

DAVID PAUL ROSEN & ASSOCIATES

CITY OF VALLEJO INCLUSIONARY HOUSING STUDY

ADMINISTRATIVE REVIEW DRAFT

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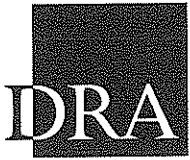


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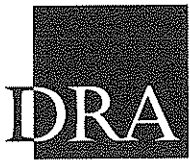


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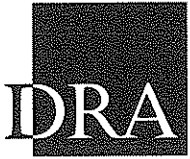
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Attachment B: Affordability Gap Analysis, Density Bonus Scenarios

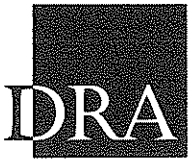
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EXECUTIVE SUMMARY

To help address its affordable housing needs, the City of Vallejo seeks to analyze the feasibility of an inclusionary housing program. The City retained DRA to conduct a study of inclusionary housing to gain an understanding of the following issues:

- the economic impact of imposing alternative inclusionary requirements on landowners and developers;
- compliance options that can be offered to developers;
- offsets and incentives the City can offer to developers to mitigate the economic impact of inclusionary requirements; and,
- a survey of nearby jurisdictions and their inclusionary housing programs.

A. Land Residual Analysis

To understand the economic impact of imposing inclusionary requirements, DRA conducted a land residual analysis. A land residual analysis calculates the underlying value of land based on revenues, net of all development costs except land, of a development on a site. Because inclusionary housing requirements reduce the revenues from a housing development, residual land value will decrease under an inclusionary housing program unless offset by incentives or alternative compliance measures provided to developers. In other words, developers are not willing to pay as much for land when compared to land that does not have any inclusionary requirements.

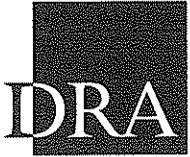
An important factor to bear in mind is that land values always fluctuate in response to a wide range of market factors, such as interest rates, construction costs, development impact fees, competitive supply of housing, cap rates, the rate of household formation, employment, wages, and other factors. In any given year, land values may fluctuate between 10 percent and 20 percent absent any local government action. Therefore, if the net effect of a jurisdiction's zoning action, such as inclusionary housing, falls within this range, or price elasticity, it may be received as non-disruptive to housing development cycles. Moreover, a jurisdiction can moderate, and in some cases eliminate, any negative effect on land value with development incentives and alternative compliance measures.

DRA calculated residual land values for five housing "prototypes" under multiple inclusionary scenarios. **Table ES-1** summarizes the housing prototypes used in this analysis. These prototypes represent broadly the range of housing types currently developed in Vallejo.

Table ES-1
Housing Prototype Projects
City of Vallejo Inclusionary Housing Study

2006

PROTOTYPE	Renter 1 Stacked Flat	Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
	Family	Family	Family	Family	Family
UNIT COUNT	150 Units	90 Units (one phase of larger development)	100 Units	150 Units	100 Units
TENURE	Rental	Owner	Owner	Owner	Owner
RESIDENT POPULATION	Family	Family	Family	Family	Family
TYPE OF PRODUCT	Stacked Flat	Single Family Detached	Single Family Detached	Townhouse	Stacked Flat
CONSTRUCTION TYPE	Wood Frame	Wood Frame	Wood Frame	Wood Frame	Wood Frame
DENSITY (DU'S/Acre)	25.0	9.0	15.4	20.7	100.0
LAND AREA (Acres)	6.00 Acres	10.00 Acres	6.5 Acres	7.25 Acres	1.00 Acres
UNITS BY BR COUNT					
One Bedroom	40	0	0	0	25
Two Bedroom/1 Bath	30	0	0	0	25
Two Bedroom	55	0	0	80	30
Three Bedroom	25	25	45	70	20
Four Bedroom	0	40	55	0	0
Five Bedroom	0	25	0	0	0
Six+ Bedroom	0	0	0	0	0
UNIT SIZE (Net Square Feet)					
One Bedroom	700	0	0	0	825
Two Bedroom/1 Bath	900	0	0	0	950
Two Bedroom	950	0	0	1,300	1,050
Three Bedroom	1,100	2,200	1,700	1,800	1,325
Four Bedroom	0	2,300	2,200	0	0
Five Bedroom	0	2,500	0	0	0
Six+ Bedroom	0	0	0	0	0
Average Square Feet	898	2,328	1,975	1,533	1,024
BLDG. SQ. FEET					
Net Living Area	134,750	209,500	197,500	230,000	102,375
Community Space	1,500	0	0	0	1,500
Total Net Bldg. Square Feet	136,250	209,500	197,500	230,000	103,875
TYPE OF PARKING	On grade/tuck under	Garage	Garage	Garage	Structured parking, one level underground
PARKING REQUIREMENT	1 per 1BR unit 2 per 2/3BR unit	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	260	245	255	300	175



An inclusionary housing program requires that developers set aside a portion of new construction units as affordable housing. For the rental housing prototype, the land residual value under 10 percent, 11 percent, and 15 percent inclusionary requirements were calculated under the following scenarios:

- five percent of units targeted to very low income households (50 percent of area median income) and five percent of units targeted to low income households (80 percent of area median income);
- 11 percent of units targeted to very low income households (to meet threshold qualifications for the maximum density bonus of 35 percent allowable under State density bonus law); and,
- 15 percent of units targeted to low income households.

For the owner housing prototypes, the land residual value was calculated under 10 percent and 20 percent inclusionary requirements. Land residual values were calculated assuming moderate income households (120 percent of area median income) would be targeted.

The following chart summarizes household income ranges for the defined targeted income levels described above.

**2006 Household Income Limits
Solano County**

Family Size	1 person	2 persons	3 persons	4 persons	5 persons
Very Low Income (50% of area median income)	\$25,900	\$29,600	\$33,300	\$37,000	\$39,950
Low Income (80% of area median income)	\$41,450	\$47,350	\$53,300	\$59,200	\$63,950
Moderate Income (120% of area median income)	\$62,200	\$71,000	\$79,900	\$88,800	\$95,900

Source: State of California Department of Housing and Community Development

Table ES-2 summarizes the land residual values for the rental housing prototypes under three alternative inclusionary scenarios. Table ES-2 shows that even in the absence of inclusionary requirements, multifamily rental housing is not economically feasible in the

current Vallejo housing market. Inclusionary requirements only modestly exacerbate this condition. It is important to bear in mind that an inclusionary housing policy is a long-term policy. The land residual analysis is always a “snapshot” of current economic conditions, and rental housing development may become economically feasible in the future. The economic impact of inclusionary requirements on rental housing will also change as market conditions change.

Table ES-3 summarizes land residual values for the four owner housing prototypes. This analysis shows that while inclusionary requirements have a negative impact on revenue generated by a housing development, the current Vallejo market can still support some types of owner housing development. Single family detached, small lot single family detached, and condominium developments all remain economically feasible even when developers are required to set aside 20 percent of units for moderate income households. The only potential issue is with townhome developments. Because of series of conservative assumptions used in this analysis, the land residual analysis indicates that new construction townhomes are not economically feasible in Vallejo under a 20 percent inclusionary requirement. It is likely that the sales price assumptions used in the analysis understate the actual market price for new construction homes. If that is true, then it is likely that townhomes are also economically feasible in the Vallejo housing market even a under 20 percent inclusionary requirement.

B. Compliance Options

Jurisdictions that impose inclusionary requirements typically provide developers with compliance options in addition to providing affordable units on-site. According to a statewide survey of inclusionary housing programs by the Northern California Association of Nonprofit Housing, the most common compliance options are as follows:

- payment of fees;
- building affordable units off-site;
- dedicating land to a nonprofit developer or to a jurisdiction for affordable housing development.

This study analyzes two alternative compliance options: in lieu fees and building affordable units off-site. Land dedication is not viewed as a viable compliance option because in most cases additional subsidies are necessary to build affordable units. Additionally, land dedication will result in a delay in the construction of affordable units.

Table ES-2

**Residual Land Value Per Square Foot Site Area
Rental Housing Prototype with Alternative Inclusionary Housing Requirements**

**City of Vallejo Inclusionary Housing Analysis
2006**

Prototype	Renter 1 Stacked Flat
Total Units	44
Inclusionary Requirement, Alternative 1: 5% of units at 50% of area median income 5% of units at 80% of area median income	
Land Value Per Square Foot	(\$50.68)
Inclusionary Requirement, Alternative 2: 11% of units at 50% of area median income	
Land Value Per Square Foot	(\$52.76)
Inclusionary Requirement, Alternative 3: 15% of units at 80% of area median income	
Land Value Per Square Foot	(\$51.22)
No Inclusionary Requirement	(\$48.08)

Source: David Paul Rosen & Associates

Table ES-3

Residual Land Value Per Square Foot Site Area
 Owner Housing Prototypes with Alternative Inclusionary Housing Requirements

City of Vallejo Inclusionary Housing Analysis
 2006

Prototype	Owner 1	Owner 2	Owner 3	Owner 4
	Low Density Detached	Small Lot Detached	Medium Density Attached	Stacked Flat Condominium
Total Units	90	100	150	100
Inclusionary Requirement, Alternative 1: 10% of units at 110% of area median income				
Land Value Per Square Foot	\$31.02	\$61.64	\$28.27	\$110.02
Inclusionary Requirement, Alternative 2: 20% of units at 110% of area median income				
Land Value Per Square Foot	\$25.56	\$53.18	\$22.11	\$87.96
No Inclusionary Requirement	\$36.57	\$69.93	\$34.42	\$130.97
Market Land Sales Comparables	\$9.00	\$20.00	\$30.00	\$35.00

Source: David Paul Rosen & Associates



1. In Lieu Fees

Cities typically include in lieu fees as a compliance option. In lieu fees can be a valuable compliance option to allow developers of smaller developments to contribute to the development of affordable housing while avoiding the economic burden of providing an affordable unit. For example, many jurisdictions impose inclusionary requirements on projects smaller than five units. Requiring a developer of a fourplex to set aside one of the four units as affordable may render the development economically infeasible. As an alternative, a jurisdiction may allow payment of a fee that is less of an economic burden than providing an affordable unit.

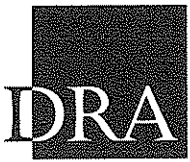
The problem with in lieu fees is that unless the fees are comparable to the affordability gap (the difference between the cost of constructing a housing development and the amount households at targeted income levels can afford to pay to rent or buy that housing), the collection of fees will result in development of fewer affordable units. Additionally, if fees are set too low, then developers will have an incentive to pay the fees rather than build affordable units. To calculate a fee schedule that avoids the issues discussed above, the following criteria should be used:

- fees for each inclusionary unit obligation should be sufficient to allow a jurisdiction to provide an affordable unit to very low, low, and/or moderate income household;
- in lieu fee amounts should not provide developers with incentive to pay fees instead of provide affordable inclusionary units; and,
- the methodology for calculating the in lieu fee schedule should be simple to administer to allow for updating of the schedule over time because of changes in housing market conditions.

This analysis evaluates two alternative methodologies for calculating in lieu fees:

- Method 1: fees equal the difference between market sales price and affordable home price; and,
- Method 2: fees equal the difference between the cost of developing a market rate unit and the amount of financing supported by an affordable unit.

Both of these methods satisfy the first two criteria stated above. The two methods provide sufficient subsidy to a jurisdiction to provide an affordable unit. Additionally, these two methods result in fees that do not provide developers incentive with paying fees. However,



because it is often difficult and time consuming to calculate housing development costs, the method that relies on defining development costs is not simple to administer over time.

Table ES-4 summarizes the fees that would be charged based on the difference in sales prices. **Table ES-5** summarizes the fees that would be charged based on the difference between the cost of developing a market rate unit and the amount of financing supported by an affordable unit.

2. Off-Site Construction of Affordable Units

Allowing off-site construction of affordable units can be advantageous to market rate developers while serving the public policy goals of a jurisdiction. First, providing inclusionary units on-site with some developments, especially very low density single family detached home developments, is not a cost effective means for providing affordable units. In this case, off-site construction of affordable units can reduce the costs of compliance for a developer by providing affordable units in a higher density format and/or on a site with lower land costs.

Additionally, off-site compliance can result in a greater number of affordable housing units if a developer is able to secure subsidies for the off-site affordable housing development.

The difficulty with off-site construction is that jurisdictions may have a problem enforcing construction of the affordable units after the market rate housing project is completed. For this reason, many jurisdictions require the affordable units to be constructed concurrently or before the construction of the market rate unit development.

C. Analysis of Developer Incentives

An economic analysis of inclusionary requirements demonstrates that inclusionary housing programs have a negative economic impact on landowners, including developers who own land at the time an inclusionary housing ordinance is implemented. A jurisdiction can offer incentives and offsets to reduce the financial impact of inclusionary housing. Important offsets and incentives include:

Table ES-4

**In Lieu Fees Per Developed Unit Based on
Difference Between Median Sales Price
and Affordable Home Price to Low and Moderate Income Households**

Fees Based on September 2005-August 2006 Sales in Vallejo

City of Vallejo Inclusionary Housing Study

Inclusionary Requirement	In Lieu Fee Per Developed Unit, Gap Between Median Home Price and Affordable Home Price to Low Income Households	In Lieu Fee Per Developed Unit, Gap Between Median Home Price and Affordable Home Price to Moderate Income Households
10% Inclusionary Requirement	\$29,630	\$15,406
20% Inclusionary Requirement	\$59,260	\$30,812

Source: David Rosen & Associates

Table ES-5

In Lieu Fees Based on Alternative Inclusionary Requirements
Fees Based Gap Between Development Costs and Affordable Price

City of Vallejo Inclusionary Housing Study

Inclusionary Requirement	Rental - Stacked Flat	Owner - Low Density Detached	Owner- Small Lot Detached	Owner - Medium Density Attached	Owner - Stacked Flat Condo
10% Inclusionary Requirement	\$17,747	\$13,385	\$8,692	\$13,549	\$5,175
20% Inclusionary Requirement	\$35,493	\$26,770	\$17,385	\$27,098	\$10,350



- awarding higher than permitted densities if inclusionary units are provided on-site;
- allowing developers to provide fewer parking spaces than permitted under current zoning; and,
- allowing modest differences between affordable housing units and market rate units, such as allowing developers to reduce the size of affordable units relative to market rate units.

Table ES-6 summarizes the strengths and weaknesses of each incentive.

Table ES-6

Evaluation of Offsets/Incentives Provided to Developers

Offset/Incentive	Strengths	Weaknesses
Density Bonus	<ul style="list-style-type: none"> • lowers per unit land costs 	<ul style="list-style-type: none"> • Developers often build at lower densities to serve a particular market • Can increase costs if higher density leads to more expensive construction type • Can increase costs if higher density results in need to provide structured parking
Reduction in Parking Requirements	<ul style="list-style-type: none"> • lowers cost of compliance 	<ul style="list-style-type: none"> • may be less effective because of parking demands imposed by market
Alternative Unit Comparability Standards	<ul style="list-style-type: none"> • lowers costs of compliance 	<ul style="list-style-type: none"> • City must establish minimum standards

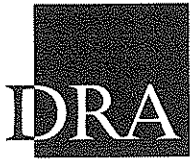
D. Survey of Jurisdictions with Inclusionary Housing Programs

City of Vallejo staff surveyed several local jurisdictions with inclusionary housing programs. City staff surveyed the following cities:

- American Canyon;
- Cotati;
- Napa;
- Santa Rosa;
- Rohnert Park;
- Petaluma; and,
- Benecia

The following is a summary of the general parameters of these inclusionary housing programs:

- affordability set-asides: inclusionary requirements range from 10 percent to 20 percent. Typically, very low and low income households are targeted with rental developments, while low and moderate income households are targeted with owner developments.
- applicability of inclusionary requirements: inclusionary requirements are applied to all projects in Cotati and Santa Rosa. Benecia and Napa exempt projects smaller than 10 units. All other cities surveyed exempt projects smaller than five units.
- term of affordability: the minimum term of affordability is 30 years, while Napa applies affordability requirements in perpetuity.
- compliance options: the cities surveyed offer a variety of compliance options, including in lieu fees, off-site construction of affordable units, land dedication, and developer credit transfers.



I. INTRODUCTION

The City of Vallejo (City) retained David Paul Rosen & Associates (DRA) to conduct a feasibility analysis of an inclusionary housing program. In this analysis, DRA evaluates the need for affordable housing in the City and the role an inclusionary housing program can play in helping to address this need.

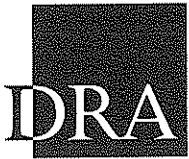
An important consideration for jurisdictions evaluating adoption of inclusionary programs is to understand the economic impact of imposing inclusionary requirements. By imposing inclusionary requirements, the amount of revenue generated by a development is reduced. In turn, developers reduce the amounts they are willing to pay for land. DRA conducted a financial analysis of the economic impact of inclusionary requirements on land values.

The financial analysis also incorporates potential program elements that the City may provide developers to offset the cost of providing affordable units. Examples include density bonuses, reduced parking requirements, and allowing affordable units to be smaller in size than market rate units. DRA quantifies the economic impact of these potential offsets and incentives.

Jurisdictions typically offer developers with options for complying with inclusionary requirements. In this report, DRA analyzes important compliance options, including:

- payment of fees in lieu of providing on-site affordable units; and,
- construction of affordable units off-site.

Finally, when considering program elements for inclusionary programs, many jurisdictions are interested in learning from the experience of other jurisdictions and their inclusionary programs. This report includes a survey conducted by City staff of North Bay Area jurisdictions that impose inclusionary requirements.



II. AFFORDABLE HOUSING NEED

A. Cost Burdened Households

From several alternative perspectives, the City faces a need for housing affordable to very low and low income households. In this analysis, very low, low, and moderate income households are defined as follows:

- very low income: households earning less than 50 percent of area median income, adjusted for family size;
- low income: households earning between 50 percent and 80 percent of area median income, adjusted for family size; and,
- moderate income: households earning between 80 percent and 120 percent of area median income, adjusted for family size.

Table 1 summarizes income limits for Solano County for 2006.

Table 1

2006 Income Limits
Solano County

Family Size	1 person	2 persons	3 persons	4 persons	5 persons
Very Low Income (50% of median)	\$25,900	\$29,600	\$33,300	\$37,000	\$39,950
Low Income (80% of median)	\$41,450	\$47,350	\$53,300	\$59,200	\$63,950
Moderate Income (120% of median)	\$62,200	\$71,000	\$79,900	\$88,800	\$95,900

Vallejo, like much of the housing market in California and especially the San Francisco Bay Area, has experienced significant increases in housing costs. The increase in housing costs has put current median home prices and rents out of the reach of very low, low, and moderate income households in Vallejo.

Approximately 73 percent of the housing stock in Vallejo is made up of single family homes. Out of the total of 41,161 housing units in the City, there are 28,337 detached single family homes and an additional 1,699 single family attached units. At the time of the 2000 Census, there were 9,781 multifamily units in the City and 1,239 mobilehome units.



The 2000 US Census documents that the median home value in Vallejo was \$166,400. In July 2006, the median price of \$425,000 price of homes in the City represents an increase of over 155 percent from 2000.

The median home price in Vallejo is not affordable to very low, low, and moderate income households. Assuming an interest rate of 6.48 percent (the average conforming mortgage rate reported on August 24, 2006, by Freddie Mac), a downpayment of 20 percent, and an allowance for property taxes, insurance, and homeowners association costs, a household income of approximately \$100,000 annually is needed to afford a median price home of \$425,000 in Vallejo.

Table 2

City of Vallejo
Annual Household Income Needed to Purchase Median Price Home
July 2006 Median Home Price: \$425,000

2006 Very Low Income: \$37,000 (family of four)
2006 Low Income: \$59,200 (family of four)
2006 Moderate Income: \$88,800 (family of four)

Type of Home	Median Sales Price, July 2006 Sales	Annual Household Income Needed to Purchase Median Price Home (1)
All Homes	\$425,000	\$100,000

(1) Assuming a 20% downpayment, 35% of income devoted to housing costs, mortgage rate of 6.48%.

Source: Dataquick Information Systems; David Paul Rosen & Associates

With the high cost of housing in Vallejo, a large proportion of households are cost burdened. **Table 3** shows that almost 22 percent of all owner households in Vallejo are cost burdened and pay more than 35 percent of household income on housing costs. Almost 80 percent of cost burdened owner households have household incomes below \$50,000 annually.



Table 3

Households Overpaying for Owner Housing Costs
City of Vallejo
2000 Census

Total Number of Owner Households: 22,269 Households

Owner Housing Costs as Percentage of Household Income	Number of Households, Total	Number of Households Below \$50,000 in Household Income
35 percent and over	4,863	3,801

Source: 2000 US Census

Not surprisingly, renters experience high housing costs in Vallejo, which results in a high percentage of cost burdened renter households. **Table 4** shows that over 41 percent of all renter households pay more than 30 percent of their household income toward rent. Almost half of all cost burdened renter households pay more than 50 percent of their household income on rent.

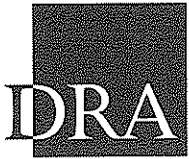
Table 4

Renter Households Overpaying for Housing Costs
City of Vallejo
2000 Census

Total Number of Renter Households: 14,513 Households

Gross Rent as Percentage of Household Income	Number of Renter Households	Percent of All Vallejo Renter Households
30 percent to 39 percent	1,995	13.7%
40 percent to 49 percent	1,065	7.3%
50 percent and over	2,953	20.3%
Total Number of Households Overpaying for Rental Housing	6,013	41.3%

Source: 2000 US Census



Most cost-burdened renter households are very low and low income households. Of the 6,013 households paying more than 30 percent of their income toward rent, 5,431 have incomes below \$35,000 annually. In other words, over 90 percent of cost burdened renter households have incomes below \$35,000 annually.

An additional indicator of housing need is the number of overcrowded households in Vallejo. With high housing expenses, many households can only afford to pay housing expenses by sharing housing costs with another household. According to the 2000 Census, 4,743 households were considered overcrowded. An overcrowded household is defined as one where the number of persons living in a unit exceeds the number of rooms, excluding bathrooms and kitchens. Of these, 2,647 households, or 56 percent, are renter households.

B. Fair Share Housing Goals

An additional measure of affordable housing need in Vallejo is the Association of Bay Area Governments' (ABAG) fair share housing goals for the City. For the period 1999-2006, ABAG projects that an additional 1,943 new housing units are needed to meet projected demand by very low, low, and moderate income households in Vallejo. Of these units, 1,164 units are for very low and low income households in the City.

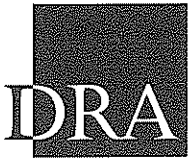
Table 5 provides Vallejo's fair share housing goals as defined by ABAG.

Table 5

**City of Vallejo
Fair Share Housing Goal by Income Level, 1999-2006**

<u>Income Level</u>	<u>Housing Goal, 1999-2006</u>
Very Low Income (\$37,000 for a family of four)	690 units
Low Income (\$59,200 for a family of four)	474 units
Moderate Income (\$88,800 for a family of four)	779 units
Total Housing Goal, Very Low, Low, and Moderate Income Households, 1999-2006	1,943 units

Source: Association of Bay Area Governments; Income levels are for 2006



C. Affordable Housing Production and Barriers to Production

1. Affordable Housing Production

The 2001 Housing Element discusses several strategies and outlines several programs to increase the availability of affordable housing. Important strategies include:

- increase the supply of Section 8 vouchers;
- provide financial assistance for new construction units affordable to very low and low income households;
- ensure that condominium conversions do not adversely affect the availability of affordable housing; and,
- provide funding for first-time homebuyer programs.

These strategies will increase the availability of affordable housing opportunities. However, for several reasons, the City remains unable to meet the demand for affordable housing. These reasons include high land and construction costs and limited sources of public subsidy, discussed in the next section of this report.

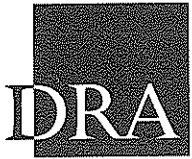
Importantly, one policy discussed in the Housing Element is the exploration of the adoption of a local inclusionary housing program. With an inclusionary housing program, market rate housing developers construct affordable units to help address the housing affordability problem in Vallejo.

2. Barriers to Production of Affordable Housing

a. High Development Costs

Both land and construction costs in Vallejo contribute significantly to affordable housing production costs in the City. In Vallejo, land for housing can cost from \$40,000 to \$80,000 per lot for single family homes. In addition to these costs, a developer may have to undertake significant off-site work because the unavailability of undeveloped land requires developers to look at sites with issues, such as grading or environmental hazards. These costs can exceed the acquisition costs of the land.

Vallejo, as with most areas of the state, experiences high construction costs. For example, construction costs only on a single family detached home can range from \$65 to \$80 per square foot for developers of large single family developments. For developers of small developments of one or two homes, construction costs can be significantly higher. At



construction costs of \$80 per square foot, single family homes would cost in excess of \$400,000 per home. Even if a developer sold the home at the development cost, a moderate income household (at 120 percent of area median income, and assuming five persons in the household) can only afford to purchase a home priced at approximately \$282,400.

b. Limited Public Resources

In an environment with high development costs, the lack of local public sources of funds for subsidizing the development of affordable housing is a significant barrier to affordable housing production. There are two ongoing sources of local subsidies for affordable housing: HOME funds from HUD and redevelopment agency housing set-aside funds. Additionally, the Housing Authority has reserves available for funding affordable housing development, and the City may allocate Community Development Block Grant (CDBG) funds for affordable housing development.

The City receives a direct allocation of HOME funds from HUD, in the amount of \$638,689 in FY2006. Relative to the cost of developing housing in the Vallejo housing market, this allocation amount is not significant.

According to the Vallejo Redevelopment Agency's Implementation Plan (FY2004/05-FY2008/09), the total amount of unencumbered housing set-aside funds available during that five-year period is \$1.34 million. According to the City, approximately \$224,000 is available annually from Agency housing set-aside funds for housing development after administrative costs. The amount of housing set-aside funds available is very low compared to the cost of developing affordable housing in Vallejo.

The City receives \$1.4 million annually in CDBG funds. However, jurisdictions do not typically use CDBG funds for new housing development activities. Instead, housing activities typically funded through CDBG are owner-occupied rehabilitation loan programs, or first-time homebuyer assistance. The City may consider allocating a portion of its CDBG funds for affordable housing development.

To complement the City's existing financial resources for affordable housing, the City is in the process of identifying City-owned land suitable for affordable housing development. The City has conducted an initial assessment of City-owned sites, and is in the process of determining the most suitable sites for affordable housing development.

3. Buchongo Settlement Agreement, Vallejo Redevelopment Agency

Importantly, the Vallejo Redevelopment Agency entered into an affordable housing agreement with Legal Services of Northern California in July 1999. This agreement, known as the Buchongo Settlement Agreement, requires the Agency to provide 425 units of



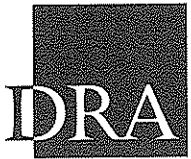
housing affordable to low and moderate income households by July 2007. Housing units that count toward this requirement must be either new construction or substantial rehabilitation (at least \$40,000 or 25 percent of the after-rehabilitation value of the unit). Of the 425 units, 300 must be affordable to very low income households. Additionally, 125 units must be multifamily units of two bedrooms or more.

D. Meeting Affordable Housing Need - Inclusionary Housing Program

One potential tool for assisting the City with meeting its affordable housing need is the adoption of an inclusionary housing program. An inclusionary housing program requires housing developers to set aside a portion of its units for very low, low, and/or moderate income households. Typically, cities with inclusionary programs require developers to set aside 10 percent to 20 percent of housing units for targeted income households. In addition to compelling market rate housing developers to construct affordable housing, inclusionary housing programs can encourage partnerships between market rate and affordable housing developers to produce affordable housing units. For example, a market rate developer can donate land to an affordable housing developer to construct affordable units on the donated site.

Most jurisdictions also allow market rate developers to pay fees in lieu of developing affordable housing units. In turn, these fees are used to further affordable housing development, such as new affordable housing development or first-time homebuyer programs. As we discuss later in this report, this compliance option typically results in the development of fewer affordable housing units relative to the number of units a market rate developer is required to build under an inclusionary program. Most jurisdictions set their "in lieu fees" at an amount that does not provide sufficient subsidy to produce a comparable number of affordable units required under their inclusionary programs.

An important consideration for jurisdictions evaluating inclusionary housing programs is the economic effect on housing development. By reducing the amount of revenue generated by a development, an inclusionary program ultimately affects land values. Developers typically conduct land residual analyses to calculate the value attributed to land from proposed development. Therefore, if the amount of revenue that can be generated by a development is reduced because of inclusionary requirements, developers will pay less for land. Of course, land values are affected by other factors, such as availability of development opportunities, the strength or weakness of the economy, interest rates, land costs in surrounding areas, and several other factors. However, the ultimate result from imposing inclusionary requirements is a reduction in land value.



III. LAND RESIDUAL ANALYSIS

A. Introduction to Land Residual Analysis

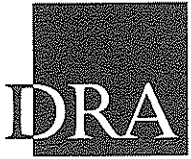
As we discuss earlier, an important consideration for jurisdictions considering the adoption of inclusionary housing is the economic impact of inclusionary requirements on landowners.

To examine the potential economic effects of inclusionary requirements in the Vallejo housing market, DRA conducted a land residual analysis. The analysis evaluates the economic impact of alternative inclusionary set-aside requirements on both renter and owner housing. In addition, the analysis evaluates the economic benefit of incentives the City can offer to developers to offset the cost of providing affordable units under inclusionary requirements.

This analysis is specific to the Vallejo housing market, based on housing construction costs, market rents, and market prices in the City. DRA interviewed residential developers active in Vallejo to develop assumptions about development costs. Five housing prototypes were developed with City staff. These prototypes represent the variety of housing currently or prospectively being built in Vallejo.

Land residual analyses are used by real estate developers, lenders, and investors to evaluate development financial feasibility. Because developers and landlords charge the maximum rents and sales prices the market will bear, any increase in development costs resulting from government action or other factors ultimately affects the price of land and/or profits to developers and owners. To maintain a threshold level of profit, developers will reduce the amount they are willing to pay for land when faced with increases in development costs and/or reductions in the revenue potential of developments. Increases in development costs will not result in an increase in home prices or apartment rent. Importantly, a reduction in developer profit margins does not necessarily render a project infeasible as long as the developer meets threshold profit and overhead requirements.

This land residual analysis calculates the value of the five housing prototypes based on income potential and subtracts the estimated cost of development to yield the underlying value of the land. A land use that generates a negative land value is not financially feasible. Similarly, an alternative use that generates a land value lower than a landowner is willing to accept is infeasible. Conversely, a land use that generates a land value in excess of current market prices for land is economically feasible.



1. Land Residual Methodology

The first step in this land residual analysis is to create housing prototypes that reflect the Vallejo housing market. **Table ES-1** in the Executive Summary describes the five housing prototypes used in this analysis developed with City staff.

The second step is to estimate development costs (not including land costs) for the five housing prototypes. Based on interviews with developers experienced in the Vallejo market as well as construction cost indexes, DRA developed cost estimates for each of the housing prototypes.

The third step is to estimate the economic value of the housing prototypes. For the rental housing prototype, economic value is based on the amount of income generated by the prototypical development. In this case, projected net operating income from a combination of market rents and rents affordable to targeted income groups (e.g. very low income and low income households) less operating expenses is calculated. In this analysis, market rents are based on average rents for the Vallejo market using data provided by REALFACTS. The use of average rents is a conservative assumption given that new apartments typically rent at higher per square foot rates than existing apartment buildings. The age of apartment buildings in the Vallejo market ranges from 46 years old to 18 years old.

The economic value of the rental housing prototype is calculated by dividing annual net income by a "cap rate". A cap rate is equal to the net operating income of a property divided by the price (or value) of a property. The real estate industry uses this ratio to estimate the value of rental properties.

For purposes of this analysis, we use a cap rate of 6.1 percent. Defining an appropriate cap rate for this analysis was particularly challenging because the last sale of an apartment building in Vallejo was in 2004.

For the owner housing prototypes, the economic value of the prototypes is based on projected sales revenues including sales prices affordable to targeted income groups (e.g. moderate income households) under an inclusionary housing program. The projected market sales prices are based on sales data for existing homes in Vallejo for the 12 month period from September 2005 to August 2006. This is a conservative approach because there is typically a significant premium for new construction homes.

The fourth step is to calculate the land residual value for each of the housing prototypes by subtracting the total development cost (not including land cost) for each prototype from the estimated economic value of each prototype to render the underlying value of the land.



2. Alternative Land Residual Calculations

At the City's direction, land residual value for the housing prototypes was calculated under a variety of scenarios to understand the range of effects of alternative inclusionary requirements and program elements. For the rental housing prototype, the land residual value under 10 percent, 11 percent, and 15 percent inclusionary requirements were calculated under the following scenarios:

- five percent of units targeted to very low income households (50 percent of area median income) and five percent of units targeted to low income households (80 percent of area median income);
- 11 percent of units targeted to very low income households (to qualify for the maximum density bonus of 35 percent allowed under State density bonus law); and,
- 15 percent of units targeted to low income households.

Table ES-2 in the Executive Summary summarizes land residual values under those alternative inclusionary scenarios.

For the owner housing prototypes, the land residual value was calculated under 10 percent and 20 percent inclusionary requirements. The land residual value was calculated assuming moderate income households (120 percent of area median income) would be targeted.

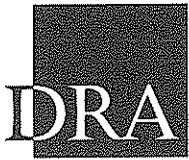
Table ES-3 in the Executive Summary summarizes land residual values under those alternative inclusionary requirements.

B. Housing Prototypes

Table ES-1 in the Executive Summary describes the five housing prototypes, one rental and four owner, examined in the land residual analysis. These prototypes were developed with City staff to represent the range of housing development types in Vallejo.

1. Rental Housing Prototypes

The rental prototype analyzed is a stacked flat, new construction family rental housing development at 20 development units per acre. Although this type of development is not currently being developed in the City, potential changes in the housing market could result in the development of larger rental housing developments.



2. Owner Housing Prototypes

The owner housing prototypes include:

- a low density new construction single family housing development;
- a new construction small lot detached single family housing development with zero lot lines;
- a new construction townhome development; and,
- a high density new construction condominium tower with structured parking underneath.

These owner housing prototypes are based on developments that are currently being developed in Vallejo.

C. Development Costs

1. Rental Housing Prototype

Estimating costs for stacked flat rental housing in Vallejo is difficult because of the absence of recent developments in the area. Based on developer interviews, construction costs for a stacked flat rental constructed in 2004 was approximately \$90 per square foot to \$100 per square foot, adjusting for prevailing wages.

A major developer of affordable housing in California recently developed an apartment building in Sonoma County at a cost of \$160 per square foot, including general contractor overhead and profit, as well as paying prevailing wages. Prevailing wages typically add 20 percent to 30 percent to construction costs. Adjusting for both prevailing wages and taking out contractor overhead and profit results in a range from approximately \$107 per square foot to \$116 per square foot for hard construction costs.

For 2006, RS Means estimates hard construction costs for a stacked flat wood frame rental at approximately \$100 to \$140 per square foot, not including contractor profit and overhead, general requirements, and architect fees.

In American Canyon, a developer is constructing a rental development with similar density as the rental housing prototype in this analysis. Excluding contractor profit, overhead, and general conditions, construction costs are expected to be approximately \$130 per square foot while paying prevailing wages. Adjusting for prevailing wages, hard construction costs would be in the range of \$110 to \$115 per square foot.



For the stacked flat rental housing prototype, DRA estimates hard construction costs at \$115 per square foot.

Table 6 and **Table 7** summarize development costs and development cost assumptions for the rental housing prototype.

b. Owner Housing Prototypes

Construction hard costs are based on guidelines provided by developers in interviews and from RS Means estimates.

For the low density single family detached prototype, developers interviewed provided a range from \$65 per square foot to \$85 per square foot for hard construction costs. According to 2006 RS Means data for Vallejo, hard construction costs for an average quality two-story home of 2,000 square feet is approximately \$79 per square foot. In the land residual analysis, we use \$79 per square foot for hard construction costs.

With the small lot detached housing prototype, developers we interviewed provided a range from \$68 per square foot to \$90 per square foot. According to 2006 RS Means data for Vallejo, based on average quality two story homes, construction costs are approximately \$86 per square foot. In the land residual analysis, we use \$86 per square foot for hard construction costs.

The cost estimates for the medium density attached housing prototype is based on interviews with developers. In this instance, RS Means data does not appear to be accurate for Vallejo. In the interviews with developers, we were given a range of \$110 per square foot to \$140 per square foot for hard construction costs, with comments from developers stating that costs are closer to the lower end of that range. In the land residual analysis, we use \$117 per square foot hard construction costs based on comments from developers.

For the higher density condominium development, developers contacted by DRA did not provide data on costs for this type of development. In the absence of this data, DRA reviewed RS Means cost data. For high rise steel frame buildings, RS Means estimates construction costs at \$140 per square foot. However, the condominium prototype is assumed to be wood frame construction, which should be substantially less expensive than steel frame.

For this analysis, we assume square footage costs higher than the stacked flat rental prototype at \$115 per square foot hard construction costs and the medium density attached owner prototype at \$117 per square foot, while remaining lower than the \$140 per square foot estimate for steel frame construction housing from RS Means.

Table 6

**Rental Prototype Development Cost
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Renter 1 Stacked Flat
Number of Units	150
Acres	6.00
Units/Acre	25
Total Net Square Feet	136,250
Ratio Net/Gross SF	85%
Total Gross Square Feet Building Area	160,294
LAND ACQUISITION, DEMOLITION, RELOCATION	\$2,352,240
OFF-SITE AND SITE IMPROVEMENTS	\$2,613,600
UNIT CONSTRUCTION HARD COSTS	\$18,433,824
PARKING	\$1,040,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,052,371
LOCAL PERMITS AND FEES	\$3,750,000
ALTA SURVEY	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000
SOILS TESTING	\$90,000
CONSTRUCTION LOAN FEES	\$141,221
PERMANENT LOAN FEES	\$114,076
CONSTRUCTION/LEASE-UP INTEREST	\$932,057
PROPERTY INSURANCE	\$60,000
PROPERTY TAXES DURING CONSTR.	\$233,997
CONSTR. LOAN TITLE AND CLOSING	\$15,000
APPRAISAL FEES	\$10,000
REAL ESTATE LEGAL	\$30,000
MARKET STUDY	\$15,000
MARKETING/LEASE-UP/START-UP	\$50,000
FURNITURE/EQUIPMENT	\$75,000
DEVELOPMENT/ADMIN. FEE	\$2,699,860
TOTAL PROJECT COSTS	\$33,748,244
COST PER UNIT	\$224,988
COST PER NET SF	\$247.69

Source: David Paul Rosen & Associates

Table 7

**Assumptions, Rental Development Costs
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

**Renter 1
Stacked Flat**

DEVELOPMENT COST ASSUMPTIONS

Land Acquisition/Relocation/Demolition Cost Per Square Foot		\$9.00	
Land Acquisition Cost Per Unit		\$15,682	
Off-Site and Site Improvement Costs per SF Site Area		\$10	
Hard Construction Costs per SF		\$115	
Parking Costs per SF		\$20	392040
Architectural/Engineering (Percent of Hard Costs)		5.00%	
Local Permits and Fees (Per Unit)		\$25,000	
Property Insurance During Construction (Percent of Hard Costs)		0.50%	
Development Fee (% of Total Development Costs Less Land)		8.00%	

FAIR MARKET VALUE CALCULATION

Net Operating Income		\$1,148,595
Capitalization Value @ Cap Rate of:	6.10%	\$18,829,426
Maximum Construction Loan @LTV of	75%	\$14,122,070

MAXIMUM CONSTRUCTION LOAN CALCULATION

Capitalized Value at Restricted Rents		\$18,829,426
Maximum Construction Loan @ LTV of	75%	\$14,122,070

CONSTRUCTION LOAN

Construction Loan Amount		\$14,122,070
Interest Rate		8.00%
Loan Fees	1.00%	\$141,221
Average Loan Balance		55.00%
Construction Period		14 Months
Lease-Up Period		4 Months
Total Construction Loan Term		18 Months
Construction Loan Interest--Construction Period		\$724,933
Construction Loan Interest--Lease-Up		\$207,124

PERMANENT LOAN

Net Operating Income, Market Rents		\$1,148,595
Debt Coverage Ratio		1.20
Debt Service		\$957,163
Mortgage Term (Amortization)		30 years
Interest Rate		7.50%
Maximum Permanent Loan Amount Based on DCR		\$11,407,598
Loan Fees	1.00%	\$114,076
Maximum Loan to Value (% of FMV @ Restr. Rents)		100%
Maximum Loan Amount Based on LTV Test		\$18,829,426
Permanent Loan Amount (Min. DCR or LTV)		\$11,407,598
Permanent Loan Debt Service		\$957,163



In addition to the cost of developing the housing units, the density of this prototype creates a need for structured parking. The prototype is defined at one level of underground parking and one level of above ground structured parking (assuming 300 square feet per parking space including circulation). For 2006, RS Means estimates structured parking at approximately \$18,000 per space, and underground garage parking at \$22,000 per space. We use an estimate of \$20,000 per space overall for the structured parking garage.

Per unit total development costs for each prototype are summarized in **Table 8**. Detailed development cost assumptions and budgets for each prototype are contained in **Table 9**.

D. Determining Economic Value: Selecting Target Income Levels and Calculating Affordable Housing Cost

For the rental housing prototype, economic value is calculated by estimating net operating income. With the owner housing prototypes, economic value was based on estimates of gross sale proceeds.

1. Assumptions for Determining Economic Value of Rental Prototypes

With the rental housing prototype, the following factors for determining economic value were incorporated in the land residual analysis:

- affordable rents, as determined by definition of affordable housing expense, target income levels, occupancy levels, and allowances for payment of utilities;
- operating expenses;
- vacancy rates;
- market rents; and,
- cap rates.

This section discusses the assumptions incorporated in the land residual analysis.

Table 8

Estimate Prototype Development Costs
Ownership Housing Prototypes
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
Acres	10.00	6.50	7.25	1.00
No. of Units	90	100	150	100
Units/Acre	9.0	15.4	20.7	100.0
Total Net Square Feet	209,500	197,500	230,000	103,875
Ratio Net/Gross SF	100%	100%	100%	85%
Total Gross Square Feet Building Area	209,500	197,500	230,000	122,206
LAND AND BUILDING ACQUISITION	\$3,920,400	\$5,662,800	\$9,474,300	\$1,524,600
PARKING GARAGE	\$0	\$0	\$0	\$3,500,000
OFF-SITE AND SITE IMPROVEMENTS	\$7,840,800	\$5,096,520	\$6,316,200	\$871,200
CONSTRUCTION HARD COSTS (INCLUDING GARAGES)	\$16,550,500	\$16,985,000	\$26,910,000	\$15,275,735
GENERAL CONDITIONS	\$260,000	\$260,000	\$320,000	\$340,000
ARCH./ENG./CONSTR. SUPERVISION	\$975,652	\$883,261	\$1,993,572	\$968,816
LOCAL PERMITS AND FEES	\$2,681,545	\$2,738,410	\$4,125,000	\$2,756,295
ALTA SURVEY	\$20,000	\$20,000	\$20,000	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000	\$20,000	\$20,000	\$20,000
SOILS TESTING	\$90,000	\$90,000	\$90,000	\$90,000
CONSTRUCTION LOAN FEES	1.00% \$277,500	\$273,750	\$412,500	\$204,750
CONSTRUCTION/SALE PERIOD INTEREST	\$1,322,750	\$1,304,875	\$2,420,000	\$1,201,200
PROPERTY INSURANCE	\$165,505	\$169,850	\$269,100	\$152,757
PROPERTY TAXES	\$283,117	\$277,443	\$427,005	\$176,715
TITLE AND CLOSING	\$30,000	\$30,000	\$30,000	\$30,000
APPRAISAL FEES	\$10,000	\$10,000	\$10,000	\$10,000
REAL ESTATE LEGAL	\$50,000	\$50,000	\$50,000	\$50,000
WARRANTY	2.00% \$989,500	\$1,021,500	\$1,155,000	\$667,500
MARKETING/SALES COMMISSIONS	4.00% \$1,979,000	\$2,043,000	\$2,310,000	\$1,335,000
TOTAL PROJECT COST	\$37,466,269	\$36,936,409	\$56,352,677	\$29,194,569
PER UNIT	\$416,292	\$369,364	\$375,685	\$291,946
PER SF	\$178.84	\$187.02	\$245.01	\$281.05

Source: David Paul Rosen & Associates

Table 9

Financing Assumptions
Ownership Housing Prototypes
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
DEVELOPMENT COST ASSUMPTIONS				
Property Acquisition Cost Per SF	\$9	\$20	\$30	\$35
Property Acquisition Cost Per Unit	\$43,600	\$56,600	\$63,200	\$15,200
Off-site and Site Improvement Costs per SF Site Area	\$18	\$18	\$20	\$20
Parking Garage (per space)	\$0	\$0	\$0	\$20,000
Hard Construction/Rehabilitation Costs per SF	\$79	\$86	\$117	\$125
Hard Construction/Rehabilitation Costs per Unit	\$183,894	\$169,850	\$179,400	\$152,757
Architectural/Engineering (Percent of Hard Costs)	4%	4%	6%	6%
Local Permits and Fees Per Unit	\$29,795	\$27,384	\$27,500	\$27,563
Property Insurance During Construction (Percent of Hard Costs)	1.00%	1.00%	1.00%	1.00%
CONSTRUCTION LOAN				
Value, Based on Development Costs				
Constr. Loan Amt 75% Total Dev. Cost	\$27,750,000	\$27,375,000	\$41,250,000	\$20,475,000
Interest Rate	8.00%	8.00%	8.00%	8.00%
Loan Points	1.00%	1.00%	1.00%	1.00%
Average Loan Balance--Construction	55.00%	55.00%	55.00%	55.00%
Construction Period	13 Months	13 Months	16 Months	17 Months
Total Construction Loan Term	13 Months	13 Months	16 Months	17 Months
Total Construction Loan Interest	\$1,322,750	\$1,304,875	\$2,420,000	\$1,201,200
Construction Loan Points	\$277,500	\$273,750	\$412,500	\$204,750
HOMEBUYER PERMANENT MORTGAGES				
Interest Rate (include. PMI)	6.48%	6.48%	6.48%	6.48%
Term (Years)	30	30	30	30



a. Affordable Housing Expense and Utility Allowances

Affordable housing expense for renters is defined as 30 percent of targeted income, including an allowance for utilities. This definition is used by virtually all affordable housing programs, and is consistent with California Redevelopment Law, U.S. Department of Housing and Urban Development programs, and State of California Housing and Community Development programs.

Allowable affordable rents are calculated net of allowances for the utilities paid directly by the tenants from the gross rent (or affordable housing cost). For purposes of this analysis, we incorporated utility allowances as adopted by the Vallejo Housing Authority in August 2006. The analysis assumes that the resident pays utilities on the following items:

- electric heating;
- electric cooking;
- other electric appliances and uses;
- water;
- range/microwave; and,
- refrigerator.

Actual utility allowances depend upon a variety of factors, including the utilities that are paid by the tenants (e.g. water, gas, electricity, sewer, trash), the type of appliances and heating units incorporated in the units, and whether appliances and heating units require electricity or gas.

The following utility allowances are used in the land residual and affordability gap analysis:

<u>Size of Unit</u>	<u>Utility Allowance</u>
1 Bedroom	\$78 per month
2 Bedroom	\$97 per month
3 Bedroom	\$108 per month

b. Target Income Levels and Occupancy Levels

The land residual analysis for the rental prototype is based on alternative inclusionary requirements targeting very low and low income households. Targeted income levels are used to calculate affordable rents, which in turn form the basis for net operating income calculations for the rental housing prototypes. For this study, very low income is defined at approximately 50 percent of area median income for Solano County, or \$37,000 for a family of four, based on incomes published by the State of California Department of Housing and Community Development (HCD). Low income households are households at



or below approximately 80 percent of area median income for Solano County. For 2006, HCD defines lower income for a household of four persons in Solano County at \$59,200. However, affordable rent for lower income households is targeted to 60 percent of area median income, per California Redevelopment Law. For 2006, a household of four persons in Solano County at 60 percent of area median income is \$44,400.

An additional factor to determine affordable housing cost is defining occupancy levels for targeted households. California Health and Safety Code defines household income by household size and by targeted income level. This methodology is used in California Redevelopment Law, HUD, HCD, and the California Tax Credit Allocation Committee. For 2006, HUD and HCD, a three person very low income household in Solano County is assumed to have a household income of \$33,300, while a five person very low income household is assumed to have a household income of \$39,950. Based on this method for defining affordable housing expense, for example, a five person low income household can afford a higher housing expense than a three person low income household.

In this analysis a standard of one person per room (not including kitchen and bathrooms) was used. This occupancy standard is required by California Redevelopment Law when determining affordable housing expense.

Table 10 summarizes the calculations of affordable rents based on the assumptions of targeted income levels, occupancy levels, utility allowances, and percentage of income devoted to housing expenses.

c. General Operating Costs, Vacancy Allowance

Annual operating costs are estimated at \$4,232 per unit for the rental prototypes. This amount is based on data from the Institute of Real Estate Management ("Income/Expense Analysis: Conventional Apartments") 2004, adjusted for inflation using the Consumers Price Index changes from 2004 to 2006. The median operating expense figure from IREM is for 23 apartment buildings in the Oakland metropolitan area, comprising 4,026 garden-style apartment units.

A vacancy allowance of five percent of rental income is used to compensate for the landlord's potential loss of rental income when units become unoccupied.

Summaries of the net operating income generated under alternative household income and inclusionary set aside scenarios are included in **Attachment A**.

Table 10

Affordable Rents by Income Level
 City of Vallejo Inclusionary Housing Study
 Land Residual Analysis
 2006

ASSUMPTIONS

2006 Median Household Income, Family of Four, Solano County \$75,000
 Affordable Housing Cost As a % of Income, Rental 30%

Household Size, (1 person per room plus one)	2 Persons	3 Persons	4 Persons	5 Persons
Renter Utility Allowance, City of Vallejo Hsg. Auth., Aug. 2006	\$78	\$97	\$108	\$134

AFFORDABLE RENTS AND GROSS RENTAL INCOME BY INCOME LEVEL

	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
<u>50% of Median</u> Rental				
Annual Gross Income	\$29,600	\$33,300	\$37,000	\$39,950
Affordable Monthly Housing Cost	\$740	\$833	\$925	\$999
Less: Monthly Utility Allowance	\$78	\$97	\$108	\$134
Affordable Monthly Rent	\$662	\$736	\$817	\$865
<u>60% of Median (1)</u> Rental				
Annual Gross Income	\$35,520	\$39,960	\$44,400	\$47,940
Affordable Monthly Housing Cost	\$888	\$999	\$1,110	\$1,199
Less: Monthly Utility Allowance	\$78	\$97	\$108	\$134
Affordable Monthly Rent	\$810	\$902	\$1,002	\$1,065

(1) Affordable rent for Lower Income households (up to 80 percent of area median income) is targeted to 60 percent of area median income per California Redevelopment Law.

Source: David Paul Rosen & Associates



d. Market Rent Assumptions

Under an inclusionary housing program, market rate units remain the large majority of units in housing development. Therefore, it is necessary to make assumptions regarding market rate rents in Vallejo. According to REALFACTS, the average rent in Vallejo during the second quarter of 2006 was \$1,034. The following chart summarizes average rents in Vallejo during the second quarter of 2006.

City of Vallejo

Average Rents, Second Quarter 2006

<u>Unit Type</u>	<u>Average Per Unit Rent</u>	<u>Average Rent Per Square Foot</u>
One Bedroom/One Bath	\$914/month	\$1.33/sf/month
Two Bedroom/One Bath	\$1,019/month	\$1.16/sf/month
Two Bedroom/Two Bath	\$1,188/month	\$1.25/sf/month
Three Bedroom/Two Bath	\$1,280/month	\$1.04/sf/month

Source: REALFACTS

In the land residual analysis, we assume that average rents will be slightly lower than the rents offered at new construction rental developments assuming that renters are willing to pay somewhat more for renting a new unit. The following market rent assumptions were incorporated in the land residual analysis:

City of Vallejo

**Market Rent Assumptions
Land Residual Analysis**

<u>Unit Type</u>	<u>Per Unit Rent</u>	<u>Rent Per Square Foot</u>
One Bedroom	\$950/month	\$1.36/sf/month
Two Bedroom/One Bath	\$1,060/month	\$1.18/sf/month
Two Bedroom/Two Bath	\$1,225/month	\$1.29/sf/month
Three Bedroom	\$1,310/month	\$1.19/sf/month

The market rents assumed in the land residual analysis range from \$30 to \$40 per month greater than the average market rents for Vallejo in the second quarter of 2006 because of the assumption that new construction rental developments can charge somewhat higher rents than older, existing apartment buildings.



Table 11 compares average market rents with rents affordable to very low and low income households.

Table 11

City of Vallejo

Comparison Between Average Market Rents and Rents Affordable to Very Low Income and Low Income Households (50% and 80% of Area Median Income)

Unit Type	Market Rate Average Per Unit Rent	Affordable Rent Very Low Income	Affordable Rent Low Income (1)
One Bedroom/One Bath	\$914/month	\$662/month	\$810/month
Two Bedroom/One Bath	\$1,019/month	\$736/month	\$902/month
Two Bedroom/Two Bath	\$1,188/month	\$736/month	\$1,002/month
Three Bedroom/Two Bath	\$1,280/month	\$817/month	\$1,065/month

(1) Affordable rents are calculated based on the median income for Solano County, and adjusted by household size and utility allowances. Household size is assumed to be one person per bedroom plus one. For Low Income Households up to 80 percent of area median income, affordable rent is defined at 60 percent of area median income per California Redevelopment Law.

In the current housing market, rents affordable to low income households is only modestly below average market rents. Therefore, the benefit of an inclusionary housing program targeting low income renter households is not primarily lowering of rents to these households. Instead, the primary benefit of an inclusionary housing is to protect these households, and future low income households, from increases in rents that would require them to overpay for housing costs.

Average market rate rents continue to be above affordable rents for very low income households (50 percent of area median income). Therefore, an inclusionary program targeting very low income households benefits these households through offering housing units at a lower cost and restricting increases in rents for the long-term. As discussed earlier in this report, the 2000 Census showed that over 90 percent of cost burdened renter households in Vallejo (paying more than 30 percent of household income on housing expenses) were very low income households.

e. Cap Rates

Calculations of net operating income were divided by an assumed cap rate to determine economic value of the rental housing prototype under alternative inclusionary scenarios. A cap rate is equal to the net operating income of a property divided by the price or value of a property.



We assumed a cap rate of 6.1 percent. This cap rate is based on data from the National Real Estate Index for the Oakland/East Bay and Sacramento regions for Class A apartment buildings.

According to the National Real Estate Index Value Monitor, the average cap rate for the Oakland/East Bay region (which includes Contra Costa County but not Solano County) was 6.6 percent for the second quarter of 2006 for Class B apartments. For Class A apartments, the cap rate was 6.2 percent for the same time period.

For the Sacramento region, the average cap rate for the Sacramento area was 6.3 percent for Class B apartments and 6.1 percent for Class A apartments for the second quarter of 2006.

According to REALFACTS, the only sale of a larger apartment building in Vallejo in the past three years was the sale of a 148 unit development. The cap rate for that sale, which occurred in 2003, was approximately 7.0 percent. However, because the sale was three years ago in a different housing market, and is only one sample, we do not believe the cap rate of 7.0 percent accurately reflects the current housing market.

2. Assumptions for Determining the Economic Value of Owner Prototypes

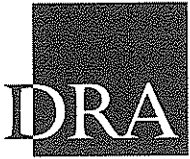
With the owner housing prototypes, the most important factors for determining economic value are:

- affordable home price, based on target income level, mortgage rates, downpayment amount (as a percentage of affordable home price), targeted income levels, occupancy standards, percent of income devoted to housing expense, and defining items to include in housing expense; and,
- market home prices.

a. Target Income Levels and Occupancy Standards

With the owner land residual analysis, affordable home prices are based on targeting moderate income households. For purposes of this study, a four person moderate income household (at approximately 120 percent of area median income) has a total annual income of \$88,800.

The owner housing land residual analysis incorporates occupancy standards of one person per bedroom, plus one, based on the standard used in California Redevelopment Law.



b. Definition of Housing Expense

For homeowners, housing expense is equal to mortgage payments, homeowner association fees, property taxes, insurance, assessments passed on to owners, and maintenance costs. Based on California Redevelopment Law definitions of affordable housing expense, we assume that 35 percent of a household's income goes toward housing expenses. This is a conservative assumption because most lenders will allow a greater percentage of household income to pay for housing expenses.

Using the California Redevelopment Law definition for housing expense for owner moderate income households, we assume that 35 percent of 110 percent of area median income, adjusted for household size, will be devoted to total housing expenses. Although moderate income is defined as households at or below 120 percent of area median income, housing expense is tied to 110 percent of area median income under California Redevelopment Law.

We assume a modest homeowners association fee of \$200 per month as part of monthly housing expense.

Mortgage payments are based on an interest rate of 6.48 percent. Currently, rates for 30 year fixed rate mortgages are slightly lower than that rate, although rates have been higher and lower than 6.48 percent in 2006. The rate of 6.48 percent was the average rate for 30 year fixed rate mortgages for the week of August 24, 2006, according to Freddie Mac.

Additionally, we incorporate a utility allowance based on the definition of affordable housing expense under California Redevelopment Law. For the owner prototypes, we assume payment of the following utilities:

- gas heating;
- gas cooking;
- other electric;
- water heating;
- water;
- sewer;
- trash collection;
- range/microwave; and,
- refrigerator.

Table 12 provides assumptions and calculations for affordable mortgages and home prices.

Table 12
Maximum Affordable Mortgage
Households Earning 110% of Area Median Income

City of Vallejo Inclusionary Housing Study
2006

Unit Size (Bedroom Count)	1 Bedrooms	2 Bedrooms	3 Bedrooms	3 Bedrooms	4 Bedrooms	5 Bedrooms
Household Size	2 Persons	3 Persons	4 Persons	4 Persons	5 Persons	6 Persons
2006 Income Limit	\$71,000	\$79,900	\$88,800	\$88,800	\$95,900	\$103,000
% of Income Used to Calculate Afford. Mortg.	110% of AMI	110% of AMI	110% of AMI	110% of AMI	110% of AMI	110% of AMI
% of Income Spent on Housing	35%	35%	35%	35%	35%	35%
Income Used to Calculate Affordable Mortg.	\$65,120	\$73,260	\$81,400	\$81,400	\$87,912	\$94,424
Affordable Monthly Housing Cost	\$1,899	\$2,137	\$2,374	\$2,374	\$2,564	\$2,754
Less: Monthly Utility Allowance	\$120	\$178	\$195	\$262	\$318	\$355
Less: Homeowner Association Fees	\$200	\$200	\$200	\$200	\$200	\$200
Less: Property Taxes and Assess. 1.20%	\$214	\$240	\$273	\$263	\$282	\$305
Less: Property Insurance	\$125	\$125	\$125	\$125	\$125	\$125
Affordable Mortgage Payment (P&I)	\$1,214	\$1,364	\$1,547	\$1,492	\$1,603	\$1,731
Affordable Mortgage-	\$192,435	\$216,175	\$245,340	\$236,475	\$254,197	\$274,433
Affordable Home Price	\$213,817	\$240,194	\$272,600	\$262,750	\$282,441	\$304,925

Source: David Paul Rosen & Associates



c. Downpayment Assumptions

The analysis assumes that homebuyers will provide ten percent (of affordable home price) downpayments. Homebuyers generally provide between five to 20 percent of home price as downpayments. We use the lower end of this range assuming that moderate income persons will have difficulty providing downpayments ranging from 15 percent to 20 percent of home price.

d. Market Home Prices

Table 13 summarizes market sales price assumptions for the owner housing prototypes and compares these prices to prices for resale homes in Vallejo.

Table 13

**Sales Price Assumptions
Owner Housing Prototypes**

<u>Type</u>	<u>Unit Type</u>	<u>Median Sales Prices, Sept. 2005 to Aug. 2006</u>	<u>Assumed Sales Prices</u>
Attached	One BR	\$205,000	\$250,000
	Two BR/1BA	\$295,000	\$325,000
	Two BR	\$295,000	\$350,000
	Three BR	\$310,000	\$425,000
Detached	Three BR	\$435,000	\$475,000
	Four BR	\$520,000	\$540,000
	Five BR	\$617,500	\$640,000

Source: Dataquick, David Paul Rosen & Associates

The market sales prices we assume for the new construction owner prototypes are shown as slightly higher than prices for resale homes in Vallejo for the period September 2005 to August 2006. This is a conservative approach because of the high premium paid for new construction homes. For example, according to Dataquick, the median sales price for all resale homes for the period September 2005 to August 2006 was \$421,750, while the median sales price for new construction homes was \$707,000. One other example was provided by a developer active in Vallejo. He stated that new construction townhomes have sold in the high \$300,000's and \$400,000's in Vallejo.



3. Calculating Economic Value of Housing Prototypes

a. Economic Value of Rental Housing Prototypes

For each of the rental housing prototypes, annual net operating income was calculated based on four alternative scenarios:

- no inclusionary requirements;
- five percent of units set aside for households at or below 50 percent of area median income and five percent of units set aside for households at or below 80 percent of area median income;
- 11 percent of units set aside for households at or below 50 percent of area median income; and,
- 15 percent of units set aside for households at or below 80 percent of area median income.

The calculations of net operating income for each of these scenarios are based on the assumptions described above (the calculations are contained in **Attachment A**).

As we discuss above, determining the economic value of the rental housing prototypes was based on dividing net operating income by an assumed cap rate of 6.1 percent.

b. Owner Sales Calculations

For each of the owner housing prototypes, home sales revenues were calculated based on three alternative scenarios:

- no inclusionary requirements;
- 10 percent of units set aside for households at or below 120 percent of area median income; and,
- 20 percent of units set aside for households at or below 120 percent of area median income.

The calculations for each housing prototype are contained in **Attachment A**.

In summary, the land residual analysis indicates that imposing inclusionary housing requirements lowers residual land value for all housing types. Importantly, however, with



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one potential exception, the land residual analysis also indicates that the resulting reduction in residual land value may not affect the economic feasibility of an owner development. The exception may be new construction townhomes, where a 20 percent inclusionary requirement may render a developer economically infeasible. However, this may result from conservative assumptions used in the economic modeling for townhomes.



IV. ANALYSIS OF DEVELOPER INCENTIVES

The findings of the land residual analysis of inclusionary requirements indicate that there is an economic cost to providing inclusionary units. Many jurisdictions offer developers some form of offset to these costs. This section discusses the following incentives that can be offered to developers to offset the costs of complying with inclusionary requirements:

- density bonus;
- alternative unit comparability standards; and,
- reduction in parking requirements.

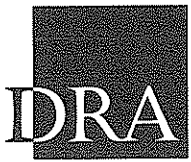
A. Density Bonus

1. Discussion

Providing developers with an increase over the legally permissible density may result in an increase in the economic value of a development. By allowing developers to build more units on a parcel, a development will generate more revenue with a reduction in per unit development costs.

SB1818 revises State Government Code Section 65915 and requires jurisdictions to provide a density bonus from five percent up to 35 percent based on the percentage of affordable units provided with the project. SB1818 provides for density bonuses under the following scenarios:

- a 20 percent density bonus for rental developments with 10 percent low income units. For every one percent increase in affordable units, the developer receives a 1.5 percent density bonus increase up to a maximum 35 percent.
- a 20 percent density bonus for rental developments with five percent very low income units. For every one percent increase in affordable units, the developer receives a 2.5 percent density bonus increase up to a maximum 35 percent.
- a five percent density bonus for planned unit developments or condominium developments with 10 percent moderate income units. For every one percent increase in affordable units, the developer receives a one percent density bonus increase up to a maximum 35 percent.



Density bonuses are also provided for senior housing developments.

In addition, if one of these conditions is met, the jurisdiction must also offer one to three of the following concessions to a developer:

- A reduction in site development standards or a modification of zoning code requirements or architectural design requirements.
- Approval of mixed use zoning.
- Other regulatory incentives or concessions that result in identifiable, financially sufficient, and actual cost reductions.

The number of incentives that must be offered to developers depends on the percentage of affordable units provided by the developer.

This analysis calculates land residual analysis under the following scenarios for rental housing:

- five percent of units set aside for very low households and five percent of units set aside for low income households. This scenario qualifies for a 20 percent density bonus;
- 11 percent of units set aside for very low income households. This scenario qualifies for the maximum 35 percent density bonus; and,
- 15 percent of units set aside for low income households. This scenario qualifies for a 27.5 percent density bonus.

With the land residual analysis for the owner housing prototypes, the following scenarios were examined:

- 10 percent of units set aside for households at or below 120 percent of area median income. Assuming the developments are PUDs or condominiums, this scenario qualifies for a five percent density bonus; and,
- 20 percent of units set aside for households at or below 120 percent of area median income. Assuming the developments are PUDs or condominiums, this scenario qualifies for a 15 percent density bonus.



2. Economic Analysis

Table 14 summarizes revisions to the rental housing prototype based on a 20 percent density bonus. **Table 15** summarizes revisions to the rental housing prototype based on a 27.5 percent density bonus, and **Table 16** summarizes revisions to the rental housing prototype based on a 35 percent density bonus.

Table 17 and **Table 18** summarize revisions to the owner housing prototypes based on density bonuses of five percent and 15 percent.

DRA conducted a land residual analysis of each of these revised prototypes based on the inclusionary housing scenarios used in the land residual analysis for the original housing prototypes.

Table 19 summarizes the results of the land residual analysis for the revised rental housing prototypes under alternative density bonus scenarios. With the rental housing prototype, residual land value was not affected significantly by the density bonuses under current housing market conditions. In the current housing market, land residual value for the rental housing prototype remains negative, i.e. economically infeasible.

One additional consideration with the rental housing prototype is that a density bonus may lead to the need to use structured parking, which substantially increases costs for parking. In this case, the need to provide structured parking will not alter economic feasibility because there are no scenarios where rental housing is financially feasible. With a 20 percent density bonus, the density of the rental housing prototype increases to 28 units per acre. With a 35 percent density bonus, the density of the rental housing prototype increases to 34 units per acre. At 34 units per acre, a significant portion of the parking requirement will have to be accommodated in structured parking, although the actual amount is site specific. As an example, an apartment development at slightly over 37 units per acre developed by BRIDGE Housing resulted in approximately 50 percent of all parking in a structure, with the remaining spaces accommodated with surface parking. At 50 units per acre, almost all parking would have to be accommodated in structured parking.

In Table 19, we assume that one-third of all parking is accommodated in a structure at a 20 percent density bonus. At density bonuses of 27.5 percent and 35 percent, we assume that half of all parking is accommodated in a structure.

Table 14

Housing Prototype Projects
 20 Percent Density Bonus
 City of Vallejo Inclusionary Housing Study

2006

PROTOTYPE	Renter 1 Stacked Flat Family
UNIT COUNT	180 Units
TENURE	Rental
ZONING	RM
RESIDENT POPULATION	Family
TYPE OF PRODUCT	Stacked Flat
CONSTRUCTION TYPE	Wood Frame
DENSITY (DU'S/Acre)	30.0
LAND AREA (Acres)	6.00 Acres
UNITS BY BR COUNT	
One Bedroom	48
Two Bedroom/1 Bath	36
Two Bedroom	66
Three Bedroom	30
UNIT SIZE (Net Square Feet)	
One Bedroom	700
Two Bedroom/1 Bath	900
Two Bedroom	900
Three Bedroom	1,100
Average Square Feet	880
BLDG. SQ. FEET	
Net Living Area	158,400
Community Space	1,500
Total Net Bldg. Square Feet	159,900
TYPE OF PARKING	On grade/Structured
PARKING REQUIREMENT	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	312
SQUARE FEET PER PARKING SPACE	200
TOTAL PARKING SF	62,400

Table 15

Housing Prototype Projects
 27.5 Percent Density Bonus
 City of Vallejo Inclusionary Housing Study

2006

PROTOTYPE	Renter 1
	Stacked Flat Family
UNIT COUNT	191 Units
TENURE	Rental
ZONING	RM
RESIDENT POPULATION	Family
TYPE OF PRODUCT	Stacked Flat
CONSTRUCTION TYPE	Wood Frame
DENSITY (DU'S/Acre)	31.8
LAND AREA (Acres)	6.00 Acres
UNITS BY BR COUNT	
One Bedroom	51
Two Bedroom/1 Bath	38
Two Bedroom	70
Three Bedroom	32
UNIT SIZE (Net Square Feet)	
One Bedroom	700
Two Bedroom/1 Bath	900
Two Bedroom	900
Three Bedroom	1,100
Average Square Feet	880
BLDG. SQ. FEET	
Net Living Area	168,100
Community Space	1,500
Total Net Bldg. Square Feet	169,600
TYPE OF PARKING	On grade/Structured
PARKING REQUIREMENT	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	331
SQUARE FEET PER PARKING SPACE	200
TOTAL PARKING SF	66,200

Table 16

Housing Prototype Projects
 35 Percent Density Bonus
 City of Vallejo Inclusionary Housing Study

2006

PROTOTYPE	Renter 1
	Stacked Flat Family
UNIT COUNT	202 Units
TENURE	Rental
ZONING	RM
RESIDENT POPULATION	Family
TYPE OF PRODUCT	Stacked Flat
CONSTRUCTION TYPE	Wood Frame
DENSITY (DU'S/Acre)	33.7
LAND AREA (Acres)	6.00 Acres
UNITS BY BR COUNT	
One Bedroom	53
Two Bedroom/1 Bath	41
Two Bedroom	74
Three Bedroom	34
UNIT SIZE (Net Square Feet)	
One Bedroom	700
Two Bedroom/1 Bath	900
Two Bedroom	900
Three Bedroom	1,100
Average Square Feet	887
BLDG. SQ. FEET	
Net Living Area	178,000
Community Space	1,500
Total Net Bldg. Square Feet	179,500
TYPE OF PARKING	On grade/Structured
PARKING REQUIREMENT	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	351
SQUARE FEET PER PARKING SPACE	200
TOTAL PARKING SF	70,200

Table 17

**Housing Prototype Projects
5% Density Bonus
City of Vallejo Inclusionary Housing Study**

2006

PROTOTYPE	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
UNIT COUNT	95 Units (one phase of larger development)	105 Units	158 Units	105 Units
TENURE	Owner	Owner	Owner	Owner
ZONING	RH	RS	RS	RM
RESIDENT POPULATION	Family	Family	Family	Family
TYPE OF PRODUCT	Single Family Detached	Single Family Detached	Townhouse	Stacked Flat
CONSTRUCTION TYPE	Wood Frame	Wood Frame	Wood Frame	Wood Frame
DENSITY (DU'S/Acre)	9.5	16.2	21.8	105.0
LAND AREA (Acres)	10.00 Acres	6.5 Acres	7.25 Acres	1.00 Acres
UNITS BY BR COUNT				
One Bedroom	0	0	0	26
Two Bedroom/1 Bath	0	0	0	26
Two Bedroom	0	0	84	32
Three Bedroom	27	47	74	21
Four Bedroom	42	58	0	0
Five Bedroom	26	0	0	0
Six+ Bedroom	0	0	0	0
UNIT SIZE (Net Square Feet)				
One Bedroom	0	0	0	825
Two Bedroom/1 Bath	0	0	0	950
Two Bedroom	0	0	1,300	1,050
Three Bedroom	2,200	1,700	1,800	1,325
Four Bedroom	2,300	2,200	0	0
Five Bedroom	2,500	0	0	0
Six+ Bedroom	0	0	0	0
Average Square Feet	2,326	1,976	1,534	1,025
BLDG. SQ. FEET				
Net Living Area	221,000	207,500	242,400	107,575
Community Space	0	0	0	1,500
Total Net Bldg. Square Feet	221,000	207,500	242,400	109,075
TYPE OF PARKING	Garage	Garage	Garage	Structured parking one level underground
PARKING REQUIREMENT	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	258	268	316	184
SQUARE FEET PER PARKING SPACE	200	200	200	200
TOTAL PARKING SF	51,600	53,600	63,200	36,800

Table 18

**Housing Prototype Projects
15% Density Bonus
City of Vallejo Inclusionary Housing Study**

2006

PROTOTYPE	Owner 1	Owner 2	Owner 3	Owner 4
	Low Density Detached Family	Small Lot Detached Family	Medium Density Attached Family	Stacked Flat Condominium Family
UNIT COUNT	104 Units (one phase of larger development)	115 Units	173 Units	116 Units
TENURE	Owner	Owner	Owner	Owner
ZONING	RH	RS	RS	RM
RESIDENT POPULATION	Family	Family	Family	Family
TYPE OF PRODUCT	Single Family Detached	Single Family Detached	Townhouse	Stacked Flat
CONSTRUCTION TYPE	Wood Frame	Wood Frame	Wood Frame	Wood Frame
DENSITY (DU'S/Acre)	10.4	17.7	23.9	116.0
LAND AREA (Acres)	10.00 Acres	6.5 Acres	7.25 Acres	1.00 Acres
UNITS BY BR COUNT				
One Bedroom	0	0	0	29
Two Bedroom/1 Bath	0	0	0	29
Two Bedroom	0	0	92	35
Three Bedroom	29	52	81	23
Four Bedroom	46	63	0	0
Five Bedroom	29	0	0	0
Six+ Bedroom	0	0	0	0
UNIT SIZE (Net Square Feet)				
One Bedroom	0	0	0	825
Two Bedroom/1 Bath	0	0	0	950
Two Bedroom	0	0	1,300	1,050
Three Bedroom	2,200	1,700	1,800	1,325
Four Bedroom	2,300	2,200	0	0
Five Bedroom	2,500	0	0	0
Six+ Bedroom	0	0	0	0
Average Square Feet	2,328	1,974	1,534	1,023
BLDG. SQ. FEET				
Net Living Area	242,100	227,000	265,400	118,700
Community Space	0	0	0	1,500
Total Net Bldg. Square Feet	242,100	227,000	265,400	120,200
TYPE OF PARKING	Garage	Garage	Garage	Structured parking one level underground
PARKING REQUIREMENT	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit 3 per 3BR+ unit	2 per 2/3BR unit	1 per 1BR unit 2 per 2/3BR unit
NO. OF PKG. SPACES	283	293	346	203
SQUARE FEET PER PARKING SPACE	200	200	200	200
TOTAL PARKING SF	56,600	58,600	69,200	40,600

Table 19

Residual Land Value Per Square Foot Site Area
 Rental Housing Prototype with Alternative Inclusionary Housing Requirements and Density Bonuses
 Incentives and Offsets
 City of Vallejo Inclusionary Housing Analysis
 2006

Prototype	Renter 1 Stacked Flat
Inclusionary Requirement, Alternative 1: 5% of units at 50% of area median income 5% of units at 80% of area median income 20 percent density bonus Land Value Per Square Foot	(\$63.36)
Inclusionary Requirement, Alternative 2: 5% of units at 50% of area median income 5% of units at 80% of area median income 20 percent density bonus 10% Reduction in Affordable Unit Size Land Value Per Square Foot	(\$62.73)
Inclusionary Requirement, Alternative 3: 11% of units at 50% of area median income 35 percent density bonus Land Value Per Square Foot	(\$72.41)
Inclusionary Requirement, Alternative 4: 11% of units at 50% of area median income 35 percent density bonus 10% Reduction in Affordable Unit Size Land Value Per Square Foot	(\$71.74)
Inclusionary Requirement, Alternative 5: 15% of units at 80% of area median income 27.5 percent density bonus Land Value Per Square Foot	(\$70.14)
Inclusionary Requirement, Alternative 6: 15% of units at 80% of area median income 27.5 percent density bonus 10% Reduction in Affordable Unit Size Land Value Per Square Foot	(\$69.17)
No Inclusionary Requirement	(\$48.08)

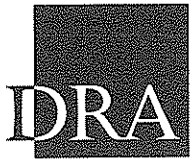


Table 20 summarizes the results of the land residual analysis for the revised owner housing prototypes under two alternative density bonus scenarios. With a five percent density bonus and a 10 percent inclusionary set aside for moderate income households, the value of the density bonus almost makes up for the lost revenue that results from the inclusionary requirements. With a 15 percent density bonus and a 20 percent inclusionary set aside for moderate income households, a similar result occurs. The density bonus provides substantial value to the developer.

The one exception is with the higher density condominium prototype. We assume that a 15 percent increase in density results in changing construction type from wood frame to steel frame. Construction costs increase from \$125 per square foot to \$140 per square foot, with the increase in costs of construction substantially reducing land residual value. However, the prototype remains economically feasible under current market conditions.

Although a density bonus can be valuable to a developer, in some situations it is difficult for a developer to take advantage of density bonuses. For example, in some single family detached developments, increases in density can reduce the market appeal of a development. In some cases, a density bonus results in a different housing or construction type, rendering the density bonus either not attractive or even unusable to developers. For example, applying a 15 percent density bonus to the condominium prototype would result in a steel frame construction rather than wood frame construction, dramatically increasing costs. Alternatively, higher densities can affect the type of parking provided on a site, which can increase costs if surface parking must now be changed to structured parking.

B. Alternative Unit Comparability Standards

1. Discussion

Jurisdictions may choose to allow developers to use alternative comparability standards for the affordable units to reduce the cost of constructing these units. Common alternatives include:

- allowing the affordable units to be smaller than the market rate units; and,
- using more modest grades of interior finishes in the affordable units.

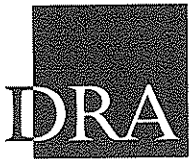
Reduction in unit size results in greater cost savings than allowing the use of more modest grades of interior finishes in the affordable units. However, when a jurisdiction allows a developer to reduce the size of the affordable units, it should set a minimum standard to ensure some degree of comparability with the market rate units. In addition to comparability standards, households should have the same access to project amenities.

Table 20

**Residual Land Value Per Square Foot Site Area
Owner Housing Prototypes with Alternative Inclusionary Housing Requirements and Density Bonuses
Incentives and Offsets
City of Vallejo Inclusionary Housing Analysis
2006**

Prototype	Owner 1	Owner 2	Owner 3	Owner 4
	Low Density Detached	Small Lot Detached	Medium Density Attached	Stacked Flat Condominium
Inclusionary Requirement, Alternative 1: 10% of units at 110% of area median income 5% density bonus				
Land Value Per Square Foot	\$34.43	\$66.80	\$31.84	\$126.00
Inclusionary Requirement, Alternative 2: 10% of units at 110% of area median income 5% density bonus 10% Reduction in Size of Affordable Units				
Land Value Per Square Foot	\$34.84	\$67.44	\$32.77	\$129.15
Inclusionary Requirement, Alternative 3: 20% of units at 110% of area median income 15% density bonus				
Land Value Per Square Foot	\$34.89	\$67.59	\$31.46	\$64.84
Inclusionary Requirement, Alternative 4: 20% of units at 110% of area median income 15% density bonus 10% Reduction in Size of Affordable Units				
Land Value Per Square Foot	\$35.71	\$68.88	\$33.32	\$71.18
No Inclusionary Requirement	\$36.57	\$69.93	\$34.42	\$130.97
Market Land Sales Comparables	\$9.00	\$20.00	\$30.00	\$35.00

Source: David Paul Rosen & Associates



2. Economic Analysis

Table 21 summarizes examples of cost savings resulting from a reduction in unit sizes by ten percent. Cost savings range from approximately \$11,000 per affordable unit for the Stacked Flat rental prototype to almost \$19,600 per unit for the Medium Density Attached owner prototype. These savings results from lower hard construction costs, general contractor profit and overhead, and construction loan interest.

Some developers question the value of allowing smaller units, because of redesign requirements. However, if the developer incorporates this concession in the design process, this strategy can be used to reduce construction costs.

C. Reduction in Parking Requirements

One potential cost saving measure for developers is a reduction in parking requirements. This offset is especially valuable with developments that have structured parking garages. Reducing the number of required parking spaces reduces the size of the parking structure which can be expensive to construct.

With the higher density condominium prototype, we estimate costs at \$20,000 per space. If the parking requirement was reduced to 1.5 spaces per unit (from 1.75 spaces per unit), the developer would construct space for 150 parking spaces, which is 25 spaces fewer than current parking requirements. In theory, a developer would save \$500,000 with a reduction in parking requirements. In practice, the number of parking spaces is also related substantially to the footprint of the building and garage. Therefore, it is not a certainty that a developer will save any money from a lower parking requirement.

D. "Packaging" Developer Incentives

Most jurisdictions offer a variety of offsets and incentives in their inclusionary housing programs. Developers are typically allowed to take advantage of more than one offset.

DRA modeled residual land values assuming that developers can take advantage of more than one incentive. **Table 19** compares residual land value for the rental housing prototype assuming:

- no inclusionary requirements;
- inclusionary requirements with three alternative density bonuses as the only incentives; and,
- inclusionary requirements with density bonus and reduction in size of affordable units by 10 percent.

Table 21

**Potential Cost Savings from Reduction in Affordable Unit Size
10% Inclusionary Requirement
City of Vallejo Inclusionary Housing Study**

2006

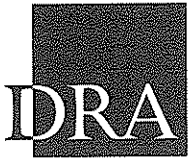
PROTOTYPE	Renter 1 Stacked Flat	Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
UNIT COUNT	150 Units	90 Units	100 Units	150 Units	100 Units
Market Rate Units (net sf)					
One Bedroom	700	0	0	0	825
Two Bedroom/1 Bath	900	0	0	0	950
Two Bedroom	950	0	0	1,300	1,050
Three Bedroom	1,100	2,200	1,700	1,800	1,325
Four Bedroom	0	2,300	2,200	0	0
Five Bedroom	0	2,500	0	0	0
Affordable Units (net sf)					
One Bedroom	630	0	0	0	743
Two Bedroom/1 Bath	810	0	0	0	855
Two Bedroom	855	0	0	1,170	945
Three Bedroom	990	1,980	1,530	1,620	1,193
Four Bedroom	0	2,070	1,980	0	0
Five Bedroom	0	2250	0	0	0
Construction Costs per SF (incl. hard construction costs, general contractor overhead and profit, construction loan interest)	\$122	\$85	\$93	\$128	\$135
Inclusionary Requirement @ 10%					
Number of Affordable Units					
One Bedroom	4	0	0	0	3
Two Bedroom/1 Bath	3	0	0	0	2
Two Bedroom	6	0	0	8	3
Three Bedroom	2	3	5	7	2
Four Bedroom	0	3	5	0	0
Five Bedroom	0	3	0	0	0
Total Affordable Units	15	9	10	15	10
Net Savings in SF	1,340 S.F.	2,100 S.F.	1,950 S.F.	2,300 S.F.	1,018 S.F.
Total Cost Savings	\$163,267	\$179,159	\$180,584	\$293,300	\$137,189
Cost Savings per Affordable Unit	\$10,884	\$19,907	\$18,058	\$19,553	\$13,719



Table 20 compares residual land value for the owner housing prototypes assuming:

- no inclusionary requirements;
- inclusionary requirements with two alternative density bonuses as the only incentive; and,
- inclusionary requirements with density bonus and reduction in size of affordable units by 10 percent.

Tables 19 and **20** show that while density bonuses can have a beneficial effect on land residual values, reduction in the size of affordable units does not have a material effect. Importantly, under all scenarios with the potential exception of the Medium Density Attached owner housing prototype under a 20 percent inclusionary requirement, the owner housing prototypes are economically feasible even without incentives and offsets provided to developers. A density bonus with the Stacked Flat Condominium prototype, however, substantially reduces land residual value. As discussed earlier, if a density bonus requires the use of a more expensive construction type, such as with the Condominium prototype, then the density bonus can actually have a negative economic effect on a development.



V. ANALYSIS OF ALTERNATIVE COMPLIANCE MEASURES

Inclusionary housing programs are adopted by jurisdictions to increase the availability of housing affordable to very low, low, and moderate income persons. To attain this goal, the simplest method is to require developers to build affordable units on the same site as the market rate units.

However, for a variety of reasons, a jurisdiction should consider alternative means for complying with inclusionary requirements. For example, including affordable housing units in luxury single family detached housing development can be an inefficient means for providing affordable housing.

Recognizing the importance of alternative compliance measure, almost all jurisdictions offer developers a degree of flexibility with complying with inclusionary requirements. Alternative compliance measures offer developers opportunities to reduce the economic impact of inclusionary requirements.

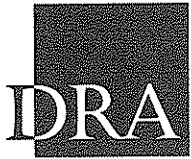
According to a survey of inclusionary housing programs by the Northern California Association of Nonprofit Housing, the most commonly used alternative compliance measures are:

- payment of fees in lieu of constructing affordable housing units;
- off-site construction of inclusionary units; and,
- dedication of land to a nonprofit or the jurisdiction for the purpose of constructing affordable housing.

This section analyzes the strengths and weaknesses of two alternative compliance measures:

- in lieu fees: payment of fees to a jurisdiction in lieu of constructing affordable housing units; and,
- off-site compliance: construction of affordable units at a site other than the market rate development.

Land dedication is not analyzed because of several issues with offering this compliance option. Notably, additional subsidy is required to construct affordable units even with the provision of free land. In other words, free land is insufficient to bridge the gap between market rate units and affordable units.



A. In lieu Fees

1. Advantages of In lieu Fee Option

Most jurisdictions offer an in lieu fee option that permits developers to pay fees to the jurisdiction in lieu of constructing affordable housing units.

In lieu fees are useful with jurisdictions that apply inclusionary requirements to small developments. For example, if a jurisdiction imposes a ten percent inclusionary requirement yet imposes inclusionary requirements on projects of five units and larger, the inclusionary requirement results in a fractional unit of 0.5 units on a five unit development. Rather than building an inclusionary unit, a developer can pay an in lieu fee to the jurisdiction.

An in lieu fee option is simple to administer by City staff. Once a schedule of fees is developed then it is a simple matter to assess the fee on a development.

In lieu fees provide jurisdictions with flexibility with its affordable housing production. A jurisdiction can decide how to use these fees in a manner that best fits the community's needs. For example, in lieu fees can be used for downpayment and mortgage assistance for first-time homebuyers, constructing affordable rental housing, or constructing affordable owner housing. In contrast, on-site compliance means that the affordable housing product type will be similar to the market rate housing units.

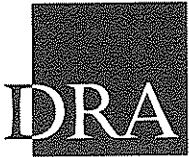
2. Disadvantages

In many cases, in lieu fees are set at amounts that provide developers with incentive to pay the fees. To prevent this issue, in lieu fees at a minimum should be set at the affordability gap amount.

For rental housing, the affordability gap is equal to the amount of capital required to develop housing affordable to very low and low income households and the amount the targeted households can afford to pay for rental housing. For owner housing, the affordability gap is the difference between the cost of constructing a home and the price affordable to a targeted household.

If a jurisdiction sets fees at below the affordability gap, developers will opt to pay the fees rather than build the affordable units because it is cheaper for the developer to pay the fee. For this reason, low fees will result in fewer affordable units when compared to on-site compliance.

On-site compliance also means that affordable housing units will be constructed within a specific time frame because jurisdictions typically require affordable units to be built



concurrently with market rate units. Importantly, the use of in lieu fees depends on affordable housing development opportunities. Development opportunities are not within the control of a jurisdiction; it is possible that several years will pass before a jurisdiction is able to use in lieu fees to fund an affordable housing development.

An important goal of an inclusionary housing program is economic integration. The construction of affordable units within a market rate development results in a single development can accommodate a mix of household income levels. Payment of in lieu fees means that a developer does not provide affordable units on-site.

3. Criteria for Development of an In Lieu Fee Schedule

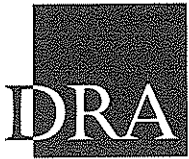
To calculate an appropriate in lieu fee schedule that avoids some of the issues discussed above, the following criteria can be used to develop an in lieu fee schedule:

- the in lieu fee for each inclusionary unit obligation should be sufficient to allow a jurisdiction to provide an affordable unit to a very low or low income household for a rental development, or to a moderate income household for an owner development;
- in lieu fee amounts should not provide developers with incentive to pay fees instead of provide affordable inclusionary units; and,
- the methodology for calculating the in lieu fee schedule should be simple to administer to allow for updating of the schedule over time. Because housing market conditions change over time, jurisdictions should adjust in lieu fee schedules regularly to accommodate these changes.

a. Alternative Methodologies for Calculating In Lieu Fees

Using the criteria discussed above, there are two alternative methods for calculating in lieu fees for new construction housing:

- in lieu fees should equal the difference between the median price of market rate homes in the City of Vallejo and the price affordable to a very low, low, or moderate income household; and,
- in lieu fees should equal the difference between the cost of constructing a market rate unit in the City and the amount affordable to a very low, low, or moderate income household.



Method 1: Fees Equal Difference Between Market Sales Price and Affordable Home Price

According to Dataquick, the median price for all homes sold in Vallejo for the period September 2005 to August 2006 was \$436,500, based on the sales of 2,666 homes. An affordable home price to a moderate income household is \$282,441 for a household of five persons. An affordable home price to a low income household is \$140,199 for a household of five persons. A household of five persons is the occupancy standard for a four bedroom home using California Redevelopment Law standards. Additional assumptions used to calculate affordable home price are as follows:

- affordable home expense: 35 percent of 110 percent of area median income, based on California Redevelopment Law standards for moderate income households, 30 percent of 70 percent of area median income for low income households;
- utility allowances of \$195 monthly, based on gas heating, cooking, water heating; other electric; water; sewer; trash collection; range/microwave; and, refrigerator;
- homeowners association fees of \$200 monthly;
- interest rate of 6.48 percent with a 30 year mortgage;
- downpayment of ten percent;
- property taxes at 1.2 percent of affordable home price; and,
- property insurance of \$125 monthly.

This methodology has the benefit of providing incentive to developers to construct affordable units rather than pay in lieu fees. Additionally, updating this fee is methodologically simple.

Table ES-4 in the Executive Summary provides per developed unit in lieu fees equal to the difference between market home prices and affordable home prices and based on alternative inclusionary requirements.

Table 22 summarizes median home prices for Vallejo for 2006. **Table 23** summarizes the affordable home price to low and moderate income households in Vallejo, assuming a family size of five persons.

Table 22

**Median Homes Sales
City of Vallejo Inclusionary Housing Study
2006**

	All Homes Sales, September 2005 to August 2006	All Homes Sales, March 2006 to August 2006
Median Sales Price	\$436,500	\$432,000
Number of Sales	2,666	1,283

Source: Dataquick

Table 23

**Affordable Home Price
Low and Moderate Income Households
City of Vallejo Inclusionary Housing Analysis
2006**

Income	Affordable Home Price
Low Income Household (five persons, 70% of area median income)	\$140,199
Moderate Income Household (five persons, 110% area median income)	\$282,441

Assumptions:

1. Solano County area median income, 2006 (family of four): \$74,000
2. Definition of household expense: For moderate income households, 35% of household income goes toward mortgage payment, property taxes, homeowners insurance, homeowners association/maintenance allowance. For low income households, 30 percent of income goes toward housing expenses
3. Mortgage interest rate: 6.48%, 30 year fixed rate for August 24, 2006 (Freddie Mac survey).
4. Property insurance: \$1,500 annually (\$125 monthly).
5. Homeowners association/monthly maintenance allowance: \$200 per month.
6. Property taxes: 1.2% of affordable home price.
7. Downpayment: 10% of affordable home price.
8. Occupancy standard: based on California Redevelopment Law standard, one person per bedroom plus one.
9. Although moderate income households are defined at up to 120 percent of area median income, California Redevelopment Law defines housing expense targeting households at 110 percent of area median income. Low income households are defined at up to 80 percent of area median income. However, California Redevelopment Law defines housing expense targeting households at 70 percent of area median income.

Source: David Paul Rosen & Associates

Method 2: Fees Equal Difference Between the Cost of Developing a Market Rate Unit and the Amount of Financing Supported by an Affordable Unit

This method employs the use of an affordability gap analysis. In an affordable gap analysis, the cost of developing a market rate unit is calculated. Second, the amount a tenant or homebuyer within the target income range(s), adjusted for family size, can afford to contribute to the cost of renting or owning a unit is calculated. The difference between these two amounts is the affordability gap.

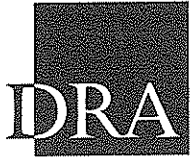
For the rental housing prototype, the gap analysis approach is used to measure the difference between what households of different income levels can afford to pay for rental housing and what it costs to produce such housing in Vallejo. For the owner housing prototypes, the affordability gap is the difference between the cost of developing a home and the price affordable to a targeted household.

Importantly, the cost estimates developed for the rental housing prototype may not represent the actual costs of providing affordable housing units under an inclusionary housing program. Many cities with inclusionary housing programs allow developers to reduce costs on affordable units through strategies such as allowing the affordable units to be smaller than the market rate units, eliminating luxury items from the affordable units, or using less costly interior finishes in the affordable units. The cost estimates in this analysis assume that affordable units cost exactly the same as the market rate units. These cost estimates represent a high-end estimate for an affordable unit.

One important issue regarding rental housing development costs is the difficulty in determining land values for rental housing. As demonstrated in the land residual analysis, rental housing results in a negative residual land value. Therefore, in the current Vallejo housing market, land is not purchased for rental housing uses. Land is purchased for uses such as owner housing. The land residual analysis shows that most, if not all, of the four owner housing prototypes ranging from single family detached homes to condominiums, are economically feasible in the current market. Because land is not currently purchased for rental housing uses, the rental housing gap analysis assumes a land cost of \$392,000 per acre, which is the lowest land cost estimate for the four owner housing prototypes. This is the land cost assumption used for the low density single family detached prototype. Using this land cost as the assumption for the rental housing underestimates actual land price for rental housing because of the need to upzone such property for rental housing purposes.

For owner housing, the second step is to estimate construction costs. These construction costs are estimated in the land residual analysis, along with estimates of land costs.

The next step in the gap analysis establishes the housing expenses paid by the tenants and owners. These costs can be categorized into operating costs, and financing or mortgage obligations. For renter households, housing expense is defined as rent less an allowance for



tenant paid utilities. For owner households, housing expense is defined as utilities, property maintenance, property taxes, property insurance, assessments paid by homeowners, and insurance. These calculations are also a part of the land residual analysis.

Financing or mortgage obligations are the costs associated with the purchase or development of the housing unit itself. For the renter housing prototype, the gap analysis calculates the difference between total development costs and the conventional mortgage supportable by net operating income from restricted rents. For the owner housing prototypes, the gap is the difference between the estimated construction cost of a home and the mortgage supportable by a moderate income household plus the moderate income household's downpayment.

Table ES-5 in the Executive Summary provides per developed unit in lieu fees equal to the affordability gap assuming a 10 percent inclusionary requirement and a 20 percent inclusionary requirement.

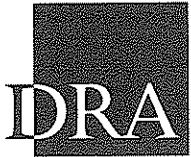
B. Off-Site Compliance

1. Advantages

Development of affordable units off-site may be beneficial to a developer. Off-site construction of units may be less expensive than the development of on-site inclusionary units if the housing product type of the market rate development is expensive. To maintain a consistent "character" for a project and to maintain its perceived attractiveness, a developer may feel it is necessary to construct affordable units comparable in quality to the market rate units. Off-site construction would be less expensive because the developer can build lower cost units in an off-site affordable housing development.

Off-site compliance may also provide a developer an opportunity to take advantage of lower land costs at a separate location, although in Vallejo the consistency of land costs may render this potential advantage moot.

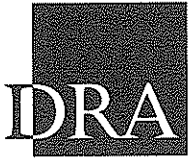
From the City's perspective, there are two reasons off-site compliance can be an attractive option. First, more affordable units may be built under an off-site compliance option if a developer can secure subsidies, such as low income housing tax credits, to build additional affordable units. Second, off-site compliance allows developers to partner with nonprofit affordable housing developers. Partnerships with nonprofit developers can be beneficial because of nonprofit developers' expertise in securing additional subsidies and developing affordable units. Additionally, nonprofit developers' long-term interest in maintaining quality affordable housing developments benefits the City.



2. Disadvantages

Many jurisdictions do not consider off-site compliance an attractive alternative compliance measure for two reasons. Similar to the payment of in lieu fees, off-site construction means that affordable units will not be integrated with market rate units. Again, one public policy goal of an inclusionary housing program is to provide a mix of housing affordability levels in a single development.

Second, off-site compliance can be difficult to enforce. A jurisdiction can require off-site affordable units to be constructed either before or concurrently with the construction of the market rate units. In practice, this requirement can be difficult to enforce. Because of the complexities of the development process, developers may not be able to synchronize the construction of two projects. However, a developer has economic incentive to complete the market rate units and no incentive to construct the affordable units. Therefore, developers will seek to build the market rate units before the affordable units. A jurisdiction may not have any effective methods to enforce compliance with inclusionary requirements once the market rate units are constructed.



VI. SURVEY OF INCLUSIONARY HOUSING ORDINANCES OF LOCAL JURISDICTIONS

Inclusionary housing programs have become common practice among California jurisdictions to address their affordable housing needs. The Northern California Association of Nonprofit Housing surveyed inclusionary housing programs statewide and found 107 jurisdictions that impose inclusionary requirements.

In the San Francisco Bay Area, there are a number of jurisdictions that have adopted inclusionary housing programs to address their affordable housing problem. City staff surveyed seven local jurisdictions that have adopted inclusionary housing programs to gain an understanding of the requirements these jurisdictions impose.

City staff surveyed the following jurisdictions:

- American Canyon;
- Cotati;
- Napa;
- Santa Rosa;
- Rohnert Park;
- Petaluma;
- Benecia

A. Requirements Imposed on Developers

The cities surveyed impose 10 percent to 20 percent inclusionary requirements. Most jurisdictions target very low and low income households (50 to 80 percent of area median income) for rental housing and low and moderate income households (80 to 120 percent of area median income) for ownership units. Certain cities exempt developments of 10 to 15 units or less from inclusionary requirements, although some cities impose lower thresholds. Santa Rosa and Cotati do not exempt any housing developments, including single family homes.

These jurisdictions impose long-term affordability requirements are imposed on both ownership and rental developments. With ownership units, cities generally impose resale restrictions, controlling the appreciation of home prices. Most cities impose thirty year



resale restrictions, although Rohnert Park imposes 45 year resale restrictions. American Canyon now imposes 40 year resale restrictions, an increase from the 10 year restriction originally adopted.

With rental developments, cities impose affordability requirements ranging from 30 years to permanent affordability, which is imposed by Napa. The City of Rohnert Park imposes 55 year rent restrictions. American Canyon recently updated their ordinance to impose 40 year rent restrictions, increasing the term from 10 year rent restrictions.

B. In-lieu Fees

All jurisdictions surveyed by City staff offer in lieu payment options. However, some jurisdictions impose restrictions on the ability of developers to use the in lieu fee option. For example, the City of Napa requires developers to demonstrate that providing affordable inclusionary units is economically infeasible. Cotati only allows payment of fees with developments of nine units and smaller. Santa Rosa allows payment of fees on developments with densities higher than 15 units to the acre.

American Canyon imposes the highest in lieu fees. Recently adopted, American Canyon now imposes an in lieu fee of \$38,770 per developed unit to encourage developers to build affordable units rather than pay in lieu fees. Rather than using a flat fee, the City of Napa imposes a fee based on two percent of the construction cost of the housing development.

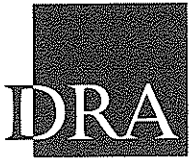
In lieu fees of jurisdictions surveyed by DRA include:

- Pleasant Hill: \$27,275 per developed unit (based on a ten percent inclusionary requirement for very low income households);
- Pittsburg: \$15,400 per developed unit for rental housing, \$20,650 per developed unit for developments with densities higher than seven units/acre; and,
- Brentwood: no in lieu fee allowed for rental developments, \$23,900 per developed unit for owner housing developments.

C. Additional Compliance Options

Most jurisdictions offer compliance options in addition to constructing inclusionary units on-site. Similar to in lieu fees, cities have different strategies when using alternative compliance options. Some cities, such as Petaluma, provide a number of options to tailor compliance for a particular developer.

Other commonly used compliance options are:



- off-site construction of affordable units;
- land dedications to a nonprofit or the jurisdiction; and,
- credit for affordable units built at another location within the jurisdiction.

All jurisdictions surveyed offer off-site construction of affordable units as a compliance option. Additionally, all jurisdictions surveyed offer land dedication as a compliance option.

Just over half of the jurisdictions surveyed offer developer credit transfers as a compliance option. The cities of American Canyon, Benecia, Rohnert Park, and Petaluma offer this compliance option, while Cotati, Napa, and Santa Rosa do not.

D. Offsets/Incentives Provided to Developers

All jurisdictions offer some offsets and/or incentives to developers constructing the inclusionary units. In most cases, a density bonus for affordable housing development is offered.

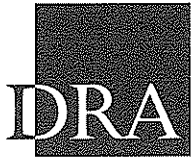
Offsets and/or incentives other than density bonuses provided to developers include:

- reductions in development standards, such as reductions in setbacks and parking space ratios;
- fee waivers or deferrals; and,
- design modifications, such as reduction in interior finish quality.

Some cities make it clear that financial assistance will not be offered to developers. For example, Benecia's ordinance states that it is not the intention of the City to provide subsidies to assist a developer with complying with inclusionary requirements. The City of American Canyon recently revised its ordinance to eliminate language that allowed the City to provide subsidies to developers meeting inclusionary requirements.

E. Long-Term Affordability through City First Right of Refusal

To ensure long-term affordability of ownership units, some jurisdictions require developers to offer the city a first right of refusal to purchase ownership units when an affordable unit is re-sold. Napa incorporates this type of provision in its ordinance.



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These provisions are important because a city's first right of refusal makes it easy for an owner of an inclusionary unit to sell the home if the seller cannot easily identify an income-eligible purchaser. As we summarized earlier, most cities impose long-term resale restrictions on inclusionary units.

Table 24 provides a summary of local jurisdictions' inclusionary housing programs.

Table 24
Sample Inventory of North Bay Jurisdictions' Inclusionary Zoning Ordinances.xls
 A Comparison of Key Features

Jurisdiction	Applies to Projects with More than _____ Units	Inclusionary Requirement	Targeted Income Groups		Term of Affordability: Term of Sale Restrictions		Alternatives to Building Affordable Units				Notes	Units Developed through Inclusionary Housing Program
			Rental Units	For-Sale Units	Rental Units	For-Sale Units	In Lieu Fees	Off-Site Allowance	Land Dedication Allowance	Developer Credit Transfer		
American Canyon	5	10%	Very Low and Low income: at least 50% very low income	Low	40 years	40 years	Yes	Yes	Yes	Offer development reduction in standards and deferral of fee payments to reduce financial impact	Information not available	
Benicia	10	10%	Very Low and Low income: at least 50% very low income	Very Low and Low: at least 50% very low income	30 years	30 years	Yes	Yes	Yes	Guidelines for the distribution of 1-, 2-, 3 and 4-bedroom units in developments with fewer than 10 units.	Information not available	
Cotati	0	20%	Very Low, Low and Moderate Income: 1/3 very low 1/3 low income 1/3 moderate	Very Low, Low and Moderate Income: 1/3 very low 1/3 low income 1/3 moderate	30 years	30 years	Only for developments < 9 units	Yes	No	Alternatives could be used in combination or individually. Affordable Housing Plan is used to identify which alternative would better serve the intent of the code.	Information not available	
*City of Napa	10	10	Low, Moderate Income	Low, Moderate Income	In perpetuity	30 years, with transfer of home, term of restrictions starts again	Yes	Yes	No	Available for single-family projects where inclusionary requirements deemed infeasible. Sliding scale fee equals 2% of the construction cost.	200 - 250	

Table 24
Sample Inventory of North Bay Jurisdictions' Inclusionary Zoning Ordinances.xls
 A Comparison of Key Features

Jurisdiction	Applies to Projects with More than _____ Units	Inclusionary Requirement	Targeted Income Groups		Term of Affordability, Term of Sale Restrictions		Alternatives to Building Affordable Units					Notes	Units Developed through Inclusionary Housing Program
			Rental Units	For-Sale Units	Rental Units	For-Sale Units	In Lieu Fees	Off-Site Allowance	Land Dedication Allowance	Developer Credit Transfer			
Rohnert Park	5	15%	Very Low, Low Income: at least 50% very low income	Low, Moderate Income: at least 50% low income	55 years	45 years	Yes	Yes	Yes	Yes	Yes	Most developers do not take advantage of compliance options; they build inclusionary units.	≤100
Petaluma	5	15%	Low Income	Moderate Income	30 years	30 years	Determined by square footage and applies to units between 640 and 4,000 sq. ft. Minimum fee is \$2,400 (for 640 sq. ft.) to \$23,500 (for 4,000 sq. ft.).	Yes	Yes	Yes	Yes	Petaluma also offers customized alternatives on a case-by-case basis.	1000+
Santa Rosa	0	15%	Low Income	Low Income	30 years	30 years	Current fee schedule is \$819 for a 910 sq. ft. unit and \$10,423 for a 2,000 sq. ft. unit.	Yes, but affordable units must be constructed within the same City "quadrant" and inclusionary unit requirement increases to 20 percent.	Yes, but sites must be at least 7.5% to 10% of the area of developer's net acreage.	No	No		538 (300+ in progress)

*Napa County's Ordinance is very similar to that of the City of Napa
 Solano County jurisdictions lacking Inclusionary Zoning Ordinances: County of Solano, City of Dixon, City of Fairfield, City of Suisun City, City of Vacaville, City of Vallejo

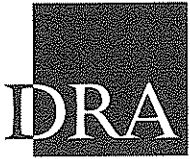
Source: City of Vallejo



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ATTACHMENT A

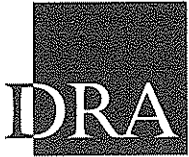
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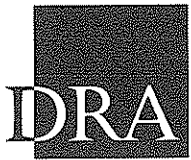


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Table A-1
Mix of Market Rate and Inclusionary Units
10% Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1 Stacked Flat	Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Units by Bedroom Count	Total:	150	90	100	150	100
One Bedroom		40	0	0	0	25
Two Bedroom/1 Bath		30	0	0	0	25
Two Bedroom/2 Bath		55	0	0	80	30
Three Bedroom		25	25	45	70	20
Four Bedroom		0	40	55	0	0
Five Bedroom		0	25	0	0	0
Six+ Bedroom		0	0	0	0	0
Market Rent Units						
One Bedroom		36	0	0	0	22
Two Bedroom/1 Bath		27	0	0	0	23
Two Bedroom/2 Bath		49	0	0	72	27
Three Bedroom		23	22	40	63	18
Four Bedroom		0	37	50	0	0
Five Bedroom		0	22	0	0	0
Six+ Bedroom		0	0	0	0	0
Total		135	81	90	135	90
Inclusionary Units	10%					
One Bedroom		4	0	0	0	3
Two Bedroom/1 Bath		3	0	0	0	2
Two Bedroom/2 Bath		6	0	0	8	3
Three Bedroom		2	3	5	7	2
Four Bedroom		0	3	5	0	0
Five Bedroom		0	3	0	0	0
Six+ Bedroom		0	0	0	0	0
Total		15	9	10	15	10

Source: David Paul Rosen & Associates

Table A-2
Mix of Market Rate and Inclusionary Units
11 % Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1
		Stacked Flat
Units by Bedroom Count	Total:	150
One Bedroom		40
Two Bedroom/1 Bath		30
Two Bedroom/2 Bath		55
Three Bedroom		25
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Market Rent Units		
One Bedroom		36
Two Bedroom/1 Bath		27
Two Bedroom/2 Bath		49
Three Bedroom		22
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Total		134
Inclusionary Units	11%	
One Bedroom		4
Two Bedroom/1 Bath		3
Two Bedroom/2 Bath		6
Three Bedroom		3
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Total		16

Source: David Paul Rosen & Associates

Table A-3
Mix of Market Rate and Inclusionary Units
15% Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1
		Stacked Flat
Units by Bedroom Count	Total:	150
One Bedroom		40
Two Bedroom/1 Bath		30
Two Bedroom/2 Bath		55
Three Bedroom		25
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Market Rent Units		
One Bedroom		34
Two Bedroom/1 Bath		25
Two Bedroom		47
Three Bedroom		21
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Total		127
Inclusionary Units		
	15%	
One Bedroom		6
Two Bedroom/1 Bath		5
Two Bedroom		8
Three Bedroom		4
Four Bedroom		0
Five Bedroom		0
Six+ Bedroom		0
Total		23

Source: David Paul Rosen & Associates

Table A-4
Mix of Market Rate and Inclusionary Units
20% Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1	Owner 2	Owner 3	Owner 4
		Low Density Detached	Small Lot Detached	Medium Density Attached	Stacked Flat Condominium
Units by Bedroom Count	Total:	90	100	150	100
One Bedroom		0	0	0	25
Two Bedroom/1 Bath		0	0	0	25
Two Bedroom/2 Bath		0	0	80	30
Three Bedroom		25	45	70	20
Four Bedroom		40	55	0	0
Five Bedroom		25	0	0	0
Six+ Bedroom		0	0	0	0
Market Rent Units					
One Bedroom		0	0	0	20
Two Bedroom/1 Bath		0	0	0	20
Two Bedroom/2 Bath		0	0	64	24
Three Bedroom		20	36	56	16
Four Bedroom		32	44	0	0
Five Bedroom		20	0	0	0
Six+ Bedroom		0	0	0	0
Total		72	80	120	80
Inclusionary Units	20%				
One Bedroom		0	0	0	5
Two Bedroom/1 Bath		0	0	0	5
Two Bedroom/2 Bath		0	0	16	6
Three Bedroom		5	9	14	4
Four Bedroom		8	11	0	0
Five Bedroom		5	0	0	0
Six+ Bedroom		0	0	0	0
Total		18	20	30	20

Source: David Paul Rosen & Associates

Table A-5
Market Rent Assumptions
Rental Housing Prototype
City of Vallejo Inclusionary Housing Analysis
2006

<u>Prototype</u>	Renter 1	<u>Stacked Flat</u>
Per Unit Monthly Market Rent		
One Bedroom		\$950
Two Bedroom/1 Bath		\$1,060
Two Bedroom/2 Bath		\$1,225
Three Bedroom		\$1,310
Per Sq. Ft. Monthly Market Rent		
One Bedroom		\$1.36
Two Bedroom/1 Bath		\$1.18
Two Bedroom/2 Bath		\$1.29
Three Bedroom		\$1.19

Source: REALFACTS; David Paul Rosen & Associates

Table A-6
Affordable Rent Assumptions
Very Low and Low Income Units
50% and 80% of Area Median Income
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Analysis
2006

<u>Prototype</u>	<u>Renter 1</u> <u>Stacked Flat</u>
Per Unit Monthly Affordable Rent, 50% of Area Median Income	
One Bedroom	\$662
Two Bedroom/1 Bath	\$736
Two Bedroom/2 Bath	\$736
Three Bedroom	\$817
Per Sq. Ft. Monthly Affordable Rent, 50% of Area Median Income	
One Bedroom	\$0.95
Two Bedroom/1 Bath	\$0.82
Two Bedroom/2 Bath	\$0.77
Three Bedroom	\$0.74
Per Unit Monthly Affordable Rent, 80% of Area Median Income (1)	
One Bedroom	\$810
Two Bedroom/1 Bath	\$902
Two Bedroom/2 Bath	\$1,002
Three Bedroom	\$1,065
Per Sq. Ft. Monthly Affordable Rent, 80% of Area Median Income (1)	
One Bedroom	\$1.16
Two Bedroom/1 Bath	\$1.00
Two Bedroom/2 Bath	\$1.05
Three Bedroom	\$0.97

(1) Per California Redevelopment Law, affordable rent for lower income households (up to 80 percent of area median income) is targeted to 60 percent of area median income.

Source: David Paul Rosen & Associates

Table A-7

**Net Operating Income
Market Rent Assumptions
Rental Housing
City of Vallejo Inclusionary Housing Analysis**

Prototype	Renter 1 Stacked Flat	
Units by Bedroom Count	Total:	150
One Bedroom		40
Two Bedroom/1 Bath		30
Two Bedroom		55
Three Bedroom		25
Four Bedroom		0
Net Operating Income		
One Bedroom		\$456,000
Two Bedroom/1 Bath		\$381,600
Two Bedroom		\$808,500
Three Bedroom		\$393,000
Four Bedroom		\$0
Total Gross Rents		\$2,039,100
Less: Vacancy	5%	(\$101,955)
Effective Gross Income		<u>\$1,937,145</u>
Operating Expenses		(\$788,550)
Net Operating Income		<u>\$1,148,595</u>
(1) Total Per Unit Oper. Costs		\$5,257
Annual Operating Costs/Unit		\$4,232
Annual Property Taxes/Unit		\$1,025

(1) Includes operating expenses, property taxes and insurance.

Table A-8

Net Operating Income
5% Very Low Income Units, 5% Low Income Units, 90% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis

Prototype	Renter 1 Stacked Flat
Units by Bedroom Count Total:	150
Net Operating Income, Market Rate Units	
One Bedroom	\$410,400
Two Bedroom/1 Bath	\$343,440
Two Bedroom	\$720,300
Three Bedroom	\$361,560
Total Gross Rents, Market Rate Units	\$1,835,700
Net Operating Income, Affordable Units	
One Bedroom	\$35,328
Two Bedroom/1 Bath	\$39,312
Two Bedroom	\$62,568
Three Bedroom	\$22,584
Total Gross Rents, Inclusionary Units	\$159,792
Less: Vacancy	5% (\$99,775)
Effective Gross Income	\$1,895,717
Operating Expenses	(\$788,550)
Net Operating Income	\$1,107,167
(1) Total Per Unit Oper. Costs/Reserves	\$5,257
Annual Operating Costs/Unit	\$4,232
Annual Property Taxes/Unit	\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management. Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-9

Net Operating Income
11% Very Low Income Units, 89% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis

Prototype	Renter 1 Stacked Flat
Units by Bedroom Count Total:	150
Net Operating Income, Market Rate Units	
One Bedroom	\$410,400
Two Bedroom/1 Bath	\$343,440
Two Bedroom	\$720,300
Three Bedroom	\$345,840
Total Gross Rents, Market Rate Units	\$1,819,980
Net Operating Income, Affordable Units	
One Bedroom	\$31,776
Two Bedroom/1 Bath	\$26,496
Two Bedroom	\$52,992
Three Bedroom	\$29,412
Total Gross Rents, Inclusionary Units	\$140,676
Less: Vacancy	5% (\$98,033)
Effective Gross Income	\$1,862,623
Operating Expenses	(\$788,550)
Net Operating Income	\$1,074,073
(1) Total Per Unit Oper. Costs/Reserves	\$5,257
Annual Operating Costs/Unit	\$4,232
Annual Property Taxes/Unit	\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management.
Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-10

Net Operating Income
15% Low Income Units, 85% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis

Prototype		Renter 1 Stacked Flat
Units by Bedroom Count	Total:	150
Net Operating Income, Market Rate Units		
One Bedroom		\$387,600
Two Bedroom/1 Bath		\$318,000
Two Bedroom		\$690,900
Three Bedroom		\$330,120
Total Gross Rents, Market Rate Units		\$1,726,620
Net Operating Income, Affordable Units		
One Bedroom		\$58,320
Two Bedroom/1 Bath		\$54,120
Two Bedroom		\$96,192
Three Bedroom		\$51,120
Total Gross Rents, Inclusionary Units		\$259,752
Less: Vacancy	5%	(\$99,319)
Effective Gross Income		\$1,887,053
Operating Expenses		(\$788,550)
Net Operating Income		\$1,098,503
(1) Total Per Unit Oper. Costs/Reserves		\$5,257
Annual Operating Costs/Unit		\$4,232
Annual Property Taxes/Unit		\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management. Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-11

Land Residual Analysis
 100% Market Rate Units
 Rental Housing Prototype
 City of Vallejo Inclusionary Housing Study
 2006

Prototype	Renter 1 Stacked Flat
Number of Units	150 Units
Net Operating Income: Market Rents	\$1,148,595
Capitalized Value 6.10%	\$18,829,426
Total Direct Cost (Except Land)	\$31,396,004
Land Value Per Unit	(\$83,777)
Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-12

Land Residual Analysis
5% Very Low Income, 5% Low Income Inclusionary Units
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	150 Units
Net Operating Income	\$1,107,167
Capitalized Value 6.10%	\$18,150,285
Total Direct Cost (Except Land)	\$31,396,004
Land Value Per Unit	(\$88,305)
Land Value Per Square Foot	(\$50.68)

Source: David Paul Rosen & Associates

Table A-13

Land Residual Analysis
11% Very Low Income Inclusionary Units
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	150 Units
Net Operating Income	\$1,074,073
Capitalized Value 6.10%	\$17,607,757
Total Direct Cost (Except Land)	\$31,396,004
Land Value Per Unit	(\$91,922)
Land Value Per Square Foot	(\$52.76)

Source: David Paul Rosen & Associates

Table A-14

Land Residual Analysis
15% Low Income Inclusionary Units
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	150 Units
Net Operating Income	\$1,098,503
Capitalized Value 6.10%	\$18,008,252
Total Direct Cost (Except Land)	\$31,396,004
Land Value Per Unit	(\$89,252)
Land Value Per Square Foot	(\$51.22)

Source: David Paul Rosen & Associates

Table A-15

**Land Residual Analysis
All Market Rate Units**

**Owner Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006**

Prototype		Owner 1	Owner 2	Owner 2	Owner 3
		Low Density Detached	Small Lot Detached	Medium Density Attached	Stacked Flat Condominium
Total Units		90	100	150	100
One Bedroom		0	0	0	25
Two Bedroom/1 Bath		0	0	0	25
Two Bedroom		0	0	80	30
Three Bedroom		25	45	70	20
Four Bedroom		40	55	0	0
Five Bedroom		25	0	0	0
Sales Revenues, Market Units					
	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$6,250,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$8,125,000
Two Bedroom	\$350,000	\$0	\$0	\$28,000,000	\$10,500,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$29,750,000	\$8,500,000
Three Bedroom (Detached)	\$475,000	\$11,875,000	\$21,375,000	\$0	\$0
Four Bedroom	\$540,000	\$21,600,000	\$29,700,000	\$0	\$0
Five Bedroom	\$640,000	\$16,000,000	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$49,475,000	\$51,075,000	\$57,750,000	\$33,375,000
Total Direct Cost (Except Land)		\$33,545,869	\$31,273,609	\$46,878,377	\$27,669,969
Total Land Value		\$15,929,131	\$19,801,391	\$10,871,623	\$5,705,031
Land Value Per Unit		\$176,990	\$198,014	\$72,477	\$57,050
Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97

Table A-16

Land Residual Analysis
Owner Housing Prototypes
10% of Units Affordable at 110% of Area Median Income
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		90	100	150	100
Inclusionary Units:	10%				
Total, Inclusionary Units		9	10	15	10
One Bedroom		0	0	0	3
Two Bedroom/1 Bath		0	0	0	2
Two Bedroom/2 Bath		0	0	8	3
Three Bedroom		3	5	7	2
Four Bedroom		3	5	0	0
Five Bedroom		3	0	0	0
Sales Revenues, Inclusionary Units	<u>Price/Unit</u>				
One Bedroom	\$213,817	\$0	\$0	\$0	\$641,450
Two Bedroom	\$240,194	\$0	\$0	\$1,921,556	\$1,200,972
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$1,908,202	\$545,200
Three Bedroom (Detached)	\$262,750	\$788,250	\$1,313,749	\$0	\$0
Four Bedroom	\$282,441	\$847,322	\$1,412,204	\$0	\$0
Five Bedroom	\$304,925	\$914,775	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$2,550,347	\$2,725,953	\$3,829,757	\$2,387,623
Total, Market Rate Units		81	90	135	90
One Bedroom		0	0	0	22
Two Bedroom/1 Bath		0	0	0	23
Two Bedroom		0	0	72	27
Three Bedroom		22	40	63	18
Four Bedroom		37	50	0	0
Five Bedroom		22	0	0	0
Sales Revenues, Market Units	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$5,500,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$7,475,000
Two Bedroom	\$350,000	\$0	\$0	\$25,200,000	\$9,450,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$26,775,000	\$7,650,000
Three Bedroom (Detached)	\$475,000	\$10,450,000	\$19,000,000	\$0	\$0
Four Bedroom	\$540,000	\$19,980,000	\$27,000,000	\$0	\$0
Five Bedroom	\$640,000	\$14,080,000	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$44,510,000	\$46,000,000	\$51,975,000	\$30,075,000
Total Sales Revenue		\$47,060,347	\$48,725,953	\$55,804,757	\$32,462,623
Total Direct Cost (Except Land)		\$33,545,869	\$31,273,609	\$46,878,377	\$27,669,969
Land Value		\$13,514,478	\$17,452,344	\$8,926,380	\$4,792,654
Land Value Per Unit		\$150,161	\$174,523	\$59,509	\$47,927
Land Value Per Square Foot		\$31.02	\$61.64	\$28.27	\$110.02
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$9.00	\$20.00	\$30.00	\$35.00

(1) Affordable to Moderate Income households, 120% of area median income.

Source: David Paul Rosen & Associates

Table A-17

Land Residual Analysis
Owner Housing Prototypes
20% of Units Affordable at 110% of Area Median Income
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		90	100	150	100
Inclusionary Units:	20%				
Total, Inclusionary Units		18	20	30	20
One Bedroom		0	0	0	5
Two Bedroom/1 Bath		0	0	0	5
Two Bedroom		0	0	16	6
Three Bedroom		5	9	14	4
Four Bedroom		8	11	0	0
Five Bedroom		5	0	0	0
Sales Revenues, Inclusionary Units					
	<u>Price/Unit</u>				
One Bedroom	\$213,817	\$0	\$0	\$0	\$1,069,083
Two Bedroom	\$240,194	\$0	\$0	\$3,843,112	\$2,642,139
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$3,816,403	\$1,090,401
Three Bedroom (Detached)	\$262,750	\$1,313,749	\$2,364,749	\$0	\$0
Four Bedroom	\$282,441	\$2,259,526	\$3,106,849	\$0	\$0
Five Bedroom	\$304,925	\$1,524,625	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$5,097,901	\$5,471,597	\$7,659,515	\$4,801,623
Total, Market Rate Units		72	80	120	80
One Bedroom		0	0	0	20
Two Bedroom/1 Bath		0	0	0	20
Two Bedroom		0	0	64	24
Three Bedroom		20	36	56	16
Four Bedroom		32	44	0	0
Five Bedroom		20	0	0	0
Sales Revenues, Market Units					
	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$5,000,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$6,500,000
Two Bedroom	\$350,000	\$0	\$0	\$22,400,000	\$8,400,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$23,800,000	\$6,800,000
Three Bedroom (Detached)	\$475,000	\$9,500,000	\$17,100,000	\$0	\$0
Four Bedroom	\$540,000	\$17,280,000	\$23,760,000	\$0	\$0
Five Bedroom	\$640,000	\$12,800,000	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$39,580,000	\$40,860,000	\$46,200,000	\$26,700,000
Total Sales Revenue		\$44,677,901	\$46,331,597	\$53,859,515	\$31,501,623
Total Direct Cost (Except Land)		\$33,545,869	\$31,273,609	\$46,878,377	\$27,669,969
Land Value		\$11,132,032	\$15,057,988	\$6,981,138	\$3,831,654
Land Value Per Unit		\$123,689	\$150,580	\$46,541	\$38,317
Land Value Per Square Foot		\$25.56	\$53.18	\$22.11	\$87.96
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$9.00	\$20.00	\$30.00	\$35.00

(1) Affordable to Moderate Income households, 120% of area median income.

Source: David Paul Rosen & Associates

Table A-18
Mix of Market Rate and Inclusionary Units
20% Density Bonus
5% Very Low, 5% Low Income Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1
		Stacked Flat
Units by Bedroom Count	Total:	180
One Bedroom		48
Two Bedroom/1 Bath		36
Two Bedroom/2 Bath		66
Three Bedroom		30
Market Rent Units		
One Bedroom		44
Two Bedroom/1 Bath		32
Two Bedroom		60
Three Bedroom		28
Total		164
Inclusionary Units	5% Very Low	
One Bedroom		2
Two Bedroom/1 Bath		2
Two Bedroom		3
Three Bedroom		1
Total		8
Inclusionary Units	5% Low	
One Bedroom		2
Two Bedroom/1 Bath		2
Two Bedroom		3
Three Bedroom		1
Total		8

Source: David Paul Rosen & Associates

Table A-19
Mix of Market Rate and Inclusionary Units
35% Density Bonus
11% Very Low Income Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1
		Stacked Flat
Units by Bedroom Count	Total:	202
One Bedroom		53
Two Bedroom/1 Bath		41
Two Bedroom/2 Bath		74
Three Bedroom		34
Market Rent Units		
One Bedroom		49
Two Bedroom/1 Bath		38
Two Bedroom		68
Three Bedroom		31
Total		186
Inclusionary Units	11%	
One Bedroom		4
Two Bedroom/1 Bath		3
Two Bedroom		6
Three Bedroom		3
Total		16

Source: David Paul Rosen & Associates

Table A-20
Mix of Market Rate and Inclusionary Units
27.5% Density Bonus
15% Low Income Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Renter 1 Stacked Flat
Units by Bedroom Count	Total:	191
One Bedroom		51
Two Bedroom/1 Bath		38
Two Bedroom/2 Bath		70
Three Bedroom		32
Market Rent Units		
One Bedroom		45
Two Bedroom/1 Bath		33
Two Bedroom		62
Three Bedroom		28
Total		168
Inclusionary Units	15%	
One Bedroom		6
Two Bedroom/1 Bath		5
Two Bedroom		8
Three Bedroom		4
Total		23

Source: David Paul Rosen & Associates

Table A-21

Net Operating Income
20% Density Bonus
5% Very Low Income Units, 5% Low Income Units, 90% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis

Prototype	Renter 1 Stacked Flat
Units by Bedroom Count	Total: 180
Net Operating Income, Market Rate Units	
One Bedroom	\$501,600
Two Bedroom/1 Bath	\$407,040
Two Bedroom	\$882,000
Three Bedroom	\$440,160
Total Gross Rents, Market Rate Units	\$2,230,800
Net Operating Income, Affordable Units	
One Bedroom	\$35,328
Two Bedroom/1 Bath	\$39,312
Two Bedroom	\$62,568
Three Bedroom	\$22,584
Total Gross Rents, Inclusionary Units	\$159,792
Less: Vacancy	5% (\$119,530)
Effective Gross Income	\$2,271,062
Operating Expenses	(\$946,260)
Net Operating Income	\$1,324,802
(1) Total Per Unit Oper. Costs	\$5,257
Annual Operating Costs/Unit	\$4,232
Annual Property Taxes/Unit	\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management. Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-22

**Net Operating Income
35% Density Bonus
11% Very Low Income Units, 89% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis**

Prototype	Renter 1 Stacked Flat
Units by Bedroom Count Total:	202
Net Operating Income, Market Rate Units	
One Bedroom	\$558,600
Two Bedroom/1 Bath	\$483,360
Two Bedroom	\$999,600
Three Bedroom	\$487,320
Total Gross Rents, Market Rate Units	\$2,528,880
Net Operating Income, Affordable Units	
One Bedroom	\$38,880
Two Bedroom/1 Bath	\$32,472
Two Bedroom	\$72,144
Three Bedroom	\$38,340
Total Gross Rents, Inclusionary Units	\$181,836
Less: Vacancy	5% (\$135,536)
Effective Gross Income	\$2,575,180
Operating Expenses	(\$1,061,914)
Net Operating Income	\$1,513,266
(1) Total Per Unit Oper. Costs	
Annual Operating Costs/Unit	\$5,257
Annual Property Taxes/Unit	\$4,232
	\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management. Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-23

**Net Operating Income
27.5% Density Bonus
15% Low Income Units, 85% Market Rate Units
Rental Housing
City of Vallejo Inclusionary Housing Analysis**

Prototype	Renter 1 Stacked Flat
Units by Bedroom Count	Total: 191
Net Operating Income, Market Rate Units	
One Bedroom	\$513,000
Two Bedroom/1 Bath	\$419,760
Two Bedroom	\$911,400
Three Bedroom	\$440,160
Four Bedroom	\$0
Total Gross Rents, Market Rate Units	\$2,284,320
Net Operating Income, Affordable Units	
One Bedroom	\$58,320
Two Bedroom/1 Bath	\$54,120
Two Bedroom	\$96,192
Three Bedroom	\$51,120
Total Gross Rents, Inclusionary Units	\$259,752
Less: Vacancy	5% (\$127,204)
Effective Gross Income	\$2,416,868
Operating Expenses	(\$1,004,087)
Net Operating Income	\$1,412,781
(1) Total Per Unit Oper. Costs	\$5,257
Annual Operating Costs/Unit	\$4,232
Annual Property Taxes/Unit	\$1,025

(1) Includes operating expenses, property taxes and insurance. Source: Institute of Real Estate Management. Source: REALFACTS, Institute of Real Estate Management; David Paul Rosen & Associates

Table A-24

Land Residual Analysis
20% Density Bonus
5% Very Low Income, 5% Low Income Inclusionary Units
Rental Housing Prototype
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	180 Units
Net Operating Income	\$1,324,802
Capitalized Value 6.10%	\$21,718,072
Total Direct Cost (Except Land)	\$38,276,755
Land Value Per Unit	(\$91,993)
Land Value Per Square Foot	(\$63.36)
No Inclusionary Requirement, Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-25

Land Residual Analysis
35% Density Bonus
11% Very Low Income Inclusionary Units
Rental Housing Prototype
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	202 Units
Net Operating Income	\$1,513,266
Capitalized Value 6.10%	\$24,807,643
Total Direct Cost (Except Land)	\$43,733,417
Land Value Per Unit	(\$93,692)
Land Value Per Square Foot	(\$72.41)
No Inclusionary Requirement, Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-26

Land Residual Analysis
27.5% Density Bonus
15% Low Income Inclusionary Units
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	191 Units
Net Operating Income	\$1,412,781
Capitalized Value 6.10%	\$23,160,351
Total Direct Cost (Except Land)	\$41,491,816
Land Value Per Unit	(\$95,976)
Land Value Per Square Foot	(\$70.14)
No Inclusionary Requirements Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-27
Mix of Market Rate and Inclusionary Units
5% Density Bonus
Owner Housing Prototypes
10% Moderate Income Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Units by Bedroom Count	Total:	95	105	158	105
One Bedroom		0	0	0	26
Two Bedroom/1 Bath		0	0	0	26
Two Bedroom/2 Bath		0	0	84	32
Three Bedroom		27	47	74	21
Four Bedroom		42	58	0	0
Five Bedroom		26	0	0	0
Six+ Bedroom		0	0	0	0
Market Rent Units					
One Bedroom		0	0	0	23
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	42	67	19
Four Bedroom		39	53	0	0
Five Bedroom		23	0	0	0
Six+ Bedroom		0	0	0	0
Total		86	95	143	95
Inclusionary Units	10%				
One Bedroom		0	0	0	3
Two Bedroom/1 Bath		0	0	0	2
Two Bedroom		0	0	8	3
Three Bedroom		3	5	7	2
Four Bedroom		3	5	0	0
Five Bedroom		3	0	0	0
Six+ Bedroom		0	0	0	0
Total		9	10	15	10

Source: David Paul Rosen & Associates

Table A-28
Mix of Market Rate and Inclusionary Units
15% Density Bonus
Owner Housing Prototypes
20% Moderate Income Inclusionary Housing Requirement
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Units by Bedroom Count	Total:	104	115	173	116
One Bedroom		0	0	0	29
Two Bedroom/1 Bath		0	0	0	29
Two Bedroom/2 Bath		0	0	92	35
Three Bedroom		29	52	81	23
Four Bedroom		46	63	0	0
Five Bedroom		29	0	0	0
Six+ Bedroom		0	0	0	0
Market Rent Units					
One Bedroom		0	0	0	24
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	43	67	19
Four Bedroom		38	52	0	0
Five Bedroom		24	0	0	0
Six+ Bedroom		0	0	0	0
Total		86	95	143	96
Inclusionary Units	20%				
One Bedroom		0	0	0	5
Two Bedroom/1 Bath		0	0	0	5
Two Bedroom		0	0	16	6
Three Bedroom		5	9	14	4
Four Bedroom		8	11	0	0
Five Bedroom		5	0	0	0
Six+ Bedroom		0	0	0	0
Total		18	20	30	20

Source: David Paul Rosen & Associates

Table A-29

Land Residual Analysis
5% Density Bonus
Owner Housing Prototypes
10% of Units Affordable at 110% of Area Median Income
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		95	105	158	105
Inclusionary Units:	10%				
Total, Inclusionary Units		9	10	15	10
One Bedroom		0	0	0	3
Two Bedroom/1 Bath		0	0	0	2
Two Bedroom/2 Bath		0	0	8	3
Three Bedroom		3	5	7	2
Four Bedroom		3	5	0	0
Five Bedroom		3	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Inclusionary Units	Price/Unit				
One Bedroom	\$213,817	\$0	\$0	\$0	\$641,450
Two Bedroom	\$240,194	\$0	\$0	\$1,921,556	\$1,200,972
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$1,908,202	\$545,200
Three Bedroom (Detached)	\$262,750	\$788,250	\$1,313,749	\$0	\$0
Four Bedroom	\$282,441	\$847,322	\$1,412,204	\$0	\$0
Five Bedroom	\$304,925	\$914,775	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$2,550,347	\$2,725,953	\$3,829,757	\$2,387,623
Total, Market Rate Units		86	95	143	95
One Bedroom		0	0	0	23
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	42	67	19
Four Bedroom		39	53	0	0
Five Bedroom		23	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Market Units	Price/Unit				
One Bedroom	\$250,000	\$0	\$0	\$0	\$5,750,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$7,800,000
Two Bedroom	\$350,000	\$0	\$0	\$26,600,000	\$10,150,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$28,475,000	\$8,075,000
Three Bedroom (Detached)	\$475,000	\$11,400,000	\$19,950,000	\$0	\$0
Four Bedroom	\$540,000	\$21,060,000	\$28,620,000	\$0	\$0
Five Bedroom	\$640,000	\$14,720,000	\$0	\$0	\$0
Six+ Bedroom	\$750,000	\$0	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$47,180,000	\$48,570,000	\$55,075,000	\$31,775,000
Total Sales Revenue		\$49,730,347	\$51,295,953	\$58,904,757	\$34,162,623
Total Direct Cost (Except Land)		\$34,733,725	\$32,382,962	\$48,847,826	\$28,674,188
Land Value		\$14,996,623	\$18,912,992	\$10,056,931	\$5,488,434
Land Value Per Unit		\$157,859	\$180,124	\$63,651	\$52,271
Land Value Per Square Foot		\$34.43	\$66.80	\$31.84	\$126.00
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$25.00	\$15.60	\$25.00	\$25.00

Source: David Paul Rosen & Associates

Table A-30

Land Residual Analysis
15% Density Bonus
Owner Housing Prototypes
20% of Units Affordable at 110% of Area Median Income
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		104	115	173	116
Inclusionary Units:	20%				
Total, Inclusionary Units		18	20	30	20
One Bedroom		0	0	0	5
Two Bedroom/1 Bath		0	0	0	5
Two Bedroom/2 Bath		0	0	16	6
Three Bedroom		5	9	14	4
Four Bedroom		8	11	0	0
Five Bedroom		5	0	0	0
Sales Revenues, Inclusionary Units	<u>Price/Unit</u>				
One Bedroom	\$213,817	\$0	\$0	\$0	\$1,069,083
Two Bedroom	\$240,194	\$0	\$0	\$3,843,112	\$2,642,139
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$3,816,403	\$1,090,401
Three Bedroom (Detached)	\$262,750	\$1,313,749	\$2,364,749	\$0	\$0
Four Bedroom	\$282,441	\$2,259,526	\$3,106,849	\$0	\$0
Five Bedroom	\$304,925	\$1,524,625	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$5,097,901	\$5,471,597	\$7,659,515	\$4,801,623
Total, Market Rate Units		86	95	143	96
One Bedroom		0	0	0	24
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	43	67	19
Four Bedroom		38	52	0	0
Five Bedroom		24	0	0	0
Sales Revenues, Market Units	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$6,000,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$7,800,000
Two Bedroom	\$350,000	\$0	\$0	\$26,600,000	\$10,150,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$28,475,000	\$8,075,000
Three Bedroom (Detached)	\$475,000	\$11,400,000	\$20,425,000	\$0	\$0
Four Bedroom	\$540,000	\$20,520,000	\$28,080,000	\$0	\$0
Five Bedroom	\$640,000	\$15,360,000	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$47,280,000	\$48,505,000	\$55,075,000	\$32,025,000
Total Sales Revenue		\$52,377,901	\$53,976,597	\$62,734,515	\$36,826,623
Total Direct Cost (Except Land)		\$37,179,083	\$34,839,324	\$52,799,842	\$34,002,290
Land Value		\$15,198,818	\$19,137,273	\$9,934,673	\$2,824,333
Land Value Per Unit		\$146,142	\$166,411	\$57,426	\$24,348
Land Value Per Square Foot		\$34.89	\$67.59	\$31.46	\$64.84
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$25.00	\$15.60	\$25.00	\$25.00

Table A-31

Land Residual Analysis
20% Density Bonus
10% Reduction in Size of Affordable Units
5% Very Low Income, 5% Low Income Inclusionary Units
Rental Housing Prototype
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	180 Units
Net Operating Income	\$1,324,802
Capitalized Value 6.10%	\$21,718,072
Total Direct Cost (Except Land)	\$38,113,489
Land Value Per Unit	(\$91,086)
Land Value Per Square Foot	(\$62.73)
No Inclusionary Requirement, Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-32

Land Residual Analysis
35% Density Bonus
10% Reduction in Size of Affordable Units
11% Very Low Income Inclusionary Units
Rental Housing Prototype
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	202 Units
Net Operating Income	\$1,513,266
Capitalized Value 6.10%	\$24,807,643
Total Direct Cost (Except Land)	\$43,556,748
Land Value Per Unit	(\$92,817)
Land Value Per Square Foot	(\$71.74)
No Inclusionary Requirement, Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-33

Land Residual Analysis
27.5% Density Bonus
10% Reduction in Size of Affordable Units
15% Low Income Inclusionary Units
Rental Housing Prototypes
City of Vallejo Inclusionary Housing Study
2006

Prototype	Renter 1 Stacked Flat
Number of Units	191 Units
Net Operating Income	\$1,412,781
Capitalized Value 6.10%	\$23,160,351
Total Direct Cost (Except Land)	\$41,239,606
Land Value Per Unit	(\$94,656)
Land Value Per Square Foot	(\$69.17)
No Inclusionary Requirements Land Value Per Square Foot	(\$48.08)

Source: David Paul Rosen & Associates

Table A-34

Land Residual Analysis
5% Density Bonus
Owner Housing Prototypes
10% Reduction in Size of Affordable Units
10% of Units Affordable at 110% of Area Median Income
City of Vallejo Inclusionary Housing Study
2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		95	105	158	105
Inclusionary Units:	10%				
Total, Inclusionary Units		9	10	15	10
One Bedroom		0	0	0	3
Two Bedroom/1 Bath		0	0	0	2
Two Bedroom/2 Bath		0	0	8	3
Three Bedroom		3	5	7	2
Four Bedroom		3	5	0	0
Five Bedroom		3	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Inclusionary Units					
	<u>Price/Unit</u>				
One Bedroom	\$213,817	\$0	\$0	\$0	\$641,450
Two Bedroom	\$240,194	\$0	\$0	\$1,921,556	\$1,200,972
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$1,908,202	\$545,200
Three Bedroom (Detached)	\$262,750	\$788,250	\$1,313,749	\$0	\$0
Four Bedroom	\$282,441	\$847,322	\$1,412,204	\$0	\$0
Five Bedroom	\$304,925	\$914,775	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$2,550,347	\$2,725,953	\$3,829,757	\$2,387,623
Total, Market Rate Units		86	95	143	95
One Bedroom		0	0	0	23
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	42	67	19
Four Bedroom		39	53	0	0
Five Bedroom		23	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Market Units					
	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$5,750,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$7,800,000
Two Bedroom	\$350,000	\$0	\$0	\$26,600,000	\$10,150,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$28,475,000	\$8,075,000
Three Bedroom (Detached)	\$475,000	\$11,400,000	\$19,950,000	\$0	\$0
Four Bedroom	\$540,000	\$21,060,000	\$28,620,000	\$0	\$0
Five Bedroom	\$640,000	\$14,720,000	\$0	\$0	\$0
Six+ Bedroom	\$750,000	\$0	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$47,180,000	\$48,570,000	\$55,075,000	\$31,775,000
Total Sales Revenue		\$49,730,347	\$51,295,953	\$58,904,757	\$34,162,623
Total Direct Cost (Except Land)		\$34,554,565	\$32,202,378	\$48,554,526	\$28,536,999
Land Value		\$15,175,782	\$19,093,575	\$10,350,231	\$5,625,623
Land Value Per Unit		\$159,745	\$181,844	\$65,508	\$53,577
Land Value Per Square Foot		\$34.84	\$67.44	\$32.77	\$129.15
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$25.00	\$15.60	\$25.00	\$25.00

Source: David Paul Rosen & Associates

Table A-35

Land Residual Analysis
 15% Density Bonus
 Owner Housing Prototypes
 10% Reduction in Size of Affordable Units
 20% of Units Affordable at 110% of Area Median Income
 City of Vallejo Inclusionary Housing Study
 2006

Prototype		Owner 1 Low Density Detached	Owner 2 Small Lot Detached	Owner 3 Medium Density Attached	Owner 4 Stacked Flat Condominium
Total Units		104	115	173	116
Inclusionary Units:	20%				
Total, Inclusionary Units		18	20	30	20
One Bedroom		0	0	0	5
Two Bedroom/1 Bath		0	0	0	5
Two Bedroom/2 Bath		0	0	16	6
Three Bedroom		5	9	14	4
Four Bedroom		8	11	0	0
Five Bedroom		5	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Inclusionary Units	<u>Price/Unit</u>				
One Bedroom	\$213,817	\$0	\$0	\$0	\$1,069,083
Two Bedroom	\$240,194	\$0	\$0	\$3,843,112	\$2,642,139
Three Bedroom (Attached)	\$272,600	\$0	\$0	\$3,816,403	\$1,090,401
Three Bedroom (Detached)	\$262,750	\$1,313,749	\$2,364,749	\$0	\$0
Four Bedroom	\$282,441	\$2,259,526	\$3,106,849	\$0	\$0
Five Bedroom	\$304,925	\$1,524,625	\$0	\$0	\$0
Total Sales Revenue, Inclusionary Units		\$5,097,901	\$5,471,597	\$7,659,515	\$4,801,623
Total, Market Rate Units		86	95	143	96
One Bedroom		0	0	0	24
Two Bedroom/1 Bath		0	0	0	24
Two Bedroom		0	0	76	29
Three Bedroom		24	43	67	19
Four Bedroom		38	52	0	0
Five Bedroom		24	0	0	0
Six+ Bedroom		0	0	0	0
Sales Revenues, Market Units	<u>Price/Unit</u>				
One Bedroom	\$250,000	\$0	\$0	\$0	\$6,000,000
Two Bedroom/1 Bath	\$325,000	\$0	\$0	\$0	\$7,800,000
Two Bedroom	\$350,000	\$0	\$0	\$26,600,000	\$10,150,000
Three Bedroom (Attached)	\$425,000	\$0	\$0	\$28,475,000	\$8,075,000
Three Bedroom (Detached)	\$475,000	\$11,400,000	\$20,425,000	\$0	\$0
Four Bedroom	\$540,000	\$20,520,000	\$28,080,000	\$0	\$0
Five Bedroom	\$640,000	\$15,360,000	\$0	\$0	\$0
Six+ Bedroom	\$750,000	\$0	\$0	\$0	\$0
Total Sales Revenue, Market Units		\$47,280,000	\$48,505,000	\$55,075,000	\$32,025,000
Total Sales Revenue		\$52,377,901	\$53,976,597	\$62,734,515	\$36,826,623
Total Direct Cost (Except Land)		\$36,821,618	\$34,473,527	\$52,213,242	\$33,726,227
Land Value		\$15,556,283	\$19,503,071	\$10,521,273	\$3,100,396
Land Value Per Unit		\$149,580	\$169,592	\$60,817	\$26,728
Land Value Per Square Foot		\$35.71	\$68.88	\$33.32	\$71.18
No Inclusionary Requirement, Land Value per Square Foot		\$36.57	\$69.93	\$34.42	\$130.97
Market Land Comparables		\$25.00	\$15.60	\$25.00	\$25.00

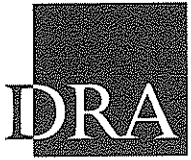


DAVID PAUL ROSEN & ASSOCIATES

ATTACHMENT B

AFFORDABILITY GAP ANALYSIS TABLES

DENSITY BONUS SCENARIOS



DAVID PAUL ROSEN & ASSOCIATES

Attachment B

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Table B-1

**Rental Prototype Development Cost
20% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Renter 1 Stacked Flat
Number of Units	180
Acres	6.00
Units/Acre	30
Total Net Square Feet	159,900
Ratio Net/Gross SF	85%
Total Gross Square Feet Building Area	188,118
LAND ACQUISITION, DEMOLITION, RELOCATION	\$2,352,240
PARKING STRUCTURE	\$2,080,000
SITE IMPROVEMENTS	\$2,613,600
UNIT CONSTRUCTION HARD COSTS	\$21,633,529
PARKING, SURFACE	\$832,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,212,356
LOCAL PERMITS AND FEES	\$4,500,000
ALTA SURVEY	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000
SOILS TESTING	\$90,000
CONSTRUCTION LOAN FEES	\$162,886
PERMANENT LOAN FEES	\$131,576
CONSTRUCTION/LEASE-UP INTEREST	\$1,194,494
PROPERTY INSURANCE	\$60,000
PROPERTY TAXES DURING CONSTR.	\$265,994
CONSTR. LOAN TITLE AND CLOSING	\$15,000
APPRAISAL FEES	\$10,000
REAL ESTATE LEGAL	\$30,000
MARKET STUDY	\$15,000
MARKETING/LEASE-UP/START-UP	\$50,000
FURNITURE/EQUIPMENT	\$90,000
DEVELOPMENT/ADMIN. FEE	\$3,250,320
TOTAL PROJECT COSTS	\$40,628,995
COST PER UNIT	\$225,717
COST PER NET SF	\$254.09

Source: David Paul Rosen & Associates

Table B-2

Assumptions, Rental Development Costs
 20% Density Bonus
 City of Vallejo Inclusionary Housing Study
 Land Residual Analysis
 2006

Renter 1
 Stacked Flat

DEVELOPMENT COST ASSUMPTIONS

Land Acquisition/Relocation/Demolition Cost Per Square Foot		\$9.00
Land Acquisition Cost Per Unit		\$13,068
Off-site and Site Improvement Costs per SF Site Area		\$10
Parking Structure (per space)		\$20,000
Hard Construction Costs per SF		\$115
Parking Costs per SF		\$20
Architectural/Engineering (Percent of Hard Costs)		5.00%
Local Permits and Fees (Per Unit)		\$25,000
Property Insurance During Construction (Percent of Hard Costs)		0.50%
Development Fee (% of Total Development Costs Less Land)		8.00%

FAIR MARKET VALUE CALCULATION

Net Operating Income; 5% Very Low, 5% Low Income Inclusionary Units		\$1,324,802
Capitalization Value @ Cap Rate of:	6.10%	\$21,718,072
Maximum Construction Loan @LTV of	75%	\$16,288,554

MAXIMUM CONSTRUCTION LOAN CALCULATION

Capitalized Value at Restricted Rents		\$21,718,072
Maximum Construction Loan @ LTV of	75%	\$16,288,554

CONSTRUCTION LOAN

Construction Loan Amount		\$16,288,554
Interest Rate		8.00%
Loan Fees	1.00%	\$162,886
Average Loan Balance		55.00%
Construction Period		16 Months
Lease-Up Period		4 Months
Total Construction Loan Term		20 Months
Construction Loan Interest--Construction Period		\$955,595
Construction Loan Interest--Lease-Up		\$238,899

PERMANENT LOAN

Net Operating Income		\$1,324,802
Debt Coverage Ratio		1.20
Debt Service		\$1,104,002
Mortgage Term (Amortization)		30 years
Interest Rate		7.50%
Maximum Permanent Loan Amount Based on DCR		\$13,157,646
Loan Fees	1.00%	\$131,576
Maximum Loan to Value (% of FMV @ Restr. Rents)		100%
Maximum Loan Amount Based on LTV Test		\$21,718,072
Permanent Loan Amount (Min. DCR or LTV)		\$13,157,646
Permanent Loan Debt Service		\$1,104,002

Table B-3

**Rental Prototype Development Cost
27.5% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Renter 1 Stacked Flat
Number of Units	191
Acres	6.00
Units/Acre	32
Total Net Square Feet	169,600
Ratio Net/Gross SF	85%
Total Gross Square Feet Building Area	199,529
LAND ACQUISITION, DEMOLITION, RELOCATION	\$2,352,240
PARKING GARAGE	\$3,310,000
SITE IMPROVEMENTS	\$2,613,600
UNIT CONSTRUCTION HARD COSTS	\$22,945,882
PARKING, SURFACE	\$662,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,277,974
LOCAL PERMITS AND FEES	\$4,775,000
ALTA SURVEY	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000
SOILS TESTING	\$90,000
CONSTRUCTION LOAN FEES	\$173,703
PERMANENT LOAN FEES	\$140,314
CONSTRUCTION/LEASE-UP INTEREST	\$1,401,201
PROPERTY INSURANCE	\$60,000
PROPERTY TAXES DURING CONSTR.	\$279,117
CONSTR. LOAN TITLE AND CLOSING	\$15,000
APPRAISAL FEES	\$10,000
REAL ESTATE LEGAL	\$30,000
MARKET STUDY	\$15,000
MARKETING/LEASE-UP/START-UP	\$50,000
FURNITURE/EQUIPMENT	\$95,500
DEVELOPMENT/ADMIN. FEE	\$3,507,525
TOTAL PROJECT COSTS	\$43,844,056
COST PER UNIT	\$229,550
COST PER NET SF	\$258.51

Source: David Paul Rosen & Associates

Table B-4

Assumptions, Rental Development Costs
 27.5% Density Bonus
 City of Vallejo Inclusionary Housing Study
 Land Residual Analysis
 2006

Renter 1
 Stacked Flat

DEVELOPMENT COST ASSUMPTIONS

Land Acquisition/Relocation/Demolition Cost Per Square Foot		\$9.00
Land Acquisition Cost Per Unit		\$12,315
Off-site and Site Improvement Costs per SF Site Area		\$10.00
Parking Garage (per space)		\$20,000
Hard Construction Costs per SF		\$115
Parking Costs per SF		\$20
Architectural/Engineering (Percent of Hard Costs)		5.00%
Local Permits and Fees (Per Unit)		\$25,000
Property Insurance During Construction (Percent of Hard Costs)		0.50%
Development Fee (% of Total Development Costs Less Land)		8.00%

FAIR MARKET VALUE CALCULATION

Net Operating Income; 15% Restr. Rents@80% AMI		\$1,412,781
Capitalization Value @ Cap Rate of:	6.10%	\$23,160,351
Maximum Construction Loan @LTV of	75%	\$17,370,263

MAXIMUM CONSTRUCTION LOAN CALCULATION

Capitalized Value at Restricted Rents		\$23,160,351
Maximum Construction Loan @ LTV of	75%	\$17,370,263

CONSTRUCTION LOAN

Construction Loan Amount		\$17,370,263
Interest Rate		8.00%
Loan Fees	1.00%	\$173,703
Average Loan Balance		55.00%
Construction Period		18 Months
Lease-Up Period		4 Months
Total Construction Loan Term		22 Months
Construction Loan Interest--Construction Period		\$1,146,437
Construction Loan Interest--Lease-Up		\$254,764

PERMANENT LOAN

Net Operating Income		\$1,412,781
Debt Coverage Ratio		1.20
Debt Service		\$1,177,318
Mortgage Term (Amortization)		30 years
Interest Rate		7.50%
Maximum Permanent Loan Amount Based on DCR		\$14,031,436
Loan Fees	1.00%	\$140,314
Maximum Loan to Value (% of FMV @ Restr. Rents)		100%
Maximum Loan Amount Based on LTV Test		\$23,160,351
Permanent Loan Amount (Min. DCR or LTV)		\$14,031,436
Permanent Loan Debt Service		\$1,177,318

Table B-5

**Rental Prototype Development Cost
35% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Renter 1 Stacked Flat
Number of Units	202
Acres	6.00
Units/Acre	34
Total Net Square Feet	179,500
Ratio Net/Gross SF	85%
Total Gross Square Feet Building Area	211,176
LAND ACQUISITION, DEMOLITION, RELOCATION	\$2,352,240
PARKING GARAGE	\$3,510,000
SITE IMPROVEMENTS	\$2,613,600
UNIT CONSTRUCTION HARD COSTS	\$24,285,294
PARKING, SURFACE	\$702,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,344,945
LOCAL PERMITS AND FEES	\$5,050,000
ALTA SURVEY	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000
SOILS TESTING	\$90,000
CONSTRUCTION LOAN FEES	\$186,057
PERMANENT LOAN FEES	\$150,294
CONSTRUCTION/LEASE-UP INTEREST	\$1,500,862
PROPERTY INSURANCE	\$60,000
PROPERTY TAXES DURING CONSTR.	\$292,511
CONSTR. LOAN TITLE AND CLOSING	\$15,000
APPRAISAL FEES	\$10,000
REAL ESTATE LEGAL	\$30,000
ORGANIZATIONAL	\$0
CONSTRUCTION MANAGER	\$0
DEVELOPMENT/BOND/FINANCIAL ADV.	\$0
MARKET STUDY	\$15,000
POST-CONSTRUCTION AUDIT	\$0
MARKETING/LEASE-UP/START-UP	\$50,000
FURNITURE/EQUIPMENT	\$101,000
DEVELOPMENT/ADMIN. FEE	\$3,686,853
TOTAL PROJECT COSTS	\$46,085,657
COST PER UNIT	\$228,147
COST PER NET SF	\$256.74

Source: David Paul Rosen & Associates

Table B-6

**Assumptions, Rental Development Costs
35% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

**Renter 1
Stacked Flat**

DEVELOPMENT COST ASSUMPTIONS

Land Acquisition/Relocation/Demolition Cost Per Square Foot		\$9.00
Land Acquisition Cost Per Unit		\$11,645
Off-site and Site Improvement Costs per SF Site Area		\$10.00
Parking Garage (per space)		\$20,000
Hard Construction Costs per SF		\$115
Parking Costs per SF		\$20
Architectural/Engineering (Percent of Hard Costs)		5.00%
Local Permits and Fees (Per Unit)		\$25,000
Property Insurance During Construction (Percent of Hard Costs)		0.50%
Development Fee (% of Total Development Costs Less Land)		8.00%

FAIR MARKET VALUE CALCULATION

Net Operating Income; 11% Restr. Rents@50% AMI		\$1,513,266
Capitalization Value @ Cap Rate of:	6.10%	\$24,807,643
Maximum Construction Loan @LTV of	75%	\$18,605,732

MAXIMUM CONSTRUCTION LOAN CALCULATION

Capitalized Value at Restricted Rents		\$24,807,643
Maximum Construction Loan @ LTV of	75%	\$18,605,732

CONSTRUCTION LOAN

Construction Loan Amount		\$18,605,732
Interest Rate		8.00%
Loan Fees	1.00%	\$186,057
Average Loan Balance		55.00%
Construction Period		18 Months
Lease-Up Period		4 Months
Total Construction Loan Term		22 Months
Construction Loan Interest--Construction Period		\$1,227,978
Construction Loan Interest--Lease-Up		\$272,884

PERMANENT LOAN

Net Operating Income, Restricted Rents		\$1,513,266
Debt Coverage Ratio		1.20
Debt Service		\$1,261,055
Mortgage Term (Amortization)		30 years
Interest Rate		7.50%
Maximum Permanent Loan Amount Based on DCR		\$15,029,425
Loan Fees	1.00%	\$150,294
Maximum Loan to Value (% of FMV @ Restr. Rents)		100%
Maximum Loan Amount Based on LTV Test		\$24,807,643
Permanent Loan Amount (Min. DCR or LTV)		\$15,029,425
Permanent Loan Debt Service		\$1,261,055

Table B-7

Estimate Prototype Development Costs
 Ownership Housing Prototypes
 5% Density Bonus
 City of Vallejo Inclusionary Housing Study
 Land Residual Analysis
 2006

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
Acres	10.00	6.50	7.25	1.00
No. of Units	95	105	158	105
Units/Acre	9.5	16.2	21.8	105.0
Total Net Square Feet	221,000	207,500	242,400	107,575
Ratio Net/Gross SF	100%	100%	100%	85%
Total Gross Square Feet Building Area	221,000	207,500	242,400	126,559
LAND AND BUILDING ACQUISITION	\$3,920,400	\$5,662,800	\$9,474,300	\$1,524,600
PARKING GARAGE	\$0	\$0	\$0	\$3,680,000
OFF-SITE AND SITE IMPROVEMENTS	\$7,840,800	\$5,096,520	\$6,316,200	\$871,200
CONSTRUCTION HARD COSTS (INCLUDING GARAGES)	\$17,459,000	\$17,845,000	\$28,360,800	\$15,819,853
GENERAL CONDITIONS	\$260,000	\$260,000	\$320,000	\$340,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,011,992	\$917,661	\$2,080,620	\$1,001,463
LOCAL PERMITS AND FEES	\$2,830,520	\$2,875,331	\$4,345,000	\$2,894,110
ALTA SURVEY	\$20,000	\$20,000	\$20,000	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000	\$20,000	\$20,000	\$20,000
SOILS TESTING	\$90,000	\$90,000	\$90,000	\$90,000
CONSTRUCTION LOAN FEES	1.00% \$288,000	\$282,000	\$429,000	\$212,250
CONSTRUCTION/SALE PERIOD INTEREST	\$1,372,800	\$1,344,200	\$2,516,800	\$1,245,200
PROPERTY INSURANCE	\$174,590	\$178,450	\$283,608	\$158,199
PROPERTY TAXES	\$292,202	\$286,043	\$441,513	\$182,157
TITLE AND CLOSING	\$30,000	\$30,000	\$30,000	\$30,000
APPRAISAL FEES	\$10,000	\$10,000	\$10,000	\$10,000
REAL ESTATE LEGAL	\$50,000	\$50,000	\$50,000	\$50,000
WARRANTY	2.00% \$994,607	\$1,025,919	\$1,178,095	\$683,252
MARKETING/SALES COMMISSIONS	4.00% \$1,989,214	\$2,051,838	\$2,356,190	\$1,366,505
TOTAL PROJECT COST	\$38,654,125	\$38,045,762	\$58,322,126	\$30,198,788
PER UNIT	\$406,886	\$362,341	\$369,127	\$287,608
PER SF	\$174.91	\$183.35	\$240.60	\$280.72

Source: David Paul Rosen & Associates

Table B-8

**Financing Assumptions
Ownership Housing Prototypes
5% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
DEVELOPMENT COST ASSUMPTIONS				
Property Acquisition Cost Per SF	\$9	\$20	\$30	\$35
Property Acquisition Cost Per Unit	\$41,300	\$53,900	\$60,000	\$14,500
Off-site and Site Improvement Costs per SF Site Area	\$18	\$18	\$20	\$20
Parking Garage (per space)	\$0	\$0	\$0	\$20,000
Hard Construction/Rehabilitation Costs per SF	\$79	\$86	\$117	\$125
Hard Construction/Rehabilitation Costs per Unit	\$183,779	\$169,952	\$179,499	\$150,665
Architectural/Engineering (Percent of Hard Costs)	4%	4%	6%	6%
Local Permits and Fees Per Unit	\$29,795	\$27,384	\$27,500	\$27,563
Property Insurance During Construction (Percent of Hard Costs)	1.00%	1.00%	1.00%	1.00%
CONSTRUCTION LOAN				
Value, Based on Development Costs				
Constr. Loan Amt. 75% Total Dev. Cost	\$28,800,000	\$28,200,000	\$42,900,000	\$21,225,000
Interest Rate	8.00%	8.00%	8.00%	8.00%
Loan Points	1.00%	1.00%	1.00%	1.00%
Average Loan Balance--Construction	55.00%	55.00%	55.00%	55.00%
Construction Period	13 Months	13 Months	16 Months	17 Months
Total Construction Loan Term	13 Months	13 Months	16 Months	17 Months
Construction Loan Interest--Construction	\$1,372,800	\$1,344,200	\$2,516,800	\$1,245,200
Total Construction Loan Interest	\$1,372,800	\$1,344,200	\$2,516,800	\$1,245,200
Construction Loan Points	\$288,000	\$282,000	\$429,000	\$212,250
HOMEBUYER PERMANENT MORTGAGES				
Interest Rate (include. PMI)	6.48%	6.48%	6.48%	6.48%
Term (Years)	30	30	30	30

Table B-9

**Estimate Prototype Development Costs
Ownership Housing Prototypes
15% Density Bonus
City of Vallejo Inclusionary Housing Study
Land Residual Analysis
2006**

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
Acres	10.00	6.50	7.25	1.00
No. of Units	104	115	173	116
Units/Acre	10.4	17.7	23.9	116.0
Total Net Square Feet	242,100	227,000	265,400	118,700
Ratio Net/Gross SF	100%	100%	100%	85%
Total Gross Square Feet Building Area	242,100	227,000	265,400	139,647
LAND AND BUILDING ACQUISITION	\$4,791,600	\$6,229,080	\$9,474,300	\$1,524,600
PARKING GARAGE	\$0	\$0	\$0	\$4,060,000
OFF-SITE AND SITE IMPROVEMENTS	\$7,840,800	\$5,096,520	\$6,316,200	\$871,200
CONSTRUCTION HARD COSTS (INCLUDING GARAGES)	\$19,125,900	\$19,522,000	\$31,051,800	\$19,550,588
GENERAL CONDITIONS	\$360,000	\$360,000	\$360,000	\$360,000
ARCH./ENG./CONSTR. SUPERVISION	\$1,078,668	\$984,741	\$2,242,080	\$1,225,307
LOCAL PERMITS AND FEES	\$3,098,674	\$3,149,172	\$4,757,500	\$3,197,302
ALTA SURVEY	\$20,000	\$20,000	\$20,000	\$20,000
ENVIRONMENTAL PHASE I AND II	\$20,000	\$20,000	\$20,000	\$20,000
SOILS TESTING	\$90,000	\$90,000	\$90,000	\$90,000
CONSTRUCTION LOAN FEES	1.00% \$312,750	\$306,000	\$457,500	\$261,750
CONSTRUCTION/SALE PERIOD INTEREST	\$1,490,775	\$1,458,600	\$2,851,750	\$1,631,575
PROPERTY INSURANCE	\$191,259	\$195,220	\$310,518	\$195,506
PROPERTY TAXES	\$317,583	\$308,476	\$468,423	\$219,464
TITLE AND CLOSING	\$30,000	\$30,000	\$30,000	\$30,000
APPRAISAL FEES	\$10,000	\$10,000	\$10,000	\$10,000
REAL ESTATE LEGAL	\$50,000	\$50,000	\$50,000	\$50,000
WARRANTY	2.00% \$1,047,558	\$1,079,532	\$1,254,690	\$736,532
MARKETING/SALES COMMISSIONS	4.00% \$2,095,116	\$2,159,064	\$2,509,381	\$1,473,065
TOTAL PROJECT COST	\$41,970,683	\$41,068,404	\$62,274,142	\$35,526,890
PER UNIT	\$403,564	\$357,117	\$359,966	\$306,266
PER SF	\$173.36	\$180.92	\$234.64	\$299.30

Source: David Paul Rosen & Associates

Table B-10

Financing Assumptions
 Ownership Housing Prototypes
 15% Density Bonus
 City of Vallejo Inclusionary Housing Study
 Land Residual Analysis
 2006

	Owner 1 Low Density Detached Family	Owner 2 Small Lot Detached Family	Owner 3 Medium Density Attached Family	Owner 4 Stacked Flat Condominium Family
DEVELOPMENT COST ASSUMPTIONS				
Property Acquisition Cost Per SF	\$11	\$22	\$30	\$35
Property Acquisition Cost Per Unit	\$46,100	\$54,200	\$54,800	\$13,100
Off-site and Site Improvement Costs per SF Site Area	\$18	\$18	\$20	\$20
Parking Garage (per space)	\$0	\$0	\$0	\$20,000
Hard Construction/Rehabilitation Costs per SF	\$79	\$86	\$117	\$140
Hard Construction/Rehabilitation Costs per Unit	\$183,903	\$169,757	\$179,490	\$168,540
Architectural/Engineering (Percent of Hard Costs)	4%	4%	6%	6%
Local Permits and Fees Per Unit	\$29,795	\$27,384	\$27,500	\$27,563
Property Insurance During Construction (Percent of Hard Costs)	1.00%	1.00%	1.00%	1.00%
CONSTRUCTION LOAN				
Value, Based on Development Costs				
Constr. Loan Amt. 75% Total Dev. Cost	\$31,275,000	\$30,600,000	\$45,750,000	\$26,175,000
Interest Rate	8.00%	8.00%	8.00%	8.00%
Loan Points	1.00%	1.00%	1.00%	1.00%
Average Loan Balance--Construction	55.00%	55.00%	55.00%	55.00%
Construction Period	13 Months	13 Months	17 Months	18 Months
Total Construction Loan Term	13 Months	13 Months	17 Months	18 Months
Construction Loan Interest--Construction	\$1,490,775	\$1,458,600	\$2,851,750	\$1,631,575
Total Construction Loan Interest	\$1,490,775	\$1,458,600	\$2,851,750	\$1,631,575
Construction Loan Points	\$312,750	\$306,000	\$457,500	\$261,750
HOMEBUYER PERMANENT MORTGAGES				
Interest Rate (include. PMI)	6.48%	6.48%	6.48%	6.48%
Term (Years)	30	30	30	30

Table B-11

**Gap Between Development Cost and Financing Supported by Rents
Affordable to Very Low Income Households**

**City of Vallejo Inclusionary Housing Study
2006**

Targeted Income	Gap Based on Development Costs
Very Low Income (50% of Area Median Income)	\$177,467

Table B-12

**Gap Between Development Costs and Affordable Price to Moderate Income Households
Owner Housing Prototypes**

**City of Vallejo Inclusionary Housing Study
2006**

Owner 1 Prototype - Low Density Detached	Owner 2 Prototype - Small Lot Detached	Owner 3 Prototype - Medium Density Attached	Owner 4 Prototype - Stacked Flat Condo
\$133,851	\$86,923	\$135,490	\$51,751

Table B-13

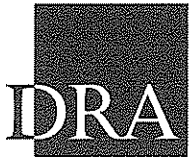
**Amount of Financing Supported by Rents
Affordable to Very Low Income Households**

**City of Vallejo Inclusionary Housing Study
2006**

Prototype		Stacked Flat
Total Units:		150
Units by Bedroom Count:		
One Bedroom		40
Two Bedroom/1 Bath		30
Two Bedroom		55
Three Bedroom		25
Net Operating Income:		
One Bedroom		\$317,760
Two Bedroom/1 Bath		\$264,960
Two Bedroom		\$485,760
Three Bedroom		\$245,100
Total Gross Rents		\$1,313,580
Less: Vacancy	5%	(\$65,679)
Effective Gross Income		\$1,247,901
Operating Expenses (1)		(\$649,800)
Net Operating Income		\$598,101
(1) Total Per Unit Oper. Costs		\$4,332
Annual Operating Costs/Unit		\$4,232
Annual Property Taxes/Unit		\$100

PERMANENT LOAN CALCULATIONS

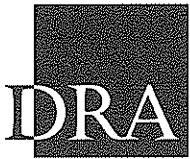
Annual Net Operating Income, Very Low Income Rents	\$598,101
Debt Coverage Ratio	1.20
Debt Service	\$498,418
Mortgage Term (Amortization)	30 years
Interest Rate	7.50%
Maximum Permanent Loan Amount Based on DCR	\$7,128,249



DAVID PAUL ROSEN & ASSOCIATES

ATTACHMENT C

DEVELOPERS CONTACTED FOR THE INCLUSIONARY HOUSING STUDY



Attachment C

Developers Contacted for the Inclusionary Housing Study

Name	Company
Barney Rancau	Lennar Homes
Robert Stevenson	Lennar Homes
Robert Sprague	Mandarich Developments
Joe Callahan (1)	Callahan Property Company
Chris Austin	Triad
Peter Ziblatt (1)	Braddock and Logan
Darrell Bolognesi (1)	Braddock and Logan
Dennis O'Keefe	Pulte Homes
Ray Panek (1)	KB Homes
Eric Clayton (1)	Vallejo NHS
Jim Buckley (1)	Citizens Housing
Jim Silverwood	Affirmed Housing

(1) Developers who provided information for this study. In addition to these developers, BRIDGE Housing and Mid-Peninsula Housing Coalition provided information on construction costs.