



MEMORANDUM

Date: March 10, 2023

To: Oakland Planning and Building Department

From: Hausrath Economics Group

Subject: **Comparative Analysis of Housing Outcomes:
Downtown Oakland Specific Plan Zoning Incentive Program and
California Density Bonus Law**

This memorandum presents analysis of how the Downtown Oakland Specific Plan (DOSP) Zoning Incentive Program (ZIP) compares to California Density Bonus Law (Government Code Sections 65915 – 65918) with respect to market-rate and on-site affordable housing supply and resources for affordable housing production in Oakland. The ZIP allows additional density beyond what is allowed by the DOSP Base Zoning in exchange for a selection of community benefits including affordable commercial space, public restrooms, streetscape improvements, and on-site affordable housing, and with the option of paying fees in lieu of providing these benefits on-site. This analysis, however, focusses entirely on the potential affordable housing outcomes by comparing outcomes for both on-site housing production and revenues for the Affordable Housing Trust Fund under different incentive scenarios.

The analysis identifies and compares the four development options that would exist for residential development sites in Downtown Oakland once the Zoning Incentive Program is approved. The options include residential development under:

1. DOSP Base Zoning
2. DOSP Base Zoning plus State Density Bonus
3. ZIP Maximum Zoning (or any increment above the base)
4. ZIP Maximum Zoning (or any increment above the base) plus State Density Bonus

For any given site, each development option results in different unit counts for market rate, on-site affordable, and total housing units. The contributions that each development option makes to additional financial resources for affordable housing production in Oakland via the City's Affordable Housing Trust Fund vary across the development options as well. To illustrate the outcomes for a range of potential

downtown project sites, the analysis uses five example projects from the Economic Analysis for the DOSP Zoning Incentive Program¹ prepared by Hausrath Economics Group (HEG).

Development Outcomes Under Zoning Incentive Program (ZIP) and California Density Bonus Law

The analysis compares the following parameters for development of five representative downtown project sites under four development options:

- ◆ Total housing units built
- ◆ Market-rate units
- ◆ Very Low-Income units on-site
- ◆ Affordable Housing Impact Fee revenue to Oakland’s Affordable Housing Trust Fund
- ◆ Value of Affordable Housing Impact Fee (AHIF) revenue for affordable housing leveraged at 4:1
- ◆ Percent increase in “Boomerang”² dollars for Oakland’s Affordable Housing Trust Fund

Table 1 on the next page summarizes key results for housing supply and financial resources for affordable housing comparing across the four different development options: 1) DOSP Base Zoning, 2) DOSP Base plus State Density Bonus, 3) ZIP Maximum Zoning, and 4) ZIP Maximum plus State Density Bonus. The table is followed by text highlighting the findings from the results presented. **Tables 2 through 6** at the end of this memorandum present the details behind the outcomes of each development option for each of the five example projects.

Additionally, HEG calculated the Transportation and Capital Improvements impact fee revenue for each of the example projects under the four development options. The results are presented in **Table 7** at the end of this memorandum. All the market rate units under each development option would be subject to both the Transportation and Capital Improvements impact fees. For each example project, the differences among the development options are simply proportional to the number of market rate units.

¹ Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022.

² The City of Oakland allocates 25% of the incremental property tax revenue from development in former Redevelopment Project areas (the “Boomerang”) to the Affordable Housing Trust Fund.

Table 1

Comparison of Outcomes for Housing Production and Resources for Affordable Housing

			Total Housing Units	Market Rate Units	On-Site Affordabl e Units	Affordable Housing Impact Fees	AHIF Leveraged
Development Option 1: DOSP Base Zoning							
Example Project / Subarea ¹	Density ²	Lot Area (sq. ft.)					
1 JLE	250	60,060	240	240	0	\$6,396,598	\$32,000,000
2 CBD	90	44,720	497	497	0	\$13,246,288	\$66,000,000
3 KONO	225	20,000	89	89	0	\$2,372,072	\$12,000,000
4 VC / JLE	250	55,000	220	220	0	\$5,863,548	\$29,000,000
5 JLW	1,000	60,000	60	60	0	\$1,599,149	\$8,000,000
Development Option 2: DOSP Base Zoning Plus State Density Bonus							
Example Project / Subarea	Increased Density over Option 1						
1 JLE		+20%	288	276	12	\$0	\$0
2 CBD		+20%	597	572	25	\$0	\$0
3 KONO		+20%	107	102	5	\$0	\$0
4 VC / JLE		+20%	264	253	11	\$0	\$0
5 JLW		+20%	72	69	3	\$0	\$0
Development Option 3: ZIP Maximum Zoning							
Example Project / Subarea ¹	Density ²	Increased Density over Option 1					
1 JLE	200	+25%	300	298	2	\$7,942,442	\$40,000,000
2 CBD	65	+38%	688	682	6	\$18,176,998	\$91,000,000
3 KONO	110	+104%	182	180	2	\$4,797,448	\$24,000,000
4 VC / JLE	110	+128%	500	494	6	\$13,166,330	\$66,000,000
5 JLW	110	+800%	545	535	10	\$14,259,082	\$71,000,000
Development Option 4: ZIP Maximum Zoning Plus State Density Bonus							
Example Project / Subarea ¹	Increased Density over Option 3						
1 JLE		+20%	360	343	17	\$7,942,442	\$40,000,000
2 CBD		+20%	826	785	41	\$18,176,998	\$91,000,000
3 KONO		+20%	219	207	12	\$4,797,448	\$24,000,000
4 VC / JLE		+20%	600	569	31	\$13,166,330	\$66,000,000
5 JLW		+20%	654	616	38	\$14,259,082	\$71,000,000

Notes:

1. Subareas are Jack London East (JLE), Central Business District (CBD), Koreatown/Northgate (KONO), Victory Court/Jack London East (VC/JLE), and Jack London West (JLW).
2. Residential density expressed as minimum lot area per unit.

Finding: The ZIP generates more residential units overall due to its higher density potential

Across the full range of sites analyzed in the ZIP economic analysis, the ZIP offers density increases ranging from 11% up to 800%. Maximum allowable densities more than double in about two-thirds of the cases.³ California’s Density Bonus program offers density increases from 20% up to 50%, although the 20% case is analyzed here as the most likely case for residential development in the DOSP.

For each of the five example project sites analyzed, the ZIP maximum density exceeds 20%, resulting in more market rate and more total housing supply under the ZIP than under the State Density Bonus program. The highest unit counts are achieved when the Density Bonus program is layered with the ZIP Maximum (Development Option 4). In that option, the total market rate units up to the ZIP maximum density become the “base” for calculating additional units allowed if more on-site below-market-rate units are included in the project through the Density Bonus Program.

Finding: The State Density Bonus program requires more on-site affordable housing

The Density Bonus program provides more on-site affordable housing downtown, at a minimum of 5% of the base units.⁴ It is not possible to derive a generally applicable percentage of the base units under the ZIP equivalent to this measure for the Density Bonus Program. This is because the number of affordable units provided on-site under the ZIP is a function of the *additional* units proposed under the ZIP maximum. The number of potential additional units under the ZIP is site-specific, depending on site location within the 18 Base Height and Intensity Areas (Table 17.101K.05) and the nine ZIP Maximum Height and Intensity Areas (Table 17.101.K.06). For the five example project sites analyzed for this memorandum, the equivalent percentage of the base ranges from 1% up to 17%.

Table 1 and project example Tables 2 – 6, located at the end of this memorandum, quantify the differences in on-site affordable housing unit counts for each development option, assuming very-low-income units are provided. Development Option 1 (DOSP Base zoning) generates no on-site affordable units. Under Development Option 2, applying the State Density Bonus program generates anywhere from three up to 25 on-site very-low-income units, depending on the underlying DOSP base density allowed. Under Development Option 3 (ZIP Maximum zoning), Example Projects 1 – 4 each generate fewer on-site below-market-rate units than under the density bonus program (Development Option 2). Example Project 5, where the base density is low and the difference between base density and the proposed ZIP Maximum density is greatest, generates more on-site affordable units under the ZIP Maximum (Development Option 3) than under the Density Bonus program applied to the lower base density project (Development Option 2). Development Option, which layers the ZIP Maximum with the Density Bonus, results in the highest

³ Under the ZIP, any additional residential density above the base (up to the ZIP Maximum) is required to provide community benefits. This analysis is based on the ZIP Maximum. Units counts and required benefits will be less if projects build to less than the maximum allowed density.

⁴ Although not analyzed here because of the cost to add higher percentages of affordable housing in high-rise development in downtown Oakland, the California Density Bonus program does offer increased density for higher percentages of affordable units. For density increases up to 50%, the affordable unit percentage increases to 15% very-low-income units, 24% low-income units, or 44% moderate-income units.

on-site affordable unit count across all example projects, ranging from 12 units (Example Project 3 a mid-rise to high-rise development under the ZIP, on a small site) up to 41 units (Example Project 2 a greater intensity high-rise project under the ZIP, in the CBD on a large site).

On-site affordable housing has these additional benefits: units are built at the same time and in the same location as the market-rate units, ensuring that affordable housing is provided in the near term and in downtown.

Finding: The ZIP generates substantially more revenue for affordable housing in Oakland

One of the most significant differences between the Zoning Incentive Program and the State Density Bonus program is collection of additional financial resources for affordable housing in Oakland. Under the ZIP, on-site affordable housing is one of the community benefits that a developer can choose to provide in order to achieve increases in residential density. All market rate units are subject to Oakland's Affordable Housing Impact Fee. The impact fee revenue generated through the ZIP accrues to Oakland's Affordable Housing Trust Fund. Under the State Density Bonus program as implemented in Oakland, on-site affordable units satisfy the Affordable Housing Impact Fee requirements, and the City collects no AHIF revenue. The ZIP is thereby a means of generating substantially more impact fee revenue for the Affordable Housing Trust Fund than is the case under the Density Bonus program. The Affordable Housing Trust Fund invests in affordable housing (both new construction and preservation of existing units) throughout the City, including within the DOSP and greater downtown areas.

These conclusions are illustrated in Table 1 and the detailed Tables 2 – 6 where, in all example project cases, Development Options 3 and 4 (which both start with additional units as determined by ZIP Maximum density) generate the most AHIF revenue and the most leveraged funding to support additional affordable housing production in Oakland. Development Option 4 generates no more AHIF revenue than does Development Option 3 because the additional market rate units under the Density Bonus layer satisfy their mitigation requirement by means of more on-site very-low-income units and therefore are not subject to the impact fee.

Finding: Leveraging of impact fee revenue provides substantially more revenue to expand the inventory of affordable housing and the locations where that housing can be produced

Additional revenue for the Affordable Housing Trust Fund under the ZIP is further enhanced to benefit affordable housing production in Oakland because it leverages other funding from federal, state, and county sources. In recent years, the leverage ratio has been as high as \$7 for every one local dollar when Alameda County Measure A1 funding was available. Since that funding source is depleted, the ratio is in the range of \$4 for every one local dollar. The success of regional housing funding measures could increase leveraging opportunities in the future.⁵

⁵ City of Oakland, Housing and Community Development Department *2021-2023 Strategic Action Plan*, page 22.

The tables present estimates of the AHIF leveraged at 4:1 in the Affordable Housing Trust Fund. These resources are not available when a development project elects to pursue more residential density only under the State Density Bonus program (Development Option 2). Under the ZIP Maximum (Development Option 3 and Development Option 4), AHIF revenue from each example project generates tens of millions of dollars for the Affordable Housing Trust Fund.

According to Oakland’s Strategic Action Plan for housing, that funding is allocated to support a variety of housing needs across the City: providing stability for existing tenants, preventing displacement, generating more immediate housing solutions for the unhoused, and meeting racial equity goals. Oakland’s most recent working assumptions for funding allocations are as follows:

Oakland Affordable Housing Trust Fund Affordable Unit Production Assumptions	
Program	Fund Split by Program
New Construction Units	50%
Acquisition-Conversion Units	35%
Preservation Units	14%
Missing Middle Units	1%
Total	100%

Source: City of Oakland, Housing and Community Development Department 2021-2023 Strategic Action Plan, Table 6, page 27.

Finding: The Affordable Housing Trust Fund also benefits from the larger number of market rate units that could be provided under the higher residential densities possible under the ZIP

Because most development sites under the ZIP have the potential to generate more additional market rate units than possible under the State Density Bonus (where density increases are capped at 50%), the ZIP provides more property tax revenue and thus more incremental property tax that Oakland allocates to the Affordable Housing Trust Fund. This revenue source is often referred to as the “Boomerang”. Oakland policy allocates 25% of the incremental property tax revenue from development in former Redevelopment Project areas (the “Boomerang”) to the Affordable Housing Trust Fund.⁶

⁶ Since nearly all of the areas to be covered by the ZIP lie within former Redevelopment Project Areas, Oakland policy allocates 25% of the incremental property tax from development in those areas to the Affordable Housing Trust Fund. Oakland’s Affordable Housing Trust Fund relies on these funding sources: Affordable Housing Impact Fee, Jobs-Housing Impact Fee, and the Boomerang (City of Oakland, Housing and Community Development Department 2021-2023 Strategic Action Plan, page 25).

Principle Features of the State Density Bonus and the Zoning Incentive Program with Respect to Affordable Housing

California Density Bonus Law has been in effect since 1979, and Oakland’s Density Bonus and Incentive Procedure implementing the law locally was first adopted in 2001.⁷ The proposed Zoning Incentive Program (ZIP) introduced with the Downtown Oakland Specific Plan has some of the same features offered by California Density Bonus Law. Both programs offer increased residential development density in return for provision of on-site affordable housing. The ZIP is a key component of implementing the DOSP: encouraging higher density development downtown while capturing some of the value of the increased development capacity in support of priority community benefits, one of which is on-site affordable housing. (The ZIP offers the same increases in residential density in exchange for other types of on-site community benefits or payment of in-lieu fees, but this analysis focuses on on-site affordable housing.) California Density Bonus Law applies statewide with the purpose to reduce the need for public subsidy for affordable housing by offering more development capacity and other regulatory concessions to offset some of the costs of providing on-site affordable housing.

While the ZIP is primarily a land use regulatory tool to incentivize higher density development in the DOSP area and generate resources for community benefits including affordable housing, the California Density Bonus law—targeted to increase the supply of affordable housing—offers a broader array of incentives to encourage private developers to include below-market-rate units in their projects. In addition to more market-rate units than allowed under base zoning, the housing developer providing on-site affordable units is entitled to incentives, concessions, and waivers that reduce project costs, thereby enhancing project feasibility. Examples of incentives and concessions include modification of zoning code or architectural design requirements.⁸ In addition, developers are allowed waivers or reductions of development standards that physically prevent the project from being built at the permitted density. These do not count against the allowed incentives/concessions, and there is no limit on waivers. Examples include setbacks, lot coverage, and open space requirements. Incentives, concessions, and waivers apply to the entirety of the proposed housing development. Finally, as implemented in Oakland, the City does not require payment of the Affordable Housing Impact Fee (AHIF) for any of the market rate units in a Density Bonus project; the on-site below-market-rate units satisfy the on-site affordable housing option for development projects otherwise subject to the AHIF.⁹

⁷ City of Oakland Planning Code, Chapter 17.107 – Density Bonus and Incentive Procedure.

⁸ One incentive or concession is allowed for the case of a 20% bonus for 5% very low-income units. Up to three incentives/concessions are allowed for higher percentages of affordable units. Four are allowed for 100% affordable housing.

⁹ City of Oakland Municipal Code, Chapter 15.72 – Affordable Housing Impact Fees, particularly section 15.72.100 On-site affordable housing option. The on-site options for both moderate- and low-income units are 10% of total units, and the option for very-low-income units is 5% of total units. Each of these on-site options is consistent with the Density Bonus minimum affordable unit percentage for that income category.

The chart below summarizes the key features of each program.

	DOSP Zoning Incentive Program	California Density Bonus Law
Objective	Encourage high density development downtown while capturing value for community benefits	Encourage on-site affordable housing by offering higher density and regulatory concessions
Voluntary Program	Yes	Yes
Additional Density	11% - 808% more density per economic analysis 65% of cases more than double allowable density	20% up to 50% more density depending on the percentage of below-market-rate units at each income level
Other Incentives	None	Other incentives, concessions, and waivers to facilitate housing development by reducing project costs
On-site Affordable Housing	Can <i>choose</i> as community benefit; amount and type dependent on benefit area requirements	5% up to 44% of units excluding those added by density bonus; 100% affordable projects also eligible for density bonus
On-site Affordable Housing Calculation	Unit count based on percent of <i>additional units</i> proposed above DOSP base units allowed up to ZIP maximum units allowed	Unit count based on percent of <i>base units or base plus additional units</i> under the ZIP if layered with ZIP
Payment of Affordable Housing Impact Fee	Yes – fee assessed on all market rate units ¹⁰	No – on-site below-market-rate units satisfy the on-site option under the AHIF program

Some Downtown projects could benefit by layering the Density Bonus for on-site affordable housing on top of additional density achieved under the ZIP to take advantage of cost savings that would apply to the entire project. The concessions, incentives, and waivers from various development regulations and standards can offer significant cost savings to residential developers in return for providing higher percentages of affordable housing than required under the ZIP. These cost savings would apply to the entire development, reducing costs per unit or per square foot. The scenario is illustrated in Development Option 4 in this analysis.

Approach to Quantitative Analysis

To assist with public review of the proposed Zoning Incentive Program (ZIP), HEG prepared this quantitative analysis to illustrate the variation in outcomes for downtown housing supply and resources for affordable housing production in Oakland under each program. The analysis was conducted for a set

¹⁰ All market-rate housing units under the ZIP (base units plus additional market-rate units) are subject to Oakland’s Affordable Housing Impact Fee (AHIF). Any on-site below-market-rate housing provided under the ZIP is provided as a community benefit in exchange for increased residential density and does not count towards on-site mitigation of affordable housing impacts. See City of Oakland Planning and Building Department, “Downtown Oakland Specific Plan (DOSP): Zoning Amendments FAQ 2, Updated 10/12/2022. See particularly Section 1.2 Zoning Incentive Program, Answers to Questions 4, 10, and 12.

of five example project sites. The sites were identified during the economic analysis for the Zoning Incentive Program to represent the full range of development situations under the proposed zoning amendments, primarily based on differentials between proposed base height and intensity standards and ZIP maximum height and intensity standards. For residential development, intensity standard refers to residential density expressed as minimum lot area per unit. The sites also span the three Residential Benefit Areas identified in the Zoning Incentive Program economic analysis.

HEG's analysis of the economics of providing on-site affordable housing in the DOSP area indicates that, using the California Density Bonus, the least costly option per bonus unit is to allocate 5% of the base units as on-site units affordable to very-low-income households. This entitles the housing developer to 20% more market-rate units than allowed under the base zoning.

HEG's quantitative analysis uses the 20% density bonus for 5% very low-income housing units as the basis for comparison to the ZIP. The ZIP benefit in exchange for maximum density is calibrated to provide the required number of below-market-rate units at the equivalent very low-income (VLI) level of affordability. For simplicity, all units are assumed to be one-bedroom units.

Tables 2 through 6 on the following pages present the details behind the outcomes for each of the five example projects. Table 7 presents the estimates of Transportation and Capital Improvements impact fee revenue for the example projects under the four development options. The last page is a map showing locations of the five example projects. The examples are representative of projects in subareas with different market characteristics and different land use /site characteristics. There is at least one example project in each of the Community Benefit Areas.

Table 2

**Housing Production and Resources for Affordable Housing: DOSP Zoning Incentive Program and State Density Bonus Outcomes Compared
Example Project 1: Greater Intensity Mid-Rise Development under Zoning Incentive Program**

Subarea: Jack London East
ZIP Residential Benefit Area R-C
Development Case II-11
HEG Prototype 24

Development Option	Lot area (sq. ft.)	Market Rate Units	How Market Rate Units are Calculated	On-Site VLI 1 BR Units	How On-Site VLI Units are Calculated ¹	Affordable Housing Impact Fee ²	AHIF Leveraged at 4:1 in Housing Trust Fund ³	Percent Increase in Boomerang for Housing Trust Fund ⁴
	60,060							
1. DOSP Base Zoning: Density = 250⁵		240	= DOSP base unit count	-	na	\$6,396,598	\$32,000,000	na
2. DOSP Base Zoning + State Density Bonus		288	= DOSP base unit count + 20% minus on-site VLI units	12	= 5% of total DOSP base unit count	\$0	\$0	15%
<i>Increment above DOSP Base (unit count or dollars)</i>		48	36	12		<i>(\$6,396,598)</i>	<i>(\$32,000,000)</i>	na
<i>Increment above DOSP Base (percent)</i>		20%	15%	100%		-100%	-100%	100%
3. ZIP Maximum Zoning: Density = 200⁵		300	= ZIP maximum unit count minus on-site VLI units	2	= 2% of difference between ZIP maximum and DOSP base unit counts	\$7,942,442	\$40,000,000	24%
<i>Increment above DOSP Base (unit count or dollars)</i>		60	58	2		<i>\$1,545,844</i>	<i>\$8,000,000</i>	na
<i>Increment above DOSP Base (percent)</i>		25%	24%	100%		24%	25%	100%
4. ZIP Maximum Zoning + State Density Bonus		360	= ZIP maximum unit count + 20% minus on-site VLI units	17	= 2% of difference between ZIP maximum and DOSP base unit counts + 5% of total ZIP maximum unit count	\$7,942,442	\$40,000,000	43%
<i>Increment above DOSP Base (unit count or dollars)</i>		120	103	17		<i>\$1,545,844</i>	<i>\$8,000,000</i>	na
<i>Increment above DOSP Base (percent)</i>		50%	43%	100%		24%	25%	100%

Notes:

- For the ZIP requirement, calculated from Table 5 in Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022. Requirement (expressed as the percentage of *additional housing units* proposed under the ZIP Maximum Zoning) is based on providing one-bedroom very-low-income units. The requirement varies by development site depending on location by ZIP Residential Benefit Area.
- Zone 1 impact fees in effect as of July 1, 2022. Applies to all market rate units under the ZIP. For State Density Bonus projects, on-site affordable units satisfy the AHIF requirement (via the on-site option), so no affordable housing impact fees are required for market rate units in State Density Bonus projects or for the incremental market rate units provided by the State Density Bonus when it is combined with a ZIP project that exceeds the base zoning. See *Oakland Municipal Code 15.72.100*.
- Based on incremental AHIF revenue only. Does not include any incremental boomerang also for the Affordable Housing Trust Fund. Leverage at 4-to-1 based on City of Oakland Housing and Community Development Department, *Strategic Action Plan 2021 - 2023*, page 22.
- Calculated relative to the market rate unit count under the DOSP Base Zoning. Property tax is assessed on all market rate units. This estimate is based on the percentage increment of market rate units above the market rate unit count under the DOSP base. The base market rate units generate similar levels of property tax revenue (and therefore boomerang revenue).
- Residential density expressed as minimum lot area per unit.

Sources: City of Oakland and Hausrath Economics Group.

Table 3

Housing Production and Resources for Affordable Housing: DOSP Zoning Incentive Program and State Density Bonus Outcomes Compared
Example Project 2: Greater Intensity High-Rise Development under Zoning Incentive Program

CBD Subareas: Lake Merritt Office / Broadway / City Center
 ZIP Residential Benefit Area R-A
 Development Case I-1
 HEG Prototype 2

Lot area (sq. ft.) 44,720

Development Option	Total Housing Units	Market Rate Units	How Market Rate Units are Calculated	On-Site VLI 1 BR Units	How On-Site VLI Units are Calculated ¹	Affordable Housing Impact Fee ²	AHIF Leveraged at 4:1 in Housing Trust Fund ³	Percent Increase in Boomerang for Housing Trust Fund ⁴
1. DOSP Base Zoning: Density = 90⁵	497	497	= DOSP base unit count	-	na	\$13,246,288	\$66,000,000	na
2. DOSP Base Zoning + State Density Bonus	597	572	= DOSP base unit count + 20% minus on-site VLI units	25	= 5% of total DOSP base unit count	\$0	\$0	15%
<i>Increment above DOSP Base (unit count or dollars)</i>	100	75		25		(\$13,246,288)	(\$66,000,000)	na
<i>Increment above DOSP Base (percent)</i>	20%	15%		100%		-100%	-100%	100%
3. ZIP Maximum Zoning: Density = 65⁵	688	682	= ZIP maximum unit count minus on-site VLI units	6	= 3% of difference between ZIP maximum and DOSP base unit counts	\$18,176,998	\$91,000,000	37%
<i>Increment above DOSP Base (unit count or dollars)</i>	191	185		6		\$4,930,711	\$25,000,000	na
<i>Increment above DOSP Base (percent)</i>	38%	37%		100%		37%	38%	100%
4. ZIP Maximum Zoning + State Density Bonus	826	785	= ZIP maximum unit count + 20% minus on-site VLI units	41	= 3% of difference between ZIP maximum and DOSP base unit counts + 5% of total ZIP maximum unit count	\$18,176,998	\$91,000,000	58%
<i>Increment above DOSP Base (unit count or dollars)</i>	329	288		41		\$4,930,711	\$25,000,000	na
<i>Increment above DOSP Base (percent)</i>	66%	58%		100%		37%	38%	100%

Notes:

- For the ZIP requirement, calculated from Table 5 in Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022. Requirement (expressed as the percentage of *additional housing units* proposed under the ZIP Maximum Zoning) is based on providing one-bedroom very-low-income units. The requirement varies by development site depending on location by ZIP Residential Benefit Area.
- Zone 1 impact fees in effect as of July 1, 2022. Applies to all market rate units under the ZIP. For State Density Bonus projects, on-site affordable units satisfy the AHIF requirement (via the on-site option), so no affordable housing impact fees are required for market rate units in State Density Bonus projects or for the incremental market rate units provided by the State Density Bonus when it is combined with a ZIP project that exceeds the base zoning. See *Oakland Municipal Code 15.72.100*.
- Based on incremental AHIF revenue only. Does not include any incremental boomerang also for the Affordable Housing Trust Fund. Leverage at 4-to-1 based on City of Oakland Housing and Community Development Department, *Strategic Action Plan 2021 - 2023*, page 22.
- Calculated relative to the market rate unit count under the DOSP Base Zoning. Property tax is assessed on all market rate units. This estimate is based on the percentage increment of market rate units above the market rate unit count under the DOSP base. The base market rate units generate similar levels of property tax revenue (and therefore boomerang revenue).
- Residential density expressed as minimum lot area per unit.

Sources: City of Oakland and Hausrath Economics Group.

Table 4

Housing Production and Resources for Affordable Housing: DOSP Zoning Incentive Program and State Density Bonus Outcomes Compared
Example Project 3: Mid-Rise to High-Rise Development under Zoning Incentive Program (smaller site)

Subarea: KONO & Garage District
 ZIP Residential Benefit Area R-B
 Development Case III-4
 HEG Prototype 3B

Development Option	Lot area (sq. ft.)	Market Rate Units	How Market Rate Units are Calculated	On-Site VLI 1 BR Units	How On-Site VLI Units are Calculated ¹	Affordable Housing Impact Fee ²	AHIF Leveraged at 4:1 in Housing Trust Fund ³	Percent Increase in Boomerang for Housing Trust Fund ⁴
	20,000							
1. ZIP Base Zoning: Density = 225⁵		89	= DOSP base unit count	-	na	\$2,372,072	\$12,000,000	na
2. ZIP Base Zoning + State Density Bonus		107	= DOSP base unit count + 20% minus on-site VLI units	5	= 5% of total DOSP base unit count	\$0	\$0	15%
<i>Increment above DOSP Base (unit count or dollars)</i>		18	13	5		(\$2,372,072)	(\$12,000,000)	na
<i>Increment above DOSP Base (percent)</i>		20%	15%	100%		-100%	-100%	100%
3. ZIP Maximum Zoning: Density = 110⁵		182	= ZIP maximum unit count minus on-site VLI units	2	= 2% of difference between ZIP maximum and DOSP base unit counts	\$4,797,448	\$24,000,000	102%
<i>Increment above DOSP Base (unit count or dollars)</i>		93	91	2		\$2,425,377	\$12,000,000	na
<i>Increment above DOSP Base (percent)</i>		104%	102%	100%		102%	100%	100%
4. ZIP Maximum Zoning + State Density Bonus		219	= ZIP maximum unit count + 20% minus on-site VLI units	12	= 2% of difference between ZIP maximum and DOSP base unit counts + 5% of total ZIP maximum unit count	\$4,797,448	\$24,000,000	133%
<i>Increment above DOSP Base (unit count or dollars)</i>		130	118	12		\$2,425,377	\$12,000,000	na
<i>Increment above DOSP Base (percent)</i>		146%	133%	100%		102%	100%	100%

Notes:

- For the ZIP requirement, calculated from Table 5 in Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022. Requirement (expressed as the percentage of *additional housing units* proposed under the ZIP Maximum Zoning) is based on providing one-bedroom very-low-income units. The requirement varies by development site depending on location by ZIP Residential Benefit Area.
- Zone 1 impact fees in effect as of July 1, 2022. Applies to all market rate units under the ZIP. For State Density Bonus projects, on-site affordable units satisfy the AHIF requirement (via the on-site option), so no affordable housing impact fees are required for market rate units in State Density Bonus projects or for the incremental market rate units provided by the State Density Bonus when it is combined with a ZIP project that exceeds the base zoning. See *Oakland Municipal Code 15.72.100*.
- Based on incremental AHIF revenue only. Does not include any incremental boomerang also for the Affordable Housing Trust Fund. Leverage at 4-to-1 based on City of Oakland Housing and Community Development Department, *Strategic Action Plan 2021 - 2023*, page 22.
- Calculated relative to the market rate unit count under the DOSP Base Zoning. Property tax is assessed on all market rate units. This estimate is based on the percentage increment of market rate units above the market rate unit count under the DOSP base. The base market rate units generate similar levels of property tax revenue (and therefore boomerang revenue).
- Residential density expressed as minimum lot area per unit.

Sources: City of Oakland and Hausrath Economics Group.

Table 5

Housing Production and Resources for Affordable Housing: DOSP Zoning Incentive Program and State Density Bonus Outcomes Compared
Example Project 4: Mid-Rise to High-Rise Development under Zoning Incentive Program (larger site)

Subareas: Victory Court / Jack London East
 ZIP Residential Benefit Area R-C
 Development Case II-9
 HEG Prototype 6

Development Option	Lot area (sq. ft.)	Market Rate Units	How Market Rate Units are Calculated	On-Site VLI 1 BR Units	How On-Site VLI Units are Calculated ¹	Affordable Housing Impact Fee ²	AHIF Leveraged at 4:1 in Housing Trust Fund ³	Percent Increase in Boomerang for Housing Trust Fund ⁴
	55,000							
1. ZIP Base Zoning: Density = 250⁵		220	= DOSP base unit count	-	na	\$5,863,548	\$29,000,000	na
2. ZIP Base Zoning + State Density Bonus		264	= DOSP base unit count + 20% minus on-site VLI units	11	= 5% of total DOSP base unit count	\$0	\$0	15%
<i>Increment above DOSP Base (unit count or dollars)</i>		44	33	11		<i>(\$5,863,548)</i>	<i>(\$29,000,000)</i>	na
<i>Increment above DOSP Base (percent)</i>		20%	15%	100%		-100%	-100%	100%
3. ZIP Maximum Zoning: Density = 110⁵		500	= ZIP maximum unit count minus on-site VLI units	6	= 2% of difference between ZIP maximum and DOSP base unit counts	\$13,166,330	\$66,000,000	125%
<i>Increment above DOSP Base (unit count or dollars)</i>		280	274	6		<i>\$7,302,782</i>	<i>\$37,000,000</i>	na
<i>Increment above DOSP Base (percent)</i>		127%	125%	100%		125%	128%	100%
4. ZIP Maximum Zoning + State Density Bonus		600	= ZIP maximum unit count + 20% minus on-site VLI units	31	= 2% of difference between ZIP maximum and DOSP base unit counts + 5% of total ZIP maximum unit count	\$13,166,330	\$66,000,000	159%
<i>Increment above DOSP Base (unit count or dollars)</i>		380	349	31		<i>\$7,302,782</i>	<i>\$37,000,000</i>	na
<i>Increment above DOSP Base (percent)</i>		173%	159%	100%		125%	128%	100%

Notes:

- For the ZIP requirement, calculated from Table 5 in Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022. Requirement (expressed as the percentage of *additional housing units* proposed under the ZIP Maximum Zoning) is based on providing one-bedroom very-low-income units. The requirement varies by development site depending on location by ZIP Residential Benefit Area.
 - Zone 1 impact fees in effect as of July 1, 2022. Applies to all market rate units under the ZIP. For State Density Bonus projects, on-site affordable units satisfy the AHIF requirement (via the on-site option), so no affordable housing impact fees are required for market rate units in State Density Bonus projects or for the incremental market rate units provided by the State Density Bonus when it is combined with a ZIP project that exceeds the base zoning. See *Oakland Municipal Code 15.72.100*.
 - Based on incremental AHIF revenue only. Does not include any incremental boomerang also for the Affordable Housing Trust Fund. Leverage at 4-to-1 based on City of Oakland Housing and Community Development Department, *Strategic Action Plan 2021 - 2023*, page 22.
 - Calculated relative to the market rate unit count under the DOSP Base Zoning. Property tax is assessed on all market rate units. This estimate is based on the percentage increment of market rate units above the market rate unit count under the DOSP base. The base market rate units generate similar levels of property tax revenue (and therefore boomerang revenue).
 - Residential density expressed as minimum lot area per unit.
- Sources: City of Oakland and Hausrath Economics Group.

Table 6

Housing Production and Resources for Affordable Housing: DOSP Zoning Incentive Program and State Density Bonus Outcomes Compared
Example Project 5: Low-Rise to High-Rise Development Under Zoning Incentive Program

Subarea: Jack London West
 ZIP Residential Development Benefit Area R-B
 Development Case II-1
 HEG Prototype 4A

Lot area (sq. ft.) 60,000

Development Option	Total Housing Units	Market Rate Units	How Market Rate Units are Calculated	On-Site VLI 1 BR Units	How On-Site VLI Units are Calculated ¹	Affordable Housing Impact Fee ²	AHIF Leveraged at 4:1 in Housing Trust Fund ³	Percent Increase in Boomerang for Housing Trust Fund ⁴
1. ZIP Base Zoning: Density = 1,000⁵	60	60	= DOSP base unit count	-	na	\$1,599,149	\$8,000,000	na
2. ZIP Base Zoning + State Density Bonus	72	69	= DOSP base unit count + 20% minus on-site VLI units	3	= 5% of total DOSP base unit count	\$0	\$0	15%
<i>Increment above DOSP Base (unit count or dollars)</i>	12	9		3		(\$1,599,149)	(\$8,000,000)	na
<i>Increment above DOSP Base (percent)</i>	20%	15%		100%		-100%	-100%	100%
3. ZIP Maximum Zoning: Density = 110⁵	545	535	= ZIP maximum unit count minus on-site VLI units	10	= 2% of difference between ZIP maximum and DOSP base unit counts	\$14,259,082	\$71,000,000	792%
<i>Increment above DOSP Base (unit count or dollars)</i>	485	475		10		\$12,659,933	\$63,000,000	na
<i>Increment above DOSP Base (percent)</i>	808%	792%		100%		792%	788%	100%
4. ZIP Maximum Zoning + State Density Bonus	654	616	= ZIP maximum unit count + 20% minus on-site VLI units	38	= 2% of difference between ZIP maximum and DOSP base unit counts + 5% of total ZIP maximum unit count	\$14,259,082	\$71,000,000	927%
<i>Increment above DOSP Base (unit count or dollars)</i>	594	556		38		\$12,659,933	\$63,000,000	na
<i>Increment above DOSP Base (percent)</i>	990%	927%		100%		792%	788%	100%

Notes:

- For the ZIP requirement, calculated from Table 5 in Hausrath Economics Group, *Economic Analysis for DOSP Zoning Incentive Program*, prepared for Oakland Planning and Building Department, August 2022. Requirement (expressed as the percentage of *additional housing units* proposed under the ZIP Maximum Zoning) is based on providing one-bedroom very-low-income units. The requirement varies by development site depending on location by ZIP Residential Benefit Area.
- Zone 1 impact fees in effect as of July 1, 2022. Applies to all market rate units under the ZIP. For State Density Bonus projects, on-site affordable units satisfy the AHIF requirement (via the on-site option), so no affordable housing impact fees are required for market rate units in State Density Bonus projects or for the incremental market rate units provided by the State Density Bonus when it is combined with a ZIP project that exceeds the base zoning. See *Oakland Municipal Code 15.72.100*.
- Based on incremental AHIF revenue only. Does not include any incremental boomerang also for the Affordable Housing Trust Fund. Leverage at 4-to-1 based on City of Oakland Housing and Community Development Department, *Strategic Action Plan 2021 - 2023*, page 22.
- Calculated relative to the market rate unit count under the DOSP Base Zoning. Property tax is assessed on all market rate units. This estimate is based on the percentage increment of market rate units above the market rate unit count under the DOSP base. The base market rate units generate similar levels of property tax revenue (and therefore boomerang revenue).
- Residential density expressed as minimum lot area per unit.

Sources: City of Oakland and Hausrath Economics Group.

Table 7
Transportation and Capital Improvements Impact Fees for Example Projects under Four Development Options¹

Development Option	Example Project 1 Greater Intensity Mid-Rise in Jack London East ZIP Residential Benefit Area R-C Development Case II-11 HEG Prototype 24		Example Project 2 Greater Intensity High-Rise in CBD ZIP Residential Benefit Area R-A Development Case I-1 HEG Prototype 2		Example Project 3 Mid-Rise to High-Rise on smaller site in KONO & Garage District ZIP Residential Benefit Area R-B Development Case III-4 HEG Prototype 3B		Example Project 4 Mid-Rise to High-Rise on larger site in Victory Court / Jack London East ZIP Residential Benefit Area R-C Development Case II-9 HEG Prototype 6		Example Project 5 Low-Rise to High-Rise in Jack London West ZIP Residential Benefit Area R-B Development Case II-1 HEG Prototype 4A	
	Transportation	Capital Improvements	Transportation	Capital Improvements	Transportation	Capital Improvements	Transportation	Capital Improvements	Transportation	Capital Improvements
1. DOSP Base Zoning	\$218,160	\$363,600	\$451,773	\$752,955	\$80,901	\$134,835	\$199,980	\$333,300	\$54,540	\$90,900
2. DOSP Base Zoning + State Density Bonus	\$250,884	\$418,140	\$519,948	\$866,580	\$92,718	\$154,530	\$229,977	\$383,295	\$62,721	\$104,535
<i>Increment above DOSP Base (dollars)</i>	\$32,724	\$54,540	\$68,175	\$113,625	\$11,817	\$19,695	\$29,997	\$49,995	\$8,181	\$13,635
<i>Increment above DOSP Base (percent)</i>	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
3. ZIP Maximum Zoning	\$270,882	\$451,470	\$619,938	\$1,033,230	\$163,620	\$272,700	\$449,046	\$748,410	\$486,315	\$810,525
<i>Increment above DOSP Base (dollars)</i>	\$52,722	\$87,870	\$168,165	\$280,275	\$82,719	\$137,865	\$249,066	\$415,110	\$431,775	\$719,625
<i>Increment above DOSP Base (percent)</i>	24%	24%	37%	37%	102%	102%	125%	125%	792%	792%
4. ZIP Maximum Zoning + State Density Bonus	\$311,787	\$519,645	\$713,565	\$1,189,275	\$188,163	\$313,605	\$517,221	\$862,035	\$559,944	\$933,240
<i>Increment above DOSP Base (dollars)</i>	\$93,627	\$156,045	\$261,792	\$436,320	\$107,262	\$178,770	\$317,241	\$528,735	\$505,404	\$842,340
<i>Increment above DOSP Base (percent)</i>	43%	43%	58%	58%	133%	133%	159%	159%	927%	927%

Notes:

1. Zone 1 impact fees in effect as of July 1, 2022.

Sources: City of Oakland and Hausrath Economics Group.