Total All Worker Households		39.1	14.7	54.4

Source: Applied Development Economics, Inc., 2015; Strategic Economics & Vernazza Wolfe Associates, Inc. 2015.

V. AFFORDABILITY GAP ANALYSIS

Estimating the housing affordability gap is necessary to calculate the maximum potential housing impact fee. This affordability gap analysis was conducted at the county-wide level so that it can be applied to all the jurisdictions in San Mateo County participating in the multi-city nexus study.⁸ This section summarizes the approach to calculating the housing affordability gap and the results of the analysis.

METHODOLOGY

The housing affordability gap is defined as the difference between what very low, low, and moderate income households can afford to pay for housing and the development cost of new, modest housing units. Calculating the housing affordability gap involves the following three steps:

1. Estimating affordable rents and housing prices for households in target income groups.
2. Estimating development costs of building new, modest housing units, based on current cost and market data.
3. Calculating the difference between what renters and owners can afford to pay for housing and the cost of development of rental and ownership units.

The housing affordability gap is estimated at a countywide level, and assumed to be the same for all the jurisdictions participating in the multi-city nexus studies, for the following reasons:

- Both the California Department of Housing and Community Development Department (HCD) and U.S. Housing and Urban Development Department (HUD) define the ability to pay for housing at the county (rather than the city) level. Existing affordable housing studies and policies in most jurisdictions rely on these countywide area median income (AMI) estimates published by HCD or by HUD. This analysis uses 2014 income limits published by California Department of Housing and Community Development (HCD).
- Construction costs for housing and commercial development do not vary dramatically between different jurisdictions in San Mateo County, because the cost of labor and materials is regional in nature.

Although land costs vary widely in San Mateo County, the study estimated a single land value for the county based on data provided by developers of recently built projects. These costs are at the low end of recent land sales, as described below. Additionally, because the land costs used in the analysis are from 2012 and 2013, and land values have escalated rapidly since then, the resulting affordability gap will be slightly lower than if the analysis incorporated 2014 land costs, providing a conservative estimate of the affordability gap.

⁸ Although there is a single housing affordability gap estimate for all jurisdictions in the county, the subsequent steps in the fee calculation considers market and household characteristics for the City of San Mateo, generating a unique maximum fee for each jurisdiction in the county, as described in Section V.

ESTIMATING AFFORDABLE RENTS AND SALES PRICES

The first step in calculating the housing affordability gap is to determine the maximum amount that households at the targeted income levels can afford to pay for housing. For eligibility purposes, most affordable housing programs define very low income households as those earning approximately 50 percent or less of area median income (AMI), low income households as those earning between 51 and 80 percent of AMI, and moderate income households as those earning between 81 and 120 percent of AMI. In order to ensure that the affordability of housing does not use the top incomes in each category, the analysis uses a point within the income ranges for the low and moderate income groups.⁹

Figure V-1 and Figure V-2 show the calculations for rental housing. The maximum affordable monthly rent is calculated as 30 percent of gross monthly household income, minus a deduction for utilities. For example, a very low income, three-person household could afford to spend \$1,273 on total monthly housing costs. After deducting for utilities, \$1,220 a month is available to pay for rent.

Figure V-3 and Figure V-4 demonstrate housing affordability for homeowners. Homeowners are assumed to pay a maximum of 35 percent of gross monthly income on total housing costs, depending on income level. The maximum affordable price for for-sale housing is then calculated based on the total monthly mortgage payment that a homeowner could afford, using standard loan terms used by CalHFA programs and many private lenders for first-time homebuyers, including a five percent down payment (Figure V-3). For example, a moderate income, three-person household could afford to spend \$2,974 a month on total housing costs, allowing for the purchase of a \$348,526 home. Key assumptions used to calculate the maximum affordable rents and housing prices are discussed below.

- **Unit types:** For rental housing, the analysis included studios, one-, two-, and three-bedroom units. For for-sale housing, one-, two-, and three-bedroom units were included. These unit types represent the affordable and modest market-rate apartment and condominium units available in San Mateo County. Condominiums were used to represent modest for-sale housing because single-family homes in San Mateo County tend to be significantly more expensive than condominiums.
- **Occupancy and household size assumptions.** Because income levels for affordable housing programs vary by household size, calculating affordable unit prices requires defining household sizes for each unit type. Consistent with California Health and Safety Code Section 50052.5(h), unit occupancy was generally estimated as the number of bedrooms plus one. For example, a studio unit is assumed to be occupied by one person, a one bedroom unit is assumed to be occupied by two people, and so on. Several adjustments to this general assumption were made in order to capture the full range of household sizes. In particular, it is assumed that one-bedroom condominiums could be occupied by one- or two-person households, and three-bedroom apartments and condominiums could be occupied by four- or five-person households.¹⁰

⁹ For rental housing, 70 percent of AMI is used to represent low income households and 90 percent of AMI is used to represent moderate income households. For ownership housing, it is assumed that moderate income homebuyers may earn slightly less than the maximum for that income category (110 percent of AMI). Higher income limits are used for ownership than for rental housing because ownership housing is more expensive to purchase and maintain.

¹⁰ For these unit types, the maximum affordable home price (or rent) is calculated as the average price (or rent) that the relevant household sizes can afford to pay. For example, the maximum affordable home price for a one-bedroom condominium is calculated as the average of the maximum affordable home price for one- and two-person households.

- **Targeted income levels for rental housing:** For rental housing, affordable rents were calculated for very low income, low income, and moderate income households (see Figure V-1 and Figure V-2). For eligibility purposes, most affordable housing programs define very low income households as those earning 50 percent or less of area median income (AMI), low income households as those earning between 51 and 80 percent of AMI, and moderate income households as those earning between 81 and 120 percent of AMI. However, defining affordable housing expenses based at the top of each income range would result in prices that are not affordable to most of the households in each category. Thus, this analysis does not use the maximum income level for all of the income categories. Instead, for rental housing, 70 percent of AMI is used to represent low income households and 90 percent of AMI is used to represent moderate income households.
- **Targeted income levels for ownership housing** For ownership housing, affordable home prices were calculated only for moderate income households (see Figure V-3 and Figure V-4). Higher income limits are used for ownership than for rental housing because ownership housing is more expensive to purchase and maintain. It is assumed that moderate income homebuyers may earn slightly less than the maximum for that income category (110 percent of AMI).
- **Maximum monthly housing costs.**¹¹ For all renters, maximum monthly housing costs are assumed to be 30 percent of gross household income. For homebuyers, 35 percent of gross income is assumed to be available for monthly housing costs, reflecting the higher incomes of this group.¹² These standards are based on California’s Health & Safety Code Sections 50052.5 and 50053.
- **Utilities.** The monthly utility cost assumptions are based on utility allowances calculated by the U.S. Department of Housing and Urban Development for San Mateo County.¹³ Both renters and owners are assumed to pay for heating, cooking, other electric, and water heating. In addition, owners are assumed to pay for water and trash collection.¹⁴
- **Mortgage terms and costs included for ownership housing.** The mortgage calculations are based on the terms typically offered to first-time homebuyers (such as the terms offered by the California Housing Finance Authority), which is a 30-year mortgage with a five percent down payment. A five percent down payment standard is also used by many private lenders for first-time homebuyers. Based on recent interest rates to first-time buyers, the analysis assumes a 5.375 percent annual interest rate.¹⁵ In addition to mortgage payments and utilities,

¹¹ The calculation of homeowner affordability is conservative in that the model accounts for additional costs for buyers (such as utility costs) that might not be considered by all lenders.

¹² The assumption that homebuyers spend 35 percent of gross household income on housing results in a lower affordability gap than if 30 percent of gross household income were used instead.

¹³ U.S. Department of Housing and Urban Development, "Allowances for Tenant-Furnished Utilities and Other Services: Housing Authority of San Mateo County," November 2013.

¹⁴ Units are assumed to have natural gas heating, cooking, and water heating systems, as natural gas is the most common fuel for units located in San Mateo County. Sources: U.S. Census Bureau, 2012 American Community Survey, "Table B25117: Tenure by House Heating Fuel," San Mateo County; U.S. Census Bureau, 2011 American Housing Survey, "Table C-03-AH-M, San Francisco-San Mateo-Redwood City: Heating, Air Conditioning, and Appliances – All Housing Units."

¹⁵ Sources: CalHFA Mortgage Calculator, accessed March 2014; Zillow.com, "Current Mortgage Rates and Home Loans," accessed March 2014; interviews with California Housing Finance Agency (CalHFA) Preferred Loan Officers, March 2014.

monthly ownership housing costs include homeowner association (HOA) dues,¹⁶ property taxes,¹⁷ private mortgage insurance,¹⁸ and hazard and casualty insurance.¹⁹

¹⁶ HOA fees are estimated at \$300 per unit per month, based on common HOA fees in San Mateo County as reported in: Polaris Pacific, "Silicon Valley Condominium Market," February 2014.

¹⁷ The annual property tax rate is estimated at 1.18 percent of the sales price, based on the average total tax rate for San Mateo County (calculated from County of San Mateo, 2008-09 Property Tax Highlights http://www.co.sanmateo.ca.us/Attachments/controller/Files/PTH/PTH_2009.pdf) and discussions with Preferred Loan Officers.

¹⁸ The annual private mortgage insurance premium rate is estimated at 0.89 percent of the total mortgage amount, consistent with standard requirements for conventional loans with a five percent down payment. Sources: Genworth, February 2014; MGIC, December 2013; Radian, April 2014.

¹⁹ The annual hazard and casualty insurance rate is assumed to be 0.35 percent of the sales price, consistent with standard industry practice.

Figure V-1. Calculation of Affordable Rents in San Mateo County by Household Size, 2014

Persons per Household (HH)	1	2	3	4	5
Very Low Income (50% AMI)					
Maximum Household Income at 50% AMI	\$39,600	\$45,250	\$50,900	\$56,550	\$61,050
Maximum Monthly Housing Cost (a)	\$990	\$1,131	\$1,273	\$1,414	\$1,526
Utility Deduction	\$29	\$40	\$53	\$68	\$68
Maximum Available for Rent (HH Size) (b)	\$961	\$1,091	\$1,220	\$1,346	\$1,458
Low Income (70% AMI)					
Maximum Household Income at 70% AMI	\$50,470	\$57,680	\$64,890	\$72,100	\$77,875
Maximum Monthly Housing Cost (a)	\$1,262	\$1,442	\$1,622	\$1,803	\$1,947
Utility Deduction	\$29	\$40	\$53	\$68	\$68
Maximum Available for Rent (HH Size) (b)	\$1,233	\$1,402	\$1,569	\$1,735	\$1,879
Moderate Income (90% AMI)					
Maximum Household Income at 90% AMI	\$64,890	\$74,160	\$83,430	\$92,700	\$100,125
Maximum Monthly Housing Cost (a)	\$1,622	\$1,854	\$2,086	\$2,318	\$2,503
Utility Deduction	\$29	\$40	\$53	\$68	\$68
Maximum Available for Rent (HH Size) (b)	\$1,593	\$1,814	\$2,033	\$2,250	\$2,435

Notes:

(a) 30 percent of maximum monthly household income.

(b) Maximum monthly housing cost minus utility deduction.

Acronyms:

AMI: Area median income

HH: Household

Sources: California Department of Housing and Community Development, 2014; U.S. Department of Housing and Urban Development, 2013; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Figure V-2. Calculation of Affordable Rents in San Mateo County by Unit Type, 2014

Affordable Sales Price by Unit Type (a)	Studio (1 person)	1 Bedroom (2 persons)	2 Bedroom (3 persons)	3 Bedroom (4 and 5 persons)
Very Low Income (50% AMI)	\$961	\$1,091	\$1,220	\$1,402
Low Income (70% AMI)	\$1,233	\$1,402	\$1,569	\$1,807
Moderate Income (90% AMI)	\$1,593	\$1,814	\$2,033	\$2,342

Notes:

(a) Affordable rents are calculated as follows: Studios are calculated as one-person households; One-bedroom units are calculated as two-person households; Two-bedroom units are calculated as three-person households; Three-bedroom units are calculated as an average of four and five person households. See Figure V-1.

Sources: California Department of Housing and Community Development, 2014; U.S. Department of Housing and Urban Development, 2013; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Figure V-3. Calculation of Affordable Sales Prices in San Mateo County by Household Size, 2014

Persons per Household (HH)	1	2	3	4	5
Moderate Income (110% AMI)					
Maximum Household Income at 110% AMI (a)	\$79,310	\$90,640	\$101,970	\$113,300	\$122,375
Maximum Monthly Housing Cost (b)	\$2,313	\$2,644	\$2,974	\$3,305	\$3,569
Monthly Deductions					
Utilities	\$106	\$106	\$130	\$156	\$156
HOA Dues	\$300	\$300	\$300	\$300	\$300
Property Taxes and Insurance (c)	\$517	\$607	\$690	\$773	\$844
Monthly Income Available for Mortgage Payment (d)	\$1,390	\$1,631	\$1,854	\$2,076	\$2,269
Maximum Mortgage Amount (e)	\$248,195	\$291,274	\$331,100	\$370,795	\$405,155
Maximum Affordable Sales Price - HH Size (f)	\$261,258	\$306,604	\$348,526	\$390,311	\$426,479

Notes:

(a) Calculated as 110 percent of the median household income reported by HCD for each household size.

(b) Maximum housing cost is estimated at 35 percent of household income for homebuyers.

(c) Assumes annual property tax rate of 1.18 percent of sales price; annual private mortgage insurance premium rate of 0.89 percent of mortgage amount; annual hazard and casualty insurance rate of 0.35 percent of sales price.

(d) Maximum monthly housing cost minus deductions

(e) Assumes 5.375 percent interest rate and 30 year loan term

(f) Assumes 5 percent down payment (75 percent loan-to-value ratio)

Acronyms:

AMI: Area median income

HH: Household

HOA: Home owners association

Sources: California Department of Housing and Community Development, 2014; U.S. Department of Housing and Urban Development, 2013; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Figure V-4. Calculation of Affordable Sales Prices in San Mateo County by Unit Type, 2014

Affordable Sales Price by Unit Type (a)	1 Bedroom (1 and 2 persons)	2 Bedroom (3 persons)	3 Bedroom (4 and 5 persons)
Moderate Income (110% AMI)	\$283,931	\$348,526	\$408,395

Notes:

(a) One-bedroom units are calculated as an average of one- and two-person households; Two-bedroom units are calculated as three-person households; and three-bedroom units are calculated as an average of four and five person households. See Figure V-3

Sources: California Department of Housing and Community Development, 2014; U.S. Department of Housing and Urban Development, 2013; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

ESTIMATING HOUSING DEVELOPMENT COSTS

The second step in calculating the housing affordability gap is to estimate the cost of developing new, modest housing units. Modest housing is defined slightly differently for rental and ownership housing. For rental housing, the costs and characteristics of modest housing are similar to recent projects developed in San Mateo County by the affordable rental housing sector. Modest for-sale housing is assumed to be non-luxury multifamily (condominium) development because single-family homes in San Mateo County tend to be significantly more expensive than condominiums; many of the new single-family homes in the county are custom-built luxury units that are too costly to meet the standard for modest housing.

The calculation of housing development costs used in the housing affordability gap requires several steps. Because the gap covers both rental housing and for-sale housing, it is necessary to estimate costs for each. The following describes the data sources used to calculate rental and for-sale housing development costs.

Rental Housing

Rental housing development costs were based on pro forma data obtained from three recent affordable housing projects in San Mateo County. Figure V-5 shows the location and description of these projects and summarizes the information that was used to generate a per-square-foot cost of \$410 used in the cost analysis. These costs include site acquisition costs, hard costs (on- and off-site improvements), soft costs (such as design, city permits and fees, construction interest, and contingencies), and developer fees. The costs from the rental housing pro formas were also cross-referenced against proprietary pro formas available to the consultant team from other private development projects in order to ensure accuracy.

Since these projects assumed state and federal funding, the labor costs included in the original pro formas reflect the prevailing wage requirement imposed by state and local governments. The costs shown in Figure V-5 have been adjusted to subtract out the prevailing wage requirement because the development cost model used in the housing affordability gap analysis does not assume receipt of government subsidies. A rule of thumb used by local economists who assist affordable housing developers in obtaining public financing, is to estimate that, under the prevailing wage requirement, labor costs are 25 percent higher than would otherwise be the case. Therefore, on-site and off-site improvement costs obtained from the original pro formas are reduced by 25 percent to reflect actual labor costs that would apply to construction projects that do not have these requirements.²⁰ Finally, on average, land acquisition costs accounted for 20 percent or less of these total adjusted costs.

²⁰ These prevailing wage requirements refer only to labor cost requirements on construction projects that receive funding from the state or federal government. These are not the same as minimum wage requirements that individual cities may adopt.

Figure V-5. Affordable Housing Project Pro Forma Data

Project Description	Project 1	Project 2	Project 3
Location	San Mateo	San Mateo	San Bruno
Year Built	2013	2010	2011
Land Area (acres)	1.05	1	0.63
Gross Building Area (square feet)	106,498	127,718	42,688
Net Building Area (square feet)	56,075	67,850	33,297
Number of Units	60	68	42
Parking Type	Podium	Underground	Structure
Parking Spaces/ Unit	1.82	1.55	1.0
Land Acquisition Costs	\$3,157,000 (\$69 per SF of land)	\$5,543,600 (\$127 per SF of land)	\$2,096,500 (\$76 per SF of land)
Project Costs per SF of Net Building Area			
Land Cost (a)	\$56	\$82	\$63
Land Cost (per sq. ft. of net building area)	\$56	\$82	\$63
Hard Costs (b)	\$228	\$216	\$187
Soft Costs (c)	\$93	\$99	\$114
Developer Fees	\$25	\$21	\$39
Total Project Costs (d)	\$402	\$417	\$403

Notes:

- (a) Calculated per square foot of net building area.
- (b) Excludes prevailing wage requirements for on-site and off-site hard costs.
- (c) Includes design, engineering, city permits and fees, construction interest, contingencies, legal, etc.
- (d) Total costs include developer fees.

Acronyms:

SF: Square feet

Source: Confidential Pro Forma Data; Vernazza Wolfe Associates, Inc; Strategic Economics, 2014.

To ensure that the land value assumptions used in the rental development cost estimates (ranging from \$69 to \$127 per square foot of land) were reasonable, the consultant team analyzed recent sales of vacant properties in San Mateo County using DataQuick, a commercial vendor that tracks real estate transactions. Cities with fewer than three vacant land transactions were excluded from the analysis. As shown below in Figure V-6, land values in San Mateo County are highly variable from city to city, ranging from \$45 to \$300 per square foot; the average sales price for the selected sites in the County was \$189 per square foot. The analysis demonstrates the land cost assumptions used to calculate rental housing costs (in Figure V-5) represent the lower range of current land values.

Figure V-6. Sales of Vacant Lands in San Mateo County, 2014

Jurisdiction	Number Transactions	Average Sales Price	Average Site Size (SF)	Average Sales Price/SF Land
Belmont	4	\$920,000	6,383	\$165
Menlo Park	6	\$1,239,500	5,802	\$220
Pacifica	4	\$487,000	7,221	\$111
San Bruno	13	\$933,769	3,259	\$295
San Mateo	8	\$1,314,188	5,424	\$300
Unincorporated San Mateo County	4	\$224,250	5,194	\$45
Average of Records		\$853,118	5,547	\$189

Notes: Includes data from cities with 3 or more transactions of vacant land in San Mateo County from January through May 2014. Records with missing sales or land area information were eliminated.

Acronyms:

SF: Square feet

Sources: DataQuick, January-May 2014; Vernazza Wolfe Associates, Inc; Strategic Economics, 2014.

For-Sale Housing

Since affordable housing developers do not typically build for-sale housing in San Mateo County, the cost of developing new, modest for-sale housing was estimated using two data methods: the first method used price data for recently built condominium units as a proxy for development costs; the second approach estimated development costs based on published market and cost data for similar projects in San Mateo County. Each of these cost estimate approaches is described in more detail below.

Review of condominium sales data – In this approach, average sales prices from condominium units built in San Mateo County between 2008 and 2012 are used as a proxy for development costs.²¹ This approach assumes that construction costs, land costs, soft costs, and developer profit are all included in the unit sales price. Using data provided by DataQuick, the consultant team analyzed sales prices of condominium units of various sizes in the seven cities that experienced condominium development that exceeded 10 units in the aggregate between 2008 and 2012. These seven cities included Brisbane, East Palo Alto, Millbrae, Redwood City, San Carlos, San Mateo City, and South San Francisco. The other jurisdictions in San Mateo County experienced little or no condominium development during this time period. Figure V-7 summarizes the information that was used to generate a per-square-foot cost for condominium development of \$420.

Cost estimate of hypothetical condominium project - The second approach relied on published industry data sources and recent financial feasibility studies to estimate the development costs of a hypothetical condominium project, as described in Figure V-8.²² Land costs were estimated based on recent DataQuick land transactions shown in Figure V-6. RS Means cost data, adjusted for the Bay

²¹ Ideally, cost estimates would be based only on projects built in the last year or two. However, the decline in new construction after 2007 necessitated that the analysis use several years' worth of data in order to estimate for-sale housing costs. Since costs are not adjusted for inflation, they may be slightly lower than actual costs required for a new project to be built in 2014 or 2015. This approach is more conservative – and likely more accurate – than applying across-the-board inflation factors to historic costs. Furthermore, the increasing cost of residentially zoned, high density parcels is the main source of development cost increase. Adjusting land costs for inflation is not easily done.

²² The hypothetical condominium building type is a Type V building with underground parking and floor-area ratio of 1.7. The building characteristics are described in Figure IV-8.

Area's construction costs, was used to calculate hard costs. Based on a review of recent financial feasibility analyses in the Bay Area, soft costs were estimated at 30 percent of hard costs, and developer fees and profits were estimated at 12 percent of hard and soft costs. Using this second method, the development costs are estimated at \$495 per net square foot of building area. In order to ensure that the results of the affordability gap analysis are conservative, the lower development cost estimate of \$420 per net square foot was selected for ownership units.

Figure V-7. Condominium Sales: Average Unit Characteristics and Prices for Selected Cities in San Mateo County (2008-2012)

Jurisdiction	Average Number of Bathrooms	Average Number of Bedrooms	Average Square Feet	Average Price per Square Foot	Average Unit Price
Brisbane	1.2	1.5	892	\$413	\$368,625
East Palo Alto	1.8	1.3	1,029	\$340	\$349,991
Millbrae	1.9	2	1,290	\$429	\$553,893
Redwood City	2.7	2.9	1,933	\$402	\$776,655
San Carlos	1.8	1.8	1,066	\$508	\$541,932
San Mateo City	2.3	2.2	1,545	\$439	\$677,430
South San Francisco	1.7	1.8	981	\$427	\$418,740
Aggregate	1.9	1.9	1,248	\$423	\$527,401

Sources: DataQuick, Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Figure V-8. Estimate of Development Costs of Hypothetical Condominium Project

Building Characteristics	
Land Area (SF)	110,727
Gross Building Area (SF)	188,235
Net Building Area (SF)	160,000
Number of Units	100
Parking Type	Underground
Floor-area ratio (FAR)	1.7
Density (units per acre)	39
Average Unit Size	1,600
Land Acquisition Costs per Square Foot (a)	\$189
Development Cost	
	Cost per Net SF
Land Cost (b)	\$131
Hard Costs	\$250
Soft Costs (c)	\$75
Developer Fees (d)	\$39
Total Development Costs	\$495

Notes:

- (a) Land value is calculated based on DataQuick records of vacant land transactions in the county. See Figure IV-6.
- (b) Calculated based on RS Means cost estimates per square foot of net building area.
- (c) Estimated at 30 percent of hard costs. Includes design, engineering, city permits and fees, construction interest, contingencies, legal, etc.
- (d) Estimated at 12 percent of hard costs and soft costs.

Acronyms:

SF: square feet

Sources: RS Means, 2014; DataQuick 2014; Recent financial feasibility studies; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Cost Estimates by Unit Size

The data sources described above also provided information on estimated unit sizes. Unit size information is needed to translate costs/sales prices per square foot to unit costs. Unit sizes are estimated separately for rental and for-sale units. For the rental units, the recent inventory of projects developed by MidPen Housing was analyzed. For ownership units, the average sizes of recently built condominium units (Figure V-7) were analyzed.

Figure V-9 provides the unit sizes and development cost estimates for rental units. Per-unit development costs were calculated by multiplying average unit sizes by the per-square foot development costs of \$410. Rental unit costs range from \$205,000 for studio units to \$479,700 for three-bedroom units.

Figure V-10 summarizes the costs of condominium units. The per-unit costs were derived by multiplying the average unit size by the development cost per square foot of \$420. Condominium development costs range from \$357,000 for one-bedroom units to \$672,000 for three-bedroom units.

Figure V-9. Rental Housing Unit Sizes and Development Costs

Unit Type	Estimated Cost per Net SF	Unit Size (net SF)	Development Costs
Studio	\$410	500	\$205,000
One bedroom	\$410	700	\$287,000
Two bedroom	\$410	970	\$397,700
Three bedroom	\$410	1,170	\$479,700

Acronyms:

SF: Square feet

Sources: Confidential Pro Forma Data; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

Figure V-10. For-Sale Housing Unit Sizes and Development Costs

Unit Type	Estimated Cost per Net SF	Unit Size (net SF)	Development Costs
One bedroom	\$420	850	\$357,000
Two bedroom	\$420	1,200	\$504,000
Three bedroom	\$420	1,600	\$672,000

Acronyms:

SF: Square feet

Sources: DataQuick, 2014; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2014.

CALCULATING THE HOUSING AFFORDABILITY GAP

The final step in the analysis is to calculate the housing affordability gap, or the difference between what renters and owners can afford to pay and the total cost of developing new units. The purpose of the housing affordability gap calculation is to help determine the fee amount that would be necessary to cover the cost of developing housing for very low, low, and moderate income households. The calculation does not assume the availability of any other source of housing subsidy because not all "modest" housing is built with public subsidies, and tax credits and tax-exempt bond financing are highly competitive programs that will not always be available to developers of modest housing units.

Figure V-11 shows the housing affordability gap calculation for rental units. For each rental housing unit type and income level, the gap is defined as the difference between the per-unit cost of development and the supportable debt per unit. The supportable debt is calculated based on the net operating income generated by an affordable monthly rent, incorporating assumptions about operating expenses (including property taxes, insurance, etc.), reserves, vacancy and collection loss, and mortgage terms based on discussions with local affordable housing developers. Because household sizes are not uniform and the types of units each household may occupy is variable, the average housing affordability gap is calculated by averaging the housing affordability gaps for the various unit sizes.

Figure V-12 shows the housing affordability gap calculation for ownership units. For each unit type, the gap is calculated as the difference between the per-unit cost of development and the affordable sales price for each income level. As with rental housing, the average housing affordability gap for each income level is calculated by averaging the housing affordability gaps across unit sizes in order to reflect that households in each income group vary in size, and may occupy any of these unit types.

Finally, the tenure-neutral estimates of the housing affordability gap were estimated for very low, low, and moderate income households (Figure V-13). Because very low and low income households that are looking for housing in today's market are much more likely to be renters, an ownership gap was not calculated for these income groups. The rental gap represents the overall affordability gap for these two income groups. On the other hand, moderate income households could be either renters or owners. Therefore, the rental and ownership gaps are averaged for this income group to calculate the overall affordability gap for moderate income households. The calculated average affordability gap per unit is \$280,783 for very low income households; \$240,477 for low income households, and \$175,558 for moderate income households. The housing affordability gap is highest for very low income households because those households with higher incomes can afford to pay more for housing.

Figure V-11. Housing Affordability Gap Calculation for Rental Housing

Income Level and Unit Type	Unit Size (SF)	Maximum Monthly Rent (a)	Annual Income	Net Operating Income (b)	Available for Debt Service (c)	Supportable Debt (d)	Development Costs (e)	Affordability Gap
Very Low Income (50% AMI)								
Studio	500	\$961	\$11,532	\$3,455	\$2,764	\$36,552	\$205,000	\$168,448
1 Bedroom	700	\$1,091	\$13,095	\$4,940	\$3,952	\$52,259	\$287,000	\$234,741
2 Bedroom	970	\$1,220	\$14,634	\$6,402	\$5,122	\$67,725	\$397,700	\$329,975
3 Bedroom	1,170	\$1,402	\$16,824	\$8,483	\$6,786	\$89,733	\$479,700	\$389,967
Average Affordability Gap								\$280,783
Low Income (70% AMI)								
Studio	500	\$1,233	\$14,793	\$6,553	\$5,243	\$69,323	\$205,000	\$135,677
1 Bedroom	700	\$1,402	\$16,824	\$8,483	\$6,786	\$89,733	\$287,000	\$197,267
2 Bedroom	970	\$1,569	\$18,831	\$10,389	\$8,312	\$109,902	\$397,700	\$287,798
3 Bedroom	1,170	\$1,807	\$21,680	\$13,096	\$10,477	\$138,535	\$479,700	\$341,165
Average Affordability Gap								\$240,477
Moderate Income (90% AMI)								
Studio	500	\$1,593	\$19,119	\$10,663	\$8,530	\$112,796	\$205,000	\$92,204
1 Bedroom	700	\$1,814	\$21,768	\$13,180	\$10,544	\$139,417	\$287,000	\$147,583
2 Bedroom	970	\$2,033	\$24,393	\$15,673	\$12,539	\$165,796	\$397,700	\$231,904
3 Bedroom	1,170	\$2,342	\$28,108	\$19,202	\$15,362	\$203,127	\$479,700	\$276,573
Average Affordability Gap								\$187,066

Notes:

- (a) Affordable rents are based on State of California Housing and Community Development FY 2014 Income Limits for San Mateo County. See Figure V-2.
- (b) Amount available for debt. Assumes 5% vacancy and collection loss and \$7,500 per unit per year for operating expenses and reserves based on recently built (2012-2014) and proposed affordable housing projects in the San Francisco Bay Area.
- (c) Assumes 1.25 Debt Coverage Ratio.
- (d) Assumes 6.38%, 30 year loan. Calculations based on annual payments.
- (e) Assumes \$410/SF for development costs based on comparable project pro formas.
- (f) Calculated as the difference between development costs and supportable debt.

Acronyms:

- SF: Square feet
- AMI: Area median income

Sources: Housing and Community Development, 2014; Selected San Mateo Rental Housing Pro Formas; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure V-12. Housing Affordability Gap Calculation for For-Sale Condominium Housing

Income Level and Unit Type	Unit Size (SF)	Affordable Sales Price (a)	Development Costs (b)	Affordability Gap (c)
Moderate Income (110% of AMI)				
1 Bedroom	850	\$283,931	\$357,000	\$73,069
2 Bedroom	1,200	\$348,526	\$504,000	\$155,474
3 Bedroom	1,600	\$408,395	\$672,000	\$263,605
Average Affordability Gap				\$164,049

Notes:

(a) See calculation in Figure V-3.

(b) Assumes \$420/SF for development costs, based on recent condominium sales data.

(c) Calculated as the difference between development cost and affordable sales price.

Acronyms:

SF: Square feet

AMI: Area median income

Sources: DataQuick Sales Data, 2008-2012; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure V-13. Average Housing Affordability Gap by Income Group

Income Level	Rental Gap	Ownership Gap	Average Affordability Gap
Very Low Income (50% AMI)	\$280,783	N/A	\$280,783
Low Income (70% - 80% AMI) (a)	\$240,477	N/A	\$240,477
Moderate Income (90% - 110% AMI) (b)	\$187,066	\$164,049	\$175,558

Notes:

(a) Low income households are defined at 70 percent of AMI for renters and 80 percent of AMI for owners.

(b) Moderate income households are defined at 90 percent of AMI for renters and 110 percent AMI for owners.

Acronyms:

AMI: Area median income.

Source: Vernazza Wolfe Associates, Inc. and Strategic Economics, 2015.

VI. NEXUS FEES AND REQUIREMENTS

This section builds on the findings of the previous analytical steps to calculate maximum justified housing impact fees for each prototype.

MAXIMUM FEE CALCULATION

To derive the maximum nexus-based fee, the housing affordability gap is applied to the number of lower-income worker households linked to the prototypes. This is the basis for developing an estimate of the total affordability gap for each prototype. The total gap for each prototype is then divided by the number of units in the development prototype to calculate a single maximum fee per unit.

Figure VI-1 presents the results of the nexus fee calculation for the single-family attached prototype. The per unit housing affordability gap number is multiplied by the number of income-qualified worker households linked to the prototype to estimate the total gap. The total affordability gap is then divided by the number of units in the prototype to derive the maximum fee per unit, estimated at \$84,705 per unit. The same steps are taken for the condominium and apartment prototypes to estimate the maximum fee per unit, as shown in Figures VI-2 and VI-3. The calculated maximum fees are \$67,726 per condominium unit, and \$72,192 per apartment unit.

The fees can also be calculated on per-square-foot basis by dividing the total gap by the net residential area for each prototype. The maximum fee per square foot is \$42 for the 169,600-square-foot single-family attached prototype (Figure VI-4), \$45 for the 60,000-square-foot condominium prototype (Figure VI-5), and \$80 per square foot for the 125,800-square-foot apartment prototype (Figure VI-6).

The per-unit and per-square-foot fees shown in the tables below express the total nexus-based fees for new market-rate single-family attached, condominium and rental apartment development in San Mateo. They represent the maximum justified fees based on the nexus analysis that could be imposed on new development. The city may adopt fees or require mitigations at a lower level than these justified fees, depending on financial feasibility and other policy considerations.

Figure VI-1. Maximum Per-Unit Fee for Single-Family Attached Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Number Units in Prototype	Total Fee Per Unit
Very Low Income (<=50% AMI)	\$280,783	10.0	\$2,794,549		
Low Income (51-80% AMI)	\$240,477	10.0	\$2,413,729		
Moderate Income (81-120% AMI)	\$175,558	11.3	\$1,991,613		
Total			\$7,199,891	85	\$84,705

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VI-2. Maximum Per-Unit Fee for Condominium Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Number Units in Prototype	Total Fee Per Unit
Very Low Income (<=50% AMI)	\$280,783	3.8	\$1,074,906		
Low Income (51-80% AMI)	\$240,477	3.8	\$902,981		
Moderate Income (81-120% AMI)	\$175,558	4.2	\$731,145		
Total			\$2,709,032	40	\$67,726

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VI-3. Maximum Per-Unit Fee for Apartment Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Number Units in Prototype	Total Fee Per Unit
Very Low Income (<=50% AMI)	\$280,783	14.6	\$4,091,459		
Low Income (51-80% AMI)	\$240,477	13.9	\$3,350,807		
Moderate Income (81-120% AMI)	\$175,558	15.2	\$2,664,635		
Total			\$10,106,902	140	\$72,192

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VI-4. Maximum Fee per SF for Single-Family Attached Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Net Residential Area (SF)	Total Fee Per SF
Very Low Income (<=50% AMI)	\$280,783	10.0	\$2,794,549		
Low Income (51-80% AMI)	\$240,477	10.0	\$2,413,729		
Moderate Income (81-120% AMI)	\$175,558	11.3	\$1,991,613		
Total			\$7,199,891	169,600	\$42

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VI-5. Maximum Fee per SF for Condominium Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Net Residential Area (SF)	Total Fee Per SF
Very Low Income (<=50% AMI)	\$280,783	3.8	\$1,074,906		
Low Income (51-80% AMI)	\$240,477	3.8	\$902,981		
Moderate Income (81-120% AMI)	\$175,558	4.2	\$731,145		
Total			\$2,709,032	60,000	\$45

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VI-6. Maximum Fee per SF for Apartment Prototype

Income Category	Average Affordability Gap (per Household)	Number Worker Households	Maximum Fee Revenues for Prototype	Net Residential Area (SF)	Total Fee Per SF
Very Low Income (<=50% AMI)	\$280,783	14.6	\$4,091,459		
Low Income (51-80% AMI)	\$240,477	13.9	\$3,350,807		
Moderate Income (81-120% AMI)	\$175,558	15.2	\$2,664,635		
Total			\$10,106,902	125,800	\$80

Sources: California Housing and Community Development; Individual lenders; Affordable and market-rate project pro formas; DataQuick, 2014; RS Means, 2014; IMPLAN 3 via Applied Development Economics, 2015; Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

INCLUSIONARY HOUSING REQUIREMENTS

In addition to establishing the maximum potential justified fee for new development projects, the nexus results described above can also be used to establish the percentage of inclusionary units under the City’s current program. At present, inclusionary housing is one of the primary tools for providing affordable housing units in the City of San Mateo. In San Mateo, the inclusionary requirements are that 10 percent of units in projects of 11 units or more must be affordable to households earning up to 80 percent of the area median income (AMI), or 15 percent of units are required to be affordable if units are priced at the 120 percent AMI level. If the City adopts a housing impact fee, it could replace its inclusionary zoning program with an impact fee program that still allows developers the option of providing affordable units; or it could continue to require on-site units in for-sale projects.

The principal way in which the equivalent inclusionary percentage can be estimated from the nexus analysis is by taking the total number of households requiring affordable housing (for each prototype) and dividing this number by the number of total units in each prototype. Figure VI-7 presents the results of this estimate. The analysis indicates that, on average, 32 percent of new units could be sold or rented and be consistent with the findings of this impact fee study. The nexus-based inclusionary percentage rate surpasses the City’s existing inclusionary policy.

Figure VI-7. Calculated Inclusionary Rates Based on Potential Housing Impact Fees

	Households Requiring Affordable Housing	Total Units in Prototype	Calculated Inclusionary Rate
Single-Family Attached	31.3	85	37%
Condominiums	11.7	40	29%
Apartments	43.7	140	31%

Sources: Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

SUMMARY OF CONSERVATIVE ASSUMPTIONS

The housing impact fee nexus analysis methodology utilizes conservative assumptions that result in a lower estimate of the nexus-supported maximum fee. Some of the conservative assumptions undertaken in the analysis include the following:

- **Prices and rental rates for new development.** Because there has been little new housing development completed in San Mateo County, the sale prices and rental rates for new market-rate housing are based on older market data. The rental rates and sale prices for projects that are coming on the market today are significantly higher. The use of lower prices and rents results reduces the total nexus fee calculation.
- **Economic impact analysis model.** The IMPLAN3 model only measures the impacts of new market-rate housing development in San Mateo County. It does not measure any of the impacts that could be occurring in other Bay Area counties. The economic impact analysis is modeled on a household income change approach, which adjusts for income taxes and savings when calculating the employment impacts of new households.
- **Cost estimates for affordability gap analysis.** The affordability gap analysis measures the difference between what households can afford to pay for housing and the cost of new housing units. To ensure that the gap is conservative, the development cost estimates are

based on the lower range of land and construction costs in San Mateo County. In many sub-areas of the county, including priority-development areas and downtown locations, land costs for housing sites may be higher, particularly under today's market conditions.

- **Extremely low income households and very low income households are combined in the affordability gap analysis.** The affordability gap analysis combines these two income groups, thereby reducing the total fee calculation.
- **Affordability gap for owner households.** The calculation of the affordability gap for ownership households only considers moderate-income households. Low and very low income households are not considered in the calculation. This also results in a lower estimate of the maximum fee.
- **Feasibility analysis.** The analysis takes into account the financial feasibility of adding the maximum impact fee and reduced fee levels to the total cost of new development. The financial feasibility component of the analysis incorporates market-supportable assumptions about revenues, costs, land costs, and developer return expectations based on research on recent development trends. The results of financial analysis informed the final recommendations on the housing impact fee.
- **Comparison to other cities.** The Consultant Team researched existing impact fees and BMR policies in other nearby cities to determine the competitiveness of the maximum fee and reduced fee levels. The fee recommendations in this report incorporate the findings from the comparative analysis.
- **Overlap analysis.** The City is undertaking two impact fee nexus studies at the same time: the commercial linkage fee nexus study and the housing impact fee nexus study. To minimize the potential that some jobs could be double-counted by including the same worker households in both studies, the Consultant Team ensured that the recommended fees for the two programs (commercial linkage and housing fees) would – when combined –mitigate less than 100 percent of the total impact.

VII. FEASIBILITY AND POLICY CONSIDERATIONS

There are a number of policy considerations that can be taken into account when jurisdictions consider adopting an affordable housing impact fee on new market-rate development. These may include factors such as the likely impact of the proposed fee levels on local housing development, the competitiveness of the city in attracting development relative to neighboring jurisdictions, the impact of the proposed fee on existing city fee level, and the role of the proposed fee in meeting the city’s overall affordable housing objectives. This section provides a discussion of some of the key financial and policy questions for San Mateo.

FINANCIAL FEASIBILITY ANALYSIS

Summary of Residential Prototypes

As discussed in more detail in Section III of this report, this nexus analysis is based on three residential prototypes: ownership single-family attached and condominiums, and rental apartments. Figure VII-1 summarizes the characteristics of the three development prototypes that were tested for financial feasibility. These prototypes are representative of the types of market rate housing development projects that can reasonably be expected in San Mateo. The single-family attached units are Type V wood frame buildings with tuck-under parking and a density of 11 units per acre. Two-thirds of the single-family attached units have three bedrooms, and the remaining third has four bedrooms. The average net residential area is 1,995 square feet per unit. The condominiums are Type V wood frame buildings with underground parking and a density of 42 units per acre. The average net residential area is 1,500 square feet per unit. Half of the condominium units are two-bedroom units, and the other half are three-bedroom units. The apartment prototype building is Type V wood frame construction, with podium parking and a density of 44 units per acre. The average net area per unit is 899 square feet. Most of the apartment units are one and two bedrooms, with a smaller number of studios.

Figure VII-1. Residential Prototypes

Building Characteristics	Single-Family		
	Attached	Condominiums	Apartments
Building Type	Type V	Type V	Type V
Total Residential Units (a)	85	40	140
Avg. Size Unit in Square Feet (SF)	1,995	1,500	899
Net Square Footage (NSF)	169,600	60,000	125,800
Parking Type	Tuck-Under	Underground	Podium
Efficiency Factor (b)	85%	85%	65%
Gross Square Footage (GSF)	199,529	70,588	193,538
Floor Area Ratio (FAR) (c)	0.6	1.7	1.4
Land Area (SF)	332,549	41,522	138,242
Land Area (Acres)	7.63	0.95	3.17
Units per Acre	11	42	44

Notes:

(a) Unit characteristics are described in more detail in Section III.

(b) Ratio of leasable square footage to gross square footage.

(c) Floor area ratio (FAR) measures density by dividing gross building area by total site area.

Source: Vernazza Wolfe Associates, Inc. and Strategic Economics, 2015.

Fee Levels

In order to provide the City of San Mateo with guidance on how proposed fees could impact development decisions, the Consultant Team conducted a financial feasibility analysis that tested the impact of proposed fee options on developer profit. The fees were tested for four fee scenarios, which include the maximum nexus-supported fee and three reduced fee levels.

Figure VII-2 demonstrates the calculated fees per unit for each prototype for all four scenarios. The fees can also be calculated on per square foot basis. The per-square-foot fees at different fee levels are shown in Figure VII-3.

Figure VII-2. Fee Levels per Unit for Prototypes

Prototype	Net Residential SF per Unit	Scenario 1 (Maximum Fee)	Scenario 2	Scenario 3	Scenario 4
Single-Family Detached	1,995	\$84,705	\$69,835	\$49,882	\$39,906
Condominium	1,500	\$67,726	\$22,500	\$15,000	\$7,500
Apartments	899	\$72,192	\$13,479	\$8,986	\$4,493

Sources: Vernazza Wolfe Associates, Inc.; Strategic Economics, 2015.

Figure VII-3. Fee Levels per Square Foot for Prototypes

Prototype	Net Residential SF per Unit	Scenario 1 (Maximum Fee)	Scenario 2	Scenario 3	Scenario 4
Single-Family Detached	1,995	\$42	\$35	\$25	\$20
Condominium	1,500	\$45	\$15	\$10	\$5
Apartments	899	\$80	\$15	\$10	\$5

Sources: Vernazza Wolfe Associates, Inc.; Strategic Economics, 2015.

Methodology

Financial feasibility of the fee options was tested using a pro forma model that measures the residual land value of a given development project. Many pro forma models are structured to solve for the financial return for the developer or investors (internal rate of return). In contrast, the residual land value method of analysis solves for the value of the land. This method recognizes that the value of land is inextricably linked to what can be built on it, and that development potential is heavily influenced by zoning, lot size/configuration, neighborhood context, and other factors. The pro forma model tallies all development costs (minus land) including direct construction costs, indirect costs (including financing), and developer fees. Revenues from unit sales or rental leases are then summed. The total project costs are then subtracted from the total project revenues. The balance is the residual value, representing the price a developer would pay for the land if pursuing that project. The fee levels were then added as an additional development cost to measure the effect on the residual land value.

Revenues

To estimate income from residential development, the analysis uses the sales prices and monthly rents presented in Section III of this report and summarized in Figure VII-4. These revenue assumptions were based on a review of local and regional market data, including information on the type of development that has been recently constructed or is planned or proposed in the City of San Mateo; and current sales prices and rental rates of recently built (or sold) residential development in San Mateo and neighboring cities. For single-family attached and condominium projects, the revenues are

calculated by multiplying the unit count by the sales price. Single-family attached units are estimated between \$1,104,000 and \$1,222,000 and condominium units at values between \$635,000 and \$831,000, depending on size. For rental projects, the revenues were estimated using an income capitalization approach. This valuation approach first estimates the annual net operating income (NOI) of the apartment prototype, which is the difference between total project income (annual rents) and project expenses, including operating costs²³ and vacancies. The NOI is then divided by the capitalization rate (cap rate) to derive total project value. Figure VII-5 summarizes the calculations and data source used for estimating the value of the apartment prototype.

Figure VII-4. Sales Prices and Rents for Single-Family Attached, Condominium and Apartment Prototypes

Prototype	Unit Type	Number of Units	Net Area (SF)	Unit Sales Price/ Monthly Rent	Price or Rent per SF
Single-Family Attached (For-Sale)					
Type V wood frame	3 BD/3 BA	58	1,900	\$1,104,000	\$581
11 units per acre	4 BD/3.5 BA	27	2,200	\$1,222,000	\$555
Tuck-under podium parking					
Net Residential Area			169,600		
Average Net SF per Unit			1,995		
Condominiums (For-Sale)					
Type V wood frame	2 BD/2 BA	20	1,400	\$635,000	\$454
42 units per acre	3 BD/2 BA	20	1,600	\$831,000	\$519
Subterranean parking					
Net Residential Area (Net SF)			60,000		
Average Net SF per Unit			1,500		
Apartments (Rental)					
Type V wood frame	Studio	17	500	\$2,500	\$5.00
44 units per acre	1 BD/1 BA	60	800	\$3,100	\$3.88
Podium parking	2 BD/2 BA	63	1,100	\$3,700	\$3.36
Net Residential Area (Net SF)			125,800		
Average Net SF per Unit			899		

Sources: Strategic Economics & Vernazza Wolfe Associates, Inc., 2014.

²³ Operating costs were calculated based on the Institute of Real Estate Management Survey of Apartment Buildings in the San Francisco Metropolitan Statistical Area (MSA).

Figure VII-5. Apartment Revenue Calculations

Apartment Revenues	Calculation	Total
Gross Annual Rental Income (a)	Gross annual rents	\$5,539,200
Operating Expenses (b)	30 percent of income	(\$1,661,760)
Vacancy (c)	5 percent of income	(\$276,960)
Annual Net Operating Income (c)	Income less expenses and vacancy	\$3,600,480
Capitalization Rate (d)	5 percent	5.00%
Capitalized Value	Project value	\$72,009,600

Notes:

- (a) Average monthly rents multiplied by 12 months multiplied by unit count for each unit type.
- (b) Institute of Real Estate Management, San Francisco MSA Apartment Properties, 2011.
- (c) Assumes a vacancy rate of 5 percent in a stabilized rental market.
- (d) According to DTZ's San Francisco Real Estate Forecast 2015, the cap rate for apartments is approximately 5 percent.

Sources: IREM, DTZ, Strategic Economics, 2015.

Development Costs

Cost estimates for the residential prototypes include direct construction costs (site work, building costs, and parking), indirect costs, financing costs, and developer overhead and profit. Development cost estimates for the pro forma analysis are distinct from the cost estimates provided in the countywide affordability gap analysis. Direct building construction cost estimates are based on RS Means and project pro formas for recent projects in San Mateo County.²⁴ Soft costs and developer overhead/profit were calculated based on a review of similar project pro formas in the Bay Area. City fee calculations were provided by City staff. Each of the cost factors used in the analysis is summarized in Figure VII-6.

²⁴ The development cost estimates used in the pro forma analysis are slightly different from those used in the affordability gap analysis because they include more recent real estate data, and are more tailored for the City of San Mateo and Central San Mateo County, rather than an overall estimate for the entire county. Furthermore, the market-rate units are generally larger and costlier to build than the “modest” units described in the affordability gap analysis.

Figure VII-6. Development Cost Factors

Development Costs	Metric	
Direct Costs (a)		
Townhouses	\$150	Per NSF
Condominiums	\$225	Per NSF
Apartments	\$210	Per NSF
Indirect Costs (b)		
A&E & Consulting	6.00%	of direct costs
Permits & Fees (Excl. Housing) (c)		estimated by City
Taxes, Insurance, Legal & Accounting	3.00%	of direct costs
Other (d)	3.00%	of direct costs
Contingency	5.00%	of indirect costs
Total Indirect Costs		
Financing Costs (b)		
Loan to Cost Ratio (LTC)	80%	of total costs
Loan Interest Rate	6%	annual rate
Compounding Period	12	months
	12 to	
Construction/Absorption Period (e)	24	months
Utilization Rate	55%	of loan
Loan Fees	2%	of loan
Developer Overhead & Profit	12%	of total costs (excl. land)

Notes:

(a) Direct costs include site work, building construction, and parking costs of \$30,000 per space for underground parking and \$25,000 per space for podium parking. Costs estimates are based on review of Bay Area pro formas for similar projects and data from RS Means.

(b) Based on review of similar project pro formas in the Bay Area and interviews with developers.

(c) Permits & fees are a generalized estimate of costs based on prototypes, calculated by City staff. Permits and fees for actual projects vary depending on many factors.

(d) Other soft costs include marketing, personal property, environmental studies, etc.

(e) Absorption periods are estimated at 24 months for apartments, condominiums and townhouses; and 18 months for single-family subdivisions.

Sources: RS Means, 2014; Similar pro formas; San Bruno, 2015; Strategic Economics, 2015.

Land Value

In order to understand what the different fee levels indicate regarding financial feasibility, the residual land values for each fee scenario can be compared with the market value of residential land in the City of San Mateo. If the residual value is higher than the market value, the project is feasible. If the residual value is lower than the market price, then the project is infeasible.

To determine the land value of sites zoned for lower density uses (single-family attached) and higher density multi-family residential uses (condominiums and rental apartments), the Consultant Team analyzed recent sales transactions in Central San Mateo County and reviewed third-party property appraisals.²⁵ Figure VII-7 illustrates the results of the land value analysis for lower density single-family detached residential uses, while Figure VII-8 shows the value of properties zoned for higher density multi-family residential uses. For lower density residential uses, values range depending on location and size, from \$28 per square foot for the lower quartile, to \$44 per square foot for the upper quartile. For higher-density multi-family housing, values also vary depending on location and size, reaching a weighted average of \$180 per square foot. For this analysis, the estimated land value is \$25 to \$50 for lower density sites, and between \$175 and \$225 per square foot for higher density multi-family development, including condominiums and apartments. For all prototypes, the market value of land is presented as a range because the land value of properties is likely to vary depending on location, size, and other conditions.

²⁵ The land value assumptions utilized in the pro forma analysis are different from the affordability gap analysis in two ways: 1) they include more recent transactional data than the affordability gap analysis, which was completed in July 2014; and 2) they are tailored to the City of San Mateo and Central San Mateo County, unlike the affordability gap estimate, which is a countywide estimate.

Figure VII-7. Single-Family Vacant Land Sales Transactions in Central San Mateo County

Address	City	Sale Price	Lot Area	Price/ SF Land
Naughton Ave	Belmont	\$150,000	5,000	\$30.00
Cipriani	Belmont	\$150,000	6,750	\$22.22
2200 Ralston Ave	Belmont	\$225,000	3,950	\$56.96
Marsten Ave	Belmont	\$200,000	8,712	\$22.96
Naughton	Belmont	\$256,000	8,250	\$31.03
Naughton	Belmont	\$256,000	10,350	\$24.73
Belmont Ave 1	Belmont	\$920,000	4,280	\$36.03
Belmont Ave 1	Belmont	\$920,000	7,827	\$36.03
Belmont Ave 1	Belmont	\$920,000	4,000	\$36.03
Belmont Ave 1	Belmont	\$920,000	9,425	\$36.03
1724 Terrace Dr	Belmont	\$315,000	11,812	\$26.67
1717 Notre Dame Ave	Belmont	\$299,000	7,250	\$41.24
383 Sierra Dr	Hillsborough	\$11,800,000	124,582	\$94.72
1085 Parrott Dr	Hillsborough	\$1,450,000	29,250	\$49.57
	Hillsborough	\$2,200,000	34,717	\$63.37
	Hillsborough	\$999,000	22,651	\$44.10
	Hillsborough	\$1,280,000	25,265	\$50.66
30 Cinnamon Ct	Hillsborough	\$1,780,000	42,400	\$41.98
275 Robin Rd	Hillsborough	\$1,750,000	71,874	\$24.35
101 Tiptoe Ln	Hillsborough	\$3,500,000	148,958	\$23.50
77 New Place Rd	Hillsborough	\$2,512,500	68,475	\$36.69
138 New Place Rd	Hillsborough	\$4,750,000	114,998	\$41.31
Summary Statistics				
Lower Quartile (25%)				\$27.50
Median Value				\$36.03
Upper Quartile (75%)				\$43.57

Source: CoreLogic, 2015; Strategic Economics, 2015.

Figure VII-8. Multi-Family Vacant Land Sales Transactions in Central San Mateo County, 2009-2014

Site Address	Location	Price	Lot Area	Price/ SF Land
1950 Elkhorn Court	San Mateo	\$16,745,000	88,862	\$188
E. Side of Tilton Ave/N. El Camino Real	San Mateo	\$4,505,000	33,572	\$134
1840 Ogden Dr.	Burlingame	\$7,180,000	38,768	\$185
2790 S. El Camino Real	San Mateo	\$6,100,000	14,331	\$426
10 Barneson	San Mateo	\$2,530,000	19,341	\$131
Shea Homes of Northern CA	San Mateo	13,480,000	79,279	\$170
TRI Pointe Homes, LLC	San Mateo	22,510,000	132,422	\$170
Summary Statistics				
Average Value per SF				\$201
Weighted Average Value per SF				\$180

Source: Property appraisals; DataQuick, 2015; Loopnet, 2015; Strategic Economics, 2015

Financial Feasibility Results

Figures VII-10 and VII-11 provide the pro forma for the single-family attached, condominium and apartment prototypes. Below is a discussion of the findings.

Single-Family Attached

The feasibility analysis indicates that at current market prices, without the addition of new impact fees, the single-family attached prototype would have revenues of \$97.03 million, with a total development cost of \$36.95 million. The difference between the revenues and costs is the residual land value, which is estimated at \$181 per square foot. This prototype, with no additional impact fees, yields a residual land value much higher than the threshold for feasibility in the City of San Mateo, which is between \$25 and \$50 per square foot.

With the addition of the potential housing impact fees at different levels, the financial feasibility results are as follows:

- The maximum impact fee of \$42 per square foot raises development costs from \$36.95 million to \$44.15 million. This cost increase results in a residual land value of \$159 per square foot, a value over the financial feasibility threshold in San Mateo, which was determined to be between \$25 and \$50 per square foot.
- Scenario 2, an impact fee set at \$35 per square foot increases development costs to \$42.88 million. The residual land value under this scenario is \$159 per square foot, which meets the requirement to be financially feasible.
- Scenario 3, a fee level of \$25 per square foot increases development costs to \$41.19 million. The residual land value under this fee scenario is \$168 per square foot, which is higher than the threshold for financial feasibility.
- A fee level set at \$20 per square foot results in total development costs of \$40.34 million, and a residual land value of \$170 per square foot. As in the other examined cases, this land value would meet the requirement to be financially feasible.

Condominiums

The feasibility analysis shows that, following current market prices and without new impact fees, the condominium prototype would have revenues of \$29.32 million, with a total development cost of \$21.89 million. The difference between the revenues and costs is the residual land value, which is estimated at \$179 per square foot. The residual land value associated with this prototype is just over the lower threshold for feasibility in the City of San Mateo, which is between \$175 and \$225 per square foot.

Considering different housing impact fee levels, the financial feasibility analysis yields the following results:

- The full justified impact fee of \$45 per square foot raises development costs from \$21.89 million to \$24.60 million. This cost increase results in a residual land value of \$114 per square foot, which does not meet the threshold for financial feasibility in San Mateo, estimated at \$175 per square foot.

- Scenario 2, a reduced impact fee set at \$15 per square foot, raises development costs to \$22.79 million. The residual land value under this fee scenario is \$157 per square foot, a figure which still does not meet the threshold of financial feasibility.
- Scenario 3, a nexus fee at \$10 per square foot, results in development costs of \$22.49 million, and a residual land value of \$164 per square foot. This value is lower than the financial feasibility threshold for this project.
- Scenario 4, a fee level set at \$5 per square foot results in a total development cost of \$22.19 million, and a residual land value of \$172 per square foot. This land value is just under the financial feasibility threshold of \$175. Given the proximity to this threshold, and the fact that a fee of \$5 per square foot would represent just 1.35 percent of total development costs, it is possible that a higher value condominium development with higher sales prices could be financially feasible in this scenario.

Because the financial feasibility results for the condominium prototype may change over time depending on market conditions, the analysis compared the financial feasibility of the residential impact fee scenarios with 2014 rents and prices, as presented above, and with increased sales prices. According to the analysis, a five percent increase in condominium sales prices would allow a residential impact fee of \$25 per square foot to be financially feasible, while a ten percent increase would allow the maximum fee of \$45 per square foot to be financially feasible (Figure VII-9 below).

Apartments

For apartments, the financial analysis shows that under current market conditions, without a nexus fee on affordable housing, a prototypical apartment development costs approximately \$46.11 million, with a total project value of \$72.01 million. The residual land value on this prototype, excluding a nexus fee, is estimated at \$187 per square feet, meeting the threshold for financial feasibility, defined as between \$175 to \$225 per square foot.

The following describes the feasibility of potential housing impact fees at different levels for apartments:

- Scenario 1, the maximum nexus fee of \$80 per square foot brings total development costs up to nearly \$56.22 million. This cost increase results in a residual land value of \$114 per square foot, which is under the lower threshold for financial feasibility. Such a scenario would not be financially feasible.
- Scenario 2, a nexus fee of \$15 per square foot, increases development costs to approximately \$48 million. The residual land value under this fee scenario is \$173 per square foot, which is just under the minimum land value threshold (\$175 to \$225 per square foot).
- Under Scenario 3, a housing impact fee level of \$10 per square foot, development costs reach \$47.37 million. The residual land value in this scenario is \$178 per square foot, which falls within the range required for this project to be marginally feasible.
- Scenario 4, a fee level of \$5 per square foot increases development costs to \$46.74 million, resulting in a residual land value of \$183 per square foot. This fee level would also be financially feasible, falling within the range of the market value of land in the City of San Mateo.

As with the condominium prototype, the financial feasibility results for the apartment prototype may be different with increased rental rates. As shown in Figure VII-9, a five percent increase in rents in the City of San Mateo would make a fee of \$40 per square foot financially feasible for the apartment prototype, while a ten percent increase in rents would make a fee of \$70 per square foot financially feasible.

Figure VII-9. Financial Feasibility Results with Increased Condominium Prices and Apartment Rents

Revenue Scenario	Condominiums	Apartments
2014 Rents/Prices	\$0	\$10
5% Increase in Rents/ Prices	\$25	\$40
10% Increase in Rents/ Prices	\$45 (maximum fee)	\$70

Sources: Vernazza Wolfe Associates, Inc. & Strategic Economics, 2015.

Figure VII-10. Pro Forma Model Results for Single-Family Attached Prototype

	Single-Family Attached	
Development Costs (Excl. Land & Nexus Fee)	per Unit	Total
Direct Costs (a)		
Building & On-Site Improvements	\$299,250	\$25,436,250
Building & Onsite per NSF		\$150
Parking	Incl. above	Incl. above
Total Direct Costs	\$299,250	\$25,436,250
Total Direct Costs per NSF		\$150
Indirect Costs (a)		
A&E & Consulting	\$17,955	\$1,526,175
Permits & Fees (Excl. Nexus fee) (b)	\$24,908	\$2,117,155
Taxes, Insurance, Legal & Accounting	\$8,978	\$763,088
Other Indirect Costs	\$8,978	\$763,088
Contingency	\$3,041	\$258,475
Total Indirect Costs	\$63,859	\$5,427,980
Financing Costs (a)	\$24,982	\$2,123,459
Developer Overhead & Profit (a)	\$46,571	\$3,958,523
Total Development Costs	\$434,661	\$36,946,211
Total Development Costs (per NSF)		\$218
Income		
Gross Income/Sales Proceeds	\$1,141,482	\$97,026,000
Less: Operating/Sales Expenses & Vacancy		
Net (Operating or Sales) Income	\$1,141,482	\$97,026,000
Capitalized Value/Sales Value (c)	\$1,141,482	\$97,026,000
Residual Land Value Analysis		
Total Development Costs (TDC) Except Land With Various Levels of Nexus Fee	Nexus Fee per NSF	TDC incl. Nexus Fee
No Fee	\$0	\$36,946,211
Scenario 1: Max Fee	\$42	\$44,145,041
Scenario 2	\$35	\$42,881,336
Scenario 3	\$25	\$41,185,586
Scenario 4	\$20	\$40,337,711
Residual Land Value per Sq. Ft. at Various Nexus Fee Levels	Nexus Fee per NSF	Residual Land Value per SF
No Fee	\$0	\$181
Scenario 1: Max Fee	\$42	\$159
Scenario 2	\$35	\$163
Scenario 3	\$25	\$168
Scenario 4	\$20	\$170
Nexus Fee as Percentage of Total Development Costs	Nexus Fee per NSF	Fee as % of TDC
No Fee	\$0	0.00%
Scenario 1: Max Fee	\$42	16.31%
Scenario 2	\$35	13.84%
Scenario 3	\$25	10.29%
Scenario 4	\$20	8.41%
Current Land Values/ Threshold for Feasibility		\$25 - \$50

Notes:

(a) See Figure VII-5.

(b) This represents a generalized estimate of the fee and permit costs for each prototype, calculated by city staff. Actual fee and permit costs for development projects will vary depending on many factors.

(c) See Figure VII-4.

Acronyms:

SF: square feet

NSF: net square foot

TDC: total development costs

Source: Strategic Economics, 2015.

Figure VII-11. Pro Forma Model Results for Condominium and Apartment Prototypes

	Condominiums		Apartments	
Development Costs (Excl. Land & Nexus Fee)	per Unit	Total	per Unit	Total
Direct Costs (a)				
Building & On-Site Improvements	\$337,500	\$13,500,000	\$188,790	\$26,430,600
Building & Onsite per NSF		\$225		\$210
Parking	\$45,000	\$1,800,000	\$37,500	\$5,250,000
Total Direct Costs	\$382,500	\$15,300,000	\$226,290	\$31,680,600
Total Direct Costs per NSF		\$255		\$252
Indirect Costs (a)				
A&E & Consulting	\$22,950	\$918,000	\$13,577	\$1,900,836
Permits & Fees (Excl. Nexus fee)				
(b)	\$30,752	\$1,230,078	\$19,370	\$2,711,818
Taxes, Insurance, Legal & Accounting	\$11,475	\$459,000	\$6,789	\$950,418
Other Indirect Costs	\$11,475	\$459,000	\$6,789	\$950,418
Contingency	\$3,833	\$153,304	\$2,326	\$325,674
Total Indirect Costs	\$80,485	\$3,219,382	\$48,851	\$6,839,164
Financing Costs (a)	\$25,742	\$1,029,678	\$18,930	\$2,650,160
Developer Overhead & Profit (a)	\$58,647	\$2,345,887	\$35,289	\$4,940,391
Total Development Costs	\$547,374	\$21,894,947	\$329,359	\$46,110,315
Total Development Costs (per NSF)		\$365		\$366
Income				
Gross Income/Sales Proceeds	\$733,000	\$29,320,000	\$39,566	\$5,539,200
Less: Operating/Sales Expenses & Vacancy			\$13,848	\$1,938,720
Net (Operating or Sales) Income	\$733,000	\$29,320,000	\$25,718	\$3,600,480
Capitalized Value/Sales Value (c)	\$733,000	\$29,320,000	\$514,354	\$72,009,600
Residual Land Value Analysis				
Total Development Costs (TDC)				
Except Land With Various Levels of Nexus Fee	Nexus Fee per NSF	TDC incl. Nexus Fee	Nexus Fee per NSF	TDC incl. Nexus Fee
No Fee	\$0	\$21,894,947	\$0	\$46,110,315
Scenario 1: Max Fee	\$45	\$24,603,979	\$80	\$56,222,037
Scenario 2	\$15	\$22,794,947	\$15	\$47,998,215
Scenario 3	\$10	\$22,494,947	\$10	\$47,368,915
Scenario 4	\$5	\$22,194,947	\$5	\$46,739,615
Residual Land Value per Sq. Ft. at Various Nexus Fee Levels	Nexus Fee per NSF	Residual Land Value per SF	Nexus Fee per NSF	Residual Land Value per SF
No Fee	\$0	\$179	\$0	\$187
Scenario 1: Max Fee	\$45	\$114	\$80	\$114
Scenario 2	\$15	\$157	\$15	\$173
Scenario 3	\$10	\$164	\$10	\$178
Scenario 4	\$5	\$172	\$5	\$183
Nexus Fee as Percentage of Total Development Costs	Nexus Fee per NSF	Fee as % of TDC	Nexus Fee per NSF	Fee as % of TDC
No Fee	\$0	0.00%	\$0	0.00%
Scenario 1: Max Fee	\$45	11.01%	\$80	17.98%
Scenario 2	\$15	3.95%	\$15	3.93%
Scenario 3	\$10	2.67%	\$10	2.66%
Scenario 4	\$5	1.35%	\$5	1.35%
Current Land Values/ Threshold for Feasibility		\$175 - \$225		\$175 - \$225

Notes:

(a) See Figure VII-5.

(b) This represents a generalized estimate of the fee and permit costs for each prototype, calculated by city staff. Actual fee and permit costs for development projects will vary depending on many factors.

(c) See Figure VII-4.

Acronyms:

SF: square feet

NSF: net square foot

TDC: total development costs

Source: Strategic Economics, 2015.

ADDITIONAL POLICY CONSIDERATIONS

While the nexus study provides the necessary economic analysis for the residential impact fees, it is up to policymakers to decide what percentage of the maximum fee to be charged on new development. Financial feasibility is one important factor to examine. In addition, there are a number of other policy issues to consider, such as:

- How much residential fees would increase with a new residential impact fee;
- How a residential impact fee in San Mateo would compare with those in neighboring jurisdictions; and
- How a residential impact fee fits into San Mateo's overall housing strategy.

A discussion of each of these topics is presented below.

Comparison to Existing Fees on Residential Development

Figure VII-12 presents information on current city fees charged on the three residential prototypes included in this nexus analysis. It also demonstrates the effect of adding the housing impact fee scenarios on total city permits and fees.

Currently, the City of San Mateo's fees for the three residential prototypes are estimated at \$24,908 for a single-family attached unit, \$30,752 for a condominium unit and \$19,370 for an apartment unit.²⁶ Once the nexus-based residential impact fees at various levels are added to existing fees, the total fees increase as presented in Figure VII-12. The maximum fee (Scenario 1) would multiply total fees by approximately four for single-family attached units, by three for condominium units, and by almost five for and apartment units. Scenario 2 would also significantly increase city fees, ranging from an increase of approximately 170 percent for condominium and apartment units to 380 percent for single-family attached units.

Figure VII-12 is intended as a resource for the policy discussion that the City of San Mateo will have when considering what fee level to select. A fee that is set too high could have a dampening effect on private development. On the other hand, a low fee does not fully mitigate all the affordable housing impacts from new residential development.

²⁶ The fee estimates presented above represent the best approximations available from the City of San Mateo.

Figure VII-12. San Mateo Total Residential Fees Under Selected Fee Scenarios

	Single-Family Attached	Condominiums	Apartments
Number of Units in Prototype	85	40	140
Total Existing City Fees and Permits for Prototype (Excluding Nexus Fees)	\$2,117,155	\$1,230,078	\$2,711,818
Existing Fees and Permits per Unit (Excluding Nexus Fees)	\$24,908	\$30,752	\$19,370
Fee Scenario 1: Maximum Fees			
Nexus Fee Per Unit	\$84,705	\$67,726	\$72,192
Total Nexus Fees for Prototype	\$7,199,891	\$2,709,032	\$10,106,902
Combined Existing and Nexus Fees for Prototype	\$9,317,046	\$3,939,110	\$12,818,719
Combined Fees Per Unit	\$109,612	\$98,478	\$91,562
Fee Scenario 2			
Nexus Fee Per Unit	\$69,835	\$22,500	\$13,479
Total Nexus Fees for Prototype	\$5,936,000	\$900,000	\$1,887,000
Combined Existing and Nexus Fees for Prototype	\$8,053,155	\$2,130,078	\$4,598,818
Combined Fees Per Unit	\$94,743	\$53,252	\$32,849
Fee Scenario 3			
Nexus Fee Per Unit	\$49,882	\$15,000	\$8,986
Total Nexus Fees for Prototype	\$4,240,000	\$600,000	\$1,258,000
Combined Existing and Nexus Fees for Prototype	\$6,357,155	\$1,830,078	\$3,969,818
Combined Fees Per Unit	\$74,790	\$45,752	\$28,356
Fee Scenario 4			
Nexus Fee Per Unit	\$39,906	\$7,500	\$4,493
Total Nexus Fees for Prototype	\$3,392,000	\$300,000	\$629,000
Combined Existing and Nexus Fees for Prototype	\$5,509,155	\$1,530,078	\$3,340,818
Combined Fees Per Unit	\$64,814	\$38,252	\$23,863

Sources: City staff, 2015; Strategic Economics, Inc; Vernazza Wolfe Associates, Inc., 2015.

Comparison to Neighboring Jurisdictions

It is challenging to compare the potential residential impact fee in Burlingame to the adopted fees in neighboring jurisdictions, because most cities in San Mateo County are participating in the multi-city nexus studies, and the fee levels may change. However, Figure VII-14 provides the most up-to-date information available to compare Burlingame's potential fee scenarios to existing residential impact fees in jurisdictions in San Mateo and Santa Clara Counties.

If the maximum impact fees calculated for San Mateo were adopted for the three prototypes, they would all exceed the fees charged in most neighboring jurisdictions, as listed in Figure VII-12. If the recommended fees were adopted in the City of San Mateo, the fees would be comparable to the housing impact fees in neighboring cities.

Figure VII-13. Comparison with Fees in Neighboring Jurisdictions

	Single Family Attached	Condominiums	Apartments	Date Fee Was Adopted
San Mateo City Fee Scenarios				
Scenario 1 - Maximum Fee				N/A
Per SF	\$42	\$45	\$80	
Per Unit	\$84,705	\$67,726	\$72,192	
Scenario 2				N/A
Per SF	\$35	\$15	\$15	
Per Unit	\$69,835	\$22,500	\$13,479	
Scenario 3				N/A
Per SF	\$25	\$10	\$10	
Per Unit	\$49,882	\$15,000	\$8,986	
Scenario 4				N/A
Per SF	\$20	\$5	\$5	
Per Unit	\$39,906	\$7,500	\$4,493	
Impact Fees				
Cupertino	\$15/SF	\$20/SF	\$25/SF	2015
Daly City	\$14/SF	\$22/SF	\$25/SF	2014
East Palo Alto	\$22/SF	\$22-\$44/SF (a)	\$22/SF	2014
Mountain View	N/A	N/A	\$15/SF	2015
San Carlos (b)	\$23.54-\$43.54/SF	\$20.59-\$42.20/SF	\$23.54-\$43.54/SF	2010
San Jose	N/A	N/A	\$17/SF (c)	2014
Sunnyvale	N/A	N/A	\$17/SF (d)	2015
Inclusionary Policies and In-Lieu Fees				
Mountain View	3% of Sales Price	3% of Sales Price	N/A	2015
	Inclusionary @ 15% or \$17/SF	Inclusionary @ 15% or	N/A	2014
San Jose (e)	in-lieu fee	\$17/SF in-lieu fee		
Sunnyvale	7% of Sales Price	7% of Sales Price	N/A	2012

Notes:

- (a) Fee ranges from \$22 per square foot for for-sale housing without structured parking to \$44 per square foot for housing with structured parking.
- (b) Fees shown as ranges. Actual fees charged depend on project size.
- (c) Fee goes into effect in 2016. Developments approved by July 2016 are exempt with a longer exemption for downtown development.
- (d) Fees for projects that are between 4 and 7 units pay 50 percent of this fee.
- (e) Inclusionary policy and in-lieu fee apply to for-sale developments of more than 20 units.

Sources: The Non-Profit Housing Association of Northern California; City of San Carlos Municipal Code; Vernazza Wolfe Associates, Inc; Strategic Economics, 2015.

The potential fee scenarios can also be compared with existing residential impact fees in other Bay Area cities outside of San Mateo and Santa Clara Counties for regional context. This list is not an exhaustive inventory of all Bay Area cities with housing impact fees, but it provides information about many cities that have fees on housing. As shown in Figure VII-14, impact fees in other Bay Area cities vary significantly from city to city. The maximum nexus-based fees are higher than those currently in place in other Bay Area cities. However, the lower fee scenarios are comparable to the current impact fees in Berkeley, Emeryville, and Fremont.

Figure VII-14. Existing Housing Impact Fees in Bay Area Cities

City	Project Type	Amount
Berkeley	Rental Development	\$28,000 per unit (\$8,000 discount for eligible projects)
Emeryville	Rental Residential Projects	\$20,000 per dwelling unit
Fremont	For-Sale and Rental Development	\$19.50 per habitable SF \$22.50 per habitable SF for single family homes on lots 6,000 SF or greater.
Livermore	For-Sale and Rental Development	Based on type of dwelling produced
Napa	For Sale and Rental Development	Single Family: \$ 2.20 per SF Condo: \$2.20 per SF Rental: \$3.75 per sq.
Pleasanton	For-Sale and Rental Development	Single Family (over 1,500 SF): \$10,880 per unit Single Family (1,500 SF or less) and Multi-family (Apt. or Condo): \$2,696 per unit Adjusted annually based on CPI
Santa Rosa	For-Sale and Rental Development	2.5% of sale price of for-sale units. Based on SF for rentals

Sources: The Non-Profit Housing Association of Northern California, Strategic Economics, and Vernazza Wolfe Associates, Inc, 2015.

Role of Fees in Overall Housing Strategy

What is the relationship between the revenues to be collected from a potential housing impact fee program and the resources needed to provide affordable housing? The revenues to be collected from a residential impact fee provide an important source of local funding; however, fee revenues do not generally cover the entire funding gap encountered by sponsors of new affordable housing. Additional funding is almost always required.

Affordable housing is funded through the use of a variety of financing sources, including funding provided by the City of San Mateo and San Mateo County, as well as the federal government, e.g., the HOME Program. In addition, the City has allocated 20 percent of its boomerang funds to the City Housing Fund to support the existing first time homebuyer program. Equity required for affordable housing development is also provided directly by developers and indirectly raised through the allocation and sale of Low Income Housing Tax Credits. Also, a portion of permanent financing comes from conventional loans obtained from private lending institutions.

Other aspects of the City’s housing strategy include an existing inclusionary program that covers for-sale and rental housing. The requirement is that 10 percent of for-sale units with project sizes of 11 units or greater must be affordable to households earning up to 80 percent of the area median income (AMI), or 15 percent of units are required to be affordable if units are priced at the 120 percent AMI level. In-lieu fees are charged for projects of five to ten units and for fractional units that are below a half a unit. The City also operates a rental inclusionary program with the same parameters as the ownership program, with two exceptions: if rents are affordable at 50 percent AMI, then 10 percent of

the units are required to be inclusionary, and this percentage increases to 15 percent if income targeting is at 80 percent AMI. All in-lieu fees are deposited into the City Housing Fund

At this time, the City is still enforcing its rental and ownership inclusionary requirements. The inclusionary program was adopted as part of the Measure H voter initiative, which was approved in 1991 and then extended by Measure P in 2004. These measures prohibit the payment of fees instead of building onsite. Legal counsel in San Mateo believes that in order to implement a housing impact fee, it would be necessary to place another measure on the ballot.

Residential impact fee revenues (and commercial linkage fee revenues, if adopted) would augment existing affordable housing funds. The existence of a local revenue source such as nexus fees can also make certain projects more competitive for outside funding. It should be noted that revenues from a residential impact fee need to be spent on housing that benefits the workforce since the funds stem from affordable housing impacts related to new employment.

Potential for Overlap Between Residential and Commercial Fees

The city is undertaking a commercial linkage nexus study simultaneous to the residential impact fee nexus study, and may adopt a commercial linkage fee. One issue that may arise if a city considers the adoption of both fees is whether there is any overlap between the two impact fees, resulting in potential “double-counting” of impacts.

- The commercial linkage fee study examined jobs located in new commercial buildings including office/R&D/medical office buildings, retail/ restaurants/services, and hotels. The nexus analysis then calculated the average wages of the workers associated with each commercial building to derive the annual income of the new worker households. The analysis determined the area median income (AMI) level of the new worker households to identify the number of worker households that would require affordable housing.
- The residential impact fee nexus analysis discussed in this report examined households buying or renting new market rate units in the jurisdiction. The household expenditures by these new residents have an economic impact in the county, which can be linked to new jobs. The nexus analysis quantified the jobs linked to new household spending, and then calculated the wages of new workers and the household income of new worker households. Each worker household was then categorized by area median income (AMI) to determine the number of households that require affordable housing.

There may be a share of jobs counted in the commercial linkage fee analysis that are also included in the residential nexus analysis, particularly those in the service sector. Other types of jobs counted in the residential nexus analysis are unique to that analysis, and are not included in the commercial linkage fee analysis (for example, public sector employees). The commercial linkage fee analysis is limited to private sector office/ R&D/ medical office buildings, hotels, and retail/ restaurants/ service space.

There is potential that some jobs could be counted in both analyses, and that the two programs may overlap in mitigating the affordable housing demand from the same worker households. Each of the proposed fees is required to mitigate no more than 100 percent of the demand for affordable units by new worker households. In order to reduce the potential for overlap between the two programs, it is advisable to set both the commercial linkage fees and housing impact fees at below 100 percent of the nexus-based maximum. In this way, when combined, the programs would mitigate less than 100 percent of the impact even if there were overlap in the jobs counted in the two nexus analyses.

Administrative Issues

Similar to any impact fee, it will be necessary to adjust the housing impact fees on an annual basis. Adjustments are also needed due to possible changes in the affordability gap. However, the connection between new residential construction and growth in employment derived from the IMPLAN3 Model is unlikely to change in the short run.

It is advisable that the City adjusts its housing impact fee annually by using an annual adjustment mechanism. An adjustment mechanism updates the fees to compensate for inflation in development costs. To simplify annual adjustments, it is recommended that the City select a cost index that is routinely published. While there is no index that tracks changes in San Mateo's development costs, including land, specifically, there are a few options to consider.

- The first option is the Consumer Price Index (CPI) Shelter component. The shelter component of the CPI covers costs for rent of primary residence, lodging away from home, owner's equivalent rent of primary residence, and household insurance. Of the total shelter index, costs associated with the owner's equivalent rent of primary residence constitute 70 percent of total costs entered into the index.
- A second option to adjust the fee for annual inflation is the construction cost index published in the Engineering News Record (ENR). This index is routinely used to update other types of impact fees. Cost index information for the San Francisco region, the smallest geographical area available for this purpose, is available on an annual basis. The ENR cost index measures inflation in construction costs, but it does not incorporate changes in land costs or public fees charged on new development.

Because these indices are readily available, reliable, and relatively simple to use, it is recommended that San Mateo use these indices for annual adjustments. However, because both understate the magnitude of inflation, it is recommended that the City base its annual adjustment mechanism on the higher of the two indices (CPI or ENR), using a five-year moving average as the inflation factor.

In addition to revising the fee annually for inflation, the City is encouraged to update the housing impact study every five years, or at the very least, update the housing affordability gap used in the basic model. The purpose of these updates is to ensure that the fee is still based on a cost-revenue structure that remains applicable in the San Mateo housing market. In this way, the fee will more accurately reflect any potential structural changes in the relationships between affordable prices and rents, market-rate prices and rents, and development costs.

VIII. GLOSSARY OF TERMS AND ACRONYMS

GLOSSARY OF TERMS

Affordable Housing: Under state and federal statutes, housing is defined as affordable if housing costs do not exceed 30 to 35 percent of gross household income.

Annual Adjustment Mechanism: Due to inflation in housing construction costs, it is frequently necessary to adjust impact fees. An index, such as the Consumer Price Index (CPI) or a published construction cost index (for example, from the Engineering News Record) is used to revise housing fees to reflect inflation in housing construction costs.

Assisted Housing: Housing that has received public subsidies (such as low interest loans, density bonuses, direct financial assistance, etc.) from federal, state, or local housing programs in exchange for restrictions requiring a certain number of housing units to be affordable to very low-, low-, and moderate-income households.

Boomerang Funds: Monies returned to the City by the State of California, after dissolution of redevelopment agencies in the State.

Consumer price index (CPI): Index that measures changes in the price level of a market basket of consumer goods and services purchased by households.

Employment Densities: The amount of square feet per employee is calculated for each property use that is subject to a commercial development housing linkage fee. Employment densities are used to estimate the number of employees that will work in a new commercial development.

Household: The US Census Bureau defines a household as all persons living in a housing unit whether or not they are related. A single person living in an apartment as well as a family living in a house is considered a household. Households do not include individuals living in dormitories, prisons, convalescent homes, or other group quarters.

Household Income: The total income of all the persons living in a household. Household income is commonly grouped into income categories based upon household size and income, relative to the regional median family income.

Housing Affordability Gap: The affordability gap is defined as the difference between what a household can afford to spend on housing and the market rate cost of housing. Affordable rents and sales prices are defined as a percentage of gross household income, generally between 30 percent and 35 percent of income.

For renters, rental costs are assumed to include the contract rent as well as the cost of utilities, excluding cable and telephone service. The difference between these gross rents and affordable rents is the housing affordability gap for renters. This calculation assumes that 30% of income is paid for gross rent.

For owners, costs include mortgage payments, mortgage insurance, property taxes, property insurance, and homeowner association dues.²⁷ The difference between these housing expenses and affordable ownership costs is the housing affordability gap for owners. This calculation assumes that 35% of income is paid for housing costs.

Housing Subsidy: Housing subsidies refer to government assistance aimed at reducing housing sales prices or rents to more affordable levels.

Housing Unit: A housing unit can be a room or group of rooms used by one or more individuals living separately from others in the structure, with direct access to the outside or to a public hall and containing separate toilet and kitchen facilities.

IMPLAN3: A software model that is used to provide a quantitative assessment of the interdependencies between different branches of a regional (or national) economy. The latest model, IMPLAN3, was used in the nexus studies. The major input is household income, and the major output is direct and induced employment reported by industries

Inclusionary Zoning: Inclusionary zoning, also known as inclusionary housing, refers to a planning ordinance that requires that a given percentage of new construction be affordable to households with very low, low, moderate, or workforce incomes.

In-Lieu Fee: A literal definition for an in-lieu fee for inclusionary units would be a fee adopted “in place of” providing affordable units. For the purposes of operating an inclusionary housing program, a public jurisdiction may adopt a fee option for developers that prefer paying fees over providing housing units on- or off-site. A fee study is frequently undertaken to establish the maximum fee that can be charged as an in-lieu fee. This fee study must show that there is a reasonable relationship between the fee and the cost of providing affordable housing.

Market-Rate Housing: Housing which is available on the open market without any public subsidy. The price for housing is determined by the market forces of supply and demand and varies by location.

Nexus Study: In order to adopt a residential housing impact fee or a commercial linkage fee, a nexus study is required. A nexus requires local agencies proposing a fee on a development project to identify the purpose of the fee, the use of the fee, and to determine that there is “a reasonable

²⁷ Mortgage terms for first-time homebuyers typically allow down payment of five percent; these terms require private mortgage insurance.

relationship between the fee's use and the type of development project on which the fee is imposed.” A nexus study establishes and quantifies a causal link or “nexus” between new residential and commercial development and the need for additional housing affordable to new employees.

Linkage Fee: A fee or charge imposed on commercial developers to pay for a development's impact on the need for affordable housing. The fee is based on projected household incomes of new employees that will work in newly created space. The fee varies according to the type of property use.

Prototypes: Prototypes are used for residential and commercial developments in order to define housing impact fees. The prototypes generally represent new development projects built in a community and are used to estimate affordable housing impacts associated with new market rate commercial and residential developments. While the prototypes should be “typical” of what is built, for ease of mathematical computation, they are often expressed as larger developments in order to avoid awkward fractions.

Residential or Housing Impact Fee: A fee imposed on residential development to pay for a development's impact on the need for affordable housing. The fee is based on projected incomes of new employees associated with the expansion of market rate developments. Two steps are needed to define the fees. The first step is the completion of a nexus study, and the second step entails selection of the actual fee amount, which can be below the amount justified by the fee study, but not above that amount.

RS Means: Data source of information for construction cost data.

DEFINITION OF ACRONYMS

AMI:	Area Median Income
CBIA:	California Building Industry Association
EDD:	State of California Employment Development Department
FAR:	Floor-area-ratio
FF&E:	Furniture, Fixtures, and Equipment
GBA:	Gross Building Area
HCD:	Department of Housing and Community Development (State of California)
NAICS:	North American Industry Classification System
NSF:	Net Square Feet
QCEW:	Quarterly Census of Employment and Wages
R&D:	Research and development
SF:	Square Feet
TDC:	Total Development Costs