DRAFT MEMORANDUM

To: City of Riverside

From: Economic & Planning Systems

Subject: Riverside Inclusionary Housing In-Lieu Fee Analysis; EPS #204046

Date: August 28, 2022

Introduction

The City of Riverside is currently considering the adoption of an inclusionary housing ordinance. If adopted, the ordinance would require that residential developments consisting of more than two units include five or 10 percent of dwelling units at below-market-rate rents or sale prices affordable to Low or Moderate-income households, depending on the development's density. The affordable rates are based on income standards established by the State of California's Department of Housing and Community Development (HCD).

The ordinance would also allow, as an alternative to providing required units, for development projects to pay an in-lieu fee to support the development of affordable units elsewhere in the City. In-lieu fees are typically calculated to reflect the financial subsidy needed to support the development of affordable units that are not being provided on-site. The fee revenues are collected into a dedicated fund that can be utilized to support the production and preservation of affordable units in the City. Under the City's proposed ordinance, the fee would be based on the subsidy needed to provide a higher proportion of affordable units—either eight or 15 percent, depending on the development type—than would be required if the units were built on-site as part of the market-rate development. The fee can also be paid for any fractional affordable units required on-site, as an alternative to "rounding up" and building an additional unit.

Economic & Planning Systems, Inc. (EPS) has been working with the City to develop its inclusionary housing ordinance, which includes calculating an appropriate inclusionary housing in-lieu. This memorandum describes EPS's estimates of the subsidy, or "financing gap" associated with the development of affordable units, and the resulting fee calculation based on this subsidy.

A summary of the calculated fees is included in **Table 1** below.

Table 1 Proposed Inclusionary Housing In-Lieu Fees for City of Riverside

Item	*Formula*	Unit Type: Multifamily Rental	Unit Type: Townhome For-Sale	Unit Type: Single-Family For-Sale
Affordability Level		Low-Income	Low-Income	Moderate-Income
Value Per Unit	*a*	$246,937	$218,213	$510,701
Cost Per Unit	*b*	$328,720	$375,105	$615,561
Subsidy Per Unit	*c = a-b*	($81,784)	($156,892)	($104,860)
Fee Per Affordable Unit	*c*	$81,784	$156,892	$104,860
Inclusionary Percentage for In-Lieu Fees	*d*	15%	15%	8%
Fee Per Market Rate Unit	***e = c*d***	**$12,268**	**$23,534**	**$8,389**
Average Unit Size	*f*	850	1500	2500
Fee Per Affordable Sq. Ft.	*g = c/f*	$96.22	$104.59	$41.94
Fee Per Market Rate Sq. Ft.	***h = g*d***	**$14.43**	**$15.69**	**$3.36**

Financing Gap Analysis

Product Prototypes

The analysis assumes that the collected in-lieu fees would be used to subsidize the production of lower-income units similar to the type of future residential development anticipated in the City. The prototype residential products used in this analysis are the same as those utilized in EPS's analysis of the inclusionary housing policy[1] and were informed by research on trends in the local and regional housing markets, as well as interviews with local developers, and were approved by City staff to utilize in this analysis.

The assumptions for the prototype products are summarized in **Table 2**. As shown, the rental product prototype is a two-bedroom, 850 net square-foot apartment unit, developed at a density of 32 units per acre with one surface parking space per bedroom. The for-sale product prototypes include a three-bedroom, 1,500 square foot attached townhome developed at a density of 15 units per acre, and a four-bedroom, 2,500 square foot detached single-family home developed at a density of 10 units per acre. Both for-sale products are assumed to include attached parking.

[1] See staff report from February 28, 2022 Housing and Homelessness Committee Meeting, https://aquarius.riversideca.gov/clerkdb/0/doc/341286/Page1.aspx

Table 2 Prototype Unit Characteristics

Unit Category	Unit Type	Tenure	Density
Multifamily	2BR, 850 sq. ft.	Rental	32 units/acre
Townhomes	3BR, 1,500 sq. ft.	For Sale	15 units/acre
Single-Family	4BR, 2,500 sq. ft.	For Sale	10 units/acre

Maximum Affordable Housing Rents

Income levels for affordable housing units are set for the County of Riverside by the California Department of Housing and Community Development (HCD) on an annual basis. **Table 3** shows the income limits for 2022 for three, four-, and five-person households, as this analysis assumes the household size for each prototype would equal the number of bedrooms plus one.[2] The income limits correspond to the City's proposed ordinance, which sets the maximum income for Low-Income households at 70 percent of Area Median Income (AMI) and for Moderate-Income households at 110 percent of AMI.

Consistent with State guidance, the analysis assumes that Low-Income households spend no more than 30 percent of their gross annual income, and Moderate-Income households no more than 35 percent of their gross annual income, on total housing costs. For rental units, this includes rent and utilities.[3] For for-sale units, housing costs include mortgage principal and interest, property taxes, and homeowner's insurance payments (collectively, "PITI"), plus annual Homeowners Association (HOA) fees. After subtracting taxes, insurance, and HOA fees from a household's maximum affordable housing costs budget, the remaining budget was used to calculate a maximum affordable house purchase price, based on common mortgage term assumptions.[4]

As summarized in **Table 3**, a three-person Low-Income household earning 70 percent of AMI (adjusted) can pay up to $1,404 per month for a two-bedroom rental unit (including utilities). For comparison, based on data provided by CoStar, EPS estimates that the market-rate rent for a newly constructed unit of the same size in Riverside is approximately $2,570 per month.

For for-sale units, a four-person Low-Income household earning 70 percent of AMI can pay up to $995 on monthly mortgage payments (principal and interest), which translates

---

[2] Based on California Health and Safety Code Section 50052.5.

[3] The utility allowance for a rental unit is based on a schedule published by the Riverside County Housing Authority, updated annually (https://www.harivco.org/Portals/0/UtilityAllowanceChart/2022/Utility%20Allowance%20Chart--%207-1-2022--Standard--APARTMENT.pdf?ver=2022-07-07-114411-617)

[4] Estimates of sale prices assume a 30-year fixed mortgage with a 4.5 percent effective interest rate, plus a 10 percent down payment from the homebuyer.

into a maximum purchase price of $218,213 for a three-bedroom townhome unit. Based on recent home sales data, EPS estimates that a newly constructed market-rate unit of the same size could achieve a sale price of $400,000 in Riverside. A five-person Moderate-Income household earning 110 percent of AMI can pay up to $2,329 on monthly mortgage payments (principal and interest), which translates into a maximum purchase price of $510,701 for a four-bedroom single-family home unit. EPS estimates that a newly constructed market-rate unit of the same size could achieve a sale price of $625,000 in Riverside.

Table 3 Maximum Affordable Rents and Sale Prices for Prototype Units

Unit Types	Low-Income (70% AMI)	Moderate-Income (110% AMI)
Multifamily Rental Units		
2022 Maximum Income (3-person household) [1]	$56,156	Not Applicable
Maximum Housing Cost Allowance (30%) [2]	$16,847	
Maximum Monthly Rent (2-bedroom unit, incl. utilities)	***$1,404***	
Typical Market Rate [3]	*$2,571*	
For-Sale Townhome Units		
2022 Maximum Income (4-person household) [1]	$62,404	Not Applicable
Maximum Housing Cost Allowance (30%) [2]	$18,721	
Annual Other Housing Costs [4]	$6,780	
Maximum Sale Price (3-bedroom unit) [5]	***$218,213***	
Typical Market Rate [3]	*$400,000*	
For-Sale Single-Family Units		
2022 Maximum Income (5-person household) [1]	Not Applicable	$103,840
Maximum Housing Cost Allowance (35%) [2]		$36,344
Annual Other Housing Costs [4]		$8,397
Maximum Sale Price (4-bedroom unit) [5]		***$510,701***
Typical Market Rate [3]		*$625,000*

[1] Income levels are based off the 2022 median household income for Riverside County, as reported by CA HCD.

[2] Maximum housing cost allowance is based on 30% of maximum income for low-income households and 35% of maximum income for moderate-income households.

[3] Based on EPS market research.

[4] Other housing costs for for-sale units include taxes, insurance, and HOA fees, as estimated by EPS.

[5] Maximum sale price for each income level assumes mortgage payment equal to 30% of maximum monthly income for low-income households, and 35% of maximum monthly income for moderate-income households, minus other housing costs, on a 30-year mortgage with a 4.5% annual interest rate and 10% down payment.

Sources: State of CA HCD; City of Riverside; County of Riverside Housing Authority; Zillow; CoStar; EPS

Development Cost Assumptions

Residential development costs include land costs, direct or "hard" costs (e.g., labor and materials), and indirect or "soft" costs (e.g., architecture, entitlement, fees, marketing, etc.). Land cost estimates used in the analysis are based on data from recent land transactions in Riverside. Since the prototypes modeled in this analysis are lower-density than those typically found in Downtown Riverside and surrounding areas, this analysis uses a land cost reflective of areas outside of the Downtown, which are typically lower. Other development cost estimates are derived from housing market research and EPS interviews with housing developers both within Riverside and the larger Inland Empire region. These assumptions are shown in **Table 4 through 6** and indicate that the total cost per unit is approximately $329,000 for rental apartments, $375,000 for townhome units, and $616,000 for single-family units. These figures represent "prototypical" projects; the actual costs for a given project will vary by location and project design characteristics.

Revenue Assumptions

To calculate the value of the affordable units, several revenue-related assumptions were made regarding applicable income levels and the percentage of household income that can be put towards housing costs, including rent. In addition, translating a revenue estimate into a total value per rental unit estimate required assumptions for operating expenses and capitalization rates. The following assumptions were used:

- *Income Levels*—The analysis estimates the subsidy required to produce rental units for three-person households earning 70 percent of AMI; for-sale townhome units for four-person households earning 70 percent of AMI; and for-sale single-family units for five-person households earning 110 percent of AMI, as shown above in **Table 3**.

- *Percentage of Gross Household Income Available for Housing Costs*—State guidelines indicate that Low-Income households should pay no more than 30 percent of their gross income on housing costs, and Moderate-Income households should pay no more than 35 percent of their gross income on housing costs. EPS calculated the rents and sale prices that each income category would be able to pay net of other housing-related costs (e.g. utilities, insurance and taxes, HOA fees).

- *Operating Costs for Rental Units*—The analysis assumes that affordable apartment operators incur annual operating costs of $4,500 per unit on units affordable to Low-Income households, which include the cost of management, maintenance, and common utilities (those not paid by tenants). These operating costs assume that all affordable apartments constructed for Low-Income households would be exempt from property taxes, as allowed by State law.

- *Capitalization Rate*—A capitalization rate is used for the rental prototype, and represents the rate of return that an investor in a real estate project expects to receive. The rate generally indicates the project's relative risk (e.g. a lower capitalization rate suggests that a project is less risky, and therefore an investor is willing to accept a lower rate of return because the return is more guaranteed). The value of a project is calculated by dividing the net operating income (NOI) by the capitalization rate. For the rental prototypes, EPS utilized a capitalization rate of 5.0 percent.[5]

- *Profit Margin*—A profit margin is used for the for-sale prototypes, and represents the rate of return that an investor in a real estate project expects to receive. The profit margin is added as an additional cost on the developed units. EPS utilized a profit margin of 14 percent, based on the firm's work in similar markets throughout California.

Financing Gap Results

Table 4 shows the subsidies required for construction of rental apartments for three-person households at Low-Income levels (70 percent of AMI). As shown, such units are estimated to cost approximately $329,000 to develop, while the estimated operating income from those units at affordable rents would translate to values of $247,000 per unit. Based on this analysis, a rental unit affordable to a Low-Income household would require a subsidy of approximately $82,000.

Table 5 shows the subsidies required for construction of for-sale townhome units affordable to four-person households earning Low-Income levels (70 percent of AMI). As shown, these households could afford to pay up to roughly $218,000 for a home, while such homes are estimated to cost approximately $375,000 to build, requiring a subsidy of approximately $157,000. **Table 6** shows the subsidies required for construction of for-sale single-family units affordable to five-person households earning Moderate-Income levels (110 percent of AMI). As shown, these households could afford to pay up to roughly $511,000 for a home, while such homes are estimated to cost approximately $616,000 to build, requiring a subsidy of approximately $105,000.

[5] Based on H1 2021 cap rate surveys for suburban multifamily development in the Inland Empire region, published by CBRE, a real estate services firm (https://www.cbre.com/insights/reports/us-cap-rate-survey-h1-2021)

Table 4 Financing Gap Pro Forma Analysis for Prototype Rental Unit Affordable Low-Income (70% AMI) Households

Description	Factor	Unit	Multifamily Rental
DEVELOPMENT PROGRAM			
Bedrooms			2
Dwelling Units/Acre			32
Unit Square Feet (Net)			850
Common Area			15%
Unit Square Feet (Gross)			978
Parking Spaces Per Unit			1
COST ESTIMATE			
Land Acquisition	$435,600	/acre	**$13,613**
Direct			
Site Improvement	$5.00	/land sf	$6,806
Construction Costs	$205	/bldg. sq. ft	$200,388
Parking (Surface)	$5,000	/space	$5,000
Contractor Contingency	10%	of other direct costs	$21,219
Subtotal Direct			**$233,413**
Indirect	35%	direct costs	**$81,695**
Cost Per Unit			**$328,720**
VALUE ESTIMATE			
Maximum HH Income (3-person)	70%	AMI	$56,156
Maximum Annual Rent Per Unit	30%	annual income	**$16,847**
Annual Operating Expenses	$4,500	/unit	($4,500)
Net Operating Income Per Unit			**$12,347**
Value Per Unit	5.00%	capitalization rate	**$246,937**
Subsidy Per Unit			**$81,784**

Table 5 Financing Gap Pro Forma Analysis for Prototype For-Sale Townhome Unit Affordable to Low-Income (70% AMI) Households

Description	Factor	Unit	Amount Per Unit
DEVELOPMENT PROGRAM			
Bedrooms			3
Dwelling Units/Acre			15
Unit Square Feet			1,500
COST ESTIMATE			
Land Acquisition	$435,600	/acre	**$29,040**
Direct			
Site Improvement	$5.00	/land sf	$14,520
Construction Costs	$125	/bldg. sq. ft.	$187,500
Contractor Contingency	10%	of other direct costs	$20,202
Subtotal			**$222,222**
Indirect	35%	of direct costs	**$77,778**
Developer Profit	14%	of all costs	**$46,066**
Cost Per Unit			**$375,105**
VALUE ESTIMATE			
Maximum HH Income (4-person)	70%	AMI	$62,404
Annual Housing Costs Allowance	30%	annual income	$18,721
Annual Other Housing Costs [1]			$6,780
Maximum Sale Price [2]			**$218,213**
Subsidy Per Unit			**$156,892**

[1] Includes estimates for taxes, insurance, and HOA fee

[2] Assumes mortgage payment equal to 30% of maximum monthly income (minus taxes and insurance) on a 30-year mortgage w ith a 4.5% annual interest rate and 10% dow n payment.

Table 6 Financing Gap Pro Forma Analysis for Prototype For-Sale Single-Family Unit Affordable to Moderate-Income (110% AMI) Households

Description	Factor	Description	Amount Per Unit
DEVELOPMENT PROGRAM			
Bedrooms			4
Dwelling Units/Acre			10
Unit Square Feet			2,500
COST ESTIMATE			
Land Acquisition	$435,600	/acre	**$43,560**
Direct			
Site Improvement	$5.00	/land sf	$21,780
Construction Costs	$125	/bldg. sq. ft.	$312,500
Contractor Contingency	10%	of other direct costs	$33,428
Subtotal			**$367,708**
Indirect	35%	of direct costs	**$128,698**
Developer Profit	14%	of all costs	**$75,595**
Cost Per Unit			**$615,561**
VALUE ESTIMATE			
Maximum HH Income (5-person)	110%	AMI	$103,840
Annual Housing Costs Allowance	30%	annual income	$31,152
Annual Other Housing Costs [1]			$8,397
Maximum Sale Price [2]			**$510,701**
Subsidy Per Unit			**$104,860**

[1] Includes estimates for taxes, insurance, and HOA fee

[2] Assumes mortgage payment equal to 35% of maximum monthly income (minus taxes and insurance) on a 30-year mortgage with a 4.5% annual interest rate and 10% down payment.

In-Lieu Fee Calculation

Table 7 translate the subsidies calculated above into in-lieu fees. As described in the introduction to this memo, the City is proposing to base the in-lieu fee on a higher inclusionary requirement than what is required for building affordable units on-site. For rental units, the requirement associated with paying the in-lieu fee would be subsidizing a number of units affordable to Low-Income families equivalent to 15 percent of market-rate units built, higher than the 10 percent affordable units that would be required if built on-site. For townhome units, the proposed requirement associated with paying the in-lieu fee would be to subsidize a number of units affordable to Low-Income families equivalent to 15 percent of market-rate units built, again higher than the 10 percent affordable units that would be required if built on-site. For single-family units, the requirement would be to subsidize a number of units affordable to Moderate-Income families equivalent to eight percent of market-rate units built, higher than the 5 percent affordable units that would be required if built on-site.

As shown in **Table 7**, the inclusionary percentage is applied to the per unit subsidy for each prototype, in order to calculate a fee per market-rate unit. The analysis further converts the fee per market-rate unit to a fee per market-rate square foot, based on the prototype unit sizes. As shown, the fee for rental units would be **$12,268 per market-rate unit and $14.43 per market-rate square foot**; the fee for townhome units would be **$23,534 per market-rate unit and $15.69 per market-rate square foot**; and the fee for single-family units would be **$8,389 per market-rate unit and $3.36 per market-rate square foot.**

Table 7 In-Lieu Fee Calculation

		Unit Type		
Item	***Formula***	**Multifamily Rental**	**Townhome For-Sale**	**Single-Family For-Sale**
Affordability Level		Low-Income	Low-Income	Moderate-Income
Value Per Unit	*a*	$246,937	$218,213	$510,701
Cost Per Unit	*b*	$328,720	$375,105	$615,561
Subsidy Per Unit	*c = a-b*	($81,784)	($156,892)	($104,860)
Fee Per Affordable Unit	*c*	$81,784	$156,892	$104,860
Inclusionary Percentage for In-Lieu Fees	*d*	15%	15%	8%
Fee Per Market Rate Unit	***e = c*d***	**$12,268**	**$23,534**	**$8,389**
Average Unit Size	*f*	850	1500	2500
Fee Per Affordable Sq. Ft.	*g = c/f*	$96.22	$104.59	$41.94
Fee Per Market Rate Sq. Ft.	***h = g*d***	**$14.43**	**$15.69**	**$3.36**

While it is useful to think of the total in-lieu fee as it may apply to each market-rate unit, it is also useful to know the fee per affordable unit, as some projects will be required to provide a certain number of units but may meet any fractional obligation through payment of a fee. The fee per affordable unit is equivalent to the subsidy needed to develop that unit. For example, under the proposed inclusionary requirement, an 85-unit rental project would be required to provide 12.75 affordable units. If 12 units are provided on site, the additional 0.75-unit requirement could be met by charging a fee of 0.75 times the $81,784 per affordable unit subsidy, or a total payment of $61,338. An 85-unit townhome project would also be required to provide 12.75 affordable units, and if 12 units are provided on site, the additional 0.75-unit requirement could be met by charging a fee of 0.75 times the $156,892 per affordable unit subsidy, or a total payment of $117,669. Finally, an 85-unit single-family project would be required to provide 6.8 affordable units. If six units are provided on site, the additional 0.8-unit requirement could be met by charging a fee of 0.8 times the $104,860 per affordable unit subsidy, or a total payment of $83,888.