



# **Inclusionary Housing: Making it Work**

## **Economic Analysis of Inclusionary Housing Requirements**

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**Prepared for Citibank, the Sacramento Housing Alliance,  
SACOG, and the Sacramento Association of Realtors**

**Prepared by Economic & Planning Systems, Inc.**

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- ▶ **Features of Inclusionary Housing (IH) Ordinance**
- ▶ **Illustration of Affordable Housing Subsidy by Product Type**
- ▶ **Assess Land and Housing Market Conditions**
- ▶ **Conduct Economic Feasibility Analysis**
- ▶ **Identify Potential Economic Impacts**

# Features of Inclusionary Housing Ordinances

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- ▶ **Percent affordable housing set aside**
- ▶ **Target income group(s)**
- ▶ **Affordable housing prototype and tenure**
- ▶ **Applicability and exemptions**
- ▶ **In lieu fee provisions (if any)**
- ▶ **Other alternative compliance mechanisms**

# Illustration of Affordable Housing Subsidy by Product Type

	Multifamily Rental Apt	For-Sale Townhouse	Single Family Detached
<b>Production Cost</b>	\$195,000	\$235,000	\$285,000
<b>Affordable Unit Values</b>			
Very Low Income	\$87,000	\$120,000	\$120,000
Low Income	\$165,000	\$190,000	\$190,000
Moderate Income	\$210,000	\$230,000	\$230,000
<b>Required Subsidies</b>			
Very Low Income	(\$108,000)	(\$115,000)	(\$165,000)
Low Income	(\$30,000)	(\$45,000)	(\$95,000)
Moderate Income	N/A	(\$5,000)	(\$55,000)

Source: Economic & Planning Systems, Inc.

# Land & Housing Market Conditions

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- ▶ **Land supply characteristics in jurisdiction**
- ▶ **Average price points for market rate housing units**
- ▶ **Local housing development trends and potential**
- ▶ **Affordable housing needs (by household income grouping)**
- ▶ **Affordable housing supply and rate of production**

# Economic Feasibility Analysis: Housing Prototypes

1. Describe individual housing prototypes subject to the inclusionary housing requirement.

## Housing Prototype Assumptions

Product Prototype	Stacked Flats		
	A	B	C
<u>Product Description</u>			
Square Feet	700	950	1,100
Bedrooms	1	2	3

# Economic Feasibility Analysis: Housing Prototypes

2. Prepare financial analysis of each prototype housing unit.
  - a. Estimate market price for each prototype housing unit.

## Housing Prototype Assumptions

Product Prototype	Stacked Flats		
	A	B	C
<b><u>Value/Sales Price</u></b>			
Rent/Price per Sqft	\$1.79	\$1.58	\$1.55
Annual Rent	\$15,000	\$18,000	\$20,400
Annual Net Operating Income (NOI) [1]	\$10,050	\$12,060	\$13,668
<b>Estimated Value/Sales Price [2]</b>	<b>\$191,429</b>	<b>\$229,714</b>	<b>\$260,343</b>

[1] Assumes vacancy, operations, and replacement costs total 33% of maximum annual revenue possible.

[2] Value of Stacked Flats calculated based upon 'Annual Net Operating Income Per Unit' and capitalization rate of 5.25%.

# Economic Feasibility Analysis: Housing Prototypes

2. Prepare financial analysis of each prototype housing unit.
  - b. Set economic return threshold.

## Housing Prototype Assumptions

Product Prototype	Stacked Flats		
	A	B	C
Economic Return Threshold	12.5%	12.5%	12.5%

# Economic Feasibility Analysis: Housing Prototypes

2. Prepare financial analysis of each prototype housing unit.
  - c. Estimate development costs.

## Housing Prototype Assumptions

Product Prototype	Stacked Flats		
	A	B	C
<b><u>Direct Costs</u></b>			
Land (per Sqft of land)	\$11.50	\$11.50	\$11.50
Site Improvements (per Sqft of unit)	\$12.50	\$12.50	\$12.50
Vertical Costs (per Sqft of unit)	\$90.00	\$90.00	\$90.00
<b><u>Indirect Costs (% of direct costs)</u></b>			
Architecture/Engineering	10.0%	10.0%	10.0%
Management	12.5%	12.5%	12.5%
Marketing & Commissions	3.0%	3.0%	3.0%
Financing Costs	9.0%	9.0%	9.0%
Contingency	13.0%	13.0%	13.0%

# Economic Feasibility Analysis: Baseline Scenario

## 3. Assemble baseline development project scenarios with 100 percent market rate housing units.

	<b>SCENARIO 1</b>		<b>SCENARIO 2</b>		
<b>Acres</b>	20.3		20.3		
<b>Total Units</b>	820		444		
<b>Height</b>	4		2-3		
<b>Product</b>	Stacked Flats		Stacked Flats		
<b>Prototype</b>	A	B	A	B	C
<b>Units by Prototype</b>	328	492	255	135	54
<b>Land Sqft per Unit</b>	1,081	1,081	1,996	1,996	1,996

# Economic Feasibility Analysis: Baseline Scenario

4. Calculate baseline economic returns.
  - a. Estimate market price per unit (derived from housing prototype assumptions).

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b><u>Derived Value/Sales Price</u></b>					
Rent/Price per Sqft	\$1.79	\$1.58	\$1.79	\$1.58	\$1.55
Annual Rent	\$15,000	\$18,000	\$15,000	\$18,000	\$20,400
Annual Net Operating Income (NOI) [1]	\$10,050	\$12,060	\$10,050	\$12,060	\$13,668
<b>Estimated Value/Sales Price [2]</b>	<b>\$191,400</b>	<b>\$229,700</b>	<b>\$191,400</b>	<b>\$229,700</b>	<b>\$260,300</b>

[1] Assumes vacancy, operations, and replacement costs total 33% of maximum annual revenue possible.

[2] Value of Stacked Flats calculated based upon 'Annual Net Operating Income Per Unit' and capitalization rate of 5.25%.

# Economic Feasibility Analysis: Baseline Scenario

## 4. Calculate baseline economic returns.

### b. Estimate development costs per unit for each prototype.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b><u>Direct Costs</u></b>					
Land (per unit)	\$12,426	\$12,426	\$22,948	\$22,948	\$22,948
Site Improvements	\$8,750	\$11,875	\$8,750	\$11,875	\$13,750
Vertical Costs	\$63,000	\$85,500	\$63,000	\$85,500	\$99,000
City Permits & Fees	\$18,821	\$19,908	\$18,821	\$19,908	\$20,675
<b>Total Direct Costs</b>	<b>\$102,997</b>	<b>\$129,709</b>	<b>\$113,519</b>	<b>\$140,231</b>	<b>\$156,373</b>
<b><u>Indirect Costs</u></b>					
Architecture/Engineering	\$6,300	\$8,550	\$6,300	\$8,550	\$9,900
Management	\$7,875	\$10,688	\$7,875	\$10,688	\$12,375
Marketing & Commissions	\$5,742	\$6,891	\$5,742	\$6,891	\$7,810
Financing Costs	\$11,587	\$14,592	\$12,771	\$15,776	\$17,592
Contingency	\$13,390	\$16,862	\$14,758	\$18,230	\$20,329
<b>Total Indirect Costs</b>	<b>\$44,894</b>	<b>\$57,583</b>	<b>\$47,445</b>	<b>\$60,135</b>	<b>\$68,006</b>
<b>Total Production Costs</b>	<b>\$147,890</b>	<b>\$187,291</b>	<b>\$160,965</b>	<b>\$200,366</b>	<b>\$224,379</b>

# Economic Feasibility Analysis: Baseline Scenario

## 4. Calculate baseline economic returns.

### c. Estimate financial performance per unit for each prototype.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b><u>Financial Performance per Unit</u></b>					
Total Units	328	492	255	135	54
Derived Value/Sales Price	\$191,400	\$229,700	\$191,400	\$229,700	\$260,343
Less Total Production Costs	<u>(\$147,890)</u>	<u>(\$187,291)</u>	<u>(\$160,965)</u>	<u>(\$200,366)</u>	<u>(\$224,379)</u>
Derived Return to Developer	\$43,510	\$42,409	\$30,435	\$29,334	\$35,964
Cash Return as Percent of Production Costs	29.4%	22.6%	18.9%	14.6%	16.0%

# Economic Feasibility Analysis: Baseline Scenario

4. Calculate baseline economic returns.
  - d. Estimate financial performance for each development project scenario.

	<b>SCENARIO 1</b>	<b>SCENARIO 2</b>
<b><u>Financial Performance per Project</u></b>		
Total Units	820	444
Derived Value/Sales Price	\$175,791,600	\$93,875,014
Less Total Production Costs	<u>(\$140,655,402)</u>	<u>(\$80,211,893)</u>
Derived Return to Developer	\$35,136,198	\$13,663,122
Cash Return as Percent of Production Costs	25.0%	17.0%

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

5. Determine “funding gap” for affordable housing units.
  - a. Identify likely combination of prototypes with 10 percent affordable housing units.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b><u>Units by Income Level</u></b>					
Market Rate	295	443	229	121	49
Moderate (120%)	0	0	0	0	0
Moderate (100%)	0	0	0	0	0
Low Income	17	25	13	7	3
Very Low Income	<u>16</u>	<u>24</u>	<u>13</u>	<u>7</u>	<u>2</u>
<b>Total Units</b>	<b>328</b>	<b>492</b>	<b>255</b>	<b>135</b>	<b>54</b>

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

5. Determine “funding gap” for affordable housing units.
  - b. Estimate development cost of targeted affordable housing units.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b>Production Costs</b>					
Production Cost per Unit	\$147,890	\$187,291	\$160,965	\$200,366	\$224,379
<b>Project Production Cost</b>	<b>\$48,508,013</b>	<b>\$92,147,390</b>	<b>\$41,046,012</b>	<b>\$27,049,398</b>	<b>\$12,116,483</b>

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

5. Determine “funding gap” for affordable housing units.
  - c. Determine ability of targeted households to pay for housing.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b>Price (Ability to Pay)</b>					
Moderate (120%)	\$228,502	\$265,034	\$228,502	\$265,034	\$301,566
Moderate (100%)	\$179,972	\$210,415	\$179,972	\$210,415	\$240,858
Low Income	\$140,396	\$164,751	\$140,396	\$164,751	\$189,150
Very Low Income	\$72,078	\$87,300	\$72,078	\$87,300	\$102,522

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

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5. Determine “funding gap” for affordable housing units.
  - c. Determine ability of targeted households to pay for housing (*continued*)
    - ▶ Key assumptions:
      - ▶ Median income for 2- to 5-person household size;
      - ▶ Rent-to-income ratio of 0.25;
      - ▶ Mortgage calculated using annual interest rate of 7 percent, 360-month loan, 10 percent down payment;
      - ▶ Mortgage-to-income ratio of 0.25;
      - ▶ Capitalization rate of 6.5 percent, and management expenses of 3 percent of value; and
      - ▶ Monthly operating expenses from \$275 to \$350 depending on income category.

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

5. Determine “funding gap” for affordable housing units.
  - d. Calculate gross subsidy cost of each housing prototype by each targeted household income.

	SCENARIO 1		SCENARIO 2		
Prototype	A	B	A	B	C
<b><u>Affordable Unit Revenues (per Unit) [1]</u></b>					
Moderate (120%)	\$80,612	\$77,742	\$67,537	\$64,668	\$77,186
Moderate (100%)	\$32,082	\$23,124	\$19,008	\$10,049	\$16,479
Low Income	(\$7,494)	(\$22,541)	(\$20,568)	(\$35,615)	(\$35,229)
Very Low Income	(\$75,812)	(\$99,991)	(\$88,886)	(\$113,066)	(\$121,858)

[1] Affordable unit revenues equal production costs minus sales price (ability to pay).

# Economic Feasibility Analysis: 10 Percent Inclusionary Requirement Scenario

## 6. Prepare financial analysis of development scenarios with inclusionary units.

	SCENARIO 1	SCENARIO 2
<b><u>Affordable Unit Revenues</u></b>		
Moderate (120%)	\$0	\$0
Moderate (100%)	\$0	\$0
Low Income	(\$690,914)	(\$622,384)
Very Low Income	(\$3,612,784)	(\$2,190,699)
<b>Total Affordable Unit Revenues</b>	<b>(\$4,303,698)</b>	<b>(\$2,813,083)</b>
<b><u>Derived Return to Developer</u></b>		
Total Return on Market Units	\$31,622,358	\$12,281,310
Total Affordable Unit Revenues	(\$4,303,698)	(\$2,813,083)
<b>Net Return (After Affordability Gap)</b>	<b>\$27,318,660</b>	<b>\$9,468,228</b>
<b>Cash Return as Percent of Production Cost</b>		
	<b>19.4%</b>	<b>11.8%</b>
<b>Financial Gap for 12.5% Return</b>	<b>\$0</b>	<b>\$558,259</b>

# Economic Feasibility Analysis continued

7. Determine economic feasibility of inclusionary requirement for each development project scenario.

	SCENARIO 1	SCENARIO 2
<b><u>10 Percent Inclusionary Requirement Scenario</u></b>		
Cash Return as Percent of Production Cost	19.4%	11.8%
<i>Economic Return Threshold</i>	12.5%	12.5%
<b>Economic Feasibility</b>	Feasible	Infeasible

# **Economic Feasibility Analysis: City Sponsored Housing Incentives and Programs**

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- 8. Document applicability and estimated value of City-sponsored housing incentives and programs:**
  - a. In lieu fee provisions;**
  - b. Density bonuses;**
  - c. Relaxed development standards (e.g., parking);**
  - d. Impact fee deferral/waivers;**
  - e. Redevelopment agency participation; and**
  - f. Federal tax credits.**

# Economic Feasibility Analysis: City Sponsored Housing Incentives and Programs

## 9. Revise “inclusionary” financial analysis of development scenarios to include City-sponsored incentives and programs.

	SCENARIO 1	SCENARIO 2
<b><u>Financial Gap</u></b>	\$0	\$558,259
<b><u>Four Percent Tax Credits</u></b>		
Production Costs Of Affordable Rental	\$14,065,540	\$8,021,189
<b>Present Value of Tax Credits (30%)</b>	<b>\$4,219,662</b>	<b>\$2,406,357</b>
<b><u>City Sponsored Discounts</u></b>		
Marketing Costs (1)	\$0	\$0
Toilet Retrofit Fee	\$51,496	\$28,260
Street Improvement Fee (100% Median)	\$0	\$0
Street Improvement Fee (80% Median)	\$63,063	\$34,535
Street Improvement Fee (50% Median)	\$90,090	\$49,550
Water Connection Fee (100% Median)	\$0	\$0
Water Connection Fee (80% Median)	\$0	\$0
Water Connection Fee (50% Median)	\$47,640	\$26,202
Deferred City Permits & Fees Financing Savings	<u>\$3,976</u>	<u>\$3,976</u>
<b>Total City Discounts Available</b>	<b>\$256,265</b>	<b>\$142,523</b>
<b><u>Remaining Financial Gap</u></b>	<b>\$0</b>	<b>\$0</b>

# Identify Potential Economic Impacts

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- ▶ **Determine whether the inclusionary program discourages desired development.**
- ▶ **Determine the impact of higher development costs upon land markets.**
- ▶ **Estimate the public cost of City-sponsored incentives and programs.**