AECOM

Task 3: Market Analysis

Market & Economic Study for the Density Bonus Ordinance Update and RHNA Rezoning Program.

FINAL REPORT

June 28, 2024

Delivering a better world

APPENDIX 3:
Economic Analysis and Market Study

CPC-2023-7068-CA, CPC-2024-387-CA, CPC-2024-388-CA

For consideration by the City Planning Commission

September 26, 2024

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Table of Contents

1. Introduction

Background

Overview

The City of Los Angeles Department of City Planning (LACP) engaged **AECOM** to prepare economic analysis to inform policy development for the City's RHNA Rezoning Program. The analysis contained in this document **represents fulfillment of Task 3: Market Analysis in AECOM's scope of work**. The purpose of Task 3 was to:

1. Define four market tiers that will form the basis for further analysis and policy recommendations.
2. Assess the market characteristics of each market tier.
3. Define a set of residential typologies that represent future residential growth potential in each market tier.

The market tiers and residential typologies informed subsequent AECOM analysis of the City's RHNA Rezoning Program.

Market Tier Definitions

The analysis contained herein defines and analyzes the following four market tiers, which range from low to high and are intended to represent the relative strength of the residential market in different geographies across the City. As described in this report, the market tiers are based on an index that accounts for rents and for-sale prices of recently build housing, as well as the relative production of rental and for-sale housing over the past 10 years.

- Market Tier 1 (Low)
- Market Tier 2 (Medium/Low)
- Market Tier 3 (Medium/High)
- Market Tier 4 (High)

Citywide RHNA Rezoning Program

The city's RHNA Rezoning Program is a response to the shortfall between the city's inventory of residential development sites and the 2021-2029 RHNA allocation.

The City's 2021-2029 Housing Element, adopted in November 2021, includes an inventory of residential development sites for development that **anticipates realistic development potential of 230,947 units** over the 8-year RHNA planning period.

State law requires local jurisdictions to demonstrate through the Housing Element process that they maintain sufficient zoned capacity to accommodate their Regional Housing Needs Assessment (RHNA) allocation for the eight-year Housing Element period.

The 2021-2029 RHNA allocation for the Southern California Association of Governments (SCAG) region allocates to the City of Los Angeles a target production of 456,643 units. Adding the required buffer of 10% for low-income units and 15% for moderate-income units increases **target capacity to 486,379**. The variance between the site inventory and RHNA allocation is a **shortfall of 255,432 units.**

The City's proposed RHNA Rezoning Program, introduced in Program 121 of the Housing Element, is intended to help fill the expected housing production gap by creating additional housing capacity.

The Rezoning Program is being implemented through a number of work efforts including updates to up to 16 Community Plans, expansion of existing city incentive programs (including the Density Bonus Ordinance, Transit Oriented Communities program, and Adaptive Reuse Ordinance), consideration of more flexible zoning and incentives to create opportunities for a variety of "missing middle" low-scale housing typologies, process streamlining, and consideration of dedicated zoning overlays for opportunity corridors and affordable housing.

Executive Summary

Recommended Market Tiers by Neighborhood

The map on the right presents the recommended market tier classifications for each neighborhood. The legend below shows the name of each neighborhood that corresponds to the number labels used in the map, as well as the CPA that each neighborhood falls primarily within.

#	Neighborhood	Primary CPA
0	Adams-Normandie	South Los Angeles
1	Arleta	Arleta - Pacoima
2	Arlington Heights	West Adams - Baldwin Hills - Leimert
3	Atwater Village	Northeast Los Angeles
4	Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert
5	Bel-Air	Bel Air - Beverly Crest
6	Beverly Crest	Bel Air - Beverly Crest
7	Beverly Grove	Wilshire
8	Beverlywood	West Los Angeles
9	Boyle Heights	Boyle Heights
10	Brentwood	Brentwood - Pacific Palisades
11	Broadway-Manchester	Southeast Los Angeles
12	Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills
13	Carthay	Wilshire
14	Central-Alameda	Southeast Los Angeles
15	Century City	West Los Angeles
16	Chatsworth	Chatsworth - Porter Ranch
17	Chatsworth Reservoir	Chatsworth - Porter Ranch
18	Chesterfield Square	South Los Angeles
19	Cheviot Hills	West Los Angeles
20	Chinatown	Central City North
21	Cypress Park	Northeast Los Angeles
22	Del Rey	Palms - Mar Vista - Del Rey
23	Downtown	Central City
24	Eagle Rock	Northeast Los Angeles
25	East Hollywood	Hollywood
26	Echo Park	Silver Lake - Echo Park - Elysian Valley
27	El Sereno	Northeast Los Angeles
28	Elysian Park	Silver Lake - Echo Park - Elysian Valley
29	Elysian Valley	Silver Lake - Echo Park - Elysian Valley
30	Encino	Encino - Tarzana
31	Exposition Park	South Los Angeles
32	Fairfax	Wilshire
33	Florence	Southeast Los Angeles
34	Glassell Park	Northeast Los Angeles
35	Gramercy Park	South Los Angeles
36	Granada Hills	Granada Hills - Knollwood
37	Green Meadows	Southeast Los Angeles
38	Griffith Park	Hollywood
39	Hancock Park	Wilshire
40	Hansen Dam	Arleta - Pacoima
41	Harbor City	Wilmington - Harbor City
42	Harbor Gateway	Harbor Gateway
43	Harvard Heights	South Los Angeles
44	Harvard Park	South Los Angeles
45	Highland Park	Northeast Los Angeles
46	Historic South-Central	Southeast Los Angeles
47	Hollywood	Hollywood
48	Hollywood Hills	Hollywood
49	Hollywood Hills West	Hollywood
50	Hyde Park	West Adams - Baldwin Hills - Leimert
51	Jefferson Park	West Adams - Baldwin Hills - Leimert
52	Koreatown	Wilshire
53	Lake Balboa	Reseda - West Van Nuys
54	Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
55	Larchmont	Wilshire
56	Leimert Park	West Adams - Baldwin Hills - Leimert
57	Lincoln Heights	Northeast Los Angeles
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59	Manchester Square	South Los Angeles
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61	Mid-City	West Adams - Baldwin Hills - Leimert
62	Mid-Wilshire	Wilshire
63	Mission Hills	Mission Hills - Panorama City - North Hills
64	Montecito Heights	Northeast Los Angeles
65	Mount Washington	Northeast Los Angeles
66	North Hills	Mission Hills - Panorama City - North Hills
67	North Hollywood	North Hollywood - Valley Village
68	Northridge	Northridge
69	Pacific Palisades	Brentwood - Pacific Palisades
70	Pacoima	Arleta - Pacoima
71	Palms	Palms - Mar Vista - Del Rey
72	Panorama City	Mission Hills - Panorama City - North Hills
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74	Pico-Union	South Los Angeles
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89	Sun Valley	Sun Valley - La Tuna Canyon
90	Sylmar	Sylmar
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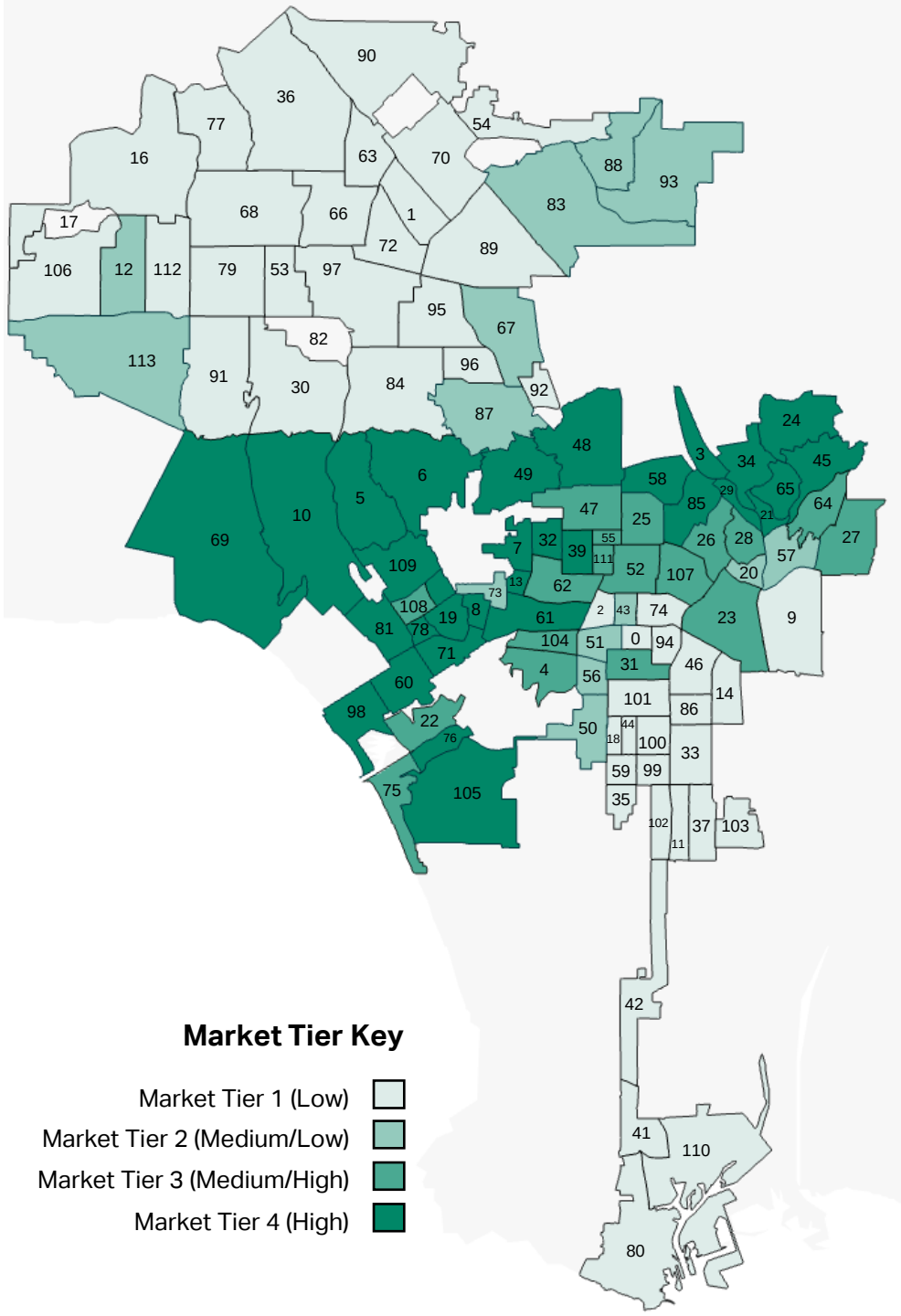
106	West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills
107	Westlake	Westlake
108	West Los Angeles	West Los Angeles
109	Westwood	Westwood
110	Wilmington	Wilmington - Harbor City
111	Windsor Square	Wilshire
112	Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills
113	Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills

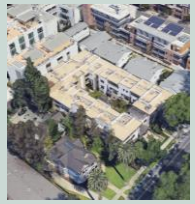
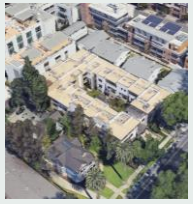
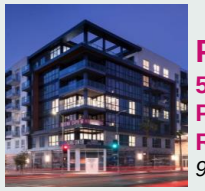
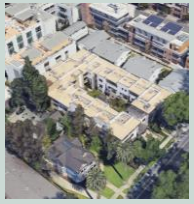
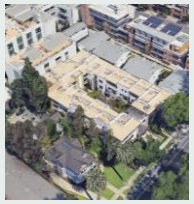


Executive Summary

Recommended Residential Typologies by Market Tier

The table on the right summarizes the housing typologies recommended for evaluation within each market tier. These selections are based on AECOM's analysis contained herein and input from LACP.

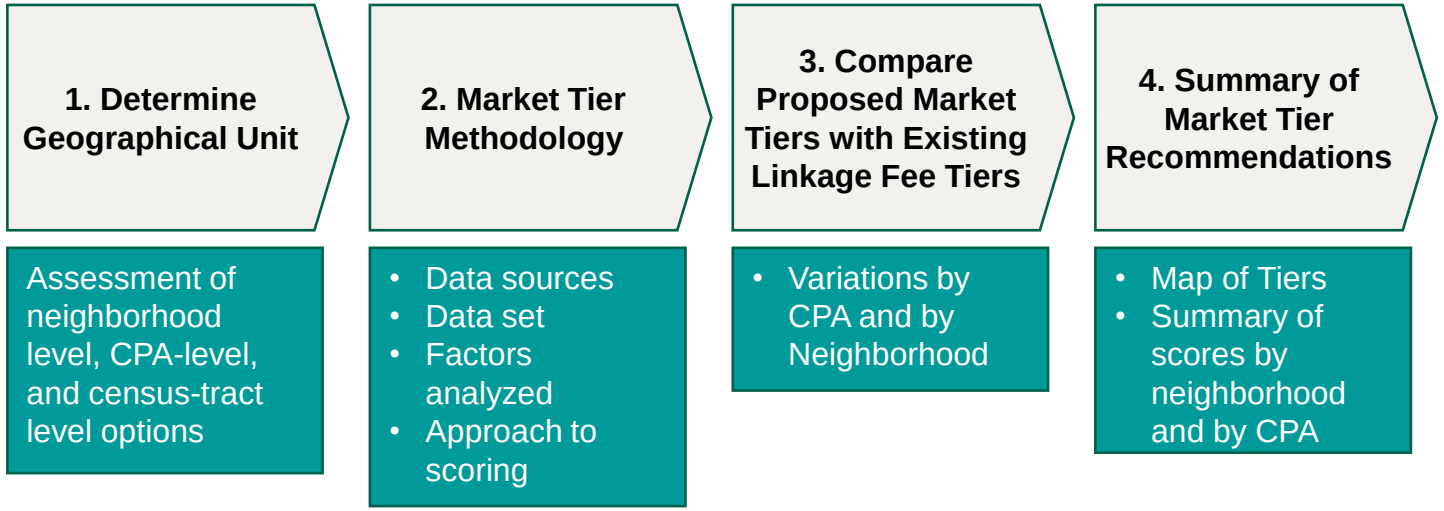
Note that in AECOM's subsequent tasks related to analysis of the City's RHNA Rezoning Program, prototypes were further tailored so that they could be used to test specific policy questions.

Prototype Concepts to be Evaluated per Housing Incentive Market Tier					
Market Tier 1 Low	 **4D** Plex Style *10 – 17 DUAC*	 **CY3** 33' Courtyard Multiplex *30 – 43 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*
Market Tier 2 Medium-Low	 **4D** Plex Style *10 – 17 DUAC*	 **CY3** 33' Courtyard Multiplex *30 – 43 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*
Market Tier 3 Medium-High	 **4D** Plex Style *10 – 17 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*	 **TW** Mixed-Use Tower *140 – 217 DUAC*
Market Tier 4 High	 **4D** Plex Style *10 – 17 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*	 **TW** Mixed-Use Tower *140 – 217 DUAC*

2. Market Tiers

Market Tier Analysis

Section Overview



This chapter describes the analysis used to establish a city-wide market tier framework. The purpose of this analysis is to assess housing market strength across different sub-geographies within the City of Los Angeles and to classify these geographies into four market area categories.

The framework provided a basis for analyzing market factors (in Chapter 3 of this document) and conducting feasibility analysis (in later project tasks) to support RHNA Rezoning Program policy recommendations.

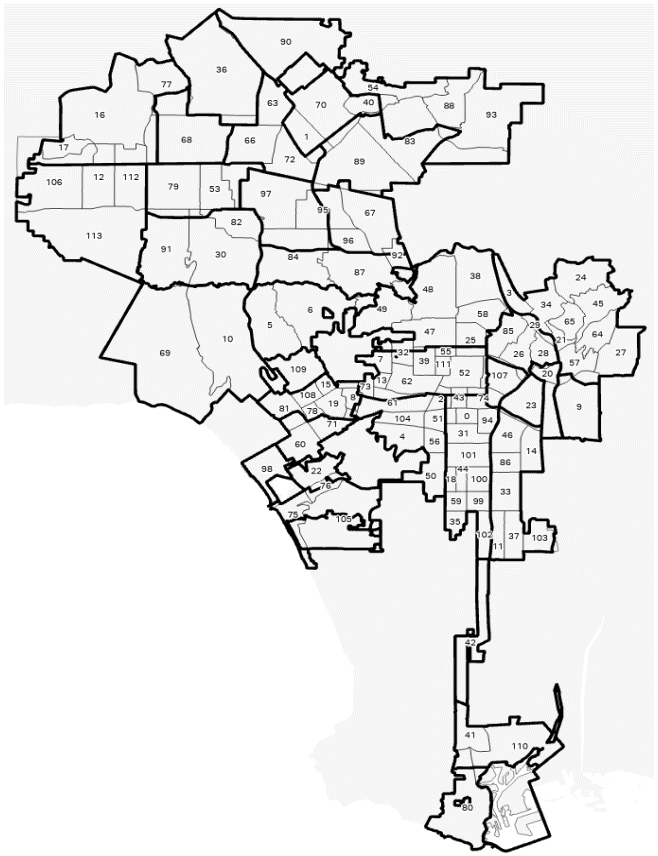
The market tier analysis was conducted in four stages as shown in the imagine on the left:

1. Determine the geographical unit
2. Develop methodology to define market tiers
3. Compare tiers resulting from the analysis with those previously developed and adopted as part of the citywide affordable housing linkage fee
4. Summarize section findings and recommendations

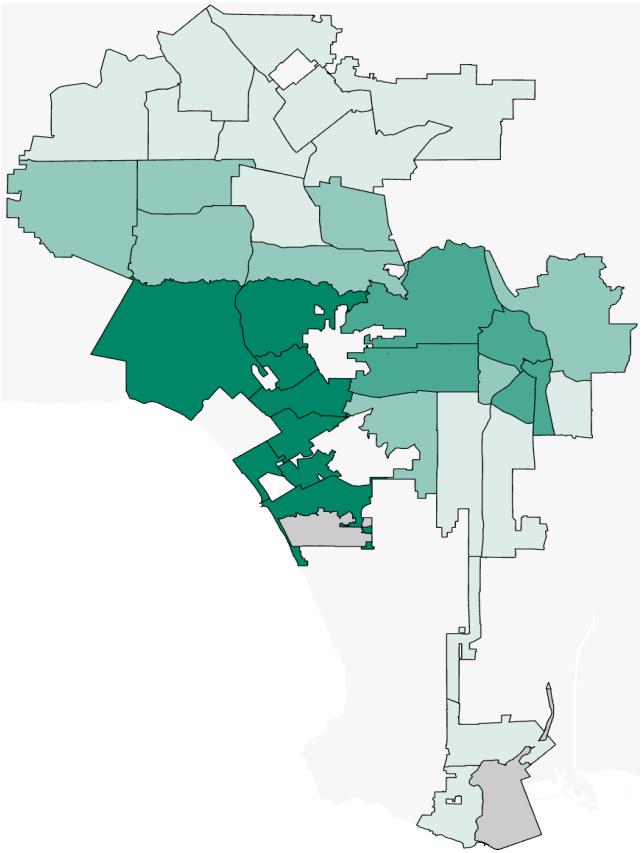
The remainder of this chapter describes how the market tiers were developed in more detail. Note that the market tiers were developed to inform subsequent economic analysis of the City's RHNA Rezoning Program. Because the RHNA Rezoning Program is focused on creating capacity for new development, the market tiers are intended to represent market conditions for new development.

Market Tier Analysis

Geographical Unit



LATimes Neighborhoods
(See Appendix A for expanded map with neighborhood names labeled)



CPA Units
(shading reflects Residential Market Tiers from the City's current adopted Affordable Housing Linkage Fee)

The market tier analysis employs the City's **114 Neighborhoods** as its primary geographic unit of analysis.

The neighborhood map was originally created by the *Los Angeles Times* in its Mapping LA project, a well-regarded and frequently referenced project that since 2009 has sought to reflect geographical, historic, and socioeconomic associations that define communities.

Two other geographical sub-area concepts were considered to provide the geographic unit of analysis including: Community Planning Areas (CPAs), and Census Tract Areas. The neighborhood-level map has advantages and some disadvantages compared with CPA and Census Tract Area maps, as follows:

Advantages:

- Neighborhood areas reflect geographical, historic, and socioeconomic associations that define communities.
- Neighborhood areas are small enough to indicate meaningful socio-economic distinctions that inform development potential but large enough to have a sufficient data points on which to base the analysis.

Disadvantages

- Neighborhood areas do not reflect political boundaries such as those defined by the City's 35 Community Plan Areas and 15 City Council Districts. Most existing city policy—such as the affordable housing linkage fee—is implemented within these larger geographies.

Note: The neighborhood geographies do not completely align with US Census Bureau data (unlike CPAs and Census Tract areas). AECOM aggregating census tract-level data up to neighborhood-level throughout this analysis using a geographic weighted average approach.

Market Tier Analysis

Methodology to Define Market Tiers

The table below describes the methodology that was used to gather, aggregate, and adjust housing market data for both renter-occupied and owner-occupied housing, as well as the methodology used to translate that data into the market tier classifications for each neighborhood. This methodology was an iterative process developed by AECOM in consultation with LACP. Neighborhood market strength was first scored separately for rental and for-sale projects, and then a single, composite neighborhood score was calculated using a weighting system the reflects the relative proportion of rental and for-sale units built in the last 10 years.

	Rent Projects	Sale Projects
Data Source	CoStar	Redfin
Geographical Unit	Neighborhood (per Mapping LA)	
Measure	Median rent/sq.ft./month per neighborhood	Median sale price/sq.ft. per neighborhood
Housing Type	All existing market-rate multifamily properties (e.g., multi-unit buildings, duplexes, etc.)	All types (e.g., single family, condominiums, townhomes), all construction years (i.e., both new and old homes)
Data Time Period	Current asking rents for all properties constructed since 2000	Transactions occurring over the most recent 12 Months (October 2021-September 2022)
# Samples in Set	793 rental properties	160 zip codes
Additional Adjustments to Data set	For 67 of the 114 neighborhoods with insufficient data (defined as less than 5 data points per neighborhood), median rent is scaled by the relationship of the neighborhood's for-sale median value to citywide median value. (For example, if a neighborhood's home value is 20% higher than the citywide median, neighborhood rent is set at 20% higher than the citywide rent median.)	Because zip codes do not perfectly align with neighborhood boundaries, neighborhood median sales price is calculated using a geographic weighted average. (For example, if a neighborhood overlaps 60% of its area with one zip code and 40% with another, the 60% zip code's median sales price is weighted more heavily than that of the 40% zip code.)
Scoring into Tiers	Neighborhood median rents and median sales prices are classified into four tiers based on standard deviations from the citywide mean: Market Tier 1 (Low, <-0.5 SD from citywide mean), Market Tier 2 (Medium/Low, -0.5 – 0 SD from citywide mean), Market Tier 3 (Medium/High, 0 – 0.5 SD from citywide mean), Market Tier 4 (High, >0.5 SD from citywide mean).	
Calculating a Composite Neighborhood Score	The final neighborhood tier score is a composite of for-rent and for-sale scores. Composite weighting is determined by the change in housing units by tenure in the neighborhood based on data from the American Community Survey, as follows: • If neighborhood inventory of for-rent and for-sale units increases, the weighting reflects the proportion of each • If inventory change for either for-rent or for-sale units is negative (meaning the number of units in that category declined), the positive change category is assigned a 95% weight and the negative category a 5% weight. • If inventory change for both for-rent and for-sale units is negative, both categories are weighted 50%/50%. Note: Inventory change may reflect factors such as new construction or demolition, previously vacant units becoming occupied, or occupied units switching between owner and renter-occupancy.	

Market Tiers by Neighborhood

Proposed

The map on the right presents the resulting market tier classifications for each neighborhood. The legend below shows the name of each neighborhood that corresponds to the number labels used in the map, as well as the CPA that each neighborhood falls primarily within.

#	Neighborhood	Primary CPA
0	Adams-Normandie	South Los Angeles
1	Arleta	Arleta - Pacoima
2	Arlington Heights	West Adams - Baldwin Hills - Leimert
3	Atwater Village	Northeast Los Angeles
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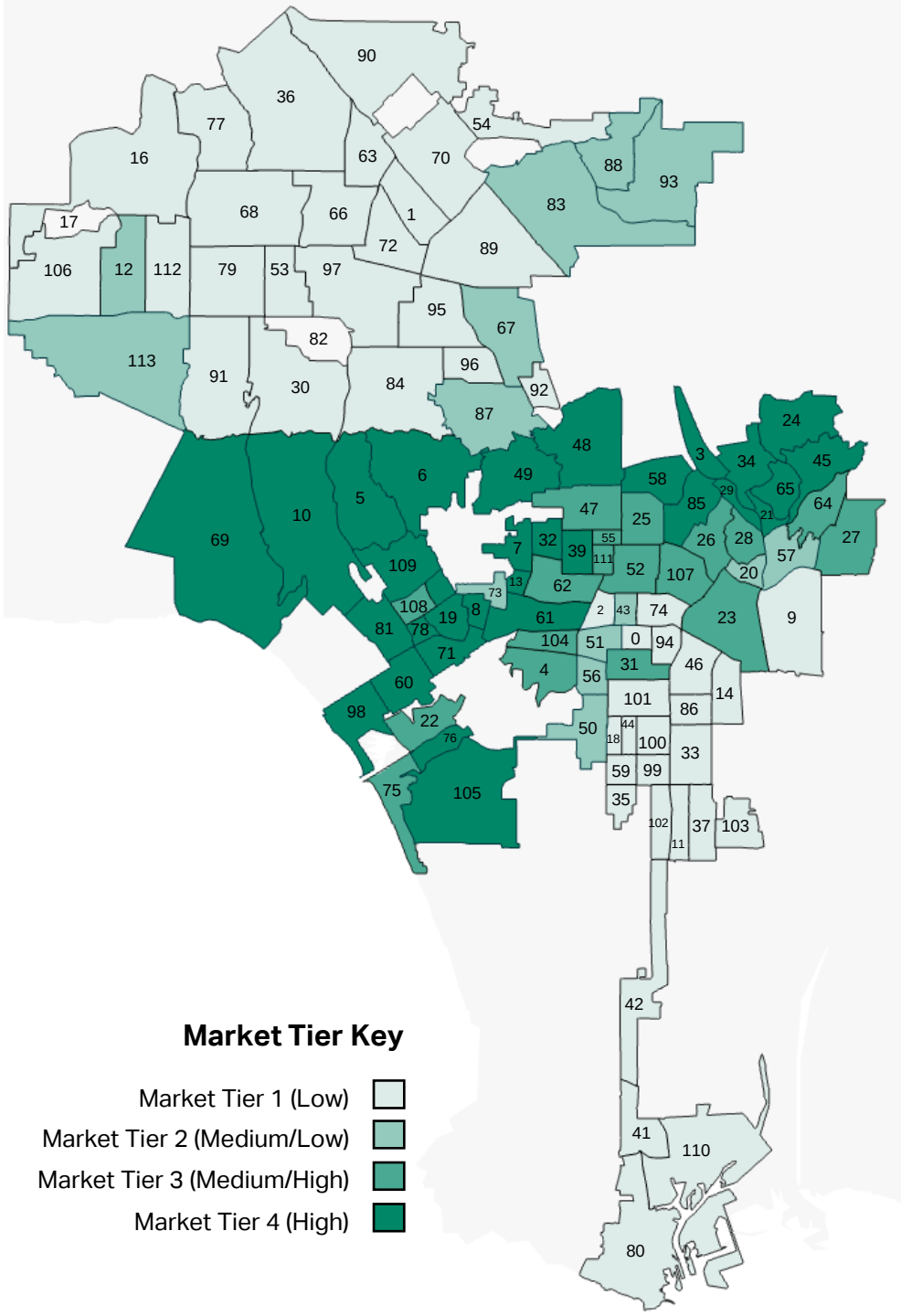

Market Tiers by Neighborhood

Proposed, Sorted by CPA (1 of 2)

Market Tier Key

- Market Tier 1 (Low)
- Market Tier 2 (Medium/Low)
- Market Tier 3 (Medium/High)
- Market Tier 4 (High)

Notes:

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2. The number of CoStar datapoints for rental projects constructed since 2000. Values <5 are **boldfaced**, indicating insufficient data on which to base rent estimates.
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4. Composite value based on weighting for-rent and for-sale values by proportion of recent (10-year) production. If one of two categories declined over the last 10 years, it is assigned a 5% weight. Where both categories declined, each is assigned a 50% weight.
5. The Linkage Fee study classified neighborhoods into 3 tiers (Low, Medium, High). For comparison with the proposed current 4-tier ranking, the linkage fee study Low tier is labeled 1, Medium tier is 2.5, and High tier is 4.
6. Because the adopted Linkage Fee is organized by CPA, all neighborhoods here reflect the CPA tier

CPA	Neighborhood	For-Sale Inventory		For-Rent Inventory			Composite	
		Median Value/Sq.Ft.[1]	Sale Tier	Data Points[2]	Median Rent $/Sq.Ft./mo.[3]	Rent Tier	For-Rent Weighting[4]	Composite Tier
Arleta - Pacoima	Arleta	$489	1	**0**	**$2.68**	1	23.6%	1
Arleta - Pacoima	Hansen Dam	NA	NA	NA	NA	NA	NA	NA
Arleta - Pacoima	Pacoima	$496	1	**1**	**$2.71**	1	52.0%	1
Bel Air - Beverly Crest	Bel-Air	$983	4	**2**	**$5.38**	4	95.0%	4
Bel Air - Beverly Crest	Beverly Crest	$1,179	4	**0**	**$6.45**	4	95.0%	4
Boyle Heights	Boyle Heights	$481	1	6	$2.75	1	62.4%	1
Brentwood - Pacific Palisades	Brentwood	$986	4	9	$4.33	4	95.0%	4
Brentwood - Pacific Palisades	Pacific Palisades	$1,258	4	**2**	**$6.89**	4	95.0%	4
Canoga Park - Winnetka - Woodland Hills - West Hills	Canoga Park	$515	1	17	$3.04	2	95.0%	2
Canoga Park - Winnetka - Woodland Hills - West Hills	West Hills	$535	1	**2**	**$2.93**	1	5.0%	1
Canoga Park - Winnetka - Woodland Hills - West Hills	Winnetka	$487	1	**2**	**$2.67**	1	95.0%	1
Canoga Park - Winnetka - Woodland Hills - West Hills	Woodland Hills	$599	2	13	$3.25	2	95.0%	2
Central City	Downtown	$691	3	58	$3.61	3	94.5%	3
Central City North	Chinatown	$621	2	**3**	**$3.40**	2	98.3%	2
Chatsworth - Porter Ranch	Chatsworth	$472	1	7	$2.96	1	91.4%	1
Chatsworth - Porter Ranch	Chatsworth Reservoir	NA	NA	NA	NA	NA	NA	NA
Chatsworth - Porter Ranch	Porter Ranch	$504	1	**0**	**$2.76**	1	95.0%	1
Encino - Tarzana	Encino	$688	3	8	$2.94	1	95.0%	1
Encino - Tarzana	Sepulveda Basin	NA	NA	NA	NA	NA	NA	NA
Encino - Tarzana	Tarzana	$529	1	**4**	**$2.89**	1	95.0%	1
Granada Hills - Knollwood	Granada Hills	$525	1	**3**	**$2.88**	1	96.2%	1
Harbor Gateway	Harbor Gateway	$527	1	**3**	**$2.89**	1	95.0%	1
Hollywood	East Hollywood	$748	3	18	$3.69	3	50.0%	3
Hollywood	Griffith Park	NA	NA	NA	NA	NA	NA	NA
Hollywood	Hollywood	$709	3	60	$3.82	3	63.0%	3
Hollywood	Hollywood Hills	$829	4	**3**	**$4.54**	4	50.0%	4
Hollywood	Hollywood Hills West	$870	4	**1**	**$4.76**	4	95.0%	4
Hollywood	Los Feliz	$896	4	**3**	**$4.90**	4	95.0%	4
Los Angeles International Airport	Westchester	$877	4	14	$3.95	4	95.0%	4
Mission Hills - Panorama City - North Hills	Mission Hills	$518	1	**0**	**$2.83**	1	95.0%	1
Mission Hills - Panorama City - North Hills	North Hills	$489	1	**4**	**$2.68**	1	95.0%	1
Mission Hills - Panorama City - North Hills	Panorama City	$454	1	5	$2.46	1	95.0%	1
North Hollywood - Valley Village	North Hollywood	$592	2	68	$3.41	2	95.0%	2
North Hollywood - Valley Village	Valley Village	$639	2	21	$2.77	1	95.0%	1
Northeast Los Angeles	Atwater Village	$879	4	**0**	**$4.81**	4	95.0%	4
Northeast Los Angeles	Cypress Park	$796	4	**0**	**$4.36**	4	95.0%	4
Northeast Los Angeles	Eagle Rock	$852	4	**3**	**$4.66**	4	95.0%	4
Northeast Los Angeles	El Sereno	$681	3	**1**	**$3.73**	3	5.0%	3
Northeast Los Angeles	Glassell Park	$800	4	**0**	**$4.38**	4	89.7%	4
Northeast Los Angeles	Highland Park	$750	4	**1**	**$4.11**	4	5.0%	4
Northeast Los Angeles	Lincoln Heights	$601	2	**3**	**$3.29**	2	21.8%	2
Northeast Los Angeles	Montecito Heights	$671	3	**0**	**$3.67**	3	95.0%	3
Northeast Los Angeles	Mount Washington	$794	4	**0**	**$4.35**	4	95.0%	4
Northridge	Northridge	$462	1	13	$2.92	1	90.3%	1
Palms - Mar Vista - Del Rey	Del Rey	$889	4	19	$3.74	3	95.0%	3
Palms - Mar Vista - Del Rey	Mar Vista	$1,047	4	7	$4.32	4	95.0%	4
Palms - Mar Vista - Del Rey	Palms	$856	4	28	$3.55	3	50.0%	4
Reseda - West Van Nuys	Lake Balboa	$550	1	7	$2.43	1	95.0%	1
Reseda - West Van Nuys	Reseda	$526	1	9	$2.68	1	95.4%	1
San Pedro	San Pedro	$515	1	6	$2.89	1	98.9%	1
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Sherman Oaks	$726	3	22	$2.59	1	95.0%	1
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Studio City	$752	4	19	$3.08	2	90.7%	2
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Toluca Lake	$629	2	12	$2.53	1	95.0%	1
Silver Lake - Echo Park - Elysian Valley	Echo Park	$793	4	8	$3.49	3	69.7%	3
Silver Lake - Echo Park - Elysian Valley	Elysian Park	$640	2	**0**	**$3.50**	3	97.8%	3
Silver Lake - Echo Park - Elysian Valley	Elysian Valley	$768	4	**1**	**$4.20**	4	5.0%	4
Silver Lake - Echo Park - Elysian Valley	Silver Lake	$833	4	5	$4.20	4	50.0%	4

Market Tiers by Neighborhood

Proposed, sorted by CPA (2 of 2)

Market Tier Key

- Market Tier 1 (Low)
- Market Tier 2 (Medium/Low)
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- Market Tier 4 (High)

Notes:

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6. Because the adopted Linkage Fee is organized by CPA, all neighborhoods here reflect the CPA tier

CPA	Neighborhood	For-Sale Inventory		For-Rent Inventory			Composite	
		Median Value/Sq.Ft.[1]	Sale Tier	Data Points[2]	Median Rent $/Sq.Ft./mo.[3]	Rent Tier	For-Rent Weighting[4]	Composite Tier
South Los Angeles	Adams-Normandie	$505	1	1	**$2.76**	1	95.0%	1
South Los Angeles	Chesterfield Square	$517	1	0	**$2.83**	1	5.0%	1
South Los Angeles	Exposition Park	$480	1	11	$4.30	4	60.1%	3
South Los Angeles	Gramercy Park	$524	1	0	**$2.87**	1	70.6%	1
South Los Angeles	Harvard Heights	$588	2	3	**$3.22**	2	74.1%	2
South Los Angeles	Harvard Park	$515	1	0	**$2.82**	1	5.0%	1
South Los Angeles	Manchester Square	$523	1	0	**$2.86**	1	91.3%	1
South Los Angeles	Pico-Union	$582	2	6	$2.51	1	87.7%	1
South Los Angeles	University Park	$339	1	2	**$1.85**	1	45.3%	1
South Los Angeles	Vermont Knolls	$464	1	2	**$2.54**	1	67.9%	1
South Los Angeles	Vermont Square	$442	1	1	**$2.42**	1	90.0%	1
South Los Angeles	Vermont Vista	$458	1	3	**$2.51**	1	95.0%	1
South Los Angeles	Vermont-Slauson	$450	1	2	**$2.46**	1	87.1%	1
Southeast Los Angeles	Broadway-Manchester	$424	1	1	**$2.32**	1	95.0%	1
Southeast Los Angeles	Central-Alameda	$424	1	1	**$2.32**	1	95.0%	1
Southeast Los Angeles	Florence	$402	1	0	**$2.20**	1	95.0%	1
Southeast Los Angeles	Green Meadows	$456	1	0	**$2.50**	1	88.4%	1
Southeast Los Angeles	Historic South-Central	$408	1	1	**$2.23**	1	95.0%	1
Southeast Los Angeles	South Park	$396	1	0	**$2.17**	1	47.8%	1
Southeast Los Angeles	Watts	$471	1	0	**$2.58**	1	60.8%	1
Sun Valley - La Tuna Canyon	Sun Valley	$552	1	7	$2.35	1	95.0%	1
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Lake View Terrace	$484	1	1	**$2.65**	1	95.0%	1
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Shadow Hills	$611	2	2	**$3.35**	2	95.0%	2
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Sunland	$608	2	0	**$3.33**	2	95.0%	2
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Tujunga	$618	2	1	**$3.38**	2	95.0%	2
Sylmar	Sylmar	$461	1	3	**$2.52**	1	95.0%	1
Van Nuys - North Sherman Oaks	Valley Glen	$596	2	14	$2.28	1	95.0%	1
Van Nuys - North Sherman Oaks	Van Nuys	$565	1	27	$2.66	1	99.7%	1
Venice	Venice	$1,099	4	5	$3.67	3	50.0%	4
West Adams - Baldwin Hills - Leimert	Arlington Heights	$619	2	5	$2.46	1	67.5%	1
West Adams - Baldwin Hills - Leimert	Baldwin Hills/Crenshaw	$663	3	1	**$3.63**	3	67.0%	3
West Adams - Baldwin Hills - Leimert	Hyde Park	$607	2	3	**$3.32**	2	5.0%	2
West Adams - Baldwin Hills - Leimert	Jefferson Park	$568	2	1	**$3.11**	2	68.2%	2
West Adams - Baldwin Hills - Leimert	Leimert Park	$627	2	0	**$3.43**	2	5.0%	2
West Adams - Baldwin Hills - Leimert	Mid-City	$710	3	5	$6.06	4	11.5%	4
West Adams - Baldwin Hills - Leimert	West Adams	$689	3	7	$4.39	4	29.3%	3
West Los Angeles	Beverlywood	$784	4	0	**$4.29**	4	95.0%	4
West Los Angeles	Century City	$868	4	3	**$4.75**	4	50.0%	4
West Los Angeles	Cheviot Hills	$927	4	1	**$5.08**	4	50.0%	4
West Los Angeles	Rancho Park	$967	4	2	**$5.29**	4	5.0%	4
West Los Angeles	Sawtelle	$834	4	37	$4.94	4	5.0%	4
West Los Angeles	West Los Angeles	$810	4	10	$3.30	2	82.3%	3
Westchester - Playa del Rey	Playa del Rey	$748	3	2	**$4.09**	4	2.7%	3
Westchester - Playa del Rey	Playa Vista	$871	4	8	$4.39	4	71.8%	4
Westlake	Westlake	$654	2	13	$3.57	3	96.0%	3
Westwood	Westwood	$708	3	10	$4.35	4	95.0%	4
Wilmington - Harbor City	Harbor City	$489	1	1	**$2.68**	1	95.0%	1
Wilmington - Harbor City	Wilmington	$491	1	0	**$2.69**	1	95.0%	1
Wilshire	Beverly Grove	$897	4	16	$4.56	4	5.0%	4
Wilshire	Carthay	$798	4	1	**$4.37**	4	50.0%	4
Wilshire	Fairfax	$856	4	2	**$4.68**	4	5.0%	4
Wilshire	Hancock Park	$746	3	2	**$4.08**	4	95.0%	4
Wilshire	Koreatown	$643	2	38	$3.60	3	95.0%	3
Wilshire	Larchmont	$712	3	4	**$3.90**	3	5.0%	3
Wilshire	Mid-Wilshire	$716	3	15	$3.96	4	5.0%	3
Wilshire	Pico-Robertson	$723	3	9	$3.11	2	50.0%	2
Wilshire	Windsor Square	$668	3	2	**$3.65**	3	50.0%	3

Market Tiers by Neighborhood

Proposed, sorted by Tier (1 of 2)

Market Tier Key

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Notes:

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Arleta - Pacoima	Pacoima	$496	1	**1**	**$2.71**	1	52.0%	1
Boyle Heights	Boyle Heights	$481	1	6	$2.75	1	62.4%	1
Canoga Park - Winnetka - Woodland Hills - West Hills	West Hills	$535	1	**2**	**$2.93**	1	5.0%	1
Canoga Park - Winnetka - Woodland Hills - West Hills	Winnetka	$487	1	**2**	**$2.67**	1	95.0%	1
Chatsworth - Porter Ranch	Chatsworth	$472	1	7	$2.96	1	91.4%	1
Chatsworth - Porter Ranch	Porter Ranch	$504	1	**0**	**$2.76**	1	95.0%	1
Encino - Tarzana	Encino	$688	3	8	$2.94	1	95.0%	1
Encino - Tarzana	Tarzana	$529	1	**4**	**$2.89**	1	95.0%	1
Granada Hills - Knollwood	Granada Hills	$525	1	**3**	**$2.88**	1	96.2%	1
Harbor Gateway	Harbor Gateway	$527	1	**3**	**$2.89**	1	95.0%	1
Mission Hills - Panorama City - North Hills	Mission Hills	$518	1	**0**	**$2.83**	1	95.0%	1
Mission Hills - Panorama City - North Hills	North Hills	$489	1	**4**	**$2.68**	1	95.0%	1
Mission Hills - Panorama City - North Hills	Panorama City	$454	1	5	$2.46	1	95.0%	1
North Hollywood - Valley Village	Valley Village	$639	2	21	$2.77	1	95.0%	1
Northridge	Northridge	$462	1	13	$2.92	1	90.3%	1
Reseda - West Van Nuys	Lake Balboa	$550	1	7	$2.43	1	95.0%	1
Reseda - West Van Nuys	Reseda	$526	1	9	$2.68	1	95.4%	1
San Pedro	San Pedro	$515	1	6	$2.89	1	98.9%	1
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Sherman Oaks	$726	3	22	$2.59	1	95.0%	1
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Toluca Lake	$629	2	12	$2.53	1	95.0%	1
South Los Angeles	Adams-Normandie	$505	1	**1**	**$2.76**	1	95.0%	1
South Los Angeles	Chesterfield Square	$517	1	**0**	**$2.83**	1	5.0%	1
South Los Angeles	Gramercy Park	$524	1	**0**	**$2.87**	1	70.6%	1
South Los Angeles	Harvard Park	$515	1	**0**	**$2.82**	1	5.0%	1
South Los Angeles	Manchester Square	$523	1	**0**	**$2.86**	1	91.3%	1
South Los Angeles	Pico-Union	$582	2	6	$2.51	1	87.7%	1
South Los Angeles	University Park	$339	1	**2**	**$1.85**	1	45.3%	1
South Los Angeles	Vermont Knolls	$464	1	**2**	**$2.54**	1	67.9%	1
South Los Angeles	Vermont Square	$442	1	**1**	**$2.42**	1	90.0%	1
South Los Angeles	Vermont Vista	$458	1	**3**	**$2.51**	1	95.0%	1
South Los Angeles	Vermont-Slauson	$450	1	**2**	**$2.46**	1	87.1%	1
Southeast Los Angeles	Broadway-Manchester	$424	1	**1**	**$2.32**	1	95.0%	1
Southeast Los Angeles	Central-Alameda	$424	1	**1**	**$2.32**	1	95.0%	1
Southeast Los Angeles	Florence	$402	1	**0**	**$2.20**	1	95.0%	1
Southeast Los Angeles	Green Meadows	$456	1	**0**	**$2.50**	1	88.4%	1
Southeast Los Angeles	Historic South-Central	$408	1	**1**	**$2.23**	1	95.0%	1
Southeast Los Angeles	South Park	$396	1	**0**	**$2.17**	1	47.8%	1
Southeast Los Angeles	Watts	$471	1	**0**	**$2.58**	1	60.8%	1
Sun Valley - La Tuna Canyon	Sun Valley	$552	1	7	$2.35	1	95.0%	1
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Lake View Terrace	$484	1	**1**	**$2.65**	1	95.0%	1
Sylmar	Sylmar	$461	1	**3**	**$2.52**	1	95.0%	1
Van Nuys - North Sherman Oaks	Valley Glen	$596	2	14	$2.28	1	95.0%	1
Van Nuys - North Sherman Oaks	Van Nuys	$565	1	27	$2.66	1	99.7%	1
West Adams - Baldwin Hills - Leimert	Arlington Heights	$619	2	5	$2.46	1	67.5%	1
Wilmington - Harbor City	Harbor City	$489	1	**1**	**$2.68**	1	95.0%	1
Wilmington - Harbor City	Wilmington	$491	1	**0**	**$2.69**	1	95.0%	1
Canoga Park - Winnetka - Woodland Hills - West Hills	Canoga Park	$515	1	17	$3.04	2	95.0%	2
Canoga Park - Winnetka - Woodland Hills - West Hills	Woodland Hills	$599	2	13	$3.25	2	95.0%	2
Central City North	Chinatown	$621	2	**3**	**$3.40**	2	98.3%	2
North Hollywood - Valley Village	North Hollywood	$592	2	68	$3.41	2	95.0%	2
Northeast Los Angeles	Lincoln Heights	$601	2	**3**	**$3.29**	2	21.8%	2
Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	Studio City	$752	4	19	$3.08	2	90.7%	2
South Los Angeles	Harvard Heights	$588	2	**3**	**$3.22**	2	74.1%	2
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Shadow Hills	$611	2	**2**	**$3.35**	2	95.0%	2
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Sunland	$608	2	**0**	**$3.33**	2	95.0%	2
Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La	Tujunga	$618	2	**1**	**$3.38**	2	95.0%	2

Market Tiers by Neighborhood

Proposed, sorted by Tier (2 of 2)

Market Tier Key

- Market Tier 1 (Low)
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West Adams - Baldwin Hills - Leimert	Jefferson Park	$568	2	**1**	**$3.11**	2	68.2%	2
West Adams - Baldwin Hills - Leimert	Leimert Park	$627	2	**0**	**$3.43**	2	5.0%	2
Wilshire	Pico-Robertson	$723	3	9	$3.11	2	50.0%	2
Central City	Downtown	$691	3	58	$3.61	3	94.5%	3
Hollywood	East Hollywood	$748	3	18	$3.69	3	50.0%	3
Hollywood	Hollywood	$709	3	60	$3.82	3	63.0%	3
Northeast Los Angeles	El Sereno	$681	3	**1**	**$3.73**	3	5.0%	3
Northeast Los Angeles	Montecito Heights	$671	3	**0**	**$3.67**	3	95.0%	3
Palms - Mar Vista - Del Rey	Del Rey	$889	4	19	$3.74	3	95.0%	3
Silver Lake - Echo Park - Elysian Valley	Echo Park	$793	4	8	$3.49	3	69.7%	3
Silver Lake - Echo Park - Elysian Valley	Elysian Park	$640	2	**0**	**$3.50**	3	97.8%	3
South Los Angeles	Exposition Park	$480	1	11	$4.30	4	60.1%	3
West Adams - Baldwin Hills - Leimert	Baldwin Hills/Crenshaw	$663	3	**1**	**$3.63**	3	67.0%	3
West Adams - Baldwin Hills - Leimert	West Adams	$689	3	7	$4.39	4	29.3%	3
West Los Angeles	West Los Angeles	$810	4	10	$3.30	2	82.3%	3
Westchester - Playa del Rey	Playa del Rey	$748	3	**2**	**$4.09**	4	2.7%	3
Westlake	Westlake	$654	2	13	$3.57	3	96.0%	3
Wilshire	Koreatown	$643	2	38	$3.60	3	95.0%	3
Wilshire	Larchmont	$712	3	**4**	**$3.90**	3	5.0%	3
Wilshire	Mid-Wilshire	$716	3	15	$3.96	4	5.0%	3
Wilshire	Windsor Square	$668	3	**2**	**$3.65**	3	50.0%	3
Bel Air - Beverly Crest	Bel-Air	$983	4	**2**	**$5.38**	4	95.0%	4
Bel Air - Beverly Crest	Beverly Crest	$1,179	4	**0**	**$6.45**	4	95.0%	4
Brentwood - Pacific Palisades	Brentwood	$986	4	9	$4.33	4	95.0%	4
Brentwood - Pacific Palisades	Pacific Palisades	$1,258	4	**2**	**$6.89**	4	95.0%	4
Hollywood	Hollywood Hills	$829	4	**3**	**$4.54**	4	50.0%	4
Hollywood	Hollywood Hills West	$870	4	**1**	**$4.76**	4	95.0%	4
Hollywood	Los Feliz	$896	4	**3**	**$4.90**	4	95.0%	4
Los Angeles International Airport	Westchester	$877	4	14	$3.95	4	95.0%	4
Northeast Los Angeles	Atwater Village	$879	4	**0**	**$4.81**	4	95.0%	4
Northeast Los Angeles	Cypress Park	$796	4	**0**	**$4.36**	4	95.0%	4
Northeast Los Angeles	Eagle Rock	$852	4	**3**	**$4.66**	4	95.0%	4
Northeast Los Angeles	Glassell Park	$800	4	**0**	**$4.38**	4	89.7%	4
Northeast Los Angeles	Highland Park	$750	4	**1**	**$4.11**	4	5.0%	4
Northeast Los Angeles	Mount Washington	$794	4	**0**	**$4.35**	4	95.0%	4
Palms - Mar Vista - Del Rey	Mar Vista	$1,047	4	7	$4.32	4	95.0%	4
Palms - Mar Vista - Del Rey	Palms	$856	4	28	$3.55	3	50.0%	4
Silver Lake - Echo Park - Elysian Valley	Elysian Valley	$768	4	**1**	**$4.20**	4	5.0%	4
Silver Lake - Echo Park - Elysian Valley	Silver Lake	$833	4	5	$4.20	4	50.0%	4
Venice	Venice	$1,099	4	5	$3.67	3	50.0%	4
West Adams - Baldwin Hills - Leimert	Mid-City	$710	3	5	$6.06	4	11.5%	4
West Los Angeles	Beverlywood	$784	4	**0**	**$4.29**	4	95.0%	4
West Los Angeles	Century City	$868	4	**3**	**$4.75**	4	50.0%	4
West Los Angeles	Cheviot Hills	$927	4	**1**	**$5.08**	4	50.0%	4
West Los Angeles	Rancho Park	$967	4	**2**	**$5.29**	4	5.0%	4
West Los Angeles	Sawtelle	$834	4	37	$4.94	4	5.0%	4
Westchester - Playa del Rey	Playa Vista	$871	4	8	$4.39	4	71.8%	4
Westwood	Westwood	$708	3	10	$4.35	4	95.0%	4
Wilshire	Beverly Grove	$897	4	16	$4.56	4	5.0%	4
Wilshire	Carthay	$798	4	**1**	**$4.37**	4	50.0%	4
Wilshire	Fairfax	$856	4	**2**	**$4.68**	4	5.0%	4
Wilshire	Hancock Park	$746	3	**2**	**$4.08**	4	95.0%	4
Arleta - Pacoima	Hansen Dam	NA	NA	NA	NA	NA	NA	NA
Chatsworth - Porter Ranch	Chatsworth Reservoir	NA	NA	NA	NA	NA	NA	NA
Encino - Tarzana	Sepulveda Basin	NA	NA	NA	NA	NA	NA	NA
Hollywood	Griffith Park	NA	NA	NA	NA	NA	NA	NA

3. Market Profiles of Housing Incentive Market Tiers

Market Profiles of Market Tiers

Section Overview

In this section, key socio-economic indicators for each market tier are compiled. The indicators include both demographic and real estate market data.

Each market tier includes non-contiguous neighborhoods. Consequently, market tier profiles reflect data that has been aggregated from neighborhoods that in some cases differ widely.

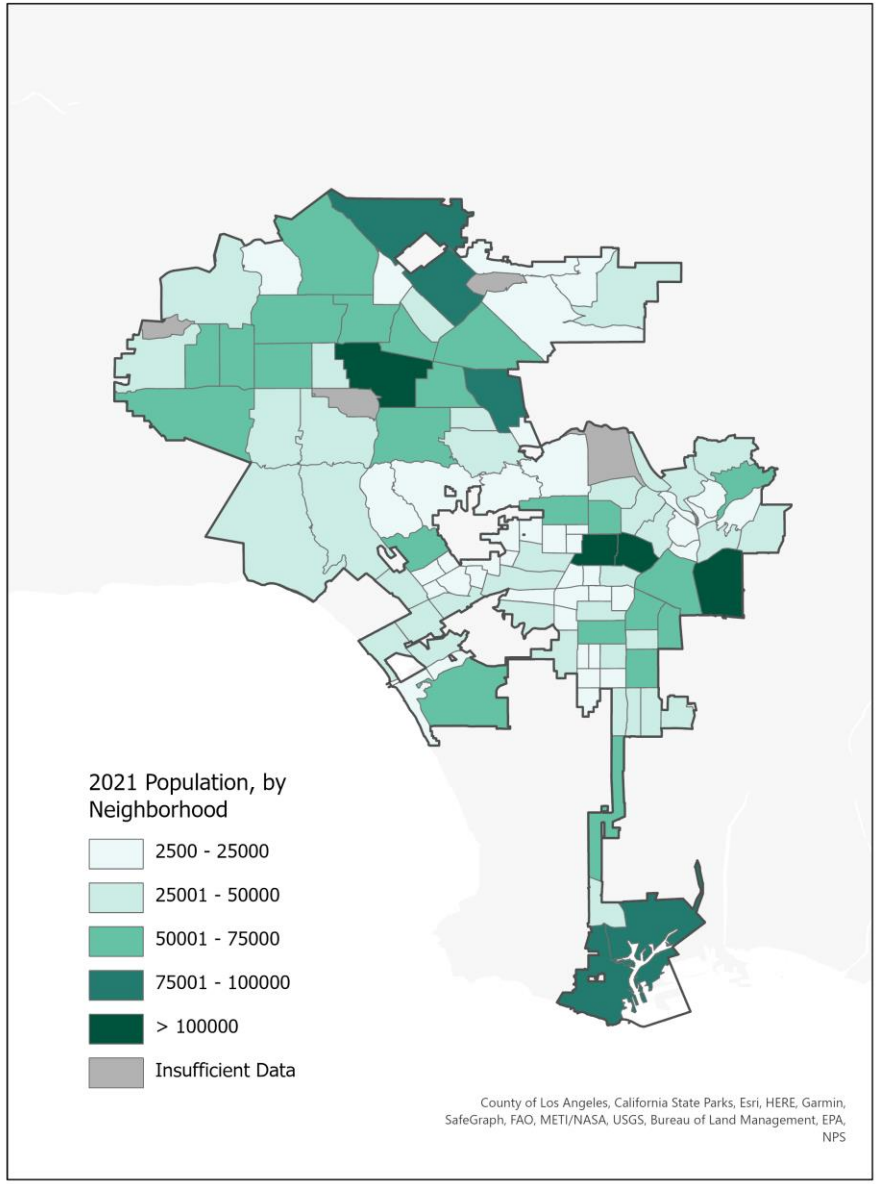
The underlying data for the characteristics and indicators illustrated in this section is provided in **Appendix C**.

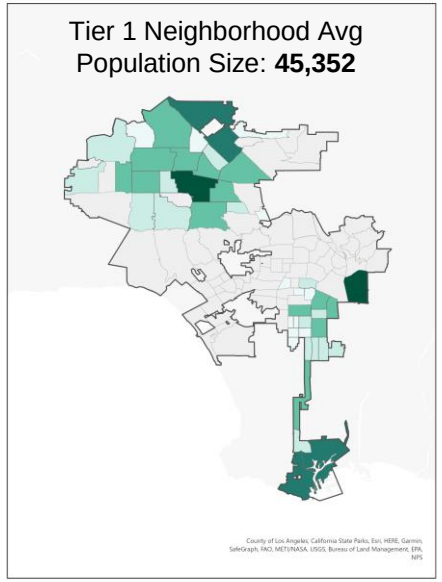
Population

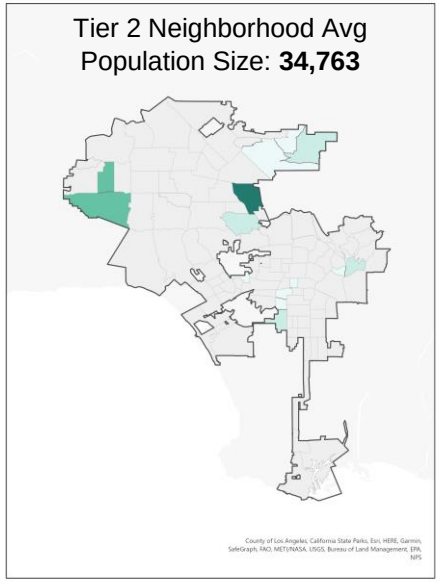
- Citywide, the average population per neighborhood is 37,124.
- More than half (52%) of Los Angelenos live within a Tier 1 (low market tier) neighborhood.

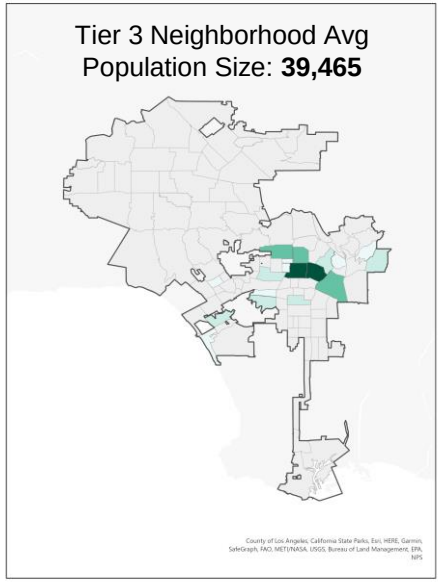
Population by Market Tier

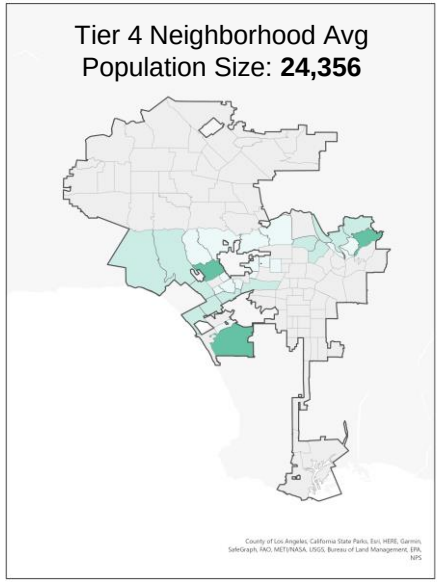
Market Tier	Population	% of Citywide Total
Market Tier 1 (Low)	2,131,544	52%
Market Tier 2 (Medium/Low)	486,685	12%
Market Tier 3 (Medium/High)	710,375	17%
Market Tier 4 (High)	755,040	18%











Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.1***

Population Change

- From 2010 to 2021, the citywide population of Los Angeles grew by 4.3%.
- The fastest growth occurred in Tier 1 neighborhoods at 6.1%, followed by Tier 2 at 5.4%. Slower growth occurred in Tier 3 (3.2%) and Tier 4 (1.7%) neighborhoods.
- Many neighborhoods decreased in population during the period, with population decline most prominent in Tier 4 neighborhoods.
- Downtown, Playa Vista, and Atwater Village populations grew the most, posting increases over 60%. El Sereno had the biggest decline in population, with a decrease of about 22%.

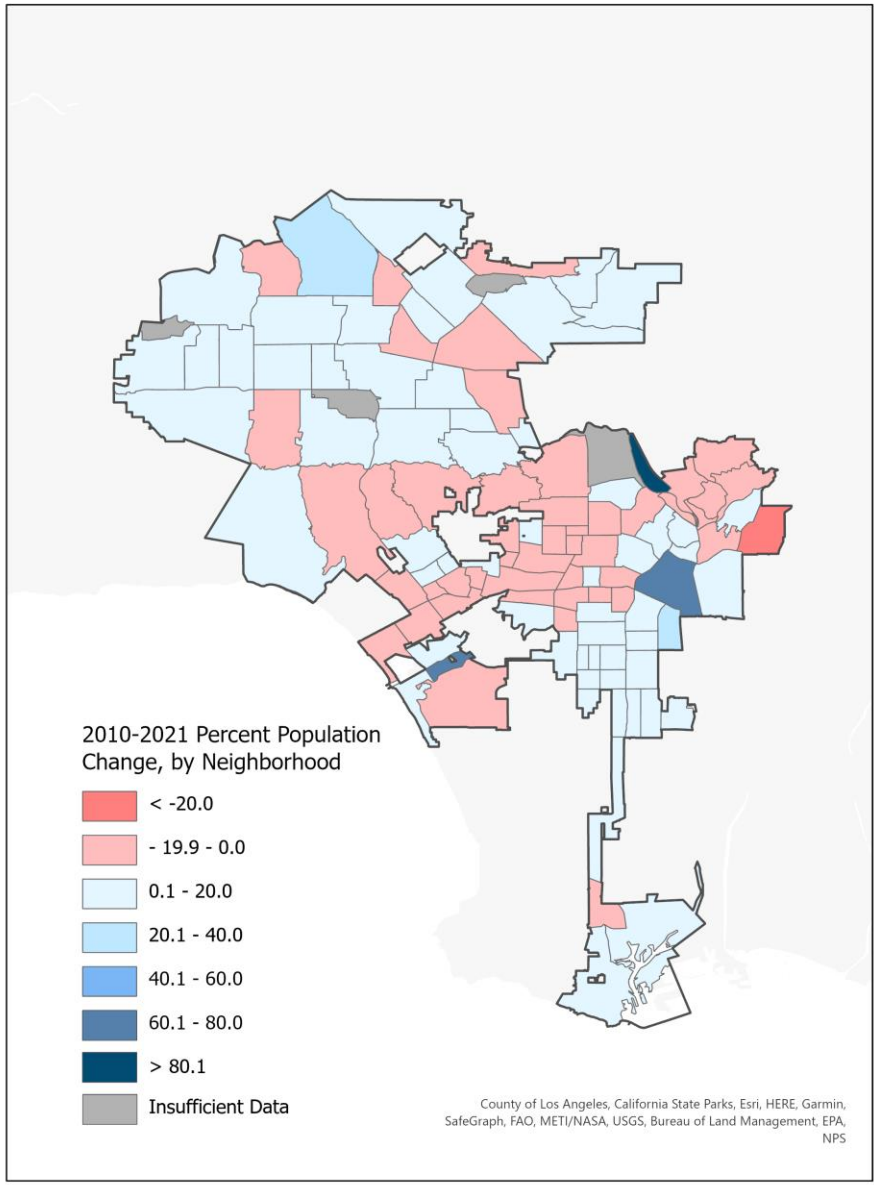
Market Tier

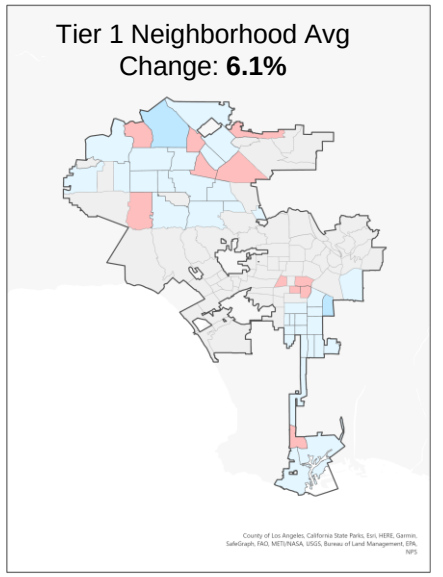
Market Tier 1 (Low)

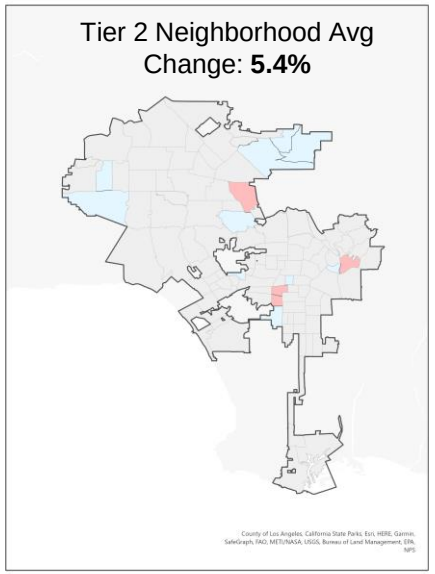
Market Tier 2 (Medium/Low)

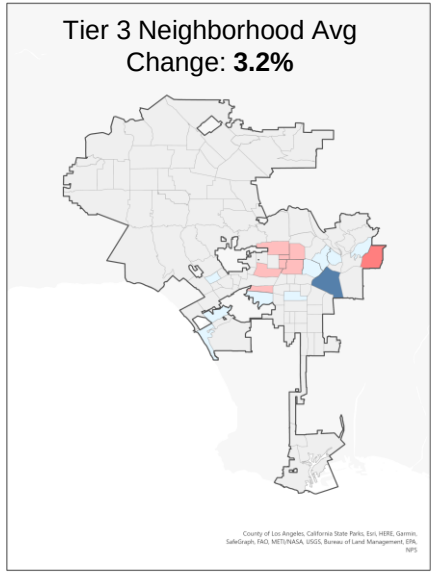
Market Tier 3 (Medium/High)

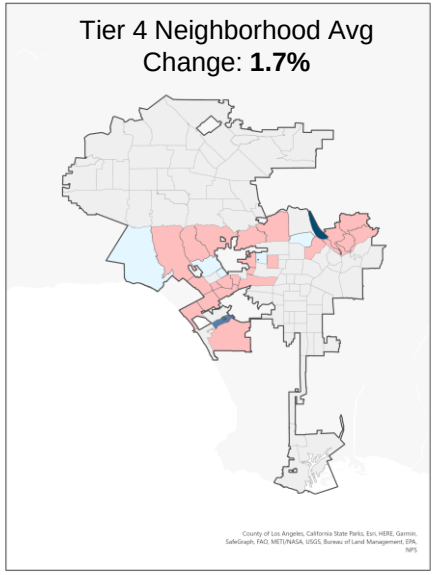
Market Tier 4 (High)











Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

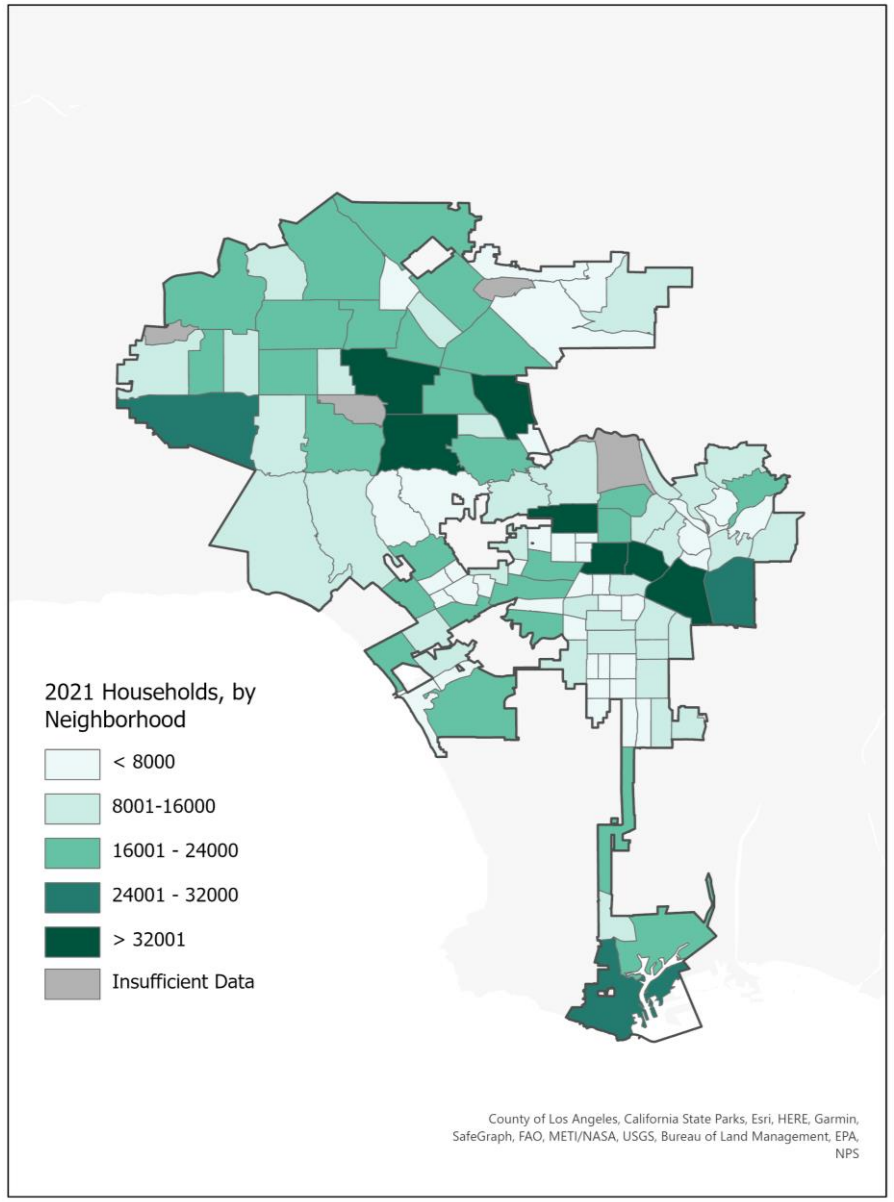
*For full backing data, see **Appendix C.1***

Households

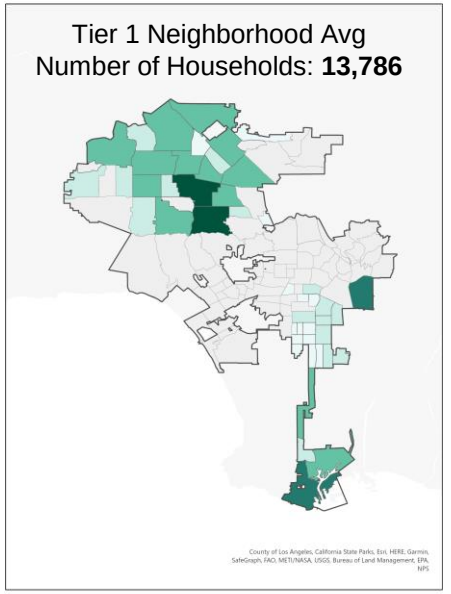
- Citywide, the average number of households per neighborhood is 13,171.
- Nearly half (45%) of Los Angeles households live within a Tier 1 neighborhood, 22% live in a Tier 4 neighborhood, 21% live in a Tier 3 neighborhood, and 13% live in a Tier 2 neighborhood.

Households by Market Tier

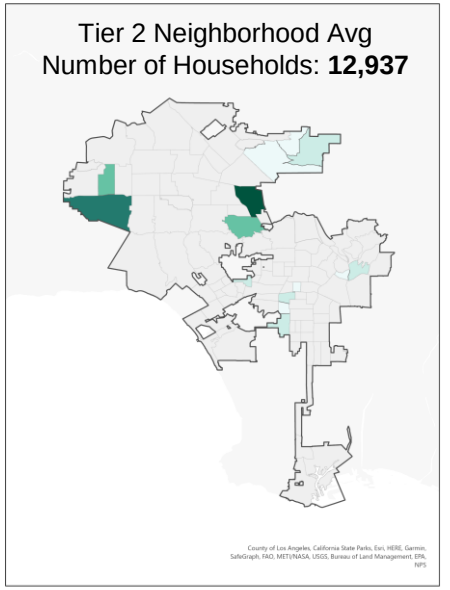
Market Tier	Number of Households	% of Citywide Total
Market Tier 1 (Low)	647,946	45%
Market Tier 2 (Medium/Low)	181,115	13%
Market Tier 3 (Medium/High)	298,490	21%
Market Tier 4 (High)	321,284	22%



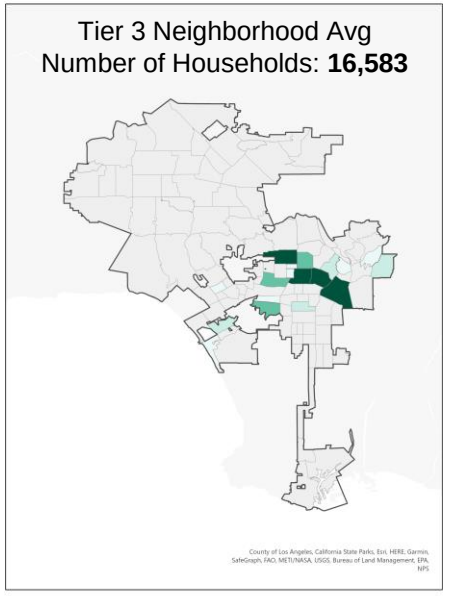
Tier 1 Neighborhood Avg Number of Households: **13,786**



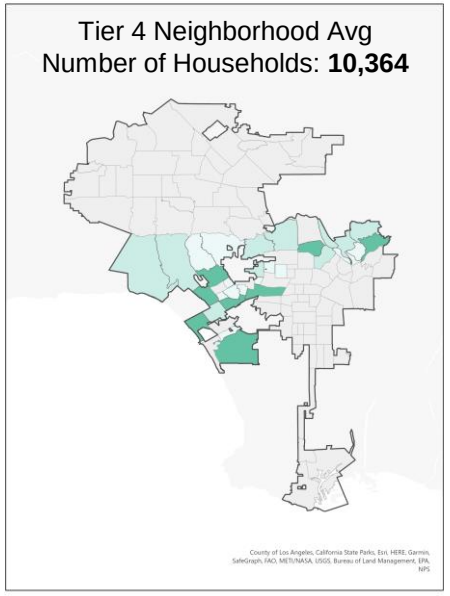
Tier 2 Neighborhood Avg Number of Households: **12,937**



Tier 3 Neighborhood Avg Number of Households: **16,583**



Tier 4 Neighborhood Avg Number of Households: **10,364**



Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.2***

Change in Total Households

- From 2010 to 2021, the number of households citywide grew by 5.7%.
- The fastest growth occurred in Tier 3 neighborhoods (9.3%), followed by Tier 1 neighborhoods (5.8%). Slower growth occurred in Tier 4 neighborhoods (2.4%) and negative growth occurred in Tier 2 neighborhoods (-7.5%).
- The household growth followed population growth with the largest increases between 2010 and 2021 in the neighborhoods of Downtown, Playa Vista, and Atwater Village.

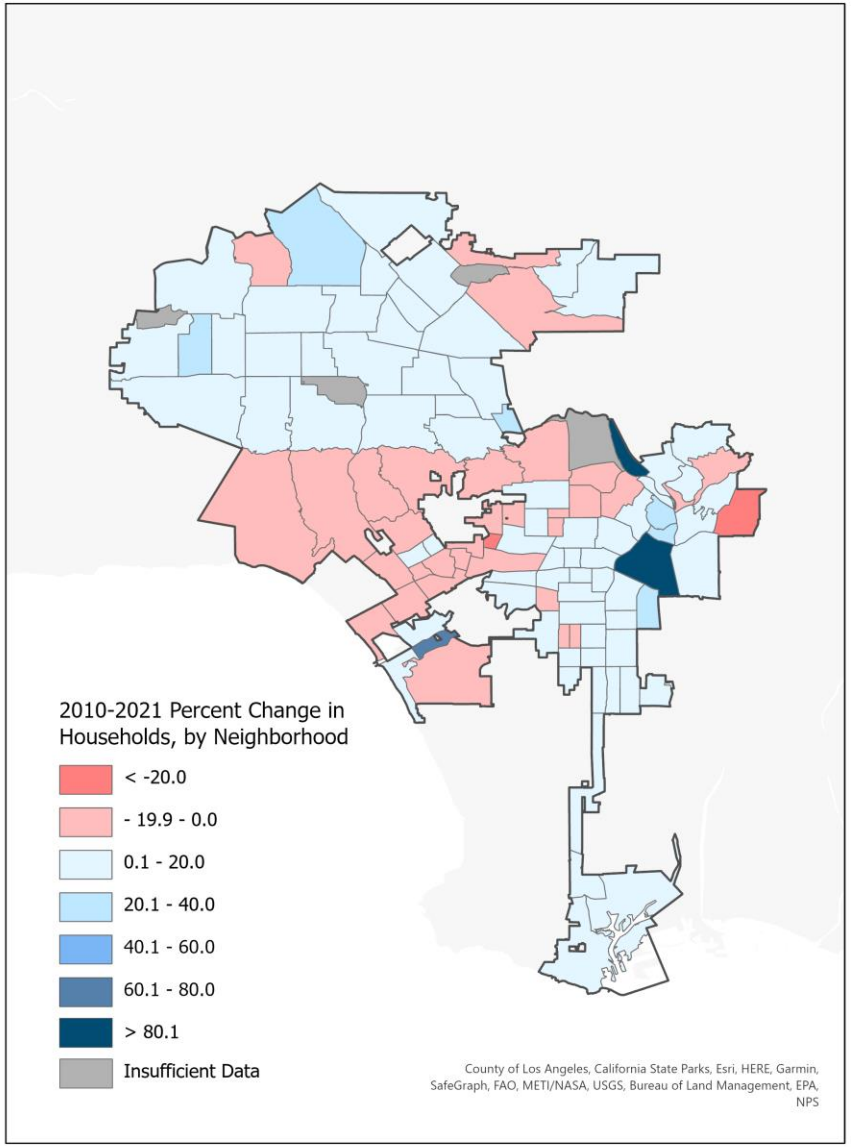
Market Tier

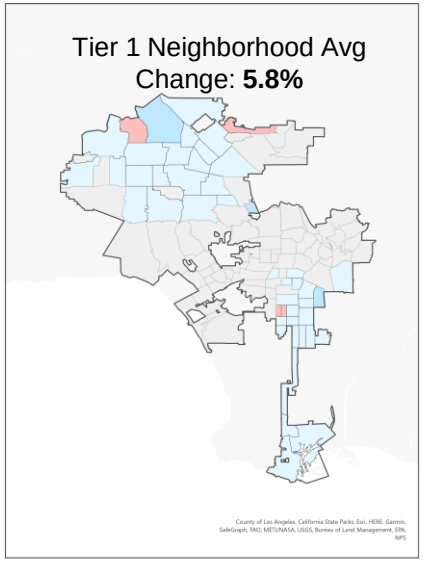
Market Tier 1 (Low)

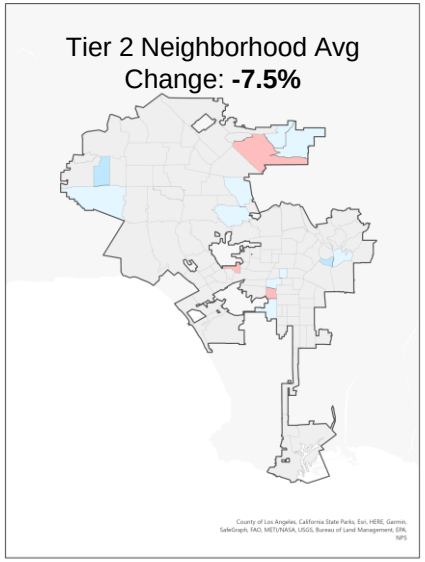
Market Tier 2 (Medium/Low)

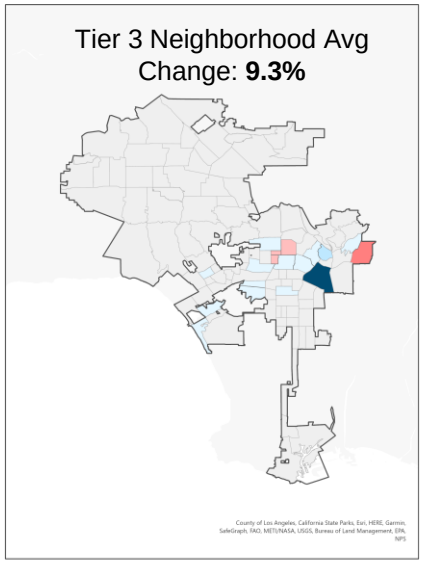
Market Tier 3 (Medium/High)

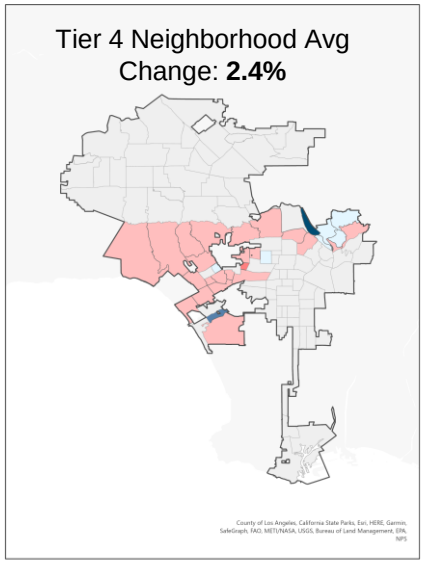
Market Tier 4 (High)









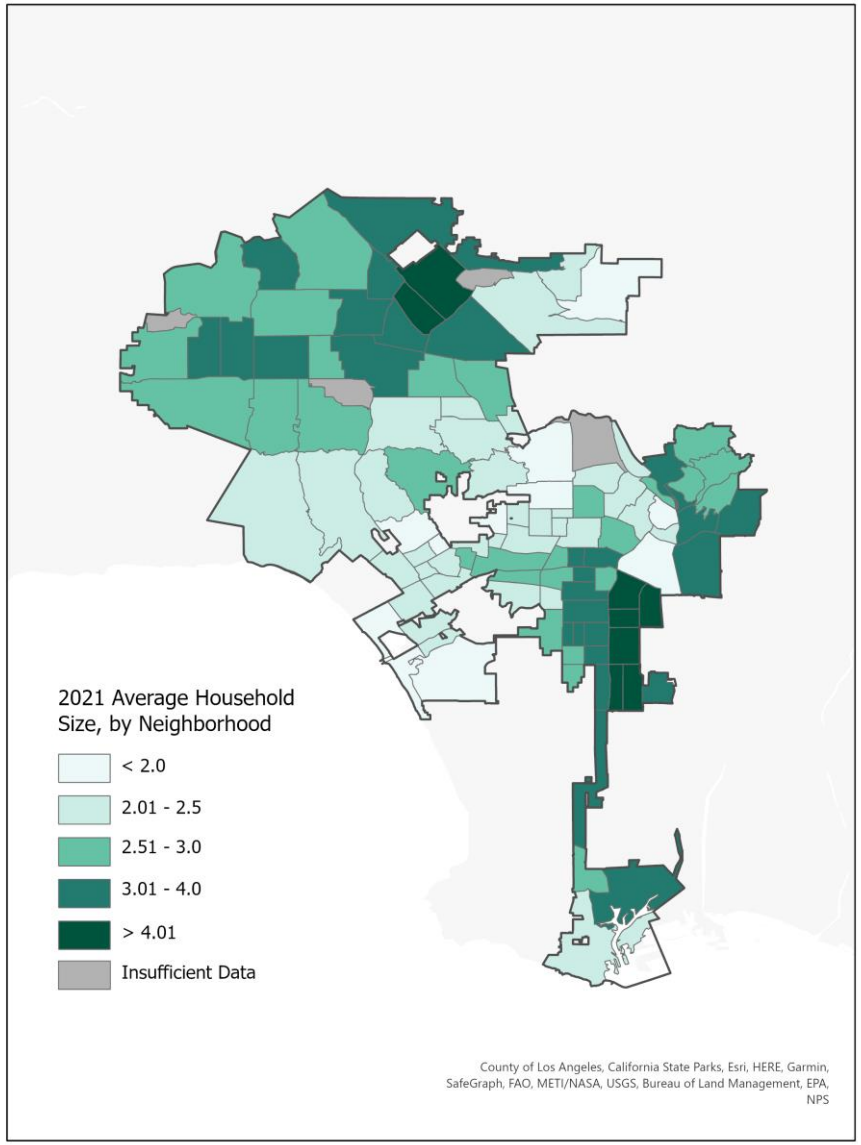


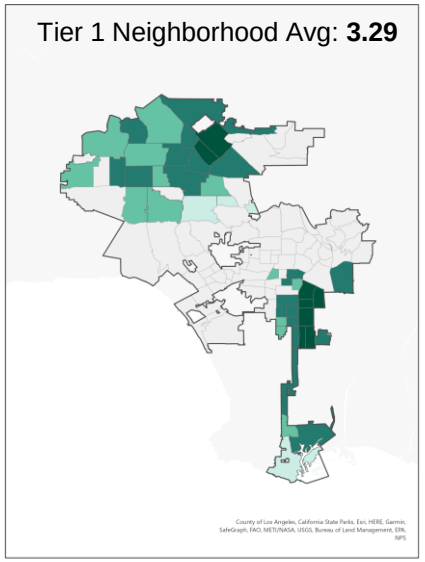
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

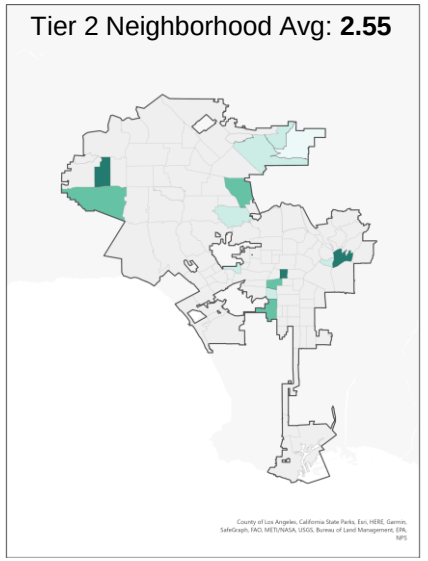
*For full backing data, see **Appendix C.2***

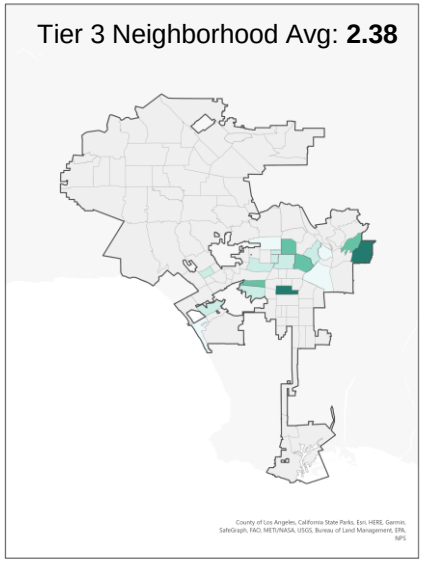
Household Size

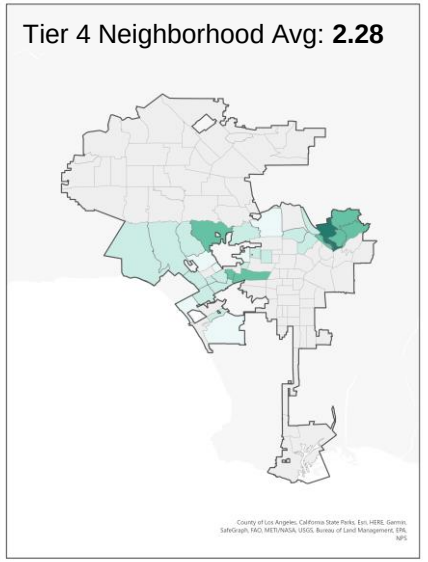
- Citywide, the average household size is 2.76 persons per household.
- Tier 1 neighborhoods have the greatest household sizes averaging 3.29 people per household while Tier 4 neighborhoods have the smallest, averaging 2.28.











Market Tier

Market Tier 1 (Low)

Market Tier 2 (Medium/Low)

Market Tier 3 (Medium/High)

Market Tier 4 (High)

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.3***

Change in Household Size

- From 2010 to 2021, average household size in the city declined by 0.02 persons per household.
- During that time, Tier 1 average household size grew by 0.03 persons per household. In all other tiers, average household size decreased.
- Growth in average household size in Tier 1 neighborhoods may reflect the pressure of high housing costs that lead to more people living under one roof.
- Several neighborhoods in every market tier saw decreases in average household size. This may reflect a number of factors, including shrinking household size trends nationwide as families tend to have fewer children.

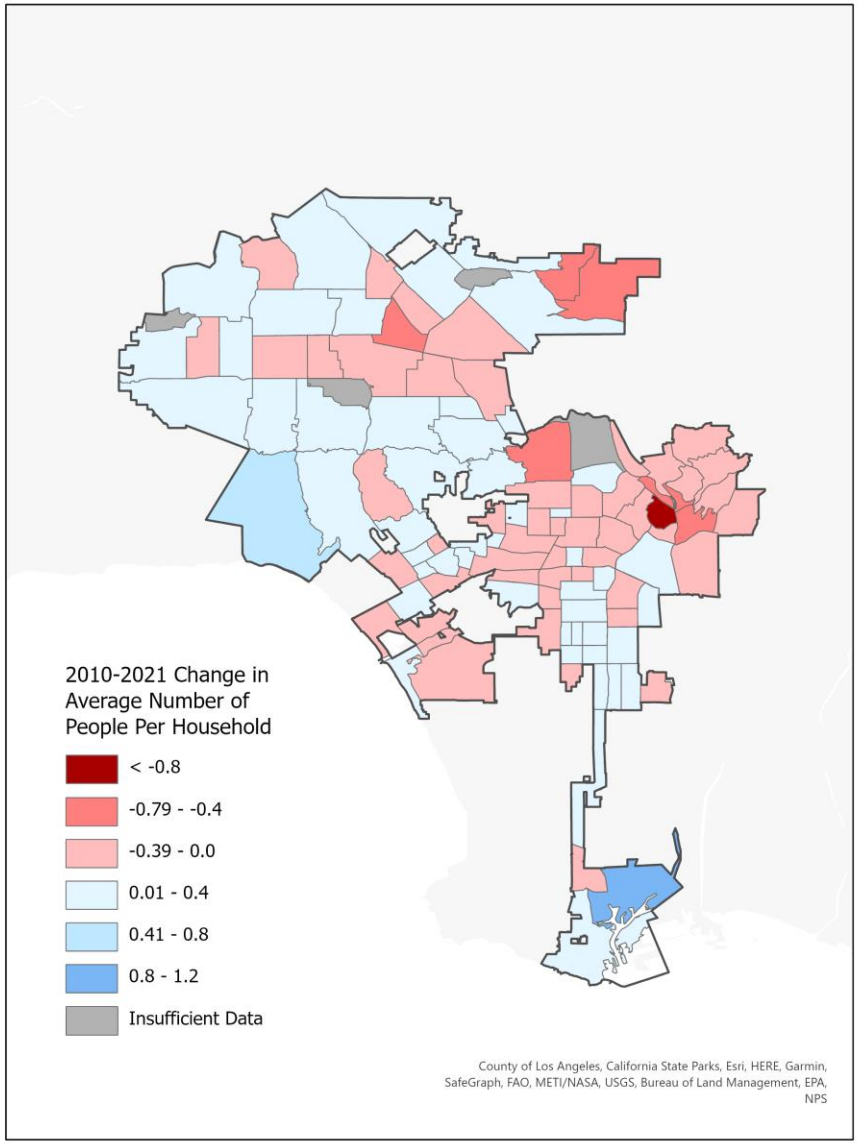
Market Tier

Market Tier 1 (Low)

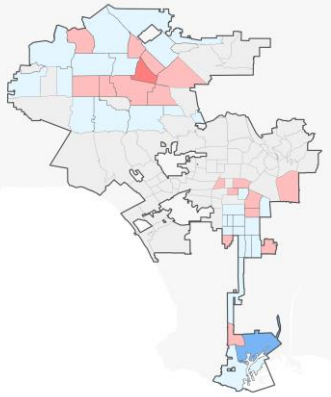
Market Tier 2 (Medium/Low)

Market Tier 3 (Medium/High)

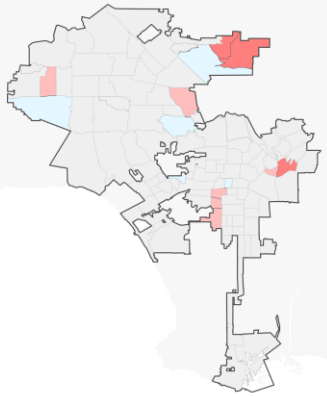
Market Tier 4 (High)



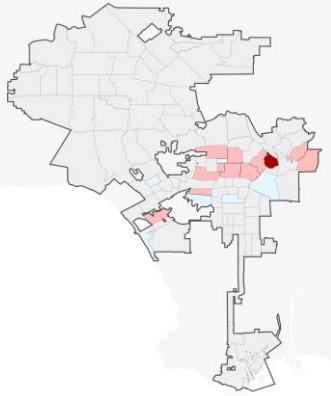
Tier 1 Neighborhood Avg Change: **0.03 persons per HH**



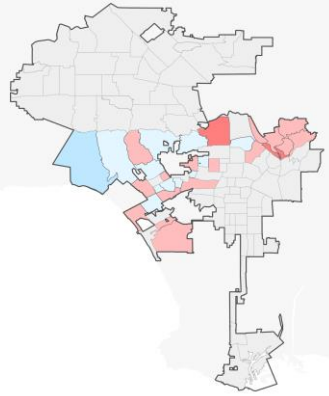
Tier 2 Neighborhood Avg Change: **-0.10 persons per HH**



Tier 3 Neighborhood Avg Change**: -0.14 persons per HH**



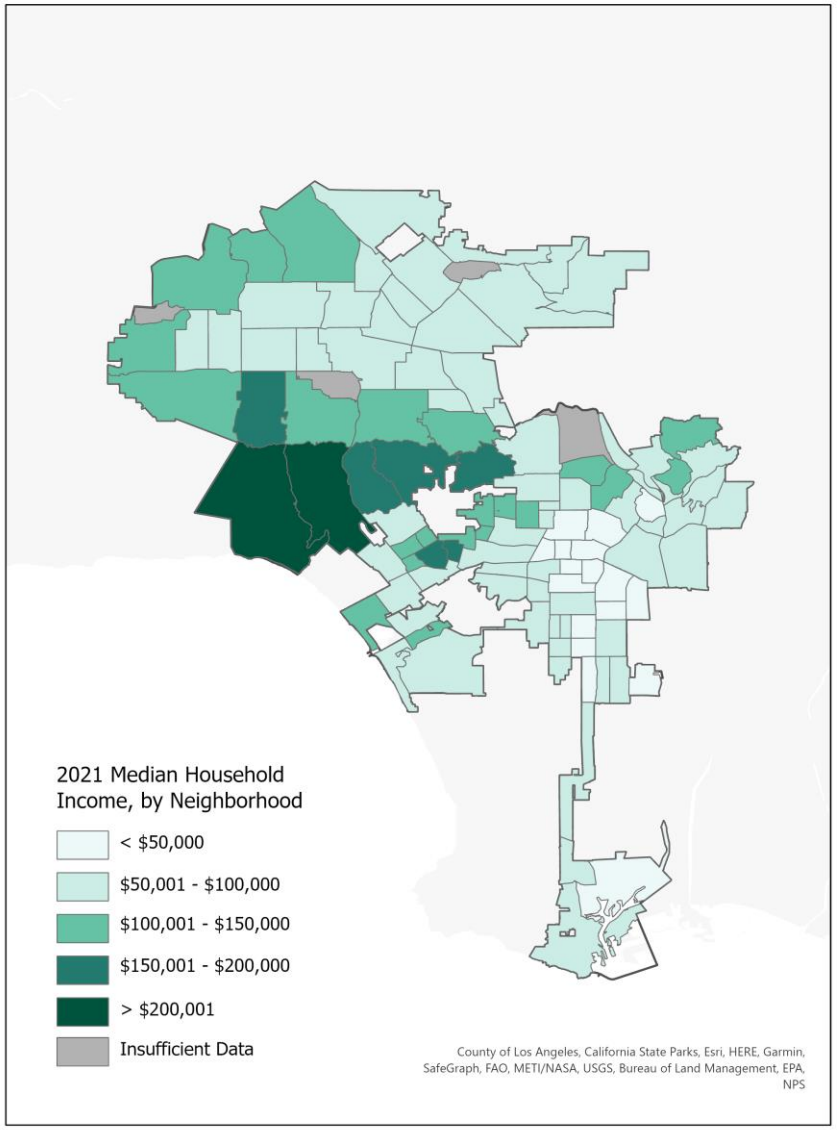
Tier 4 Neighborhood Avg Change: **-0.07 persons per HH**

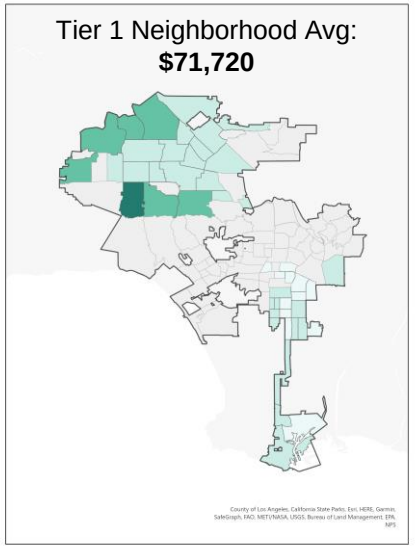


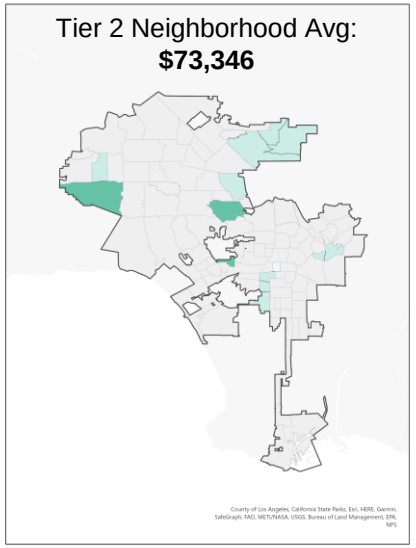
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.3***

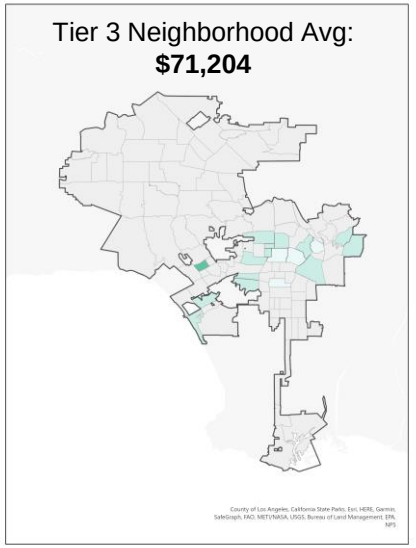
Median Household Income

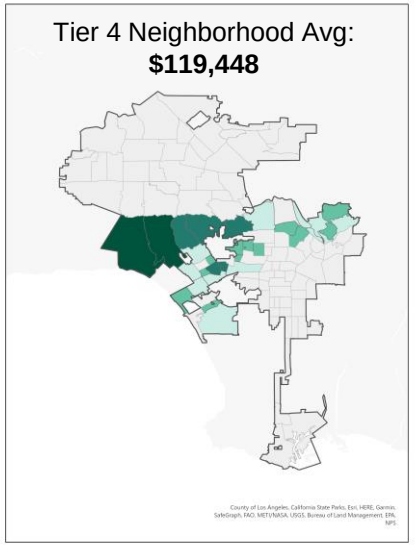
- The citywide median household income is $85,293 ($2021).
- Tiers 1,2, and 3 all have average neighborhood incomes in the $71,000-$74,000 range.
- Only in Tier 4 does the average neighborhood income exceed the citywide median, with an average of just over $119,000.











Market Tier

Market Tier 1 (Low)

Market Tier 2 (Medium/Low)

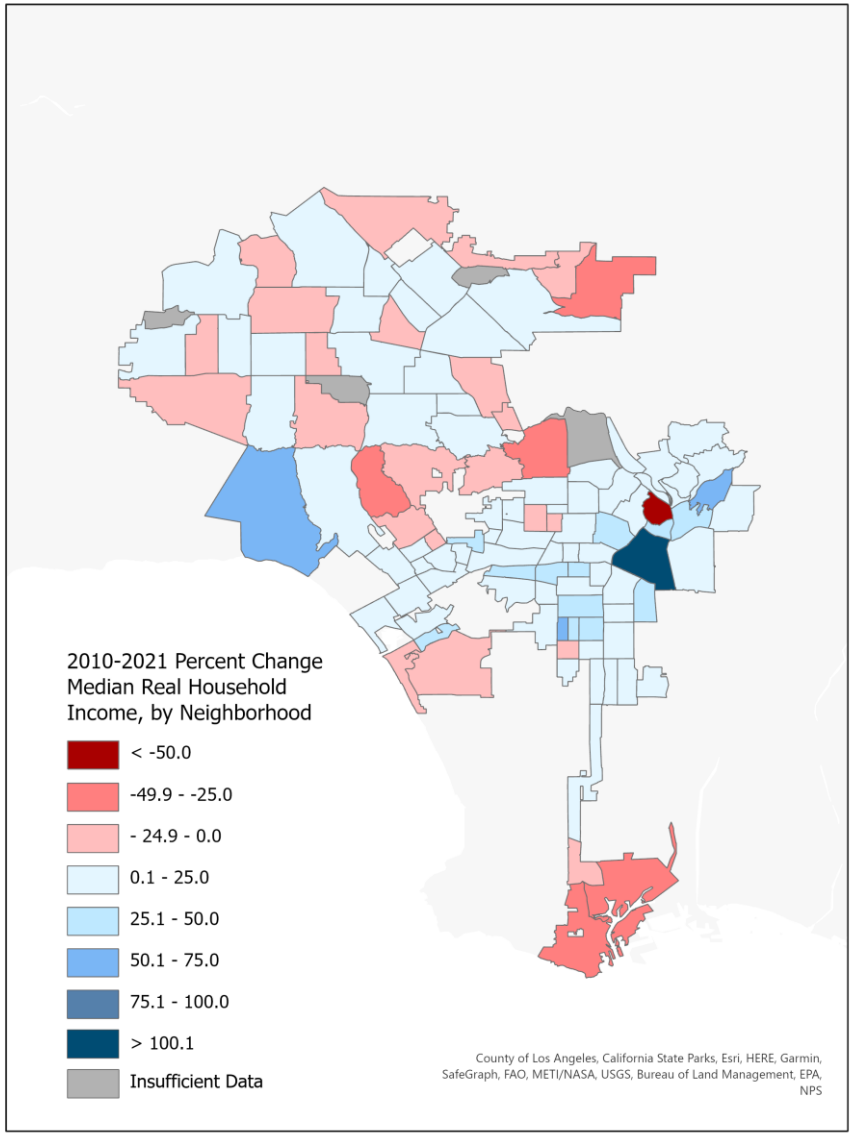
Market Tier 3 (Medium/High)

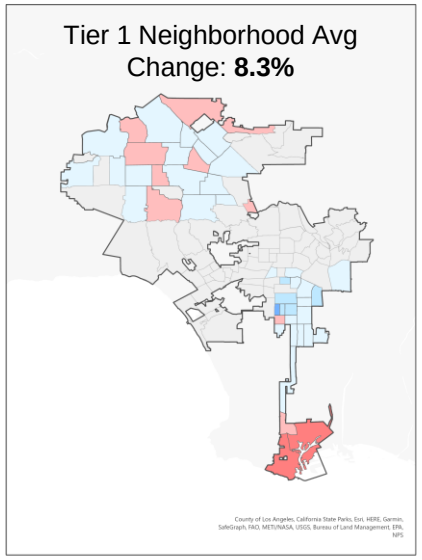
Market Tier 4 (High)

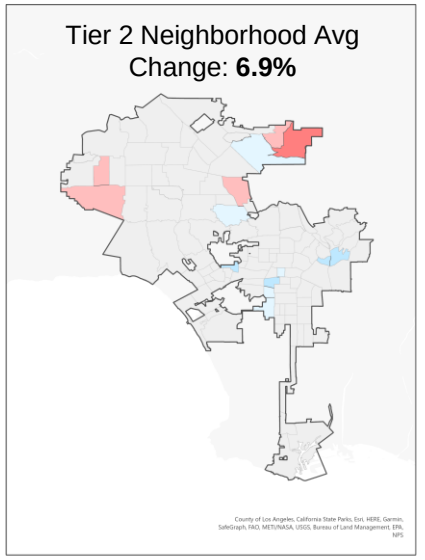
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.4***

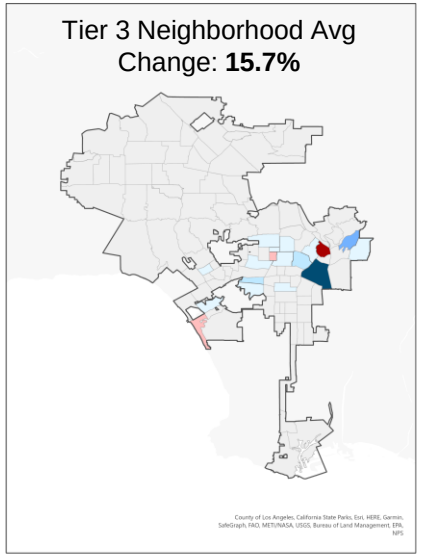
Change in Median Household Income*

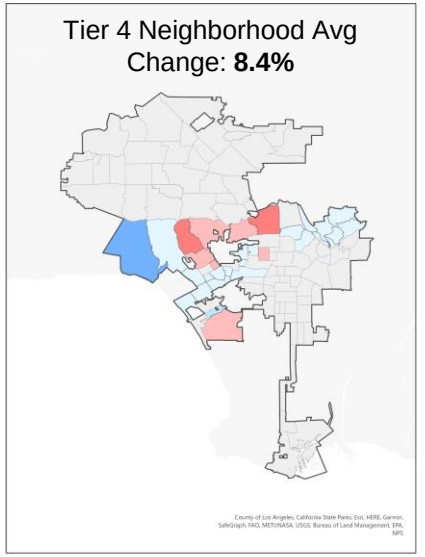
- From 2010 to 2021, median household income (in $2021) in the city increased by 9.4%.
- Only Tier 3 neighborhoods, with income growth of 15.7%, had growth greater than the citywide average.
- Tier 2 neighborhoods had the slowest household income growth with 6.9% growth from 2010 to 2021.
- The neighborhood that experienced the largest increase in median household income during this time period was Downtown, which saw a large influx of new housing units during the period.











Market Tier

Market Tier 1 (Low)

Market Tier 2 (Medium/Low)

Market Tier 3 (Medium/High)

Market Tier 4 (High)

Source: US Census American Community Survey 2021, 5-Year Estimates; Bureau of Labor and Statistics Consumer Price Index; AECOM.
*Household incomes for 2010 were adjusted for inflation to 2021$ to illustrate a fair comparison between the two years. The Bureau of Labor an Statistics Consumer Price Index was used to make the adjustment.

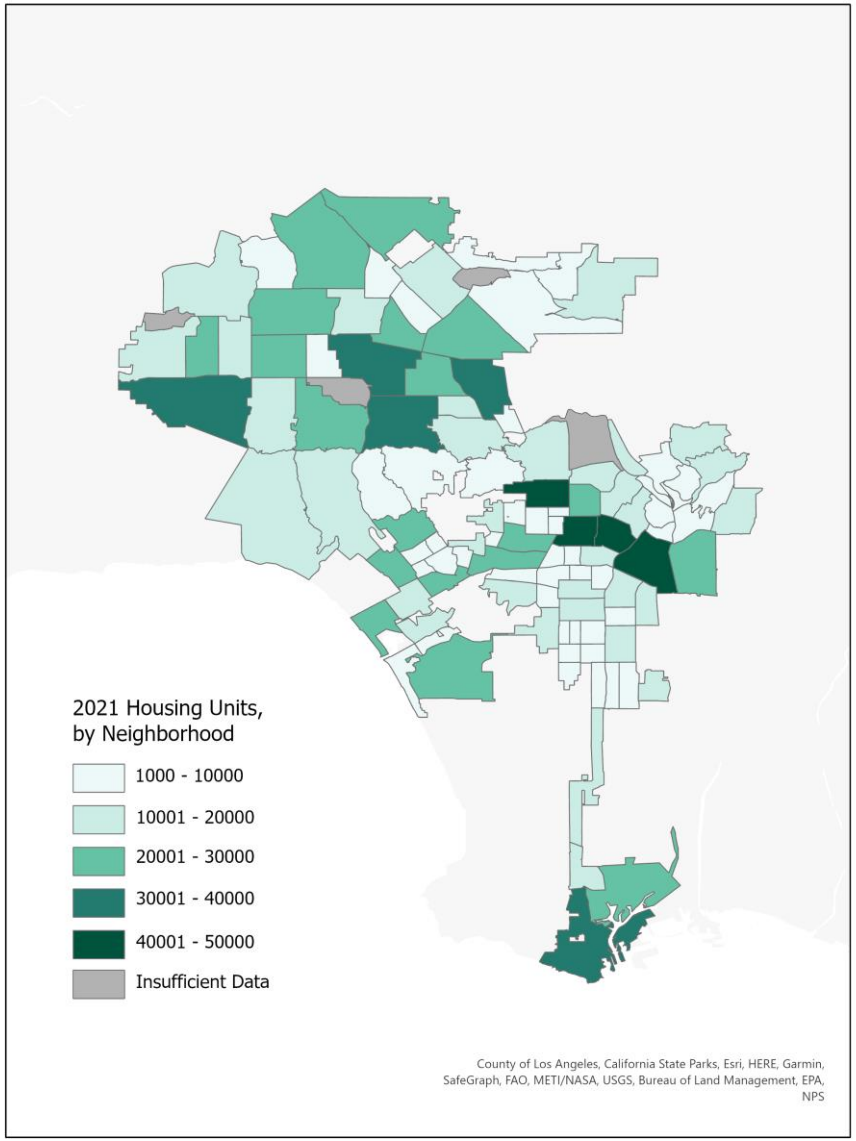
*For full backing data, see **Appendix C.4***

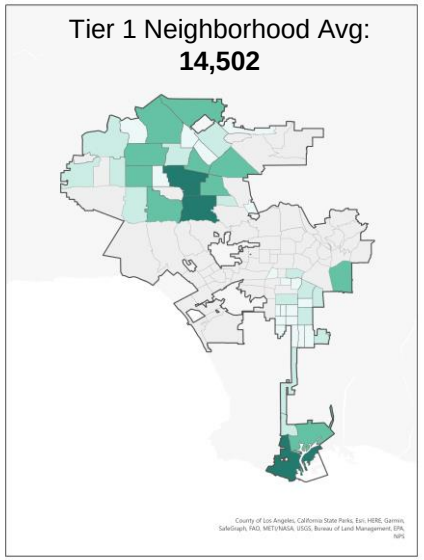
Housing Inventory

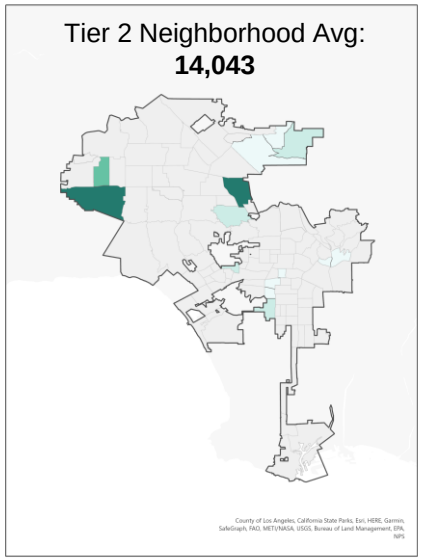
- Citywide, the average number of units per neighborhood is 14,300.
- 43% of housing units in Los Angeles are within Tier 1 neighborhoods, 23% are in Tier 4 neighborhoods, 21% are in Tier 3 neighborhoods, and 12% are in Tier 2 neighborhoods.
- The average number of housing units per neighborhood does not vary significantly, ranging from nearly 12,000 in Tier 4 to nearly 19,000 in Tier 3.

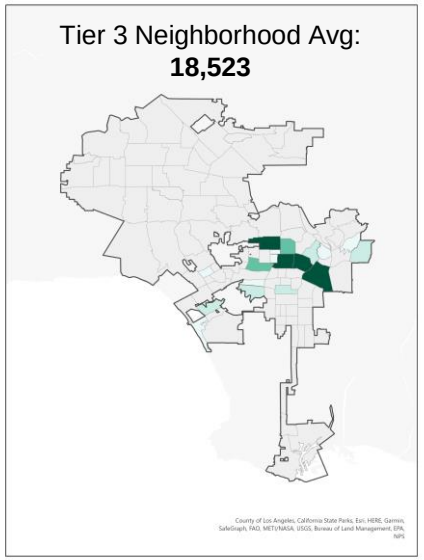
Housing Inventory by Market Tier

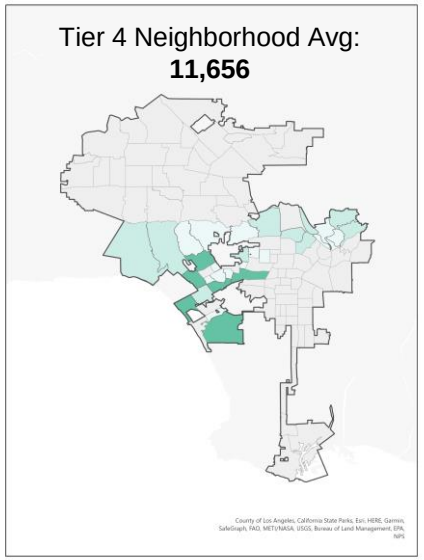
Market Tier	Number of Housing Units	% of Citywide Total
Market Tier 1 (Low)	681,596	43%
Market Tier 2 (Medium/Low)	196,606	12%
Market Tier 3 (Medium/High)	333,408	21%
Market Tier 4 (High)	361,348	23%











Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

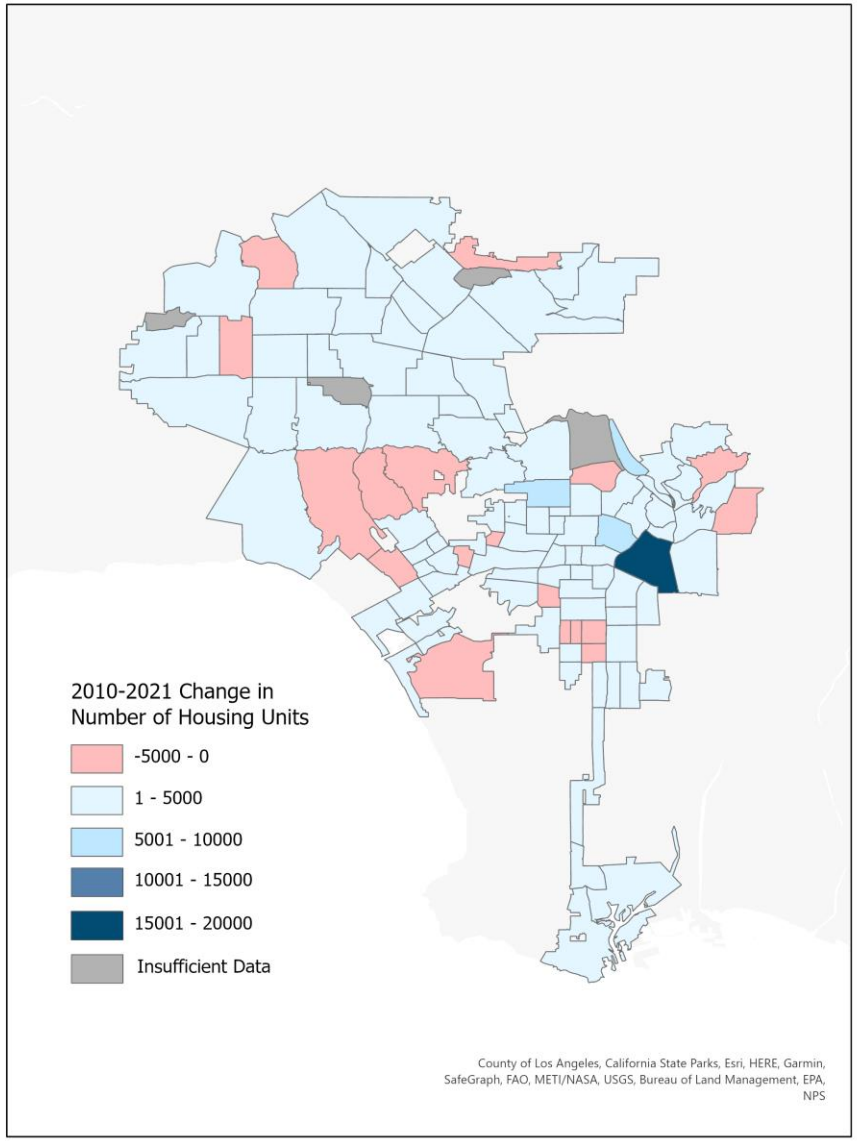
*For full backing data, see **Appendix C.5***

Housing Inventory Growth Since 2010

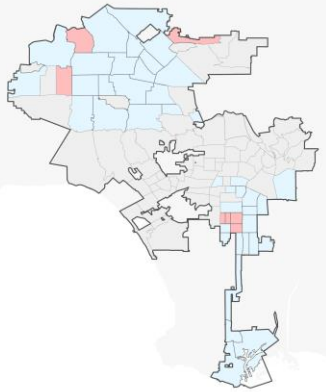
- From 2010 to 2021, housing inventory grew 6.9% with the addition of 101,569 units.
- The greatest growth occurred in Tier 3, which added 38,097 units. High inventory growth rates in Tier 3 were driven by new development in dense neighborhoods near the city core, including Downtown, Hollywood, and Koreatown.
- Some neighborhoods, especially in Tier 4, experienced small declines in the number of housing units. In these high value markets, some homes may only be occupied seasonally or dedicated to home sharing. In some, property owners may be consolidating units to form larger homes.

Housing Inventory Growth by Market Tier
Since 2010

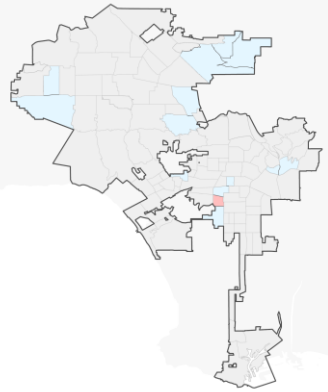
Market Tier	Housing Units Added	% of Citywide Growth
Market Tier 1 (Low)	35,845	35%
Market Tier 2 (Medium/Low)	14,750	15%
Market Tier 3 (Medium/High)	38,097	38%
Market Tier 4 (High)	12,877	13%
Total	**101,569**	**100%**



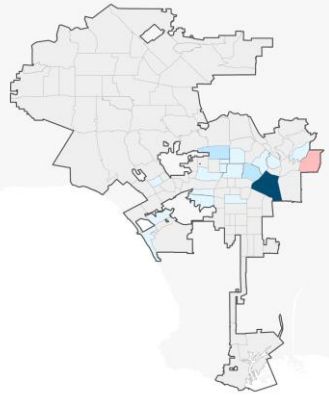
Tier 1 Neighborhood Avg Change: **763 units**



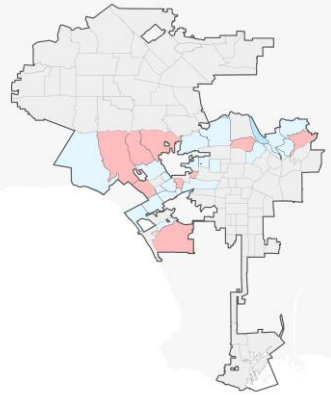
Tier 2 Neighborhood Avg Change: **1,054 units**



Tier 3 Neighborhood Avg Change: **2,116 units**



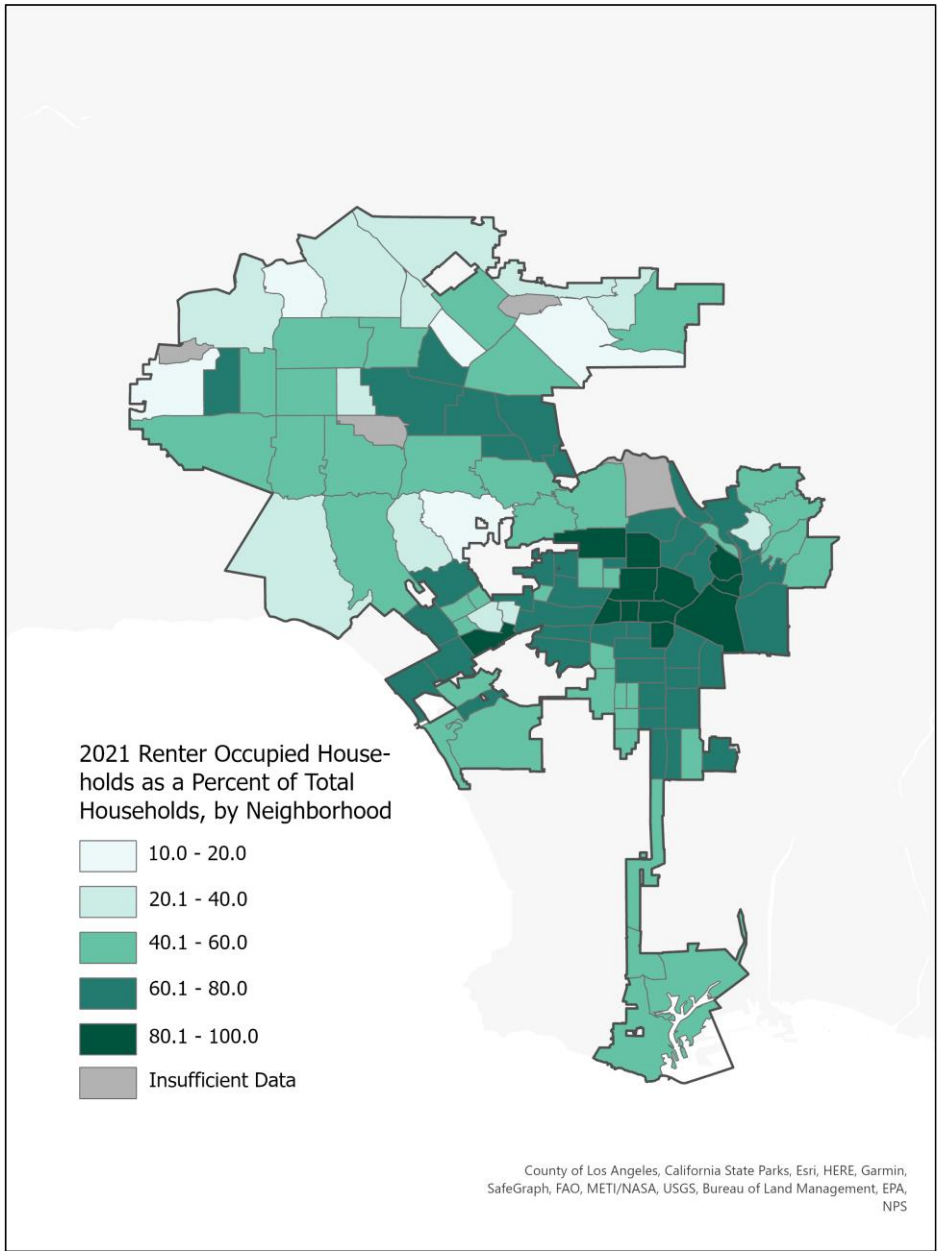
Tier 4 Neighborhood Avg Change: **415 units**

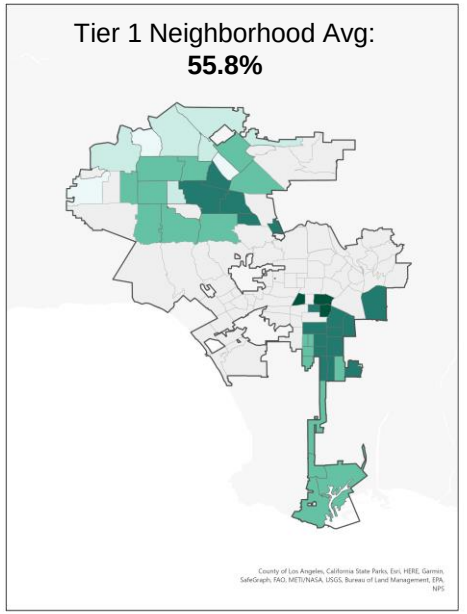


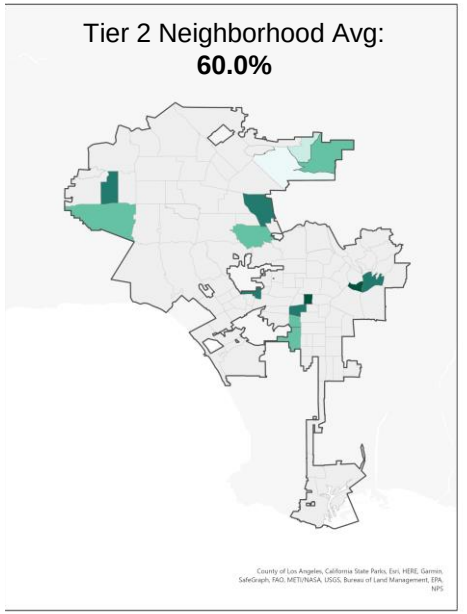
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.5***

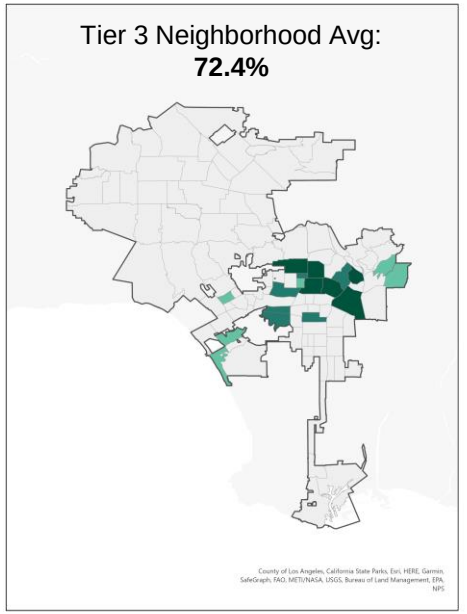
Tenure

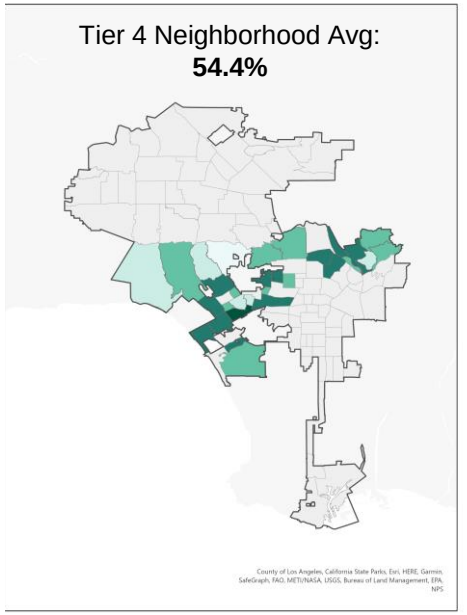
- Citywide, 59% of households are renter-occupied.
- Renters make up the largest share of households in Tier 3, at 72.4%, followed by 60% in Tier 2, 55.8% in Tier 1, and 54.4% in Tier 4.











Market Tier

Market Tier 1 (Low)

Market Tier 2 (Medium/Low)

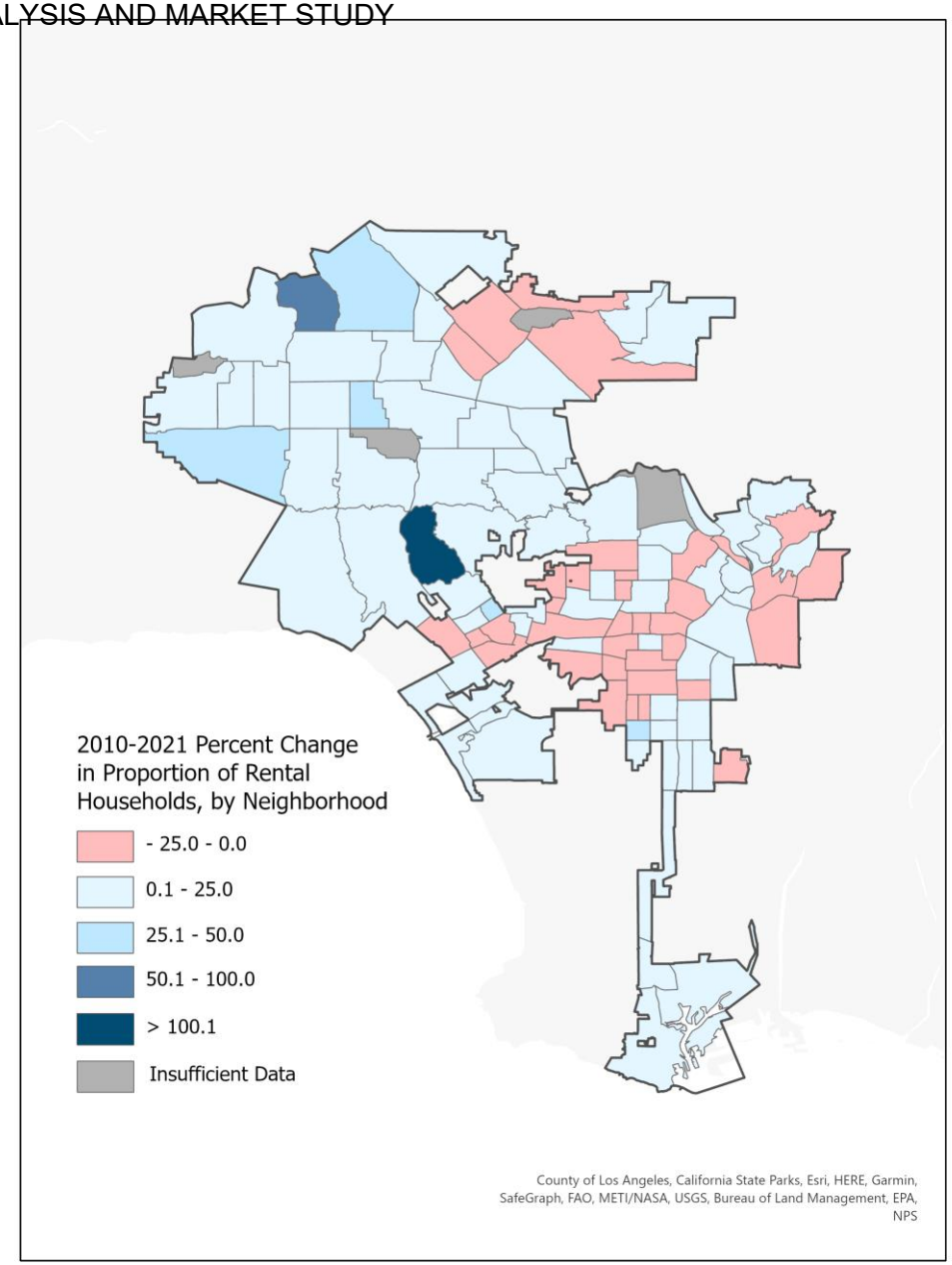
Market Tier 3 (Medium/High)

Market Tier 4 (High)

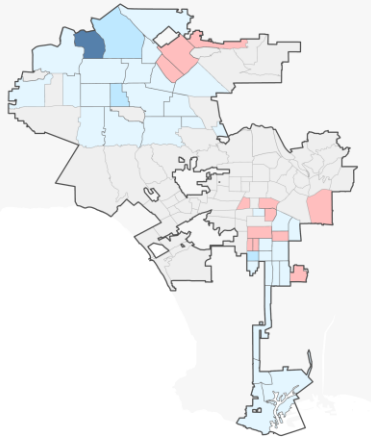
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.6***

Tenure Change Since 2010

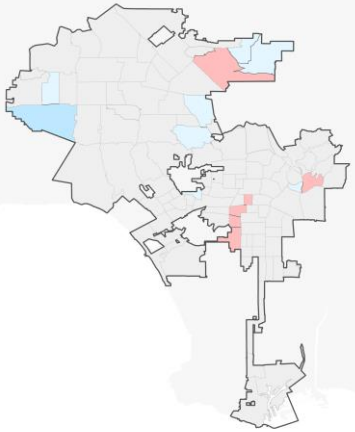
- Since 2010, there has been a 6% increase in rental households as a share of the city total.
- The greatest increase in renters occurred in Tier 4 (7.9%), followed by 7.2% in Tier 1, 3.6% in Tier 2, and 1.2% in Tier 1.
- High increases in rental household share in Tier 1 Porter Ranch and Tier 4 Bel Air reflect the impact of new rental projects introduced into neighborhoods with low existing inventory of rental units.



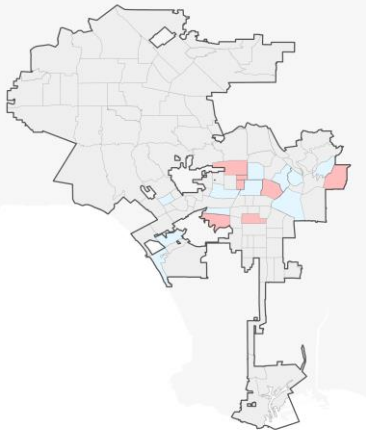
Tier 1 Neighborhood Avg Change: **7.2% increase**



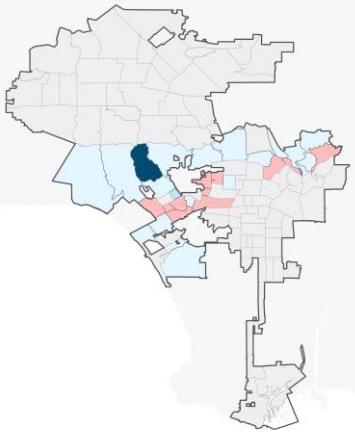
Tier 2 Neighborhood Avg: **3.6% increase**



Tier 3 Neighborhood Avg: **1.2% increase**



Tier 4 Neighborhood Avg: **7.9% increase**



Market Tier
Market Tier 1 (Low)
Market Tier 2 (Medium/Low)
Market Tier 3 (Medium/High)
Market Tier 4 (High)

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.6***

Median Rent (all units)

- According to ACS 2021 5-year estimates, the median gross rent for all units citywide averaged $1,785 per unit.
- Tier 4 gross rent is the highest at $2,114 per unit, while gross rent in all the other tiers falls in a narrow below-average band of between $1,640 and $1,687 per unit.
- The relatively low level of rent differentiation between Tiers 1-3 is attributable to a number of factors. Most importantly, older units typically command far lower rent than newer units, which weighs down neighborhoods with a significant inventory of older units. In addition, a large portion of Tier 1 and Tier 2 neighborhoods are located in suburban areas where units are larger, which skews overall Tier averages.

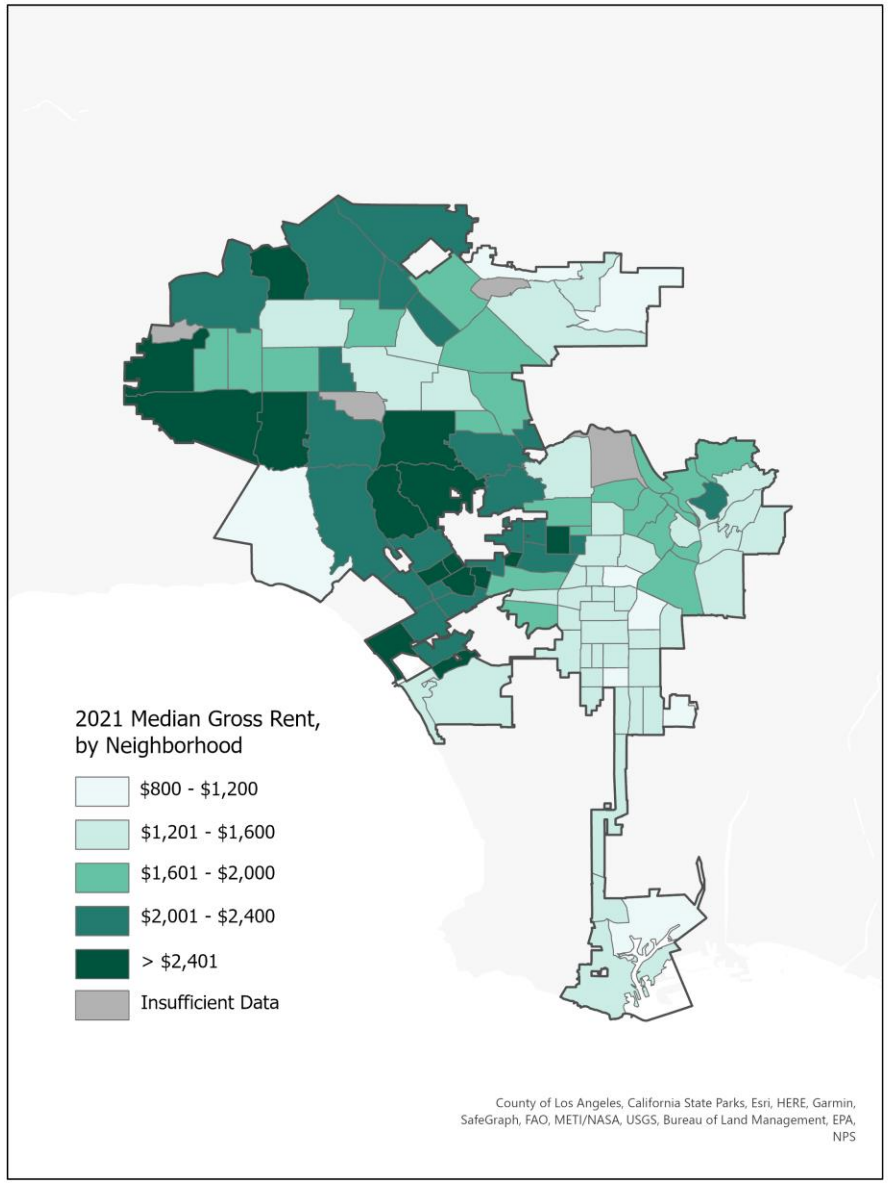
Market Tier

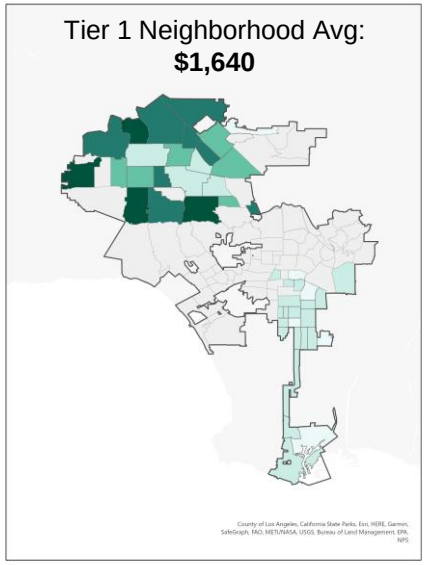
Market Tier 1 (Low)

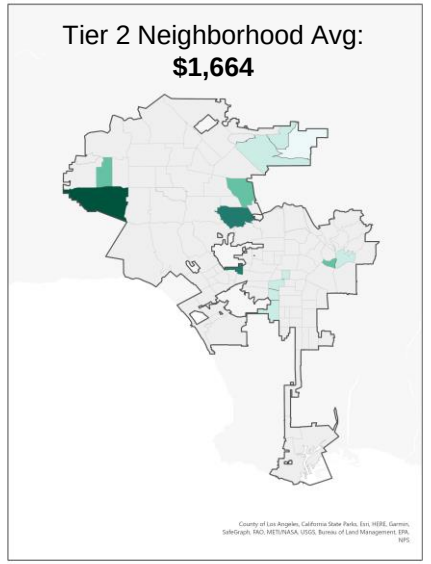
Market Tier 2 (Medium/Low)

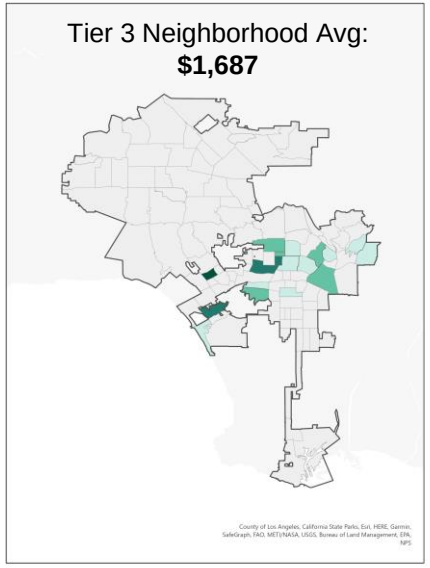
Market Tier 3 (Medium/High)

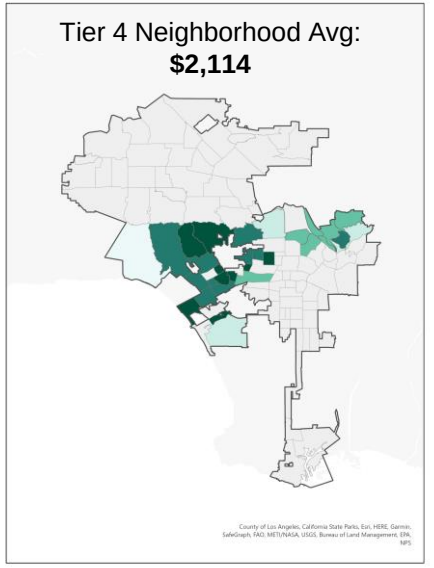
Market Tier 4 (High)











Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.7***

Change in Median Rent (all units)

- Citywide, median gross rent per unit (all units) between 2010 and 2021 grew 50%.
- Each Tier has at least one neighborhood with a 90% increase in rent per unit including: West Hills, Tarzana, Shadow Hills, Downtown, Elysian Valley, and Mount Washington.
- Two neighborhoods showed rent decline: Lakeview Terrace in Tier 1 and the Hollywood Hills in Tier 4. Both neighborhoods also declined in population and households during the period. (Other neighborhoods experienced negative population and household growth but also saw positive rent growth during the period.)
- For full backing data, see Appendix.

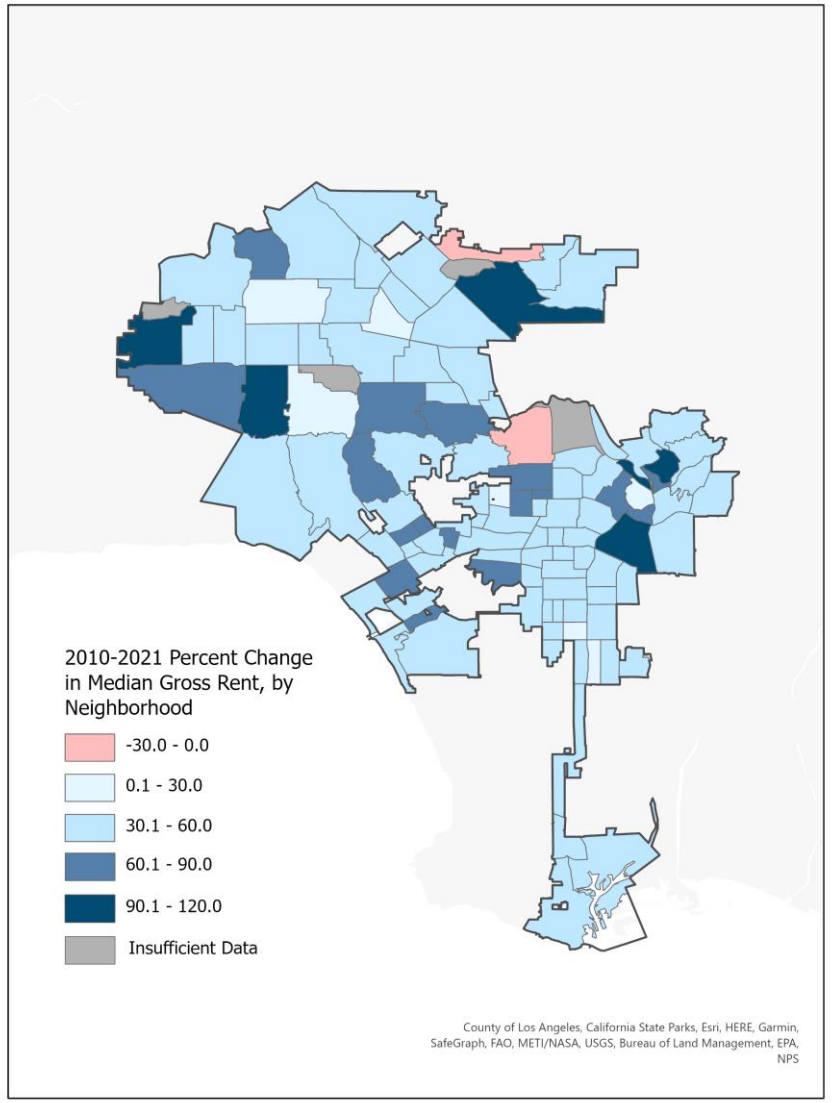
Market Tier

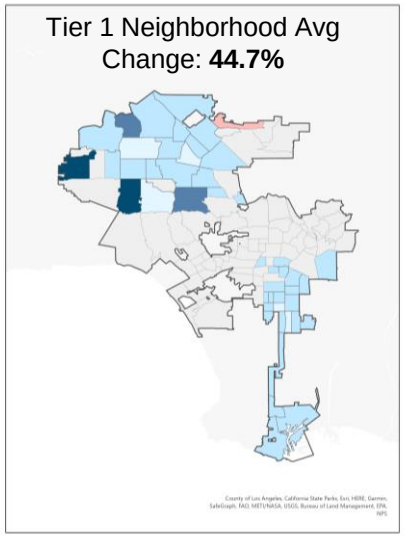
Market Tier 1 (Low)

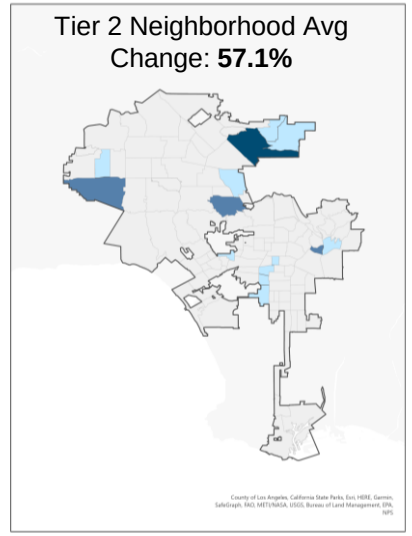
Market Tier 2 (Medium/Low)

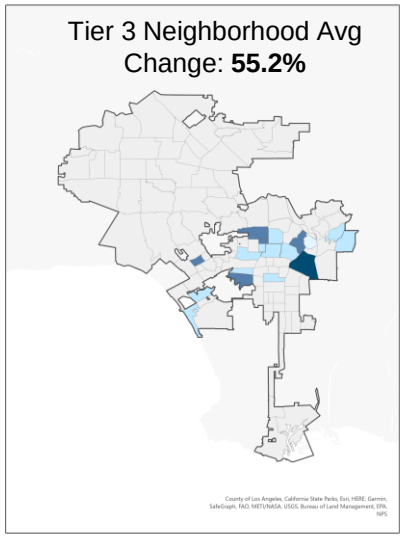
Market Tier 3 (Medium/High)

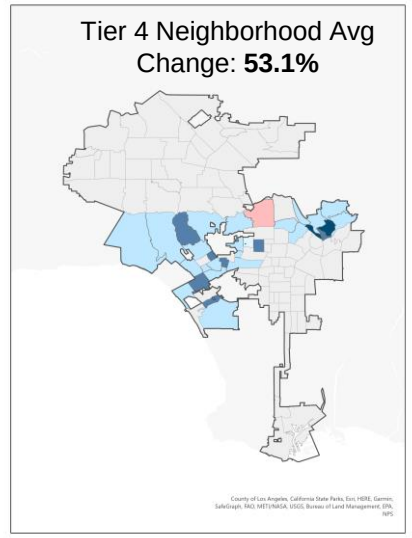
Market Tier 4 (High)







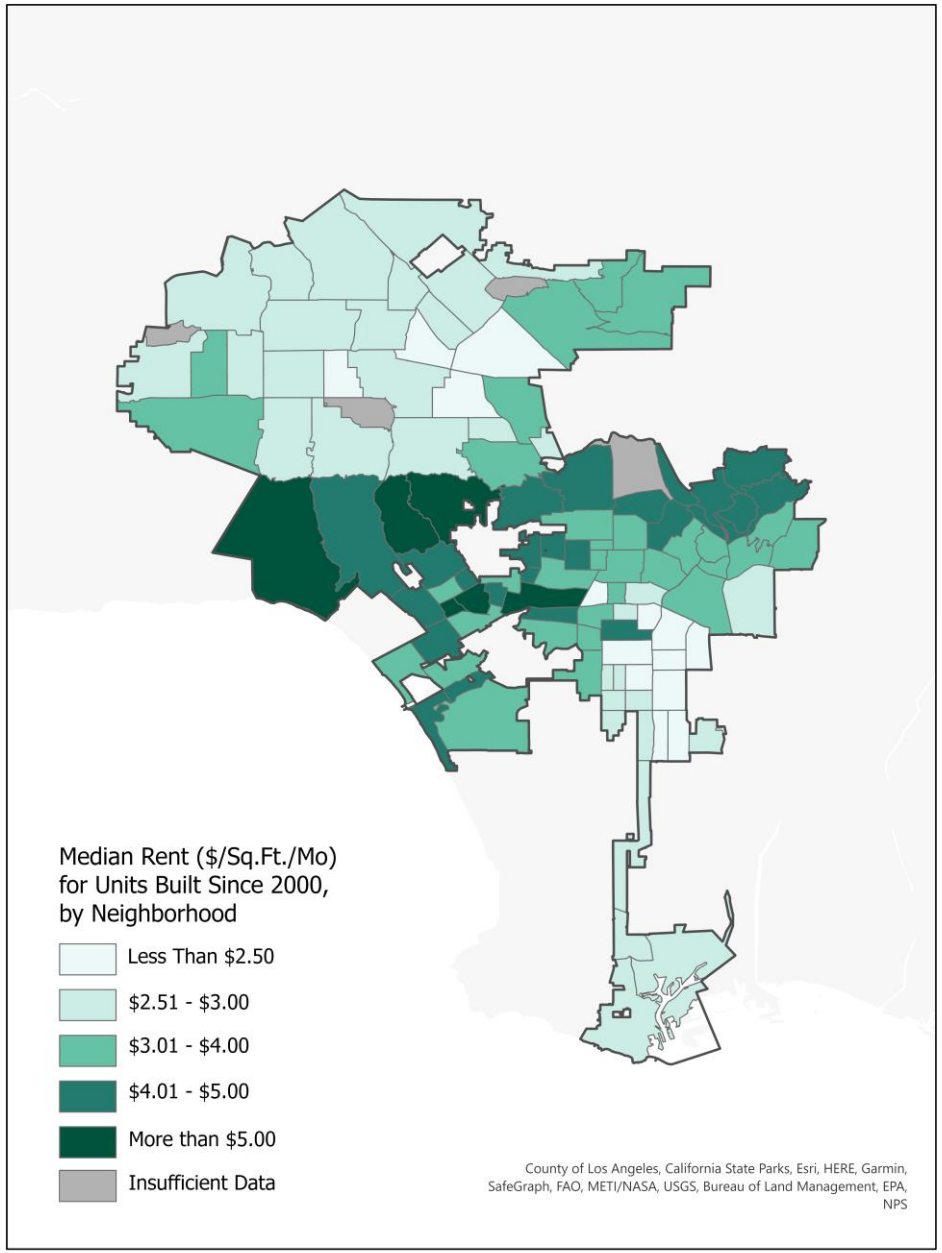




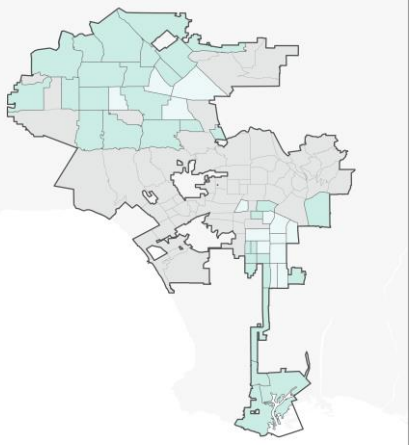
Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM
*For full backing data, see **Appendix C.7***

Median Rent ($/SF, Units Built After 2000)

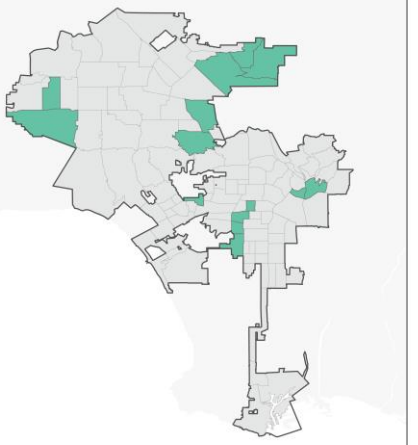
- While there is relatively little differentiation in rent/unit for Tiers 1, 2, and 3 when all units in a neighborhood are considered (as shown in the two previous slides), there is wide differentiation between Tiers when only more recently constructed units are assessed and when the rates are normalized per square foot, which eliminates the impact of unit size on averages, as shown here.
- Tier 1 neighborhoods average $2.61/sq.ft. month, while Tier 2 are 25% higher at $3.26, Tier 3 44% higher at $3.76, and Tier 4 79% higher at $4.67
- For comparison, the median citywide for all units (not just those constructed since 2000) is $2.32 per SF.



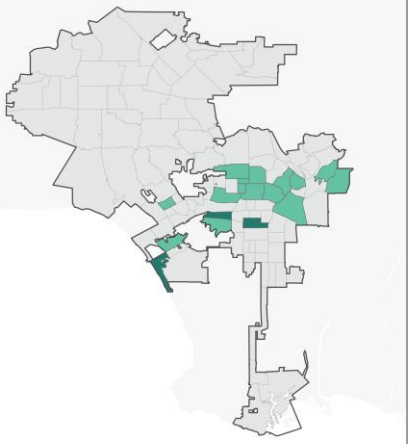
Tier 1 Neighborhood Avg:
$2.61 per sf per month



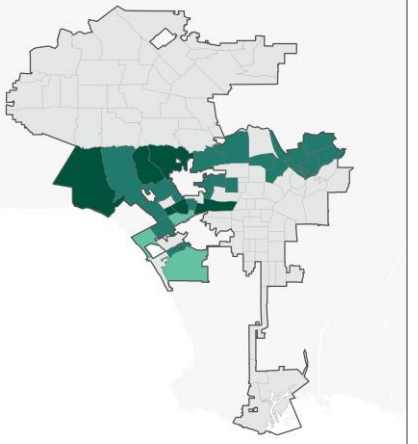
Tier 2 Neighborhood Avg:
$3.26 per sf per month



Tier 3 Neighborhood Avg:
$3.76 per sf per month



Tier 4 Neighborhood Avg:
$4.67 per sf per month



Source: CoStar

*For full backing data, see **Appendix C.7***

Home Value ($ per SF, Units Transacted 10/21-9/22)

- A set of all residential transactions in the city from between October 2021 and September 2022, measured by zip code, indicates a median value of $658 per square foot.
- Home values broken out by Tiers indicate Tier 1 neighborhoods have a median of $506/sq.ft., while Tier 2 are 22% higher at $616, Tier 3 38% higher at $700, and Tier 4 74% higher at $881

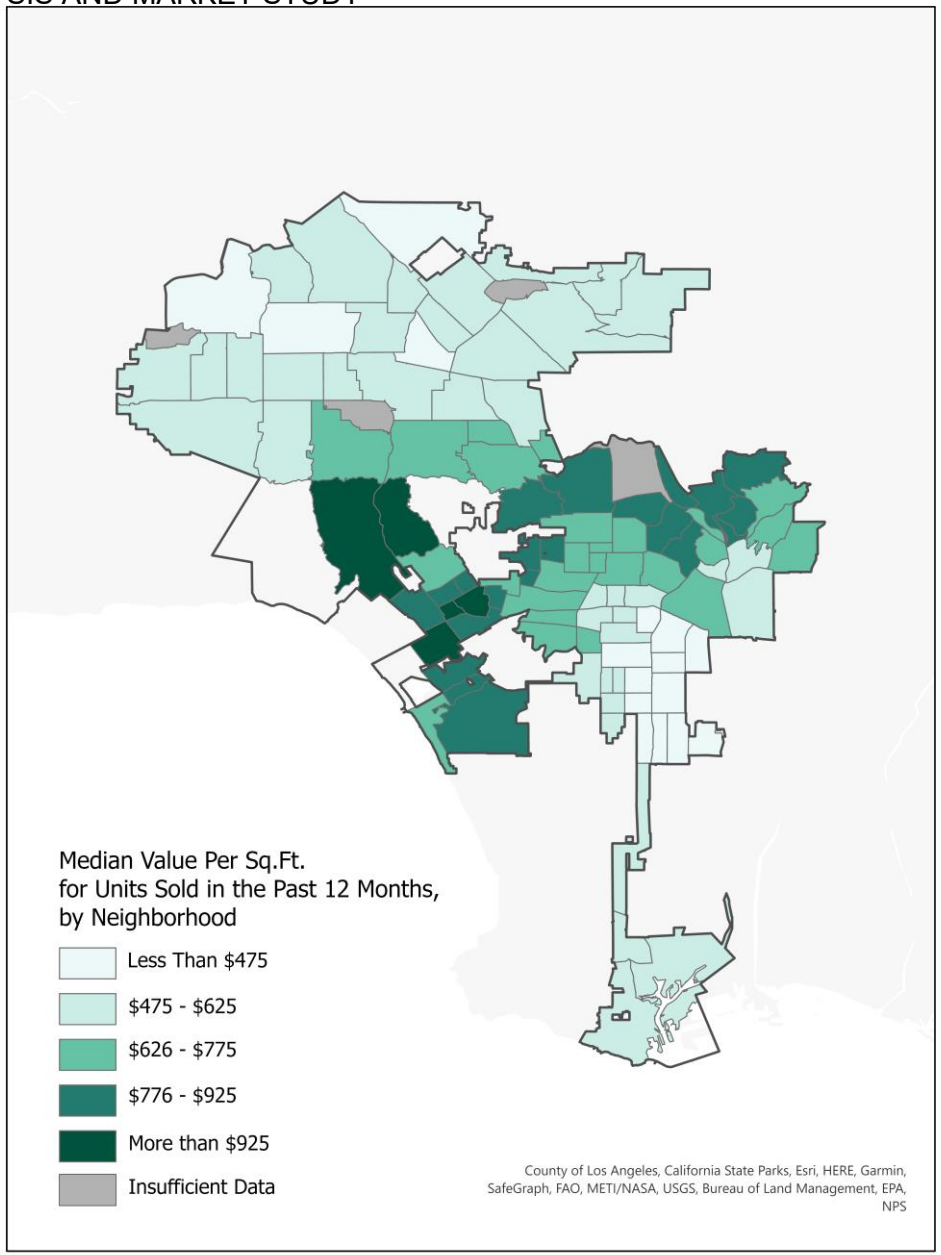
Market Tier

Market Tier 1 (Low)

Market Tier 2 (Medium/Low)

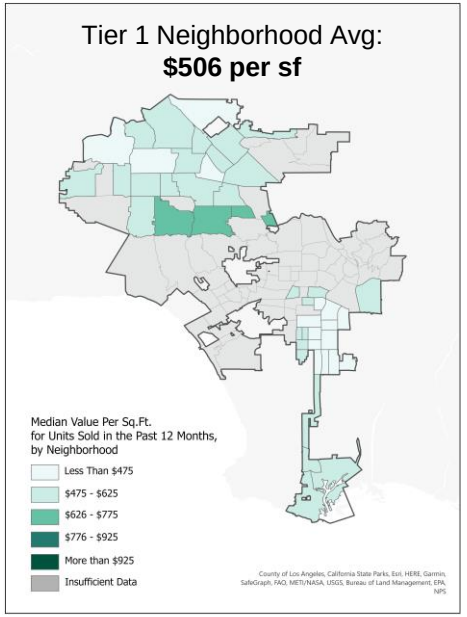
Market Tier 3 (Medium/High)

Market Tier 4 (High)

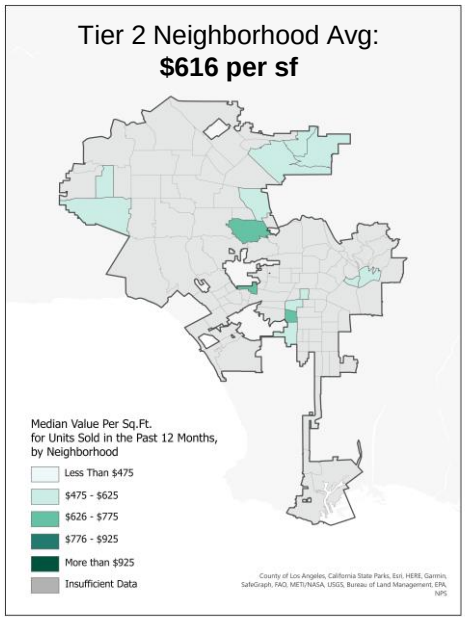


Source: Redfin, AECOM

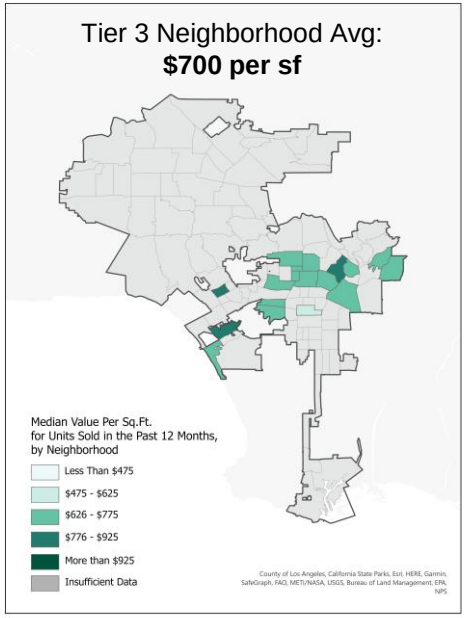
Tier 1 Neighborhood Avg:
$506 per sf



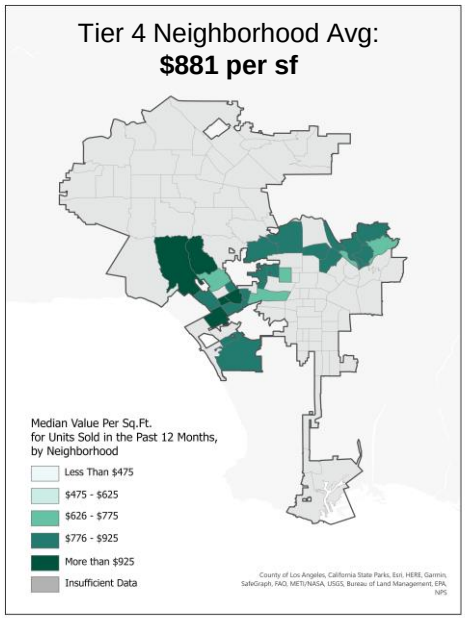
Tier 2 Neighborhood Avg:
$616 per sf



Tier 3 Neighborhood Avg:
$700 per sf



Tier 4 Neighborhood Avg:
$881 per sf



*For full backing data, see **Appendix C.8***

4. Housing Typology Assessment

Housing Typology Selection

A Multi-Step Approach to Select Housing Typologies for Future Testing

The figure below describes AECOM's multi-step approach to selecting housing typologies for further evaluation throughout the remainder of this project. Our approach begins by casting a wide net with a range of residential typologies and gradually narrows from there – concluding with a set of five typologies that will provide a representative sampling of results for the Los Angeles housing market in general and within the four market tiers more specifically.

Step 1 - Identify

Step 2 - Assess

Step 3 - Refine

Future Testing
(Later Tasks)

Step 1: Identify

Housing Typology Selection

In Step 1, a broad set of 21 housing typologies was assembled. These include housing products found in and outside the Los Angeles market and reflect uses that could help the city realize its goals to expedite housing growth, offer housing options at a wide range of price points, and expand “missing middle” formats.

The set was sorted into three groups by height: low-rise (1-3 stories), mid-rise (5-8 stories), and high-rise (9 or more stories), as shown on the following five slides

Step 1: Identify

Housing Typology Selection

Low-Rise (1-3 stories)

ADU

Address unknown, Venice
Source: bau10 architecture

Triplex

8637 Olin St, 90034
Source: apartments.com

Bungalow court

1554 N Serrano Ave, East Hollywood
Source: LAHD

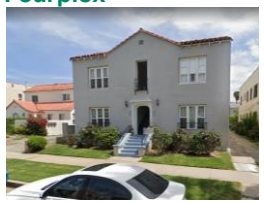
Dingbat apartments/Tuck-under

11143 Aqua Vista Street, Studio City
Source: LA Conservancy

Mobile Home Park

7800 Balboa Boulevard, Van Nuys
Source: neighborhoods.com

Fourplex



438 N Ogden Dr, Hancock Park
Source: redfin

Courtyard Apartment

4440 Ambrose Ave, Los Feliz
Source: google earth

Housing Over Retail

1700 Sunset Blvd., Echo Park
Source: Google Earth

Single-family residence

3933 S Harvard Blvd, Exposition Park
Source: redfin

Multiplex

4522 Lexington Ave, East Hollywood
Source: loopnet.com

Garden Apartment

Lincoln Place, Venice
Source: lincolnplaceapthomes.com

Duplex (multiple on one lot)

1435 S Westmoreland Ave, Pico-Union
Source: Zillow

Townhouse

2111 N Cahuenga Blvd, Hollywood Hills
Source: google earth

Rowhouse/Walk-up

Columbia Place, West Lake
Source: Google Earth

Mid-Rise (4-8 stories)

Wrap-around

"Texas Doughnut"
Source: oldurbanist.blogspot.com

Podium

6200 W Sunset Blvd, Hollywood
Source: apartments.com

Legacy Urban Apartments

1136 W 6th St, Westlake:
Source: Zillow

High-Rise (9 or more stories)

Residential Tower on a Base

2801 Sunset Pl, Westlake
Source: spectrumnews1.com

Residential Tower

640 S Curson Ave, Mid-Wilshire
Source: apartments.com

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Step 1: Identify

Initial Set of Housing Typologies—Low Rise (1 of 3)

Low-Rise (1-3 Stories)

No.	Typology	Description	Typical Density (Gross DU/AC)	Example
L-1	Accessory dwelling unit (ADU)	A secondary residential unit that is either detached or attached to the main residential structure[4]	3 – 6 du/acre	
L-2	Mobile Home Park	A community of multiple mobile homes that are usually prefabricated and without permanent foundations	5 – 10 du/acre	
L-3	Single-Family Residence (SFR)	A 1 to 3-story detached structure consisted of one single unit	3 – 6 du/acre	
L-4	Duplex V1: Side-by-Side V2: Stacked	A 1 to 2.5-story detached structure consisted of two dwelling units with a direct unit entry from the street[1]	6 -16 du/acre	
L-5	Triplex V1: Side-by-Side V2: Stacked	A 3 to 3.5-story detached structure consisted of three dwelling units that are usually stacked[1]	11 – 35 du/acre	
L-6	Fourplex V1: Side-by-Side V2: Stacked	A 2 to 2.5-story detached structure consisted of four dwelling units, usually in the form of two below and two above[1]	14 - 25 du/acre	

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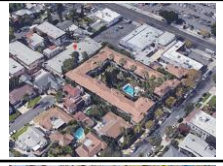
Step 1: Identify

Initial Set of Housing Typologies—Low Rise (2 of 3)

Low-Rise (1-3 Stories)

No.	Typology	Description	Typical Density (Gross DU/AC)	Example
L-7	Multiplex V1: Side-by-Side V2: Stacked	A 2 to 2.5-story detached structure consisted of 5 to 12 units[1]	10 - 63 du/acre	
L-8	Townhouse	A 2 to 4-story attached structure consisted of 2 to 16 units with a direct entry from the street and usually with on-site garage or parking[1]	10 – 22 du/acre	
L-9	Bungalow Court	A community of multiple 1 to 1.5-story detailed single-family houses sharing a communal courtyard[1]	10 – 31 du/acre	
L-10	Courtyard Apartment	A 1 to 3.5-story detached, usually either "U" or "C"-shaped structure consisted of multiple dwelling units facing one or multiple courtyard[1]	21 – 61 du/acre	
L-11	Garden Apartment	A community of multiple 2 to 3-story multi-family apartment buildings that is designed as a "superblock" with abundant green spaces to separate car and pedestrian traffic	19 – 25 du/acre	
L-12	Traditional Rowhouse/Walk-Up V1: Single-Family V2: Single-Family Over ADU V3: Rowhouse Flats	A series of 2 to 3.5-story attached structures with similar forms and design lining along the street; each structure is consisted of one single unit, or one single unit above and one smaller ADU below, or 1- to 3-unit apartments	15 – 90 du/acre	

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Step 1: Identify

Initial Set of Housing Typologies—Low Rise (3 of 3)

Low-Rise (1-3 Stories)

No.	Typology	Description	Typical Density (Gross DU/AC)	Example
L-13	Dingbat Apartments/Tuck-Under	An iconic Southern California form of 2 to 3-story detached structure consisted of 6 to 12 units with a carport on the ground level[2]	20 – 30 du/acre	
L-14	Housing Over Retail	A 2 to 4-story detached or attached structure consisted of residential units above and commercial retail below.	20 – 30 du/acre	

Step 1: Identify

Initial Set of Housing Typologies—Mid-Rise & High-Rise

Mid-Rise (4-8 stories)

No.	Typology	Description	Typical Density (Gross DU/AC)	Example
M-1	Wrap-around	A 4 to 7-story residential complex "wrapping" a central parking structure[3]	50 – 90 du/acre	
M-2	Podium	A 4 to 6-story wood or CFS residential complex sitting on a concreate base structure[3]	80 – 150 du/acre	
M-3	Legacy Urban Housing (Minimal to No Parking)	A mid-rise residential structure with none or minimal parking provided	100 – 150 du/acre	

High-Rise (9 or more stories)

No.	Typology	Description	Typical Density (Gross DU/AC)	Example
H-1	Residential Tower on a Base	A high-rise steel or concrete residential structure sitting on a base structure where houses non-residential space such as retails	140 – 300+ du/acre	
H-2	Residential Tower	A high-rise steel or concrete residential structure	140 – 300+ du/acre	

Step 2: Assess

Housing Typology Selection

In Step 2, AECOM assessed and qualified each housing typology for viability and applicability to the City of Los Angeles's RHNA Rezoning Strategies. Each typology in the initial set was assessed by several broad screens for feasibility:

a) **Historical Precedent in LA**: Has the typology been built before?

b) **Built since 2000 in LA**: Has the typology been developed recently?

c) **Impeded by Market or Site Conditions**: Is development feasibility of the typology impeded by market or site conditions?
   - Parking: The economics of on-site parking makes certain typologies less feasible. For example, for Rowhouses, Triplexes, Fourplexes, Courtyard Apartments, and Bungalows, relatively low building height and high lot coverage requires either reduced or subterranean parking. In the current market, market-rate developers consider reduced-parking designs to be too risky even if projects qualify for reduced parking, and the high cost of subterranean parking typically requires higher-density typologies.
   - Land Requirements: Large minimum site requirements of certain typologies such as Wrap-Around, which features a central parking garage surrounded by residential units, are less suitable for infill environments where assembling a large development site in a built-out area is challenging.
   - "Dated" Styles: Styles such as Dingbat and Tuck-Under apartments are prevalent in Los Angeles but now considered dated by developers and renters.

d) **Alignment with LACP's RHNA re-zoning strategies**:
   - Missing Middle (MM): Higher density than single family at three stories or less
   - Density Bonus (DB): Supports higher density
   - Transit-Oriented Communities (TOC): Supports higher density and mixed use
   - Commercial Corridor (CC): Supports higher density and mixed use
   - Residential Corridor (RC): Supports missing middle density (greater than single-family, three stories or less)

Step 2: Assess

Housing Typology Assessment by Parameter

The results of the broad screening using the four criteria described on the previous page are summarized in the table below and on the following page. These results are illustrative of the process underwent by AECOM and LACP as the final recommended typologies for further analysis were decided. These results are not intended to prohibit or discourage the development of certain typologies over others, but to narrow the future stages of our analysis to focus on typologies that are most likely to be constructed in Los Angeles in the future.

	Current Market Viability		c) Impeded by Market or Site Conditions	d) Alignment with LACP's RHNA re-zoning strategies*
Typology	a) Historical Precedent in LA	b) Built since 2000 in LA		
Low-Rise (1-3 Stories)				
Accessory dwelling unit (ADU)	X	X		MM
Mobile Home Park	X	X		
Single-family residence (SFR)	X	X		
Duplex	X	X		MM, SLD
Triplex	X	X	Parking, less profitable than higher-density typologies	MM
Fourplex	X	X	Parking, less profitable than higher-density typologies	MM
Multiplex	X	X		MM, DB, RC
Townhouse	X	X		MM, SLD, DB, RC, CC
Bungalow Court	X		Parking, less profitable than higher-density typologies	MM, SLD, DB, RC
Courtyard Apartment	X		Parking, less profitable than higher-density typologies	MM, DB, RC, CC
Garden Apartment	X		Parking, less profitable than higher-density typologies	MM
Rowhouse/Walk-up	X		Parking, conflicts with setback requirements	MM, DB, RC, CC
Dingbat Apartments/Tuck-under	X		Dated style, less profitable than higher-density typologies	MM, DB, RC
Housing Over Retail	X	X	Parking	DB, TOC, RC, CC
Mid-Rise (4-8 Stories)				
Wrap-around			Land-intensive	DB, TOC, MU, CC
Podium	X	X		DB, TOC, MU, CC
Legacy Urban Apartments	X		Parking	
High-Rise (9 or More Stories)				
Residential Tower on a Base	X	X		DB, TOC, CC
Residential Tower	X	X		DB, TOC, CC

*Housing Strategies include: Missing Middle (MM), Small Lot Subdivision (SLD): Density Bonus (DB), Transit-Oriented Communities (TOC), Micro-Units (MU), Commercial Corridor (CC), Residential Corridor (RC)

Step 2: Assess

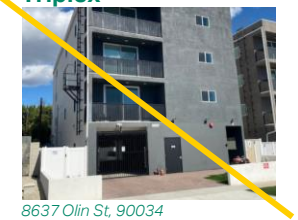
Housing Typology Assessment Filtered by Parameter

Low-Rise (1-3 stories)

ADU*

Address unknown, Venice
Source: bau10 architecture

Triplex



8637 Olin St, 90034
Source: apartments.com

Bungalow court

1554 N Serrano Ave, East Hollywood
Source: LAHD

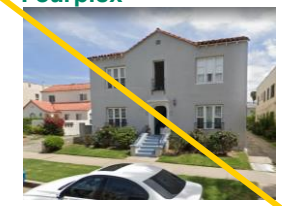
Dingbat apartments/Tuck-under

11143 Aqua Vista Street, Studio City
Source: LA Conservancy

Mobile Home Park

7800 Balboa Boulevard, Van Nuys
Source: neighborhoods.com

Fourplex

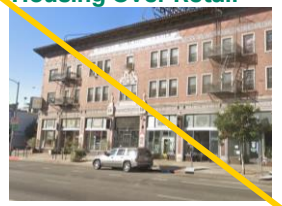


438 N Ogden Dr, Hancock Park
Source: redfin

Courtyard Apartment

4440 Ambrose Ave, Los Feliz
Source: google earth

Housing Over Retail



1700 Sunset Blvd., Echo Park
Source: Google Earth

Single-family residence

3933 S Harvard Blvd, Exposition Park
Source: redfin

Multiplex

4522 Lexington Ave, East Hollywood
Source: loopnet.com

Garden Apartment

Lincoln Place, Venice
Source: lincolnplaceapthomes.com

Duplex (multiple on one lot)

1435 S Westmoreland Ave, Pico-Union
Source: Zillow

Townhouse

2111 N Cahuenga Blvd, Hollywood Hills
Source: google earth

Rowhouse/Walk-up

Columbia Place, West Lake
Source: Google Earth

Mid-Rise (4-8 stories)

Wrap-around

"Texas Doughnut"
Source: oldurbanist.blogspot.com

Podium

6200 W Sunset Blvd, Hollywood
Source: apartments.com

Legacy Urban Apartments

1136 W 6th St, Westlake:
Source: Zillow

High-Rise (9 or more stories)

Residential Tower on a Base

2801 Sunset Pl, Westlake
Source: spectrumnews1.com

Residential Tower

640 S Curson Ave, Mid-Wilshire
Source: apartments.com

Not aligned with RHNA Rezoning Strategies

Not recently validated in LA Market

Site and Market Impediments

**The ADU typology, while an important component of the city's housing strategy, is a stand-alone policy that's outside of consideration by this RHNA rezoning strategy assessment.*

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Step 2: Assess

Shortlisted Prototype Concepts

Following the prior analysis and in consultation with staff, AECOM recommends the following eleven (11) typologies for further study and analysis.

(Note: while the Bungalow Court, Multifamily Row House, and Courtyard Apartment typologies were found in the prior assessment to face market and site impediments to feasibility, they merit further consideration under proposed RHNA rezoning strategies, which could alter the underlying regulatory conditions and contribute positively to project economics.)

4D
Plex-Style
- *10 – 17 DUAC*
- *4-6 units on 13,000-25,000 SF lot*
- *Attached or separated garage, surface prkng*

RH
Multifamily Row House
- *25-35 DUAC*
- *4-5 stories, 56'*
- *Separated garage, or no parking*

CGF
Commercial Ground Floor Residential Above
- *60 – 90 DUAC*
- *4-5 stories, 100% wood stick*
- *No parking, subterranean*

P7
7-Story Podium
- *110 – 150 DUAC*
- *7 stories, higher density*
- *Subterranean parking or above-grade parking*

BC
Bungalow Court
- *18 – 29 DUAC*
- *1-2 story, low lot coverage, bldg. separation*
- *Surface parking or separated garage*

CY3
33' Courtyard Multiplex
- *30 – 43 DUAC*
- *Stacked flats multiplex or L-shaped "City of Gardens" model*
- *Subterranean parking, separated/attached garage*

P5-Mixed
5-Story Podium Mixed
- *90 – 109 DUAC*
- *Mid-rise, 5 stories, higher density*
- *Subterranean parking or above-grade parking*

TW
Mixed-Use Tower
- *140 – 217 DUAC*
- *High-rise, mixed-use*
- *Subterranean parking, above-grade parking*

TH
Townhouse
- *18 – 29 DUAC*
- *Up to 3 stories; ADU with apartments above*
- *Surface parking, tuck-under garage*

CY4
45' Courtyard Apartment
- *50 – 55 DUAC*
- *Up to 45' in RD*
- *Subterranean parking*

P5-Res
5-Story Podium All Residential
- *90-109 DUAC*
- *100% residential, is it 1 or 2 stories of Type 1 Cons.*

5. Housing Typology Refinement

Step 3: Refine

Housing Typology Selection

In Step 3, the residential typologies established in the previous chapter are refined with regards to overall project characteristics (e.g. by height, scale, affordability category, lot characteristics) and by density category.

Step 3: Refine

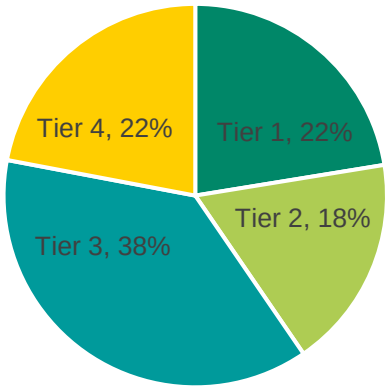
Building Permits 2017-2021

To gain insight into the nature of residential development currently favored by the market, AECOM analyzed building permits (construction and occupancy) issued between 2017 and 2021. The data comes from the Inclusionary Zoning Study Permit Database, which was originally compiled by BAE. The set of 722 permits from 2017 to 2021 excludes applications for projects with 4 or fewer units, projects from the Central City and Central City North CPAs,100% affordable projects, and the Jordan Downs public housing development. Based on the data:

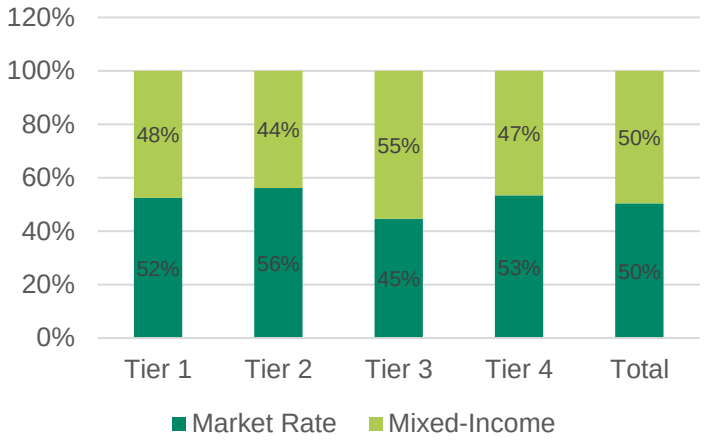
- Tier 3 captured the highest share of development with 38% of permits, followed by Tiers 1 and 4 with 22% and Tier 2 at 18%
- Mid-Rise projects (between 4 and 8 stories), captured approximately two-thirds of all permits, with low-rise capturing one-third and high-rise capturing only 2%. (Note, as the data excludes downtown CPAs and projects of less than 4 units, both the categories capture a lower share than the full dataset would indicate)
- The distribution of market-rate vs. mixed-income permits is nearly even with marginal differences between Market Tiers.
- Small lots (under 6,000 SF) captured a very small share of permitting with most permits roughly equally distributed between medium-low lots (6,000-10,000 SF), medium-high lots (10,000-20,000 SF) and Large Lots (>20,000 SF)

For an expanded view of this data, see Appendix G.0.

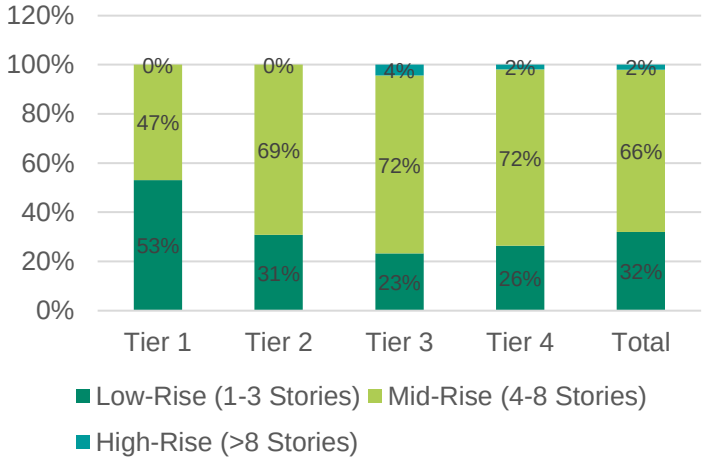
Building Permits 2017-2021* by Market Tier



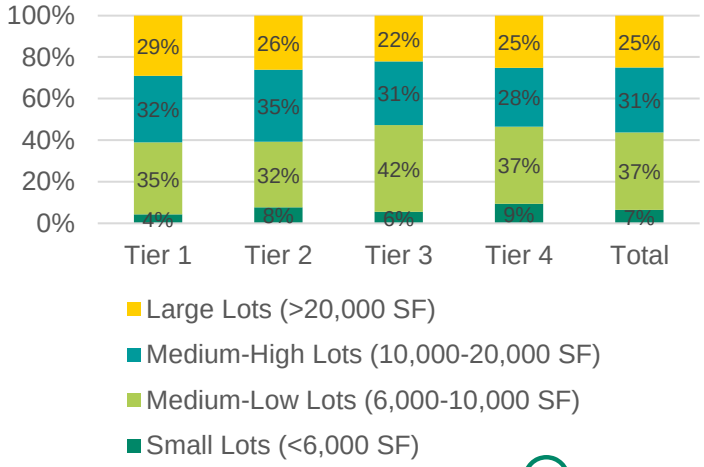
Building Permits 2017-2021*: Distribution of Market-Rate vs. Mixed-Income



Building Permits 2017-2021*: Distribution by Tier and Height



Building Permits 2017-2021*: Distribution by Lot Size



Source: City of Los Angeles, AECOM

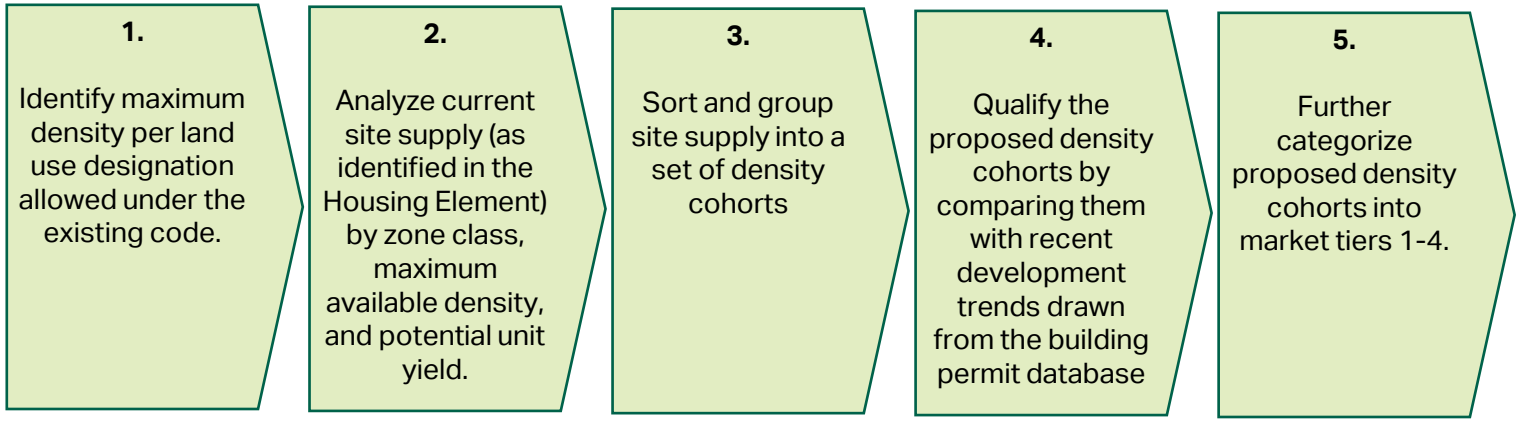
Step 3: Refine

Density Cohorts

The goal in defining a set of density cohorts is to broadly represent—for the purpose of analysis and policy recommendation—the zoning condition that future residential developers will face in Los Angeles for as long as the proposed RHNA Rezoning Program policies will remain in effect.

The resulting density cohorts provide a basis for analyzing the incentive value offered by different density bonuses in comparison with by-right development alternatives.

The proposed density cohorts were developed using a multi-step process, which is summarized on the right and fully described in the remainder of this section.



Data Sources Used in the Density Cohort Analysis:

City of LA's Inventory of Adequate Sites for Housing (Table A)
The City of LA's 2021-2029 Housing Element identified opportunity sites in Chapter 4 Adequate Sites for Housing. The Inventory of Adequate Sites for Housing provided in Appendix 4.1 offers the best insight into the sites likely eligible for the City's housing incentive programs and their capacity to accommodate additional housing units.

Los Angeles City Planning Zoning Code
The City's Zoning Code provided guidance on calculating a maximum density (DU/AC) for each zone class.

General Plan, Framework Element, Chapter 3
Policy 3.7.1 listed in the Framework Element in the City of LA's General Plan recognizes land use designations with corresponding zones and density ranges.

Step 3: Refine

Calculating Zone Class Maximum Density (DU/AC)

AECOM calculated maximum density, measured in dwelling units per acre (DU/AC) for each of the 46 zone classes identified in the City's Zoning Code. This was conducted by translating Minimum Land Area per Dwelling Unit into a Maximum DU/AC.

While the Zoning Code Summary contains 46 zone classes, the density calculations indicate only 20 unique maximum densities.

A screenshot of this process is shown on the right. The full Summary of Zoning and Density with AECOM-calculated maximum densities for each Zone Class can be found in **Appendix E**.

Note: this Generalized Zoning Code Summary does not account for the variety of "unique zones" that can be found within a zone class through modifiers such as Prefixes, Height Districts, D Limits, and Supplemental Use Districts/Overlay Zones.

Summary of Zoning and Density

Zone	Use	Minimum Area Per Dwelling Unit	Min. Lot Width	Min Unit Area (AC)	Min Unit Area (SF)	Max DU/AC
Multiple Residential						
R2	**Two-Family Dwellings** R1 Uses, Home Occupations	2,500 sq-ft	50 ft	0.057	2,500	17.4
RD1.5	**Restricted Density Multiple Dwelling** One-Family Dwellings, Two-Family Dwellings, Apartment Houses, Multiple Dwellings, Home Occupations	1,500 sq-ft		0.034	1,500	29.0
RD2		2,000 sq-ft		0.046	2,000	21.8
RD3		3,000 sq-ft	60 ft	0.069	3,000	14.5
RD4		4,000 sq-ft		0.092	4,000	10.9
RD5		5,000 sq-ft	70 ft	0.115	5,000	8.7
RD6		6,000 sq-ft		0.138	6,000	7.3
RMP	**Mobile Home Park** Home Occupations	20,000 sq-ft	80 ft	0.459	20,000	2.2
RW2	**Two-Family Residential Waterways** One-Family Dwellings, Two-Family Dwellings, Home Occupations	1,150 sq-ft	28 ft	0.026	1,150	37.9
R3	**Multiple Dwelling** R2 Uses, Apartment Houses, Multiple Dwellings, Child Care (20 max)	800 sq-ft; 500 sq-ft per guest room	50 ft	0.018	800	54.5
RAS3	**Residential/Accessory** R3 uses, Limited ground floor commercial	800 sq-ft; 200 sq-ft per guest room		0.018	800	54.5
R4	**Multiple Dwelling** R3 Uses, Churches, Schools, Childcare, Homeless Shelter	400 sq-ft; 200 sq-ft per guest room		0.009	400	108.9
RAS4	**Residential/Accessory** R4 uses, Limited ground floor commercial			0.009	400	108.9
R5	**Multiple Dwelling** R4 Uses, Clubs, Lodges, Hospitals, Sanitariums, Hotels	200 sq-ft		0.005	200	217.8

Step 3: Refine

Grouping by Density Cohorts

AECOM analyzed the Housing Element Site Inventory to gain further insight into logical density cohort groupings. The Site Inventory includes parcel-level data from the City, with characteristics including Zone Class and a Maximum Allowed Density (DU/AC) identified for each parcel.

The Site Inventory revealed four additional maximum densities that were not included in the Zoning Code Summary calculations. Combining the Zoning Code Summary and Site Inventory densities results in a total of 24 unique maximum densities.

AECOM used the density groups identified in Chapter 3 of the City's Framework Element (Policy 3.7.1) as the initial basis for organizing the 24 densities into broad density groupings called density cohorts.

The seven density cohorts shown in the table to the right, include: Low, Low-Medium I, Low-Medium II, Medium, High Medium, High, and Other. The "Other" Cohort includes parcels that don't have a specified maximum density in the site inventory (e.g., MU zones) and zones that are not necessarily for residential uses in the Zoning Summary Table (e.g., OS zones)

Density Cohort	Min Land Area per Unit	Maximum DUAC	Example of Zones ***
Low	N/A	1 unit per lot*	(Q)R1-1, (T)RS-1, A1, RU-1, etc.
	1 - 2.5ac	Less than 1	A1
	40,000sf - 1ac	1	A2, RE40
	15,000sf - 20,000sf	2	RA, RE20, RE15, RMP
	11,000sf	3	RE11
	9,000sf	4	RE9
	7,500sf	5	RS
	6,000sf	7	RD6
	5,000sf	8	R1, RD5
Low Medium I	4,000sf	10	RD4
	3,000sf	14	RD3
	2,500sf	17	R2
Low Medium II	2,000sf	21	RD2
	1,500sf	29	RD1.5
	1,200sf	36*	[Q]R3-1, [Q]C1-1VL, R3(EC), etc.
	1,150sf	37	RW2
	1,000sf	43*	[Q]R3-1, [Q]C2-1, [T][[Q]CM-1, R1-1-RIO, etc.
Medium	800sf	54	R3, RAS3, some commercial zones (C1, CM)
High Medium	600sf	72*	[Q]R4-1, [Q]R5-2, C4-2D-SN, etc.
	400sf	108	R4, RAS4, some commercial zones (CR, C1.5, C2, etc.), all manufacturing zones (e.g., MR1, M1, M2, etc.)
High	200sf	217	R5
Other****	N/A	N/A**	MU(EC), RMP-1-CUGU, etc.

Notes:
** Unique Maximum density found in the City's Housing Element Site Inventory.*
*** Includes parcels in the Site Inventory database that do not have a specified maximum density and the zones that are not necessarily for residential uses in the Zoning Summary Table*
**** It is not an exclusive list of all zones*
***** The "Other" category includes zones with Specific Plans that offer unlimited residential density in many cases, such as the Warner Center Specific Plan*

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Step 3: Refine

Site Inventory vs. Recent Development

A comparison between density cohorts from the Housing Element Site Inventory (from the prior slide) and recent development from a database provided by City staff of building permits from 2017-2021 (prepared by BAE as the Inclusionary Zoning Study Permit Database) shows a high level of consistency between the historical trend and future site supply. (See **Appendix F** for the detailed comparison.)

As shown in the tables at right, the High-Medium cohort (between 56 and 109 DUAC) is the largest category, representing 71% of unbuilt capacity and 61% of recently permitted units.

The second-largest cohort for both sets is Medium (between 30 and 55 DUAC) with 15% of the unbuilt capacity and 19% of permits.

Significant disparities between sets are found at Low Medium (combining Low Medium I and II) and High: Low Medium contributes 11% of unbuilt capacity compared with 2% of recently permitted units, and High reflects 2% of future growth compared with 10% of recent permits.

**Note: Because the City's RHNA Rezoning Program largely concerns the densities at 10 DU/AC and above, the "Low" cohort, featuring densities below 10 DU/AC, is excluded in this analysis.*

City of LA Housing Element Site Inventory Distribution by Density Cohorts

Density Cohort	Maximum Base Density Range (DUAC)	Land Area (AC)	% Land Area of Total	Unbuilt Capacity (units)	Unbuilt Capacity %
Low Medium I	10-17 DU/AC	5,693	18%	42,465	3%
Low Medium II	18-29 DU/AC	6,442	20%	93,554	8%
Medium	30-55 DU/AC	5,922	19%	190,473	15%
High Medium	56-109 DU/AC	8,840	28%	886,182	71%
High	110-218 DU/AC	148	0%	27,939	2%
Others	N/A	4,483	14%	5,776	0%
Total		31,528	100%	1,246,390	100%

Recent Development Permit Distribution by Density Cohorts, 2017-2021

Density Cohort	Maximum Base Density Range (DUAC)	Land Area (AC)	% Land Area of Total	Permitted (units)	Permitted Units %
Low Medium I	10-17 DU/AC	1	0%	11	0%
Low Medium II	18-29 DU/AC	41	8%	901	2%
Medium	30-55 DU/AC	139	32%	6,974	19%
High Medium	56-109 DU/AC	215	48%	22,702	61%
High	110-218 DU/AC	11	3%	2,629	7%
Others	N/A	38	9%	3,825	10%
Total		445	100%	37,042	100%

** Recent development based on projects included in the Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department.*
*** Excludes the development with less than 5 units*

Step 3: Refine

Site Inventory vs. Recent Development by Market Tier *

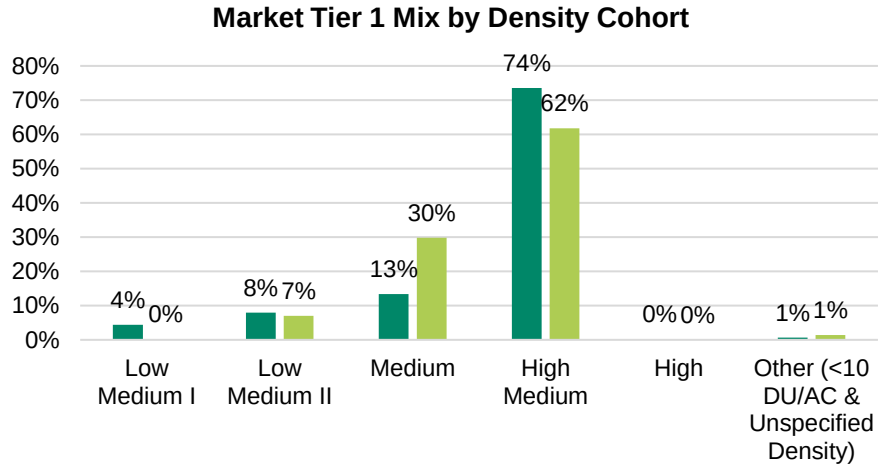
Sorting density cohorts by market tier* reveals further nuance that should be considered in the feasibility analyses to come.

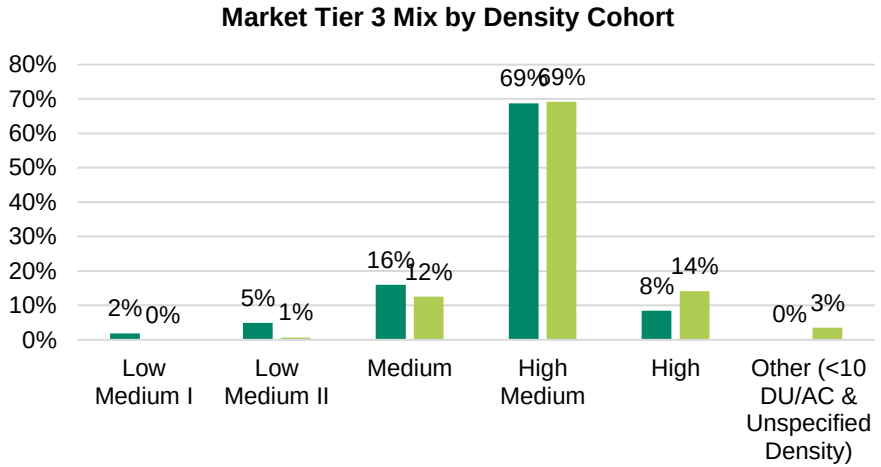
Market Tiers 1, 3, and 4 exhibit similar distributions between housing element capacity and recent permitted units: in all, “High-Medium” (56-110 DU/AC) contributes a majority of units, whereas “Others” (mainly low-density) make minor contributions.

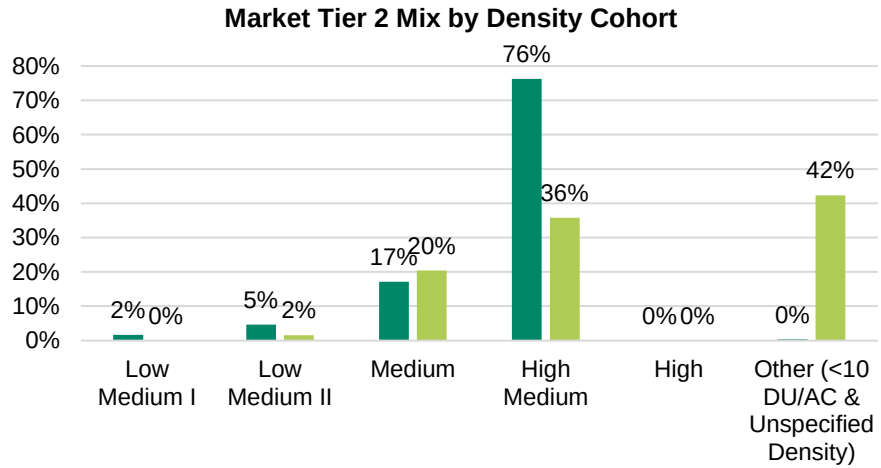
Market Tier 2 shows a notably different pattern with a very high share of recent production in the “Other” category and far less in “High Medium” – this is likely a result of the Warner Center Specific Plan which has its own zone class that permits unlimited residential density in many cases

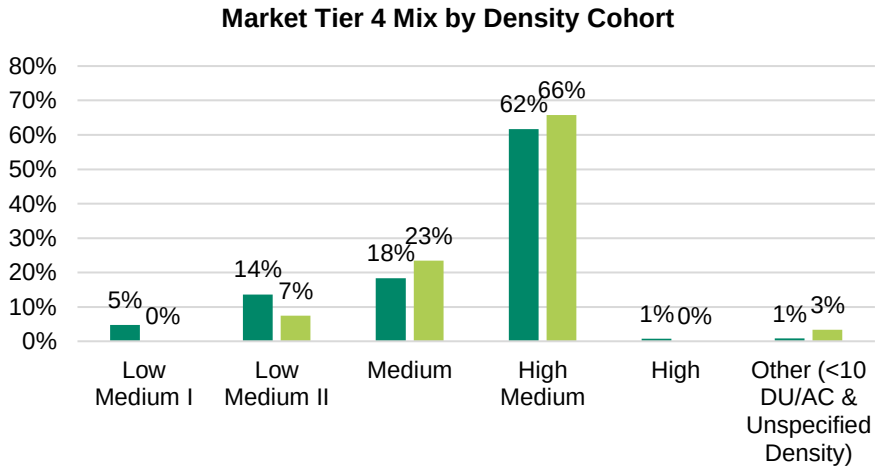
The “High” cohort is largely absent in all Market Tiers except Tier 3.

See **Appendix F** for backing data.









** Market Tiers reflect market strength with Tier 1 the Weakest and Tier 4 the strongest. The market tiers were defined in the memo* LA Density Bonus Task 3 Market Areas_020323.

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Step 3: Refine

Recommended Density Cohorts

Based on the findings of the density cohort study, AECOM recommends that subsequent analyses to support RHNA rezoning strategies (including updates to the DBO and TOC as well as the inclusionary housing analysis) be based on five Density Cohorts: Low Medium I, Low Medium II, Medium, High Medium, High.

Density Cohort	Minimum Land Area per Unit	Maximum Base Density Range (DUAC)	Examples of Typical Zone Classes Included
Low Medium I	2,500-4,000 SF	10-17	RD3, RD4, R2
Low Medium II	1,000-2,000 SF	18-43	R1.5, RD2
Medium	800 SF	44-55	RW2, R3, RAS3, C1, CM
High Medium	400-600 SF	56-109	R4, RAS4, CR, C1.5, C2, C4, C5, MR1, M1, MR2, M2,M3
High	200 SF	110-218	R5

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Step 3: Refine

Review Shortlisted Prototype Concepts

Objectives for reviewing the shortlisted prototype concepts

1. Align prototypes with RHNA Rezoning Strategies
2. Confirmation and alignment on prototype concepts
    - Defining features, unique characteristics
    - Site conditions
    - Parking strategy

4D
Plex-Style
- *10 – 17 DUAC*
- *4-6 units on 13,000-25,000 SF lot*
- *Attached or separated garage, surface prkng*

RH
Multifamily Row House
- *25-35 DUAC*
- *4-5 stories, 56'*
- *Separated garage, or no parking*

CGF
Commercial Ground Floor Residential Above
- *60 – 90 DUAC*
- *4-5 stories, 100% wood stick*
- *No parking, subterranean*

P7
7-Story Podium
- *110 – 150 DUAC*
- *7 stories, higher density*
- *Subterranean parking or above-grade parking*

BC
Bungalow Court
- *18 – 29 DUAC*
- *1-2 story, low lot coverage, bldg. separation*
- *Surface parking or separated garage*

CY3
33' Courtyard Multiplex
- *30 – 43 DUAC*
- *Stacked flats multiplex or L-shaped "City of Gardens" model*
- *Subterranean parking, separated/attached garage*

P5-Mixed
5-Story Podium Mixed
- *90 – 109 DUAC*
- *Mid-rise, 5 stories, higher density*
- *Subterranean parking or above-grade parking*

TW
Mixed-Use Tower
- *140 – 217 DUAC*
- *High-rise, mixed-use*
- *Subterranean parking, above-grade parking*

TH
Townhouse
- *18 – 29 DUAC*
- *Up to 3 stories; ADU with apartments above*
- *Surface parking, tuck-under garage*

CY4
45' Courtyard Apartment
- *50 – 55 DUAC*
- *Up to 45' in RD*
- *Subterranean parking*

P5-Res
5-Story Podium All Residential
- *90-109 DUAC*
- *100% residential, is it 1 or 2 stories of Type 1 Cons.*

Step 3: Refine

Prototype Concepts Assigned to Density Cohorts

To prepare prototypes for further analysis, the prototypes must be assigned to the proposed density cohorts. The assignments are based on fit between prototype characteristics (e.g., site size, density range, height characteristics, parking strategy) and density cohort parameters.

The table below and the chart on the following slide reflect these proposed assignments.

Prototype Ref	Prototype Description	Parking Strategy(ies)	Potential Rezoning Strategy	Rent vs. Own	Source	DUAC Range*	
						Low	*High*
Low Medium I (10-17 DUAC)							
2D	Duplex	Attached Garage	*DBO, MM*	*Rent*	AECOM	*10*	*17*
Low Medium II (18-43 DUAC)							
BC	Bungalow Court: 1-2 story, low lot coverage, bldg. separation	Surface Parking, Separated garage	*DBO, MM*	*Rent, Own*	City	*18*	*29*
TH	Townhouse up to 3 stories (adu with apartment above)	Surface Parking, Tuck-Under Garage	*DBO, MM*	*Own*	City	*22*	*29*
RH	Multi-family Row House, 4-5 stories / 56'	Separated Garage+D12:K12D11:J1D12:I12	*DBO, Cor, MM*	*Rent*	City	*25*	*35*
CY3	Courtyard/Multiplex (up to 33' in R2)	Surface Parking; Separated Garage;	*DBO, Cor, MM*	*Rent, Own*	City	*30*	*43*
Medium (44-59 DUAC)							
CY4	Courtyard Apartment (up to 45' in RD)	Subterranean Parking	*DBO, Cor*	*Rent*	City	*30*	*43*
High Medium (60-109 DUAC)							
CGF	Commercial Ground Floor Residential Above, 4-5 stories	No parking	*DBO, Cor*	*Rent*	City	*60*	*80*
P5	Podium, Mid-Rise, 5 Stories	Subterranean Parking, Above Grade	*DBO, Cor*	*Rent, Own*	City	*80*	*90*
High (110-217 DUAC)							
P7	Podium, Mid-Rise, 7 Stories	Subterranean Parking, Above Grade	*DBO*	*Rent, Own*	City	*110*	*150*
TW	High-rise mixed-use tower	Subterranean Parking, Above Grade	*DBO*	*Rent, Own*	AECOM	*140*	*217*

**Illustrative density range, prototypical density will be determined at later stage.*

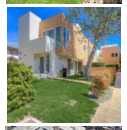
Step 3: Refine

Prototype Concepts Assigned to Density Cohorts

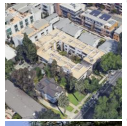
4D
Plex-Style
10 – 17 DUAC

BC
Bungalow Court
18 – 29 DUAC

CY3
33' Courtyard Multiplex
30 – 43 DUAC

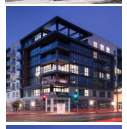


CY4
45' Courtyard Apartment
50 – 55 DUAC

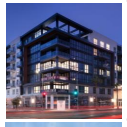


CGF
Commercial Ground Floor Residential Above
60 – 90 DUAC

P5-Mixed
5-Story Podium Mixed
90 – 109 DUAC

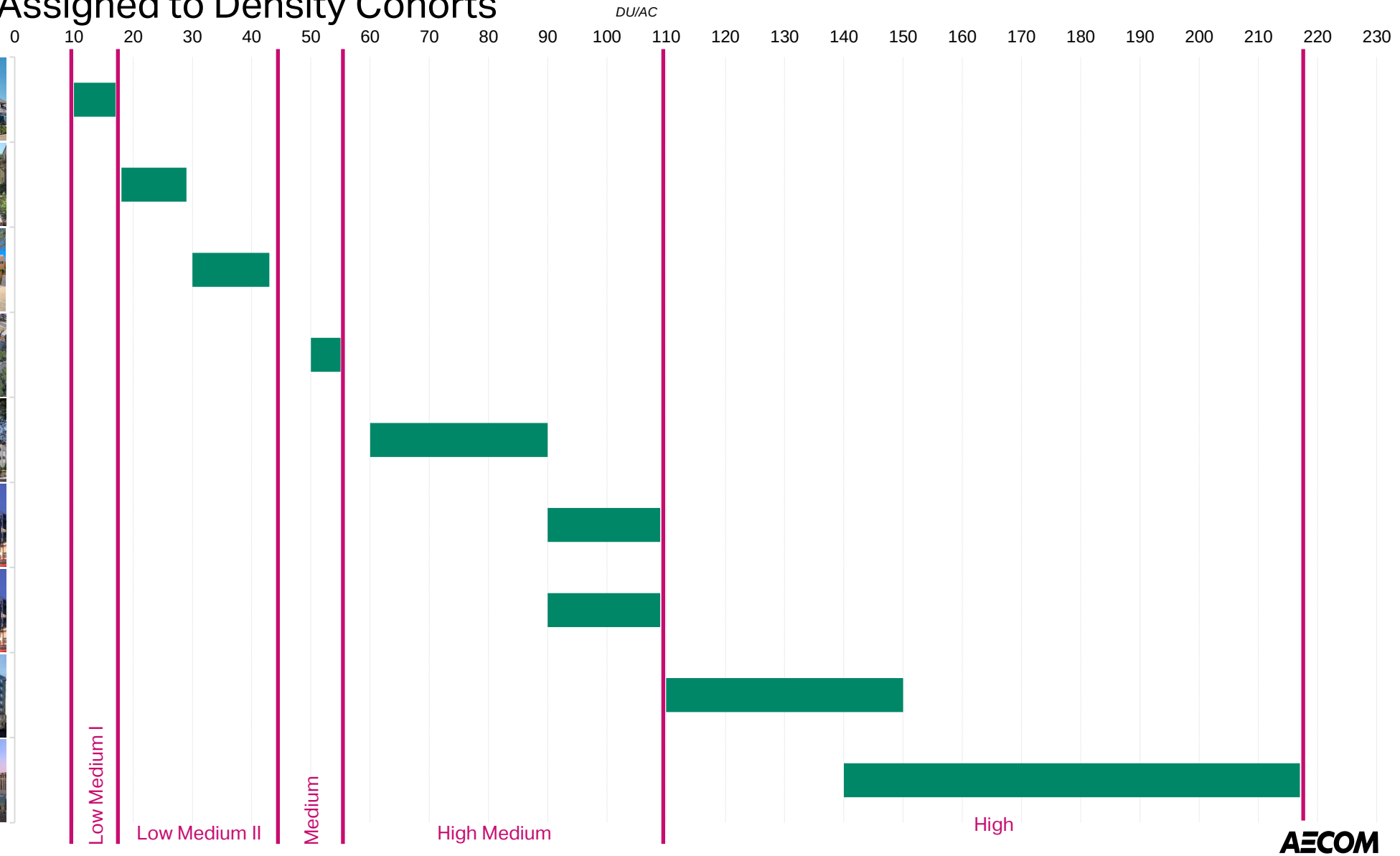


P5-Res
90 – 109 DUAC



P7
7-Story Podium
110 – 150 DUAC

TW
Mixed-Use Tower
140 – 217 DUAC



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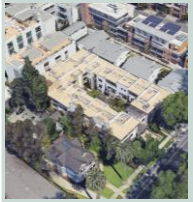
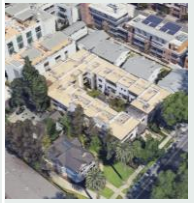
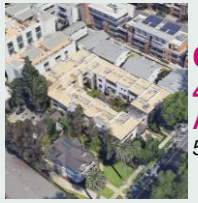
Step 3: Refine

Final Recommendation – Prototypes by Market Tier

The table on the right shows the final recommended prototypes for further evaluation in each Tier. The recommendations are based on findings from the prior analytical tasks and integrate recent market preferences, opportunity site capacity, typology densities, and staff inputs.

Note that in AECOM's subsequent tasks related to **analysis of the City's RHNA Rezoning Program**, prototypes were further tailored so that they could be used to test specific policy questions.

Prototype Concepts to be Evaluated per Housing Incentive Market Tier					
Market Tier 1 Low	 **4D** Plex Style *10 – 17 DUAC*	 **CY3** 33' Courtyard Multiplex *30 – 43 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*
Market Tier 2 Medium-Low	 **4D** Plex Style *10 – 17 DUAC*	 **CY3** 33' Courtyard Multiplex *30 – 43 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*
Market Tier 3 Medium-High	 **4D** Plex Style *10 – 17 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*	 **TW** Mixed-Use Tower *140 – 217 DUAC*
Market Tier 4 High	 **4D** Plex Style *10 – 17 DUAC*	 **CY4** 45' Courtyard Apartment *50 – 55 DUAC*	 **P5** 5-story Podium Res + Mixed *90 – 109 DUAC*	 **P7** 7-Story Podium *110 – 150 DUAC*	 **TW** Mixed-Use Tower *140 – 217 DUAC*

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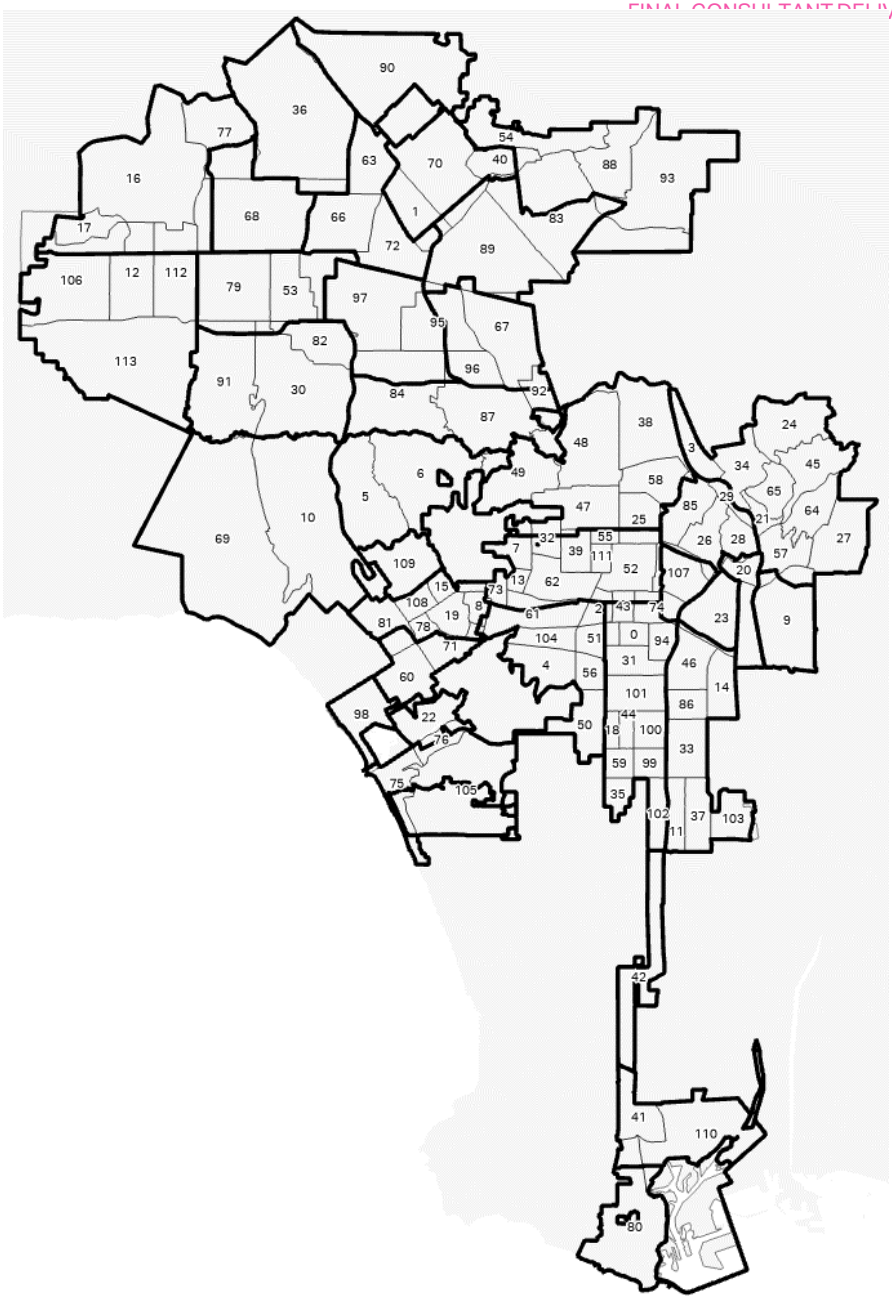
6. Appendix

Appendix Table of Contents

Appendix A

Neighborhood-Level Sub-Areas and CPAs

#	Neighborhood	Primary CPA
0	Adams-Normandie	South Los Angeles
1	Arleta	Arleta - Pacoima
2	Arlington Heights	West Adams - Baldwin Hills - Leimert
3	Atwater Village	Northeast Los Angeles
4	Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert
5	Bel-Air	Bel Air - Beverly Crest
6	Beverly Crest	Bel Air - Beverly Crest
7	Beverly Grove	Wilshire
8	Beverlywood	West Los Angeles
9	Boyle Heights	Boyle Heights
10	Brentwood	Brentwood - Pacific Palisades
11	Broadway-Manchester	Southeast Los Angeles
12	Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills
13	Carthay	Wilshire
14	Central-Alameda	Southeast Los Angeles
15	Century City	West Los Angeles
16	Chatsworth	Chatsworth - Porter Ranch
17	Chatsworth Reservoir	Chatsworth - Porter Ranch
18	Chesterfield Square	South Los Angeles
19	Cheviot Hills	West Los Angeles
20	Chinatown	Central City North
21	Cypress Park	Northeast Los Angeles
22	Del Rey	Palms - Mar Vista - Del Rey
23	Downtown	Central City
24	Eagle Rock	Northeast Los Angeles
25	East Hollywood	Hollywood
26	Echo Park	Silver Lake - Echo Park - Elysian Valley
27	El Sereno	Northeast Los Angeles
28	Elysian Park	Silver Lake - Echo Park - Elysian Valley
29	Elysian Valley	Silver Lake - Echo Park - Elysian Valley
30	Encino	Encino - Tarzana
31	Exposition Park	South Los Angeles
32	Fairfax	Wilshire
33	Florence	Southeast Los Angeles
34	Glassell Park	Northeast Los Angeles
35	Gramercy Park	South Los Angeles
36	Granada Hills	Granada Hills - Knollwood
37	Green Meadows	Southeast Los Angeles
38	Griffith Park	Hollywood
39	Hancock Park	Wilshire
40	Hansen Dam	Arleta - Pacoima
41	Harbor City	Wilmington - Harbor City
42	Harbor Gateway	Harbor Gateway
43	Harvard Heights	South Los Angeles
44	Harvard Park	South Los Angeles
45	Highland Park	Northeast Los Angeles
46	Historic South-Central	Southeast Los Angeles
47	Hollywood	Hollywood
48	Hollywood Hills	Hollywood
49	Hollywood Hills West	Hollywood
50	Hyde Park	West Adams - Baldwin Hills - Leimert
51	Jefferson Park	West Adams - Baldwin Hills - Leimert
52	Koreatown	Wilshire
53	Lake Balboa	Reseda - West Van Nuys
54	Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
55	Larchmont	Wilshire
56	Leimert Park	West Adams - Baldwin Hills - Leimert
57	Lincoln Heights	Northeast Los Angeles
58	Los Feliz	Hollywood
59	Manchester Square	South Los Angeles
60	Mar Vista	Palms - Mar Vista - Del Rey
61	Mid-City	West Adams - Baldwin Hills - Leimert
62	Mid-Wilshire	Wilshire
63	Mission Hills	Mission Hills - Panorama City - North Hills
64	Montecito Heights	Northeast Los Angeles
65	Mount Washington	Northeast Los Angeles
66	North Hills	Mission Hills - Panorama City - North Hills
67	North Hollywood	North Hollywood - Valley Village
68	Northridge	Northridge
69	Pacific Palisades	Brentwood - Pacific Palisades
70	Pacoima	Arleta - Pacoima
71	Palms	Palms - Mar Vista - Del Rey
72	Panorama City	Mission Hills - Panorama City - North Hills
73	Pico-Robertson	Wilshire
74	Pico-Union	South Los Angeles
75	Playa del Rey	Westchester - Playa del Rey
76	Playa Vista	Westchester - Playa del Rey
77	Porter Ranch	Chatsworth - Porter Ranch
78	Rancho Park	West Los Angeles
79	Reseda	Reseda - West Van Nuys
80	San Pedro	San Pedro
81	Sawtelle	West Los Angeles
82	Sepulveda Basin	Encino - Tarzana
83	Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
84	Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
85	Silver Lake	Silver Lake - Echo Park - Elysian Valley
86	South Park	Southeast Los Angeles
87	Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
88	Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
89	Sun Valley	Sun Valley - La Tuna Canyon
90	Sylmar	Sylmar
91	Tarzana	Encino - Tarzana
92	Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
93	Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
94	University Park	South Los Angeles
95	Valley Glen	Van Nuys - North Sherman Oaks
96	Valley Village	North Hollywood - Valley Village
97	Van Nuys	Van Nuys - North Sherman Oaks
98	Venice	Venice
99	Vermont Knolls	South Los Angeles
100	Vermont-Slauson	South Los Angeles
101	Vermont Square	South Los Angeles
102	Vermont Vista	South Los Angeles
103	Watts	Southeast Los Angeles
104	West Adams	West Adams - Baldwin Hills - Leimert
105	Westchester	Los Angeles International Airport
106	West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills
107	Westlake	Westlake
108	West Los Angeles	West Los Angeles
109	Westwood	Westwood
110	Wilmington	Wilmington - Harbor City
111	Windsor Square	Wilshire
112	Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills
113	Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills



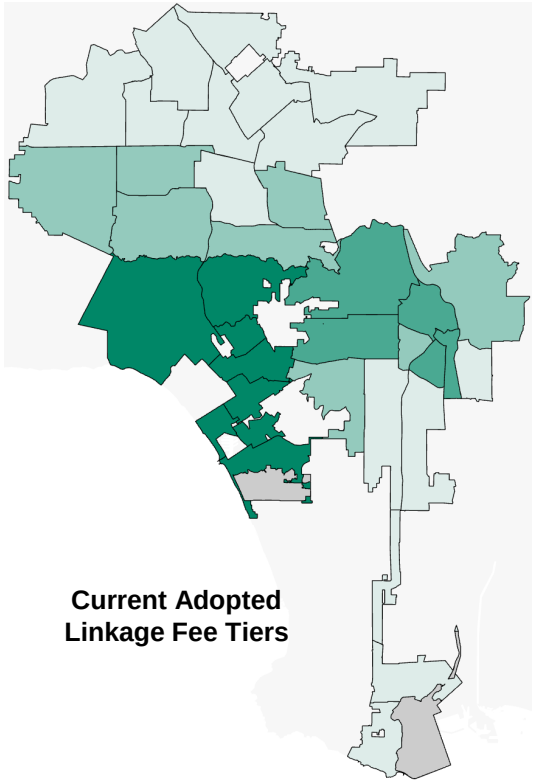
Appendix B

Geographical Sub-Area Considerations

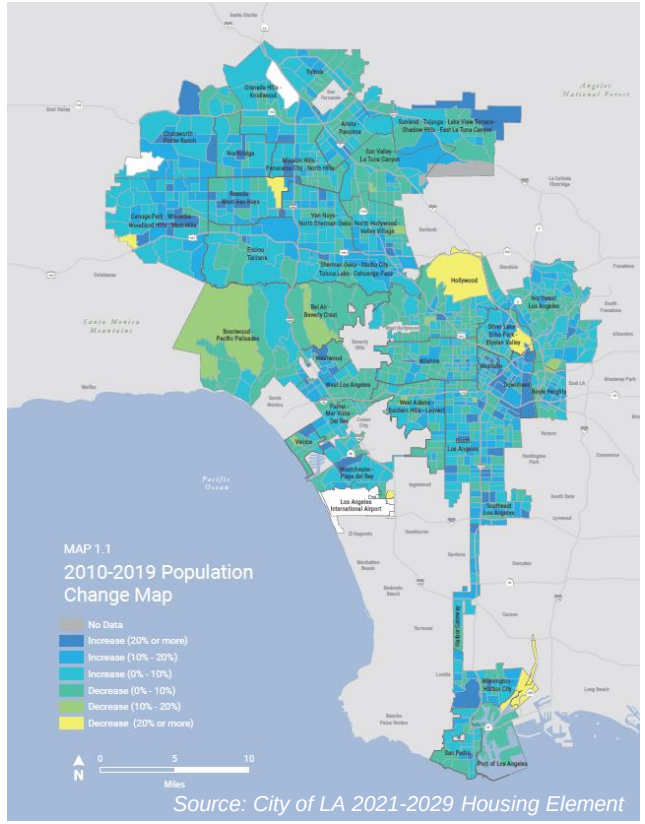
This market study considers the City's 35 Community Plan Areas as its primary geographic unit of analysis. Since the land use goals and zoning regulations for each CPA are established by its corresponding Community Plan, many development-related policies and programs, such as the Affordable Housing Linkage, have set a precedent for implementation at the CPA-level. Similarly, aspects of the RHNA Rezoning Program are likely to be implemented through updates to the Community Plans. Analysis by CPAs and CPA classification into market tiers builds on the City's existing administrative framework and simplifies navigating multiple development-related programs and policies for residents, developers, and other stakeholders.

However, CPAs can be large in area, spanning several neighborhoods and encompassing real estate sub-markets with wide-ranging home sales prices and average rents. Analysis at a smaller geography is necessary to account for market variability within CPAs and explore potential for splitting a CPA into more than one market tier where appropriate.

Census Tracts and Los Angeles Times Neighborhoods were both considered as options for sub-CPA analysis. The number of Census Tracts presented questions about implementation, whereas the small area posed questions about availability of appropriate residential market data. The LA Times Neighborhoods offered a unit of analysis with generally agreeable boundaries, more reflective of local real estate markets, and which had been previously used in the Linkage Fee Nexus Study.



Current Adopted Linkage Fee Tiers



Analysis by CPA

Pros

- Aligns with market tiers of existing development programs (Linkage Fee)
- Uses existing administrative framework for zoning and land use
- Legible unit with established boundaries

Cons

- Too large to accommodate wide-ranging real estate values within boundaries
- Critical distinctions may be lost or averaged out

Analysis by Census Tract

Pros

- Boundaries perfectly align with reliable and important Census data
- Provides granularity of analysis and findings

Cons

- Too many tracts may be difficult to implement/update
- Not always aligned with CPA boundaries or local understanding of neighborhoods/real estate sub-markets
- Smaller geographies may have fewer reliable data points (e.g., low sales history, lack of rent comps)

Appendix C.1.

Population

			Total Population		
Neighborhood	CPA	Market Tier	2010	2021	Percentage Change
Adams-Normandie	South Los Angeles	1	18,582	18,061	-3%
Arleta	Arleta - Pacoima	1	33,479	35,468	6%
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	20,676	20,387	-1%
Boyle Heights	Boyle Heights	1	99,832	100,831	1%
Broadway-Manchester	Southeast Los Angeles	1	26,209	30,301	16%
Central-Alameda	Southeast Los Angeles	1	41,685	50,876	22%
Chatsworth	Chatsworth - Porter Ranch	1	44,699	49,975	12%
Chesterfield Square	South Los Angeles	1	8,315	8,631	4%
Encino	Encino - Tarzana	1	43,334	48,254	11%
Florence	Southeast Los Angeles	1	48,271	55,288	15%
Gramercy Park	South Los Angeles	1	18,827	20,037	6%
Granada Hills	Granada Hills - Knollwood	1	51,581	63,325	23%
Green Meadows	Southeast Los Angeles	1	32,267	37,014	15%
Harbor City	Wilmington - Harbor City	1	30,125	29,947	-1%
Harbor Gateway	Harbor Gateway	1	50,537	57,465	14%
Harvard Park	South Los Angeles	1	9,785	10,162	4%
Historic South-Central	Southeast Los Angeles	1	46,943	50,130	7%
Lake Balboa	Reseda - West Van Nuys	1	26,697	26,978	1%
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	16,364	16,028	-2%
Manchester Square	South Los Angeles	1	11,731	12,869	10%
Mission Hills	Mission Hills - Panorama City - North Hills	1	19,367	18,809	-3%
North Hills	Mission Hills - Panorama City - North Hills	1	57,050	60,200	6%
Northridge	Northridge	1	59,905	66,506	11%
Pacoima	Arleta - Pacoima	1	79,006	80,425	2%
Panorama City	Mission Hills - Panorama City - North Hills	1	68,286	66,438	-3%
Pico-Union	South Los Angeles	1	42,088	38,735	-8%
Porter Ranch	Chatsworth - Porter Ranch	1	25,933	24,252	-6%
Reseda	Reseda - West Van Nuys	1	67,272	71,158	6%
San Pedro	San Pedro	1	80,377	83,380	4%
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	66,304	70,502	6%
South Park	Southeast Los Angeles	1	34,058	35,205	3%
Sun Valley	Sun Valley - La Tuna Canyon	1	74,950	72,259	-4%
Sylmar	Sylmar	1	77,722	86,901	12%
Tarzana	Encino - Tarzana	1	36,391	36,160	-1%
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	9,443	11,325	20%
University Park	South Los Angeles	1	24,045	22,958	-5%
Valley Glen	Van Nuys - North Sherman Oaks	1	56,544	56,605	0%
Valley Village	North Hollywood - Valley Village	1	23,011	26,507	15%
Van Nuys	Van Nuys - North Sherman Oaks	1	106,916	112,594	5%
Vermont Knolls	South Los Angeles	1	22,287	23,628	6%
Vermont Square	South Los Angeles	1	47,644	51,897	9%
Vermont Vista	South Los Angeles	1	24,689	28,795	17%
Vermont-Slauson	South Los Angeles	1	27,338	31,208	14%
Watts	Southeast Los Angeles	1	40,493	42,811	6%
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	39,862	41,782	5%
Wilmington	Wilmington - Harbor City	1	70,127	76,115	9%
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	50,589	52,362	4%
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	53,233	62,788	18%
Chinatown	Central City North	2	13,927	16,259	17%
Harvard Heights	South Los Angeles	2	17,732	18,015	2%
Hyde Park	West Adams - Baldwin Hills - Leimert	2	36,790	37,390	2%
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	25,097	24,831	-1%
Leimert Park	West Adams - Baldwin Hills - Leimert	2	13,541	12,341	-9%
Lincoln Heights	Northeast Los Angeles	2	29,982	28,874	-4%
North Hollywood	North Hollywood - Valley Village	2	83,294	81,303	-2%
Pico-Robertson	Wilshire	2	22,031	24,519	11%
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	16,141	16,939	5%
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	36,074	40,290	12%
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	14,721	16,561	13%
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	33,296	33,923	2%
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	64,906	72,652	12%
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	36,568	36,972	1%
Del Rey	Palms - Mar Vista - Del Rey	3	30,296	31,853	5%
Downtown	Central City	3	38,340	62,506	63%
East Hollywood	Hollywood	3	69,114	63,356	-8%
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	34,459	34,772	1%
El Sereno	Northeast Los Angeles	3	53,114	41,268	-22%
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	2,435	2,503	3%
Exposition Park	South Los Angeles	3	32,153	36,535	14%
Hollywood	Hollywood	3	72,319	71,698	-1%
Koreatown	Wilshire	3	109,611	102,192	-7%
Larchmont	Wilshire	3	8,187	8,185	0%
Mid-Wilshire	Wilshire	3	41,189	40,710	-1%
Montecito Heights	Northeast Los Angeles	3	17,980	18,509	3%
Playa del Rey	Westchester - Playa del Rey	3	10,879	11,372	5%
West Adams	West Adams - Baldwin Hills - Leimert	3	21,556	20,350	-6%
West Los Angeles	West Los Angeles	3	11,723	13,384	14%
Westlake	Westlake	3	103,140	108,050	5%
Windsor Square	Wilshire	3	6,812	6,162	-10%
Atwater Village	Northeast Los Angeles	4	14,069	27,845	98%
Bel-Air	Bel Air - Beverly Crest	4	7,482	6,259	-16%
Beverly Crest	Bel Air - Beverly Crest	4	11,968	11,025	-8%
Beverly Grove	Wilshire	4	22,011	20,931	-5%
Beverlywood	West Los Angeles	4	7,113	6,521	-8%
Brentwood	Brentwood - Pacific Palisades	4	34,561	33,877	-2%
Carthay	Wilshire	4	5,546	5,093	-8%
Century City	West Los Angeles	4	6,516	7,522	15%
Cheviot Hills	West Los Angeles	4	8,526	7,489	-12%
Cypress Park	Northeast Los Angeles	4	9,672	8,470	-12%
Eagle Rock	Northeast Los Angeles	4	39,267	38,305	-2%
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	7,639	7,018	-8%
Fairfax	Wilshire	4	12,647	13,902	10%
Glassell Park	Northeast Los Angeles	4	27,248	26,599	-2%
Hancock Park	Wilshire	4	11,117	10,340	-7%
Highland Park	Northeast Los Angeles	4	57,828	51,135	-12%
Hollywood Hills	Hollywood	4	22,215	20,459	-8%
Hollywood Hills West	Hollywood	4	16,020	15,770	-2%
Los Feliz	Hollywood	4	31,979	32,089	0%
Mar Vista	Palms - Mar Vista - Del Rey	4	35,829	35,474	-1%
Mid-City	West Adams - Baldwin Hills - Leimert	4	54,296	48,881	-10%
Mount Washington	Northeast Los Angeles	4	14,651	14,065	-4%
Pacific Palisades	Brentwood - Pacific Palisades	4	26,206	26,736	2%
Palms	Palms - Mar Vista - Del Rey	4	44,573	40,984	-8%
Playa Vista	Westchester - Playa del Rey	4	9,321	15,694	68%
Rancho Park	West Los Angeles	4	5,265	5,140	-2%
Sawtelle	West Los Angeles	4	43,028	40,373	-6%
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	32,304	30,219	-6%
Venice	Venice	4	43,258	42,010	-3%
Westchester	Los Angeles International Airport	4	52,264	51,524	-1%
Westwood	Westwood	4	46,506	53,294	15%

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Appendix C.2

Households

			Total Households		
Neighborhood	CPA	Market Tier	2010	2021	% Change
Adams-Normandie	South Los Angeles	1	5,305	5,424	2%
Arleta	Arleta - Pacoima	1	7,533	8,060	7%
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	7,006	7,061	1%
Boyle Heights	Boyle Heights	1	24,823	26,739	8%
Broadway-Manchester	Southeast Los Angeles	1	6,776	7,379	9%
Central-Alameda	Southeast Los Angeles	1	9,508	11,465	21%
Chatsworth	Chatsworth - Porter Ranch	1	15,459	17,026	10%
Chesterfield Square	South Los Angeles	1	2,582	2,559	-1%
Encino	Encino - Tarzana	1	18,465	19,635	6%
Florence	Southeast Los Angeles	1	11,818	12,817	8%
Gramercy Park	South Los Angeles	1	6,797	7,286	7%
Granada Hills	Granada Hills - Knollwood	1	17,045	20,904	23%
Green Meadows	Southeast Los Angeles	1	8,099	8,623	6%
Harbor City	Wilmington - Harbor City	1	9,767	9,934	2%
Harbor Gateway	Harbor Gateway	1	15,584	17,246	11%
Harvard Park	South Los Angeles	1	2,906	2,890	-1%
Historic South-Central	Southeast Los Angeles	1	10,745	11,658	8%
Lake Balboa	Reseda - West Van Nuys	1	8,816	9,292	5%
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	4,471	4,087	-9%
Manchester Square	South Los Angeles	1	4,175	4,523	8%
Mission Hills	Mission Hills - Panorama City - North Hills	1	5,296	5,425	2%
North Hills	Mission Hills - Panorama City - North Hills	1	16,191	16,601	3%
Northridge	Northridge	1	20,934	22,271	6%
Pacoima	Arleta - Pacoima	1	17,898	18,438	3%
Panorama City	Mission Hills - Panorama City - North Hills	1	17,846	19,595	10%
Pico-Union	South Los Angeles	1	12,333	12,518	1%
Porter Ranch	Chatsworth - Porter Ranch	1	8,445	8,024	-5%
Reseda	Reseda - West Van Nuys	1	20,057	21,802	9%
San Pedro	San Pedro	1	30,513	31,900	5%
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	31,919	32,824	3%
South Park	Southeast Los Angeles	1	7,629	8,234	8%
Sun Valley	Sun Valley - La Tuna Canyon	1	19,939	20,211	1%
Sylmar	Sylmar	1	21,019	23,308	11%
Tarzana	Encino - Tarzana	1	13,816	13,873	0%
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	4,673	5,644	21%
University Park	South Los Angeles	1	5,240	5,599	7%
Valley Glen	Van Nuys - North Sherman Oaks	1	20,007	20,328	2%
Valley Village	North Hollywood - Valley Village	1	11,204	11,911	6%
Van Nuys	Van Nuys - North Sherman Oaks	1	34,559	37,826	9%
Vermont Knolls	South Los Angeles	1	6,659	6,715	1%
Vermont Square	South Los Angeles	1	13,490	14,229	5%
Vermont Vista	South Los Angeles	1	7,373	7,999	8%
Vermont-Slauson	South Los Angeles	1	7,746	7,926	2%
Watts	Southeast Los Angeles	1	9,850	10,744	9%
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	13,658	14,061	3%
Wilmington	Wilmington - Harbor City	1	17,864	19,594	10%
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	15,679	15,740	0%
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	17,045	20,813	22%
Chinatown	Central City North	2	3,173	4,303	36%
Harvard Heights	South Los Angeles	2	5,647	5,678	1%
Hyde Park	West Adams - Baldwin Hills - Leimert	2	13,324	14,161	6%
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	8,101	8,453	4%
Leimert Park	West Adams - Baldwin Hills - Leimert	2	5,746	5,498	-4%
Lincoln Heights	Northeast Los Angeles	2	8,138	8,848	9%
North Hollywood	North Hollywood - Valley Village	2	30,929	32,761	6%

			Total Households		
Neighborhood	CPA	Market Tier	2010	2021	% Change
Pico-Robertson	Wilshire	2	10,878	10,659	-2%
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	5,664	5,604	-1%
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	17,454	18,295	5%
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	5,266	5,970	13%
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	11,621	12,048	4%
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	26,128	28,024	7%
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	16,389	16,924	3%
Del Rey	Palms - Mar Vista - Del Rey	3	12,403	13,831	12%
Downtown	Central City	3	17,724	34,484	95%
East Hollywood	Hollywood	3	23,571	22,672	-4%
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	12,399	13,994	13%
El Sereno	Northeast Los Angeles	3	15,712	12,194	-22%
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	796	994	25%
Exposition Park	South Los Angeles	3	9,208	10,217	11%
Hollywood	Hollywood	3	35,491	37,609	6%
Koreatown	Wilshire	3	42,742	43,292	1%
Larchmont	Wilshire	3	3,636	3,508	-4%
Mid-Wilshire	Wilshire	3	19,575	20,118	3%
Montecito Heights	Northeast Los Angeles	3	6,312	6,477	3%
Playa del Rey	Westchester - Playa del Rey	3	5,676	5,797	2%
West Adams	West Adams - Baldwin Hills - Leimert	3	7,015	7,202	3%
West Los Angeles	West Los Angeles	3	5,651	6,117	8%
Westlake	Westlake	3	35,515	40,437	14%
Windsor Square	Wilshire	3	2,632	2,622	0%
Atwater Village	Northeast Los Angeles	4	5,746	10,866	89%
Bel-Air	Bel Air - Beverly Crest	4	2,901	2,496	-14%
Beverly Crest	Bel Air - Beverly Crest	4	4,859	4,305	-11%
Beverly Grove	Wilshire	4	12,249	11,986	-2%
Beverlywood	West Los Angeles	4	2,780	2,455	-12%
Brentwood	Brentwood - Pacific Palisades	4	15,636	15,003	-4%
Carthay	Wilshire	4	2,675	2,138	-20%
Century City	West Los Angeles	4	3,417	4,015	17%
Cheviot Hills	West Los Angeles	4	3,351	3,078	-8%
Cypress Park	Northeast Los Angeles	4	2,662	2,657	0%
Eagle Rock	Northeast Los Angeles	4	13,108	13,299	1%
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	2,223	2,496	12%
Fairfax	Wilshire	4	6,453	6,276	-3%
Glassell Park	Northeast Los Angeles	4	8,230	8,868	8%
Hancock Park	Wilshire	4	4,677	4,775	2%
Highland Park	Northeast Los Angeles	4	17,801	17,488	-2%
Hollywood Hills	Hollywood	4	12,329	11,259	-9%
Hollywood Hills West	Hollywood	4	8,534	8,030	-6%
Los Feliz	Hollywood	4	17,140	16,275	-5%
Mar Vista	Palms - Mar Vista - Del Rey	4	15,808	15,782	0%
Mid-City	West Adams - Baldwin Hills - Leimert	4	18,835	18,472	-2%
Mount Washington	Northeast Los Angeles	4	4,956	5,178	4%
Pacific Palisades	Brentwood - Pacific Palisades	4	10,522	10,433	-1%
Palms	Palms - Mar Vista - Del Rey	4	21,684	20,837	-4%
Playa Vista	Westchester - Playa del Rey	4	4,477	7,529	68%
Rancho Park	West Los Angeles	4	2,294	2,190	-5%
Sawtelle	West Los Angeles	4	20,708	19,649	-5%
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	14,118	13,829	-2%
Venice	Venice	4	22,986	22,272	-3%
Westchester	Los Angeles International Airport	4	20,666	19,872	-4%
Westwood	Westwood	4	18,546	17,476	-6%

Appendix C.3

Household Size

Neighborhood	CPA	Market Tier	Average Household Size		
			2010	2021	Change
Adams-Normandie	South Los Angeles	1	3.38	3.21	-0.17
Arleta	Arleta - Pacoima	1	4.46	4.39	-0.07
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	2.90	2.78	-0.12
Boyle Heights	Boyle Heights	1	3.77	3.53	-0.25
Broadway-Manchester	Southeast Los Angeles	1	3.86	4.11	0.25
Central-Alameda	Southeast Los Angeles	1	4.35	4.46	0.11
Chatsworth	Chatsworth - Porter Ranch	1	2.82	2.86	0.03
Chesterfield Square	South Los Angeles	1	3.30	3.44	0.14
Encino	Encino - Tarzana	1	2.50	2.70	0.20
Florence	Southeast Los Angeles	1	4.16	4.40	0.24
Gramercy Park	South Los Angeles	1	2.76	2.57	-0.20
Granada Hills	Granada Hills - Knollwood	1	2.57	2.59	0.02
Green Meadows	Southeast Los Angeles	1	3.95	4.29	0.34
Harbor City	Wilmington - Harbor City	1	3.11	2.79	-0.32
Harbor Gateway	Harbor Gateway	1	3.13	3.27	0.15
Harvard Park	South Los Angeles	1	3.40	3.53	0.14
Historic South-Central	Southeast Los Angeles	1	4.16	4.07	-0.09
Lake Balboa	Reseda - West Van Nuys	1	3.06	2.96	-0.11
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	1	3.06	3.12	0.06
Manchester Square	South Los Angeles	1	2.82	2.89	0.07
Mission Hills	Mission Hills - Panorama City - North Hills	1	3.49	3.30	-0.19
North Hills	Mission Hills - Panorama City - North Hills	1	3.36	3.51	0.15
Northridge	Northridge	1	2.90	2.94	0.04
Pacoima	Arleta - Pacoima	1	4.36	4.36	0.00
Panorama City	Mission Hills - Panorama City - North Hills	1	3.80	3.37	-0.42
Pico-Union	South Los Angeles	1	3.32	3.07	-0.25
Porter Ranch	Chatsworth - Porter Ranch	1	3.08	3.02	-0.06
Reseda	Reseda - West Van Nuys	1	3.41	3.31	-0.11
San Pedro	San Pedro	1	1.96	2.24	0.28
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	2.16	2.26	0.09
South Park	Southeast Los Angeles	1	4.42	4.29	-0.14
Sun Valley	Sun Valley - La Tuna Canyon	1	3.75	3.56	-0.19
Sylmar	Sylmar	1	3.60	3.63	0.03
Tarzana	Encino - Tarzana	1	2.76	2.79	0.03
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	2.07	2.08	0.01
University Park	South Los Angeles	1	2.52	2.71	0.19
Valley Glen	Van Nuys - North Sherman Oaks	1	2.84	2.76	-0.07
Valley Village	North Hollywood - Valley Village	1	2.06	2.22	0.15
Van Nuys	Van Nuys - North Sherman Oaks	1	3.36	3.18	-0.18
Vermont Knolls	South Los Angeles	1	3.29	3.39	0.10
Vermont Square	South Los Angeles	1	3.48	3.62	0.14
Vermont Vista	South Los Angeles	1	3.34	3.56	0.22
Vermont-Slauson	South Los Angeles	1	3.54	3.94	0.40
Watts	Southeast Los Angeles	1	4.05	3.96	-0.09
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	2.83	2.87	0.04
Wilmington	Wilmington - Harbor City	1	2.66	3.53	0.87
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	3.20	3.34	0.14
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	3.13	3.01	-0.13
Chinatown	Central City North	2	2.68	2.34	-0.34
Harvard Heights	South Los Angeles	2	3.09	3.13	0.04
Hyde Park	West Adams - Baldwin Hills - Leimert	2	2.77	2.69	-0.08
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	3.04	2.90	-0.14
Leimert Park	West Adams - Baldwin Hills - Leimert	2	2.44	2.31	-0.13
Lincoln Heights	Northeast Los Angeles	2	3.55	3.09	-0.46
North Hollywood	North Hollywood - Valley Village	2	2.83	2.64	-0.18

Neighborhood	CPA	Market Tier	Average Household Size		
			2010	2021	Change
Pico-Robertson	Wilshire	2	2.07	2.41	0.34
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	1.99	2.31	0.31
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	2.15	2.33	0.18
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	2.52	2.10	-0.42
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	2.28	1.68	-0.60
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	2.55	2.70	0.16
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	2.17	2.22	0.05
Del Rey	Palms - Mar Vista - Del Rey	3	2.39	2.27	-0.12
Downtown	Central City	3	1.58	1.69	0.11
East Hollywood	Hollywood	3	2.80	2.61	-0.19
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	2.69	2.35	-0.34
El Sereno	Northeast Los Angeles	3	3.51	3.23	-0.29
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	2.78	1.97	-0.80
Exposition Park	South Los Angeles	3	3.41	3.52	0.11
Hollywood	Hollywood	3	2.12	1.93	-0.18
Koreatown	Wilshire	3	2.57	2.38	-0.19
Larchmont	Wilshire	3	2.16	2.23	0.07
Mid-Wilshire	Wilshire	3	2.22	2.11	-0.11
Montecito Heights	Northeast Los Angeles	3	3.11	2.98	-0.13
Playa del Rey	Westchester - Playa del Rey	3	1.14	1.20	0.07
West Adams	West Adams - Baldwin Hills - Leimert	3	3.03	2.87	-0.16
West Los Angeles	West Los Angeles	3	2.12	2.15	0.03
Westlake	Westlake	3	2.84	2.66	-0.18
Windsor Square	Wilshire	3	2.62	2.39	-0.23
Atwater Village	Northeast Los Angeles	4	2.49	2.35	-0.15
Bel-Air	Bel Air - Beverly Crest	4	2.60	2.42	-0.18
Beverly Crest	Bel Air - Beverly Crest	4	2.44	2.51	0.07
Beverly Grove	Wilshire	4	1.80	1.78	-0.02
Beverlywood	West Los Angeles	4	2.65	2.67	0.02
Brentwood	Brentwood - Pacific Palisades	4	2.41	2.49	0.09
Carthay	Wilshire	4	2.06	2.36	0.30
Century City	West Los Angeles	4	1.82	1.78	-0.04
Cheviot Hills	West Los Angeles	4	2.38	2.46	0.08
Cypress Park	Northeast Los Angeles	4	3.59	3.11	-0.48
Eagle Rock	Northeast Los Angeles	4	2.86	2.72	-0.13
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	3.47	2.77	-0.69
Fairfax	Wilshire	4	2.01	2.33	0.32
Glassell Park	Northeast Los Angeles	4	3.30	3.01	-0.29
Hancock Park	Wilshire	4	2.51	2.28	-0.23
Highland Park	Northeast Los Angeles	4	3.20	2.86	-0.33
Hollywood Hills	Hollywood	4	1.86	1.25	-0.61
Hollywood Hills West	Hollywood	4	2.02	2.08	0.06
Los Feliz	Hollywood	4	1.98	2.05	0.07
Mar Vista	Palms - Mar Vista - Del Rey	4	2.28	2.30	0.02
Mid-City	West Adams - Baldwin Hills - Leimert	4	2.76	2.54	-0.22
Mount Washington	Northeast Los Angeles	4	2.87	2.64	-0.22
Pacific Palisades	Brentwood - Pacific Palisades	4	1.96	2.38	0.42
Palms	Palms - Mar Vista - Del Rey	4	2.05	2.01	-0.04
Playa Vista	Westchester - Playa del Rey	4	2.09	2.08	-0.02
Rancho Park	West Los Angeles	4	2.32	2.37	0.06
Sawtelle	West Los Angeles	4	2.11	2.11	0.00
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	2.21	2.18	-0.03
Venice	Venice	4	1.99	1.94	-0.05
Westchester	Los Angeles International Airport	4	1.22	1.21	0.00
Westwood	Westwood	4	1.64	1.75	0.11

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

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Appendix C.4

Median Household Income

Neighborhood	CPA	Market Tier	Median Household Income		
			2010	2021	% Change
Adams-Normandie	South Los Angeles	1	$35,716	$45,058	26%
Arleta	Arleta - Pacoima	1	$75,993	$91,003	20%
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	$46,129	$47,964	4%
Boyle Heights	Boyle Heights	1	$40,522	$50,501	25%
Broadway-Manchester	Southeast Los Angeles	1	$40,851	$50,799	24%
Central-Alameda	Southeast Los Angeles	1	$37,940	$47,496	25%
Chatsworth	Chatsworth - Porter Ranch	1	$118,006	$118,432	0%
Chesterfield Square	South Los Angeles	1	$41,729	$63,499	52%
Encino	Encino - Tarzana	1	$154,966	$140,401	-9%
Florence	Southeast Los Angeles	1	$42,894	$51,268	20%
Gramercy Park	South Los Angeles	1	$64,166	$74,347	16%
Granada Hills	Granada Hills - Knollwood	1	$99,707	$103,223	4%
Green Meadows	Southeast Los Angeles	1	$43,436	$51,667	19%
Harbor City	Wilmington - Harbor City	1	$72,016	$71,221	-1%
Harbor Gateway	Harbor Gateway	1	$58,551	$67,717	16%
Harvard Park	South Los Angeles	1	$41,626	$60,612	46%
Historic South-Central	Southeast Los Angeles	1	$36,913	$42,718	16%
Lake Balboa	Reseda - West Van Nuys	1	$85,697	$84,578	-1%
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	1	$86,088	$71,658	-17%
Manchester Square	South Los Angeles	1	$61,051	$52,111	-15%
Mission Hills	Mission Hills - Panorama City - North Hills	1	$76,932	$79,581	3%
North Hills	Mission Hills - Panorama City - North Hills	1	$81,732	$93,795	15%
Northridge	Northridge	1	$97,703	$87,003	-11%
Pacoima	Arleta - Pacoima	1	$59,212	$65,202	10%
Panorama City	Mission Hills - Panorama City - North Hills	1	$63,981	$60,218	-6%
Pico-Union	South Los Angeles	1	$35,016	$41,852	20%
Porter Ranch	Chatsworth - Porter Ranch	1	$149,548	$137,547	-8%
Reseda	Reseda - West Van Nuys	1	$71,238	$72,002	1%
San Pedro	San Pedro	1	$85,927	$64,390	-25%
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$120,669	$133,683	11%
South Park	Southeast Los Angeles	1	$38,221	$47,294	24%
Sun Valley	Sun Valley - La Tuna Canyon	1	$66,164	$66,479	0%
Sylmar	Sylmar	1	$88,991	$87,766	-1%
Tarzana	Encino - Tarzana	1	$147,343	$151,422	3%
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$92,725	$89,504	-3%
University Park	South Los Angeles	1	$19,975	$20,506	3%
Valley Glen	Van Nuys - North Sherman Oaks	1	$59,978	$66,039	10%
Valley Village	North Hollywood - Valley Village	1	$80,273	$87,984	10%
Van Nuys	Van Nuys - North Sherman Oaks	1	$50,846	$53,656	6%
Vermont Knolls	South Los Angeles	1	$43,597	$46,093	6%
Vermont Square	South Los Angeles	1	$40,691	$55,364	36%
Vermont Vista	South Los Angeles	1	$39,799	$47,653	20%
Vermont-Slauson	South Los Angeles	1	$39,556	$49,797	26%
Watts	Southeast Los Angeles	1	$38,240	$38,851	2%
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$117,162	$124,318	6%
Wilmington	Wilmington - Harbor City	1	$63,734	$34,413	-46%
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$73,645	$82,154	12%
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$71,178	$68,629	-4%
Chinatown	Central City North	2	$46,301	$59,433	28%
Harvard Heights	South Los Angeles	2	$38,908	$44,320	14%
Hyde Park	West Adams - Baldwin Hills - Leimert	2	$51,655	$61,082	18%
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	$40,108	$55,032	37%
Leimert Park	West Adams - Baldwin Hills - Leimert	2	$63,235	$64,013	1%
Lincoln Heights	Northeast Los Angeles	2	$40,881	$52,042	27%
North Hollywood	North Hollywood - Valley Village	2	$56,824	$56,422	-1%
Pico-Robertson	Wilshire	2	$82,131	$105,509	28%
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	$62,190	$67,475	8%
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	$138,001	$141,213	2%
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	$86,850	$76,347	-12%
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tun	2	$93,237	$50,740	-46%
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$134,003	$124,586	-7%
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	$58,108	$71,391	23%
Del Rey	Palms - Mar Vista - Del Rey	3	$94,434	$96,378	2%
Downtown	Central City	3	$37,704	$75,676	101%
East Hollywood	Hollywood	3	$42,371	$50,398	19%
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	$60,694	$74,522	23%
El Sereno	Northeast Los Angeles	3	$59,069	$66,923	13%
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	$121,401	$41,797	-66%
Exposition Park	South Los Angeles	3	$40,117	$49,253	23%
Hollywood	Hollywood	3	$48,502	$54,773	13%
Koreatown	Wilshire	3	$46,413	$48,892	5%
Larchmont	Wilshire	3	$66,759	$80,491	21%
Mid-Wilshire	Wilshire	3	$80,384	$86,777	8%
Montecito Heights	Northeast Los Angeles	3	$65,559	$98,899	51%
Playa del Rey	Westchester - Playa del Rey	3	$83,920	$75,818	-10%
West Adams	West Adams - Baldwin Hills - Leimert	3	$44,663	$56,081	26%
West Los Angeles	West Los Angeles	3	$99,857	$107,357	8%
Westlake	Westlake	3	$37,846	$48,111	27%
Windsor Square	Wilshire	3	$100,963	$98,133	-3%
Atwater Village	Northeast Los Angeles	4	$67,405	$75,217	12%
Bel-Air	Bel Air - Beverly Crest	4	$294,399	$197,334	-33%
Beverly Crest	Bel Air - Beverly Crest	4	$240,578	$184,860	-23%
Beverly Grove	Wilshire	4	$100,756	$107,891	7%
Beverlywood	West Los Angeles	4	$150,702	$186,169	24%
Brentwood	Brentwood - Pacific Palisades	4	$220,434	$222,266	1%
Carthay	Wilshire	4	$110,929	$116,656	5%
Century City	West Los Angeles	4	$125,661	$114,132	-9%
Cheviot Hills	West Los Angeles	4	$161,944	$188,951	17%
Cypress Park	Northeast Los Angeles	4	$52,606	$63,554	21%
Eagle Rock	Northeast Los Angeles	4	$83,962	$100,970	20%
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	$60,781	$73,534	21%
Fairfax	Wilshire	4	$101,178	$119,295	18%
Glassell Park	Northeast Los Angeles	4	$71,788	$77,089	7%
Hancock Park	Wilshire	4	$142,017	$118,242	-17%
Highland Park	Northeast Los Angeles	4	$69,159	$82,741	20%
Hollywood Hills	Hollywood	4	$125,187	$75,593	-40%
Hollywood Hills West	Hollywood	4	$164,329	$155,243	-6%
Los Feliz	Hollywood	4	$108,089	$117,386	9%
Mar Vista	Palms - Mar Vista - Del Rey	4	$95,229	$99,794	5%
Mid-City	West Adams - Baldwin Hills - Leimert	4	$59,666	$69,395	16%
Mount Washington	Northeast Los Angeles	4	$87,189	$108,451	24%
Pacific Palisades	Brentwood - Pacific Palisades	4	$147,295	$233,993	59%
Palms	Palms - Mar Vista - Del Rey	4	$74,513	$92,811	25%
Playa Vista	Westchester - Playa del Rey	4	$94,151	$141,024	50%
Rancho Park	West Los Angeles	4	$101,179	$111,059	10%
Sawtelle	West Los Angeles	4	$85,509	$95,382	12%
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	$92,615	$106,720	15%
Venice	Venice	4	$102,809	$118,366	15%
Westchester	Los Angeles International Airport	4	$61,921	$60,783	-2%
Westwood	Westwood	4	$111,111	$87,989	-21%

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

AECOM

Appendix C.5

Housing Inventory

			Housing Inventory		
Neighborhood	CPA	Market Tier	2010	2021	Change
Adams-Normandie	South Los Angeles	1	5,661	5,786	125
Arleta	Arleta - Pacoima	1	7,826	8,302	476
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	7,350	7,700	350
Boyle Heights	Boyle Heights	1	26,719	27,933	1,213
Broadway-Manchester	Southeast Los Angeles	1	7,236	7,661	425
Central-Alameda	Southeast Los Angeles	1	9,953	11,911	1,957
Chatsworth	Chatsworth - Porter Ranch	1	16,088	17,745	1,657
Chesterfield Square	South Los Angeles	1	2,785	2,693	-92
Encino	Encino - Tarzana	1	19,541	20,703	1,162
Florence	Southeast Los Angeles	1	12,995	13,423	429
Gramercy Park	South Los Angeles	1	7,161	7,618	457
Granada Hills	Granada Hills - Knollwood	1	17,766	21,896	4,130
Green Meadows	Southeast Los Angeles	1	8,757	9,038	281
Harbor City	Wilmington - Harbor City	1	10,045	10,375	330
Harbor Gateway	Harbor Gateway	1	16,410	18,210	1,800
Harvard Park	South Los Angeles	1	3,120	3,008	-112
Historic South-Central	Southeast Los Angeles	1	11,599	12,097	498
Lake Balboa	Reseda - West Van Nuys	1	9,261	9,500	239
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	4,705	4,404	-301
Manchester Square	South Los Angeles	1	4,473	4,787	313
Mission Hills	Mission Hills - Panorama City - North Hills	1	5,452	5,596	144
North Hills	Mission Hills - Panorama City - North Hills	1	16,855	17,133	278
Northridge	Northridge	1	22,017	23,938	1,920
Pacoima	Arleta - Pacoima	1	18,803	19,254	450
Panorama City	Mission Hills - Panorama City - North Hills	1	18,804	20,113	1,309
Pico-Union	South Los Angeles	1	13,391	13,614	223
Porter Ranch	Chatsworth - Porter Ranch	1	8,726	8,347	-379
Reseda	Reseda - West Van Nuys	1	21,401	22,769	1,368
San Pedro	San Pedro	1	32,857	33,712	855
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	34,108	35,598	1,491
South Park	Southeast Los Angeles	1	8,116	8,565	449
Sun Valley	Sun Valley - La Tuna Canyon	1	20,902	21,445	543
Sylmar	Sylmar	1	22,386	24,553	2,168
Tarzana	Encino - Tarzana	1	14,475	14,635	159
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	5,057	6,051	994
University Park	South Los Angeles	1	5,874	6,472	598
Valley Glen	Van Nuys - North Sherman Oaks	1	20,884	21,294	410
Valley Village	North Hollywood - Valley Village	1	11,750	12,617	867
Van Nuys	Van Nuys - North Sherman Oaks	1	36,508	39,909	3,401
Vermont Knolls	South Los Angeles	1	7,234	7,220	-13
Vermont Square	South Los Angeles	1	14,433	14,962	529
Vermont Vista	South Los Angeles	1	7,901	8,236	335
Vermont-Slauson	South Los Angeles	1	8,458	8,208	-249
Watts	Southeast Los Angeles	1	10,766	11,197	430
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	14,050	14,469	419
Wilmington	Wilmington - Harbor City	1	18,621	20,451	1,830
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	16,473	16,450	-23
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	18,550	21,746	3,196
Chinatown	Central City North	2	3,419	4,532	1,113
Harvard Heights	South Los Angeles	2	5,956	6,264	308
Hyde Park	West Adams - Baldwin Hills - Leimert	2	14,523	15,483	960
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	8,772	9,134	362
Leimert Park	West Adams - Baldwin Hills - Leimert	2	6,040	5,921	-119
Lincoln Heights	Northeast Los Angeles	2	8,717	9,377	661
North Hollywood	North Hollywood - Valley Village	2	32,751	35,788	3,037
Pico-Robertson	Wilshire	2	11,618	12,753	1,135
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	5,974	6,084	110
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	19,122	19,819	697
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	5,548	6,378	830
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	12,450	12,962	512
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	28,416	30,363	1,947
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	17,610	18,499	888
Del Rey	Palms - Mar Vista - Del Rey	3	13,050	14,600	1,550
Downtown	Central City	3	21,249	40,920	19,671
East Hollywood	Hollywood	3	25,057	25,281	224
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	13,695	14,839	1,144
El Sereno	Northeast Los Angeles	3	16,519	12,982	-3,537
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	877	1,041	164
Exposition Park	South Los Angeles	3	10,078	10,847	769
Hollywood	Hollywood	3	38,864	44,875	6,011
Koreatown	Wilshire	3	45,747	49,011	3,264
Larchmont	Wilshire	3	3,758	3,892	133
Mid-Wilshire	Wilshire	3	21,165	22,582	1,418
Montecito Heights	Northeast Los Angeles	3	6,687	6,696	9
Playa del Rey	Westchester - Playa del Rey	3	5,991	6,195	203
West Adams	West Adams - Baldwin Hills - Leimert	3	7,574	7,778	204
West Los Angeles	West Los Angeles	3	6,089	6,778	688
Westlake	Westlake	3	38,571	43,575	5,005
Windsor Square	Wilshire	3	2,730	3,017	287
Atwater Village	Northeast Los Angeles	4	6,008	11,405	5,397
Bel-Air	Bel Air - Beverly Crest	4	3,207	3,114	-93
Beverly Crest	Bel Air - Beverly Crest	4	5,428	5,102	-326
Beverly Grove	Wilshire	4	13,500	14,086	586
Beverlywood	West Los Angeles	4	2,891	2,825	-66
Brentwood	Brentwood - Pacific Palisades	4	16,943	16,833	-110
Carthay	Wilshire	4	2,756	2,553	-203
Century City	West Los Angeles	4	4,111	4,932	821
Cheviot Hills	West Los Angeles	4	3,453	3,589	136
Cypress Park	Northeast Los Angeles	4	2,782	2,813	30
Eagle Rock	Northeast Los Angeles	4	13,736	13,904	168
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	2,414	2,625	211
Fairfax	Wilshire	4	6,952	7,229	277
Glassell Park	Northeast Los Angeles	4	8,795	9,414	619
Hancock Park	Wilshire	4	4,967	5,552	585
Highland Park	Northeast Los Angeles	4	18,890	18,323	-567
Hollywood Hills	Hollywood	4	13,910	14,061	151
Hollywood Hills West	Hollywood	4	9,746	9,783	37
Los Feliz	Hollywood	4	18,524	17,983	-541
Mar Vista	Palms - Mar Vista - Del Rey	4	16,425	16,718	293
Mid-City	West Adams - Baldwin Hills - Leimert	4	19,984	20,362	378
Mount Washington	Northeast Los Angeles	4	5,309	5,431	122
Pacific Palisades	Brentwood - Pacific Palisades	4	11,562	11,908	346
Palms	Palms - Mar Vista - Del Rey	4	22,783	23,839	1,056
Playa Vista	Westchester - Playa del Rey	4	4,692	8,280	3,588
Rancho Park	West Los Angeles	4	2,389	2,503	115
Sawtelle	West Los Angeles	4	22,254	21,286	-968
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	14,988	15,186	197
Venice	Venice	4	26,121	26,449	328
Westchester	Los Angeles International Airport	4	22,337	21,777	-560
Westwood	Westwood	4	20,615	21,484	869

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

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Appendix C.6

Tenure (% Renter)

			Tenure (Renter %)		
Neighborhood	CPA	Market Tier	2010	2021	% Change
Adams-Normandie	South Los Angeles	1	78%	78%	0%
Arleta	Arleta - Pacoima	1	26%	20%	-22%
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	81%	81%	0%
Boyle Heights	Boyle Heights	1	75%	75%	-1%
Broadway-Manchester	Southeast Los Angeles	1	62%	67%	8%
Central-Alameda	Southeast Los Angeles	1	69%	70%	2%
Chatsworth	Chatsworth - Porter Ranch	1	29%	35%	18%
Chesterfield Square	South Los Angeles	1	53%	50%	-6%
Encino	Encino - Tarzana	1	39%	41%	7%
Florence	Southeast Los Angeles	1	66%	72%	9%
Gramercy Park	South Los Angeles	1	41%	44%	6%
Granada Hills	Granada Hills - Knollwood	1	26%	34%	32%
Green Meadows	Southeast Los Angeles	1	56%	58%	3%
Harbor City	Wilmington - Harbor City	1	49%	55%	12%
Harbor Gateway	Harbor Gateway	1	54%	55%	3%
Harvard Park	South Los Angeles	1	53%	50%	-5%
Historic South-Central	Southeast Los Angeles	1	78%	79%	2%
Lake Balboa	Reseda - West Van Nuys	1	30%	39%	27%
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	28%	26%	-9%
Manchester Square	South Los Angeles	1	42%	54%	27%
Mission Hills	Mission Hills - Panorama City - North Hills	1	24%	27%	15%
North Hills	Mission Hills - Panorama City - North Hills	1	49%	53%	9%
Northridge	Northridge	1	48%	52%	9%
Pacoima	Arleta - Pacoima	1	47%	43%	-8%
Panorama City	Mission Hills - Panorama City - North Hills	1	63%	66%	5%
Pico-Union	South Los Angeles	1	90%	90%	0%
Porter Ranch	Chatsworth - Porter Ranch	1	7%	13%	84%
Reseda	Reseda - West Van Nuys	1	49%	51%	5%
San Pedro	San Pedro	1	55%	55%	1%
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	58%	60%	2%
South Park	Southeast Los Angeles	1	73%	73%	0%
Sun Valley	Sun Valley - La Tuna Canyon	1	47%	50%	6%
Sylmar	Sylmar	1	29%	36%	22%
Tarzana	Encino - Tarzana	1	40%	44%	10%
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	58%	65%	10%
University Park	South Los Angeles	1	92%	91%	-2%
Valley Glen	Van Nuys - North Sherman Oaks	1	64%	65%	2%
Valley Village	North Hollywood - Valley Village	1	67%	71%	7%
Van Nuys	Van Nuys - North Sherman Oaks	1	74%	75%	2%
Vermont Knolls	South Los Angeles	1	73%	78%	6%
Vermont Square	South Los Angeles	1	65%	63%	-2%
Vermont Vista	South Los Angeles	1	60%	64%	7%
Vermont-Slauson	South Los Angeles	1	65%	65%	0%
Watts	Southeast Los Angeles	1	68%	66%	-2%
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	16%	18%	17%
Wilmington	Wilmington - Harbor City	1	54%	59%	11%
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	44%	47%	7%
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	65%	73%	12%
Chinatown	Central City North	2	93%	95%	2%
Harvard Heights	South Los Angeles	2	83%	81%	-1%
Hyde Park	West Adams - Baldwin Hills - Leimert	2	56%	54%	-3%
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	71%	71%	0%
Leimert Park	West Adams - Baldwin Hills - Leimert	2	59%	55%	-6%
Lincoln Heights	Northeast Los Angeles	2	76%	73%	-5%
North Hollywood	North Hollywood - Valley Village	2	74%	76%	3%

			Tenure (Renter %)		
Neighborhood	CPA	Market Tier	2010	2021	% Change
Pico-Robertson	Wilshire	2	75%	78%	3%
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	19%	17%	-10%
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	54%	55%	3%
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	28%	29%	5%
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	38%	40%	5%
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	30%	43%	44%
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	65%	62%	-4%
Del Rey	Palms - Mar Vista - Del Rey	3	51%	56%	11%
Downtown	Central City	3	89%	93%	4%
East Hollywood	Hollywood	3	90%	91%	1%
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	75%	76%	1%
El Sereno	Northeast Los Angeles	3	52%	48%	-8%
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	84%	88%	5%
Exposition Park	South Los Angeles	3	73%	72%	-2%
Hollywood	Hollywood	3	92%	91%	-1%
Koreatown	Wilshire	3	93%	94%	1%
Larchmont	Wilshire	3	75%	75%	-1%
Mid-Wilshire	Wilshire	3	79%	80%	0%
Montecito Heights	Northeast Los Angeles	3	45%	45%	2%
Playa del Rey	Westchester - Playa del Rey	3	50%	53%	6%
West Adams	West Adams - Baldwin Hills - Leimert	3	65%	65%	0%
West Los Angeles	West Los Angeles	3	54%	59%	9%
Westlake	Westlake	3	95%	95%	0%
Windsor Square	Wilshire	3	61%	60%	-3%
Atwater Village	Northeast Los Angeles	4	66%	77%	17%
Bel-Air	Bel Air - Beverly Crest	4	8%	21%	145%
Beverly Crest	Bel Air - Beverly Crest	4	9%	11%	21%
Beverly Grove	Wilshire	4	74%	72%	-3%
Beverlywood	West Los Angeles	4	32%	34%	7%
Brentwood	Brentwood - Pacific Palisades	4	47%	47%	1%
Carthay	Wilshire	4	66%	52%	-22%
Century City	West Los Angeles	4	38%	49%	29%
Cheviot Hills	West Los Angeles	4	34%	27%	-19%
Cypress Park	Northeast Los Angeles	4	63%	64%	1%
Eagle Rock	Northeast Los Angeles	4	44%	48%	8%
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	61%	56%	-8%
Fairfax	Wilshire	4	76%	72%	-5%
Glassell Park	Northeast Los Angeles	4	58%	60%	5%
Hancock Park	Wilshire	4	51%	54%	7%
Highland Park	Northeast Los Angeles	4	61%	60%	-2%
Hollywood Hills	Hollywood	4	55%	55%	0%
Hollywood Hills West	Hollywood	4	36%	40%	11%
Los Feliz	Hollywood	4	74%	74%	0%
Mar Vista	Palms - Mar Vista - Del Rey	4	61%	63%	3%
Mid-City	West Adams - Baldwin Hills - Leimert	4	69%	68%	-1%
Mount Washington	Northeast Los Angeles	4	36%	38%	6%
Pacific Palisades	Brentwood - Pacific Palisades	4	18%	22%	23%
Palms	Palms - Mar Vista - Del Rey	4	86%	85%	-1%
Playa Vista	Westchester - Playa del Rey	4	58%	62%	8%
Rancho Park	West Los Angeles	4	55%	55%	-1%
Sawtelle	West Los Angeles	4	76%	75%	-1%
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	64%	64%	0%
Venice	Venice	4	63%	63%	0%
Westchester	Los Angeles International Airport	4	47%	51%	10%
Westwood	Westwood	4	62%	65%	6%

Source: U.S Census American Community Survey 2021, 5-Year Estimates; AECOM

AECOM

Appendix C.7

Median Gross Rent

			Median Rent per Unit (All Units) Source: 2021 ACS, 5-Year			Median Rent per Sq. Ft. (Post-2000 Units) Source: CoStar
Neighborhood	CPA	Market Tier	2010	2021	% Change	2010
Adams-Normandie	South Los Angeles	1	$829	$1,272	53%	$2.76
Arleta	Arleta - Pacoima	1	$1,508	$2,136	42%	$2.68
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	$939	$1,348	44%	$2.46
Boyle Heights	Boyle Heights	1	$867	$1,201	39%	$2.75
Broadway-Manchester	Southeast Los Angeles	1	$1,107	$1,325	20%	$2.32
Central-Alameda	Southeast Los Angeles	1	$838	$1,311	56%	$2.32
Chatsworth	Chatsworth - Porter Ranch	1	$1,561	$2,399	54%	$2.96
Chesterfield Square	South Los Angeles	1	$917	$1,327	45%	$2.83
Encino	Encino - Tarzana	1	$1,807	$2,064	14%	$2.94
Florence	Southeast Los Angeles	1	$941	$1,310	39%	$2.20
Gramercy Park	South Los Angeles	1	$980	$1,402	43%	$2.87
Granada Hills	Granada Hills - Knollwood	1	$1,504	$2,305	53%	$2.88
Green Meadows	Southeast Los Angeles	1	$1,036	$1,479	43%	$2.50
Harbor City	Wilmington - Harbor City	1	$984	$1,453	48%	$2.68
Harbor Gateway	Harbor Gateway	1	$1,049	$1,494	42%	$2.89
Harvard Park	South Los Angeles	1	$879	$1,315	50%	$2.82
Historic South-Central	Southeast Los Angeles	1	$847	$1,193	41%	$2.23
Lake Balboa	Reseda - West Van Nuys	1	$1,429	$2,112	48%	$2.43
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	$934	$687	-26%	$2.65
Manchester Square	South Los Angeles	1	$918	$1,204	31%	$2.86
Mission Hills	Mission Hills - Panorama City - North Hills	1	$1,330	$2,091	57%	$2.83
North Hills	Mission Hills - Panorama City - North Hills	1	$1,347	$1,836	36%	$2.68
Northridge	Northridge	1	$1,247	$1,591	28%	$2.92
Pacoima	Arleta - Pacoima	1	$1,133	$1,610	42%	$2.71
Panorama City	Mission Hills - Panorama City - North Hills	1	$1,235	$1,519	23%	$2.46
Pico-Union	South Los Angeles	1	$763	$1,140	49%	$2.51
Porter Ranch	Chatsworth - Porter Ranch	1	$1,740	$3,035	74%	$2.76
Reseda	Reseda - West Van Nuys	1	$1,338	$1,757	31%	$2.68
San Pedro	San Pedro	1	$961	$1,426	48%	$2.89
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$1,546	$2,478	60%	$2.59
South Park	Southeast Los Angeles	1	$910	$1,304	43%	$2.17
Sun Valley	Sun Valley - La Tuna Canyon	1	$1,164	$1,786	53%	$2.35
Sylmar	Sylmar	1	$1,441	$2,070	44%	$2.52
Tarzana	Encino - Tarzana	1	$1,515	$2,924	93%	$2.89
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$1,316	$2,097	59%	$2.53
University Park	South Los Angeles	1	$1,030	$1,411	37%	$1.85
Valley Glen	Van Nuys - North Sherman Oaks	1	$1,060	$1,590	50%	$2.28
Valley Village	North Hollywood - Valley Village	1	$1,154	$1,825	58%	$2.77
Van Nuys	Van Nuys - North Sherman Oaks	1	$892	$1,352	52%	$2.66
Vermont Knolls	South Los Angeles	1	$905	$1,145	27%	$2.54
Vermont Square	South Los Angeles	1	$878	$1,327	51%	$2.42
Vermont Vista	South Los Angeles	1	$884	$1,298	47%	$2.51
Vermont-Slauson	South Los Angeles	1	$916	$1,291	41%	$2.46
Watts	Southeast Los Angeles	1	$788	$1,095	39%	$2.58
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$1,601	$3,084	93%	$2.93
Wilmington	Wilmington - Harbor City	1	$570	$786	38%	$2.69
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$1,257	$1,899	51%	$2.67
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$1,194	$1,747	46%	$3.04
Chinatown	Central City North	2	$908	$1,633	80%	$3.40
Harvard Heights	South Los Angeles	2	$885	$1,295	46%	$3.22
Hyde Park	West Adams - Baldwin Hills - Leimert	2	$1,058	$1,522	44%	$3.32
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	$870	$1,354	56%	$3.11
Leimert Park	West Adams - Baldwin Hills - Leimert	2	$954	$1,378	44%	$3.43
Lincoln Heights	Northeast Los Angeles	2	$845	$1,294	53%	$3.29
North Hollywood	North Hollywood - Valley Village	2	$1,047	$1,616	54%	$3.41
Pico-Robertson	Wilshire	2	$1,484	$2,202	48%	$3.11
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$797	$1,532	92%	$3.35
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	$1,386	$2,361	70%	$3.08
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$973	$1,311	35%	$3.33
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$714	$1,100	54%	$3.38
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$1,683	$2,954	76%	$3.25
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	$979	$1,687	72%	$3.63
Del Rey	Palms - Mar Vista - Del Rey	3	$1,472	$2,327	58%	$3.74
Downtown	Central City	3	$972	$1,953	101%	$3.61
East Hollywood	Hollywood	3	$917	$1,402	53%	$3.69
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	$1,046	$1,680	61%	$3.49
El Sereno	Northeast Los Angeles	3	$954	$1,369	44%	$3.73
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	$1,093	$1,298	19%	$3.50
Exposition Park	South Los Angeles	3	$920	$1,278	39%	$4.30
Hollywood	Hollywood	3	$1,029	$1,665	62%	$3.82
Koreatown	Wilshire	3	$965	$1,499	55%	$3.60
Larchmont	Wilshire	3	$1,146	$1,938	69%	$3.90
Mid-Wilshire	Wilshire	3	$1,385	$2,063	49%	$3.96
Montecito Heights	Northeast Los Angeles	3	$1,035	$1,498	45%	$3.67
Playa del Rey	Westchester - Playa del Rey	3	$989	$1,363	38%	$4.09
West Adams	West Adams - Baldwin Hills - Leimert	3	$938	$1,424	52%	$4.39
West Los Angeles	West Los Angeles	3	$1,578	$2,570	63%	$3.30
Westlake	Westlake	3	$849	$1,341	58%	$3.57
Windsor Square	Wilshire	3	$1,280	$2,006	57%	$3.65
Atwater Village	Northeast Los Angeles	4	$1,112	$1,732	56%	$4.81
Bel-Air	Bel Air - Beverly Crest	4	$1,435	$2,518	76%	$5.38
Beverly Crest	Bel Air - Beverly Crest	4	$1,973	$2,837	44%	$6.45
Beverly Grove	Wilshire	4	$1,546	$2,229	44%	$4.56
Beverlywood	West Los Angeles	4	$1,835	$3,055	66%	$4.29
Brentwood	Brentwood - Pacific Palisades	4	$1,764	$2,319	31%	$4.33
Carthay	Wilshire	4	$1,560	$2,490	60%	$4.37
Century City	West Los Angeles	4	$1,924	$3,115	62%	$4.75
Cheviot Hills	West Los Angeles	4	$1,635	$2,483	52%	$5.08
Cypress Park	Northeast Los Angeles	4	$870	$1,419	63%	$4.36
Eagle Rock	Northeast Los Angeles	4	$1,226	$1,697	38%	$4.66
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	$988	$1,883	91%	$4.20
Fairfax	Wilshire	4	$1,724	$2,174	26%	$4.68
Glassell Park	Northeast Los Angeles	4	$1,024	$1,604	57%	$4.38
Hancock Park	Wilshire	4	$1,565	$2,574	64%	$4.08
Highland Park	Northeast Los Angeles	4	$1,058	$1,579	49%	$4.11
Hollywood Hills	Hollywood	4	$1,584	$1,319	-17%	$4.54
Hollywood Hills West	Hollywood	4	$1,691	$2,340	38%	$4.76
Los Feliz	Hollywood	4	$1,305	$1,901	46%	$4.90
Mar Vista	Palms - Mar Vista - Del Rey	4	$1,372	$2,210	61%	$4.32
Mid-City	West Adams - Baldwin Hills - Leimert	4	$1,110	$1,646	48%	$6.06
Mount Washington	Northeast Los Angeles	4	$1,047	$2,288	119%	$4.35
Pacific Palisades	Brentwood - Pacific Palisades	4	$602	$879	46%	$6.89
Palms	Palms - Mar Vista - Del Rey	4	$1,302	$2,040	57%	$3.55
Playa Vista	Westchester - Playa del Rey	4	$1,792	$2,891	61%	$4.39
Rancho Park	West Los Angeles	4	$1,591	$2,215	39%	$5.29
Sawtelle	West Los Angeles	4	$1,444	$2,213	53%	$4.94
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	$1,177	$1,804	53%	$4.20
Venice	Venice	4	$1,623	$2,557	58%	$3.67
Westchester	Los Angeles International Airport	4	$824	$1,262	53%	$3.95
Westwood	Westwood	4	$1,512	$2,269	50%	$4.35

Source: U.S Census American Community Survey 2021, 5-Year Estimates; CoStar; AECOM

Appendix C.8

Home Value (sales price per SF living space)

Neighborhood	CPA	Market Tier	Home Value (All Units & Recent Sales) 2010
Adams-Normandie	South Los Angeles	1	$505
Arleta	Arleta - Pacoima	1	$489
Arlington Heights	West Adams - Baldwin Hills - Leimert	1	$619
Boyle Heights	Boyle Heights	1	$481
Broadway-Manchester	Southeast Los Angeles	1	$424
Central-Alameda	Southeast Los Angeles	1	$424
Chatsworth	Chatsworth - Porter Ranch	1	$472
Chesterfield Square	South Los Angeles	1	$517
Encino	Encino - Tarzana	1	$688
Florence	Southeast Los Angeles	1	$402
Gramercy Park	South Los Angeles	1	$524
Granada Hills	Granada Hills - Knollwood	1	$525
Green Meadows	Southeast Los Angeles	1	$456
Harbor City	Wilmington - Harbor City	1	$489
Harbor Gateway	Harbor Gateway	1	$527
Harvard Park	South Los Angeles	1	$515
Historic South-Central	Southeast Los Angeles	1	$408
Lake Balboa	Reseda - West Van Nuys	1	$550
Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	1	$484
Manchester Square	South Los Angeles	1	$523
Mission Hills	Mission Hills - Panorama City - North Hills	1	$518
North Hills	Mission Hills - Panorama City - North Hills	1	$489
Northridge	Northridge	1	$462
Pacoima	Arleta - Pacoima	1	$496
Panorama City	Mission Hills - Panorama City - North Hills	1	$454
Pico-Union	South Los Angeles	1	$582
Porter Ranch	Chatsworth - Porter Ranch	1	$504
Reseda	Reseda - West Van Nuys	1	$526
San Pedro	San Pedro	1	$515
Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$726
South Park	Southeast Los Angeles	1	$396
Sun Valley	Sun Valley - La Tuna Canyon	1	$552
Sylmar	Sylmar	1	$461
Tarzana	Encino - Tarzana	1	$529
Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	1	$629
University Park	South Los Angeles	1	$339
Valley Glen	Van Nuys - North Sherman Oaks	1	$596
Valley Village	North Hollywood - Valley Village	1	$639
Van Nuys	Van Nuys - North Sherman Oaks	1	$565
Vermont Knolls	South Los Angeles	1	$464
Vermont Square	South Los Angeles	1	$442
Vermont Vista	South Los Angeles	1	$458
Vermont-Slauson	South Los Angeles	1	$450
Watts	Southeast Los Angeles	1	$471
West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$535
Wilmington	Wilmington - Harbor City	1	$491
Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills	1	$487
Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$515
Chinatown	Central City North	2	$621
Harvard Heights	South Los Angeles	2	$588
Hyde Park	West Adams - Baldwin Hills - Leimert	2	$607
Jefferson Park	West Adams - Baldwin Hills - Leimert	2	$568
Leimert Park	West Adams - Baldwin Hills - Leimert	2	$627
Lincoln Heights	Northeast Los Angeles	2	$601
North Hollywood	North Hollywood - Valley Village	2	$592
Pico-Robertson	Wilshire	2	$723
Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$611
Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass	2	$752
Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$608
Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La T	2	$618
Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills	2	$599
Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert	3	$663
Del Rey	Palms - Mar Vista - Del Rey	3	$889
Downtown	Central City	3	$691
East Hollywood	Hollywood	3	$748
Echo Park	Silver Lake - Echo Park - Elysian Valley	3	$793
El Sereno	Northeast Los Angeles	3	$681
Elysian Park	Silver Lake - Echo Park - Elysian Valley	3	$640
Exposition Park	South Los Angeles	3	$480
Hollywood	Hollywood	3	$709
Koreatown	Wilshire	3	$643
Larchmont	Wilshire	3	$712
Mid-Wilshire	Wilshire	3	$716
Montecito Heights	Northeast Los Angeles	3	$671
Playa del Rey	Westchester - Playa del Rey	3	$748
West Adams	West Adams - Baldwin Hills - Leimert	3	$689
West Los Angeles	West Los Angeles	3	$810
Westlake	Westlake	3	$654
Windsor Square	Wilshire	3	$668
Atwater Village	Northeast Los Angeles	4	$879
Bel-Air	Bel Air - Beverly Crest	4	$983
Beverly Crest	Bel Air - Beverly Crest	4	$1,179
Beverly Grove	Wilshire	4	$897
Beverlywood	West Los Angeles	4	$784
Brentwood	Brentwood - Pacific Palisades	4	$986
Carthay	Wilshire	4	$798
Century City	West Los Angeles	4	$868
Cheviot Hills	West Los Angeles	4	$927
Cypress Park	Northeast Los Angeles	4	$796
Eagle Rock	Northeast Los Angeles	4	$852
Elysian Valley	Silver Lake - Echo Park - Elysian Valley	4	$768
Fairfax	Wilshire	4	$856
Glassell Park	Northeast Los Angeles	4	$800
Hancock Park	Wilshire	4	$746
Highland Park	Northeast Los Angeles	4	$750
Hollywood Hills	Hollywood	4	$829
Hollywood Hills West	Hollywood	4	$870
Los Feliz	Hollywood	4	$896
Mar Vista	Palms - Mar Vista - Del Rey	4	$1,047
Mid-City	West Adams - Baldwin Hills - Leimert	4	$710
Mount Washington	Northeast Los Angeles	4	$794
Pacific Palisades	Brentwood - Pacific Palisades	4	$1,258
Palms	Palms - Mar Vista - Del Rey	4	$856
Playa Vista	Westchester - Playa del Rey	4	$871
Rancho Park	West Los Angeles	4	$967
Sawtelle	West Los Angeles	4	$834
Silver Lake	Silver Lake - Echo Park - Elysian Valley	4	$833
Venice	Venice	4	$1,099
Westchester	Los Angeles International Airport	4	$877
Westwood	Westwood	4	$708

Source: Redfin; AECOM

AECOM

Appendix D.1

Regional Center Contributions to Site Inventory

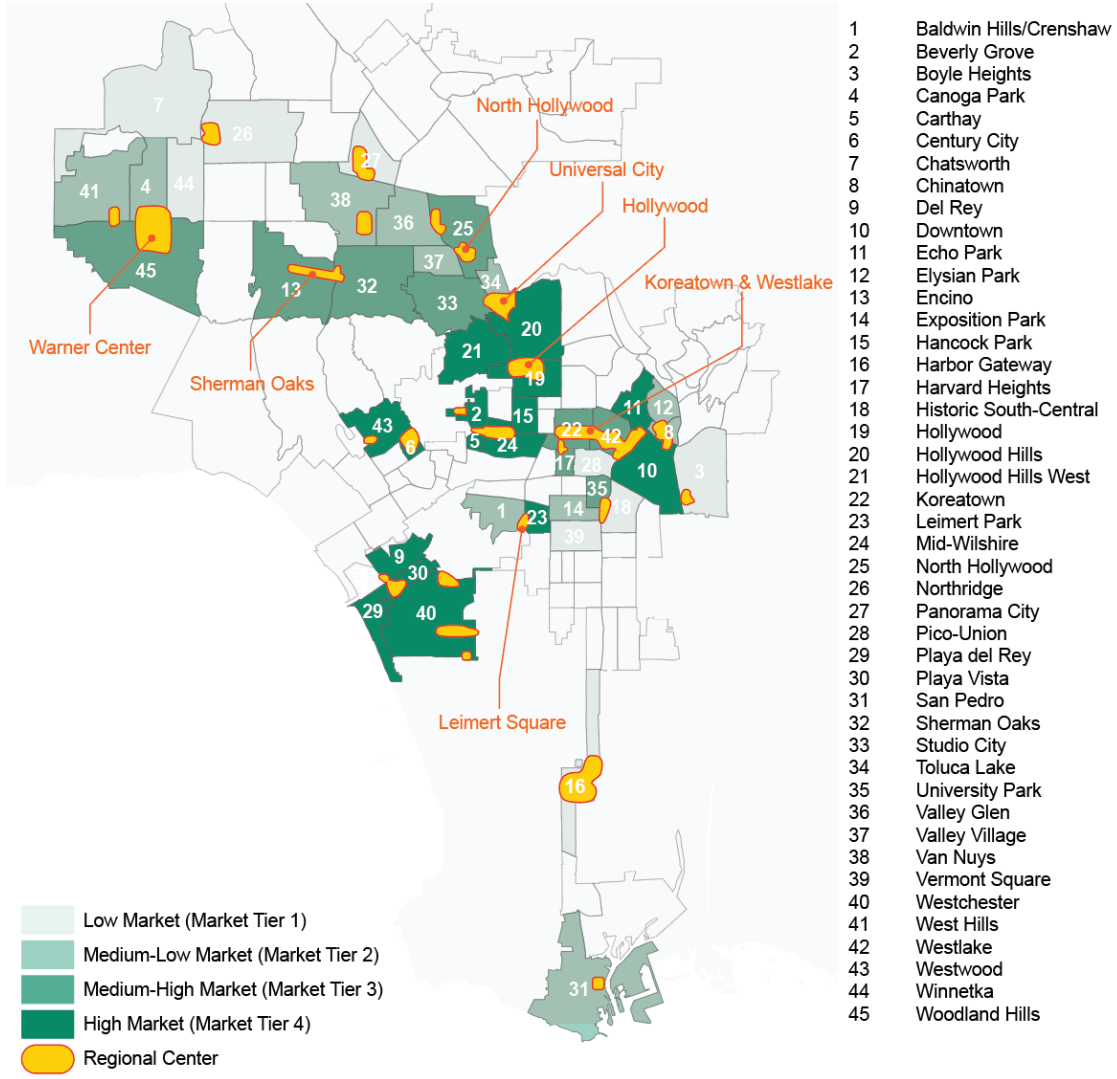
- Regional Centers, defined by the General Plan as a "focal point of regional commerce, identify, and activity," are usually zoned to support higher densities than surrounding areas and can have unique sub-market characteristics.
- As shown in the breakdown below, **Regional Center parcels contribute a relatively small 11% of total citywide unit capacity.**
- **The most significant Regional Center contribution is in the High Medium Cohort**, with an estimated unbuilt capacity of 120,497 units amounting to 89% of all Regional Center units and 14% of all High Medium units citywide.

Regional Center Parcels vs. All Parcels		Citywide						Market Tier 1		Market Tier 2		Market Tier 3		Market Tier 4	
		Total Area		Allowable Units	Existing Units	Unbilt Capacity		Parcel	Unbilt	Parcel	Unbilt	Parcel	Unbilt	Parcel	Unbilt
Density Cohort	DU/AC	AC	%	Units	Units	Units	%	AC	Units	AC	Units	AC	Units	AC	Units
All Parcels															
Low Medium I	10 - 17	5,693	18%	97,181	54,716	42,465	3%	3,398	25,474	394	2,980	786	5,554	1,114	8,457
Low Medium II	18 - 43	6,442	20%	173,297	79,743	93,554	8%	3,038	45,786	608	8,458	1,094	15,191	1,702	24,119
Medium	44 - 55	5,922	19%	322,432	131,959	190,473	15%	2,422	77,441	993	31,439	1,426	49,133	1,080	32,461
High Medium	56 - 109	8,840	28%	959,735	73,553	886,182	71%	4,186	426,496	1,386	139,739	2,198	210,729	1,071	109,219
High	110 - 218	148	0%	32,296	4,357	27,939	2%	4	675	0	0	135	25,983	9	1,282
Other	N/A	4,483	14%	6,564	788	5,776	0%	2,391	3,566	543	550	164	230	1,384	1,430
Total		**31,528**	**100%**	**1,591,506**	**345,116**	**1,246,390**	**100%**	**15,439**	**579,437**	**3,925**	**183,165**	**5,804**	**306,819**	**6,360**	**176,969**
Regional Center Parcels															
Low Medium I	10 - 17	42	2%	728	461	267	0%	11	93	0	0	12	54	18	119
Low Medium II	18 - 29	191	8%	5,565	2,872	2,693	2%	92	1,406	44	419	39	641	16	227
Medium	30 - 55	246	10%	13,374	4,641	8,733	6%	121	3,954	39	1,203	68	2,807	18	770
High Medium	56 - 109	1,853	76%	135,538	15,041	120,497	89%	596	40,968	385	24,500	690	42,525	181	12,503
High	110 - 218	15	1%	3,177	0	3,177	2%	13	2,806	0	0	2	372	0	0
Other	N/A	95	4%	114	4	110	0%	56	65	10	10	2	2	27	35
Total		**2,440**	**100%**	**158,496**	**23,019**	**135,477**	**100%**	**889**	**49,291**	**479**	**26,132**	**812**	**46,400**	**260**	**13,654**
% of All Parcels		**8%**				**11%**		**6%**	**9%**	**12%**	**14%**	**14%**	**15%**	**4%**	**8%**

Appendix D.2

Regional Centers and Market Tiers

- To determine whether Regional Centers should be treated as distinct sub-geographies for market tier classification, AECOM prepared the map at right, **which overlays the city's Regional Centers on the neighborhood sub-geographies** in which they are located.
- With this map as a guide, **AECOM has determined that Regional-Center-level market tier re-labeling will not have a meaningful impact on the feasibility study findings** and recommends that the current geographical submarkets and market tiers be retained for several reasons:
    - Many Regional Centers, such as those in Hollywood, Century City, Westwood, Beverly Grove, Carthay, and mid-Wilshire, are already in Tier 4 markets and cannot be upgraded further.
    - The Tier 3 Regional Centers, including Sherman Oaks, Universal City, North Hollywood, and Koreatown & Wilshire, reasonably reflect the market characteristics of the neighborhoods in which they're located. While Warner Center straddles Tier 3 and Tier 2 neighborhoods, the Tier 2 portion correctly occupies a lower-tier submarket from the Tier 3 portion.
    - For the density bonus analysis, it's more conservative to skew to the lower market tier, because higher-tier markets typically support more affordable units and thus need lower density bonuses to achieve policy goals. Consequently, keeping the regional centers in lower tiers will yield recommendations for higher density bonuses, thereby providing more overall incentive to encourage housing production.
    - Ultimately, the CPIO process may offer a better and more precise vehicle to further adjust incentive programs at the Regional Center level.



Appendix E

Estimated Max Density in DU/AC for Existing Zoning

Summary of Zoning and Density (AECOM)

Zone	Use	Min Unit Area (AC)	Max DU/AC
Agricultural			
A1	**Agriculture** One-Family Dwellings, Parks, Playgrounds, Community Centers, Golf Courses, Agricultural Uses	2.50	0.40
A2	**Agriculture** A1 uses	1.00	1
RA	**Suburban** Limited Agricultural Uses, One-Family Dwellings, Home Occupations	0.40	2
Residential Estate			
RE40	**Residential Estate** One-Family Dwellings, Parks, Playgrounds, Community Centers, Truck Gardening, Accessory Living Quarters, Home Occupations	0.92	1
RE20		0.46	2
RE15		0.34	2
RE11		0.25	3
RE9		0.21	4
One- Family Residential			
RS	**Suburban** One-Family Dwellings, Parks, Playgrounds, Community Centers, Truck Gardening, Home Occupations	1.72	0.58
R1 (including R1V, R1F, R1R, R1H)	**One-Family Residential** RS Uses	0.11	8
RU	**Residential Urban**	n/a	n/a
RZ2.5	**Residential Zero Side Yard**	n/a	n/a
RZ3		n/a	n/a
RZ4		n/a	n/a
RW1	**One-Family Residential Waterways** One-Family Dwellings, Home Occupations (10)	n/a	n/a
Multiple Residential			
R2	**Two-Family Dwellings** R1 Uses, Home Occupations	0.06	17
RD1.5	**Restricted Density Multiple Dwelling** One-Family Dwellings, Two-Family Dwellings, Apartment Houses, Multiple Dwellings, Home Occupations	0.03	29
RD2		0.05	21
RD3		0.07	14
RD4		0.09	10
RD5		0.11	8
RD6		0.14	7
RMP	**Mobile Home Park** Home Occupations	0.46	2
RW2	**Two-Family Residential Waterways** One-Family Dwellings, Two-Family Dwellings, Home Occupations	0.03	37
R3	**Multiple Dwelling** R2 Uses, Apartment Houses, Multiple Dwellings, Child Care (20 max)	0.02	54
RAS3	**Residential/Accessory** R3 uses, Limited ground floor commercial	0.02	54
R4	**Multiple Dwelling** R3 Uses, Churches, Schools, Childcare, Homeless Shelter	0.01	108
RAS4	**Residential/Accessory** R4 uses, Limited ground floor commercial	0.01	108
R5	**Multiple Dwelling** R4 Uses, Clubs, Lodges, Hospitals, Sanitariums, Hotels	0.00	217

Summary of Zoning and Density (AECOM)

Zone	Use	Min Unit Area (AC)	Max DU/AC
Commercial			
CR	**Limited Commercial** Banks, Clubs, Hotels, Churches, Schools, Business and Professional Colleges, Child Care, Parking Areas, Offices, R4 Uses	0.01	108
C1	**Limited Commercial** Local Retail Stores < 100,000 sq-ft, Offices or Businesses, Hotels, Hospitals and/or Clinics, Parking Areas, CR Uses except for Churches, Schools, Museums, R3 Uses	0.02	54
C1.5	**Limited Commercial** C1 Uses – Retail, Theaters, Hotels, Broadcasting Studios, Parking Buildings, Parks and Playgrounds, R4 Uses	0.01	108
C2	**Commercial** C1.5 Uses; Retail w/ Limited Manufacturing, Service Stations and Garages, Retail Contr. Business, Churches, Schools, Auto Sales, R4 Uses	0.01	108
C4	**Commercial** C2 Uses with Limitation, R4 Uses	0.01	108
C5	**Commercial** C2 Uses, Limited Floor Area for Manufacturing of CM Zone Type, R4 Uses	0.01	108
CM	**Commercial Manufacturing** Wholesale, Storage, Clinics, Limited Manufacturing, Limited C2 Uses, R3 Uses	0.02	54
Manufacturing			
MR1	**Restricted Industrial** CM Uses, Limited Commercial and Manufacturing, Clinics, Media Products, Limited Machine Shops, Animal Hospitals and Kennels	0.01	108
M1	**Limited Industrial** MR1 Uses, Limited Industrial and Manufacturing Uses, no R Zone Uses, no Hospitals, Schools, Churches, any Enclosed C2 Use, Wireless Telecommunications, Household Storage	0.01	108
MR2	**Restricted Light Industrial** MR1 Uses, Additional Industrial Uses, Mortuaries, Animal Keeping	0.01	108
M2	**Light Industrial** M1 and MR2 Uses, Additional Industrial Uses, Storage Yards, Animal Keeping, Enclosed Composting, no R Zone Uses	0.01	108
M3	**Heavy Industrial** M2 Uses, any Industrial I Uses, Nuisance Type Uses 500 ft from any other Zone, no R Zone Uses	0.01	108
Parking			
P	**Automobile Parking – Surface and Underground** Surface Parking; Parking Buildings if located below grade; Land in a P Zone may also be classified in A or R Zone	n/a	n/a
PB	**Parking Building** P Zone uses, Parking Buildings at or above grade; Automobile Parking within a Building	n/a	n/a
Open Space/Public Facilities/Submerged Lands			
OS	**Open Space** Parks and Recreation Facilities,Nature Reserves, Closed Sanitary Landfill sites, Public Water Supply Reservoirs, Water Conservation Areas	n/a	n/a
PF	**Public Facilities** Agricultural Uses, Parking Under Freeways, Fire and Police Stations, Government Buildings, Public Libraries, Post Offices, Public Health Facilities, Public Elementary and Secondary Schools, Qualified Permanent Supportive Housing Projects (12)	n/a	n/a
SL	**Submerged Lands** Navigation, Shipping, Fishing, Recreation	n/a	n/a

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Appendix F

Comparing Housing Element Site Inventory and Permit Database (2017-2021)

A comparison between density cohorts from the Housing Element Site Inventory (from the prior slide) and recent development from a database provided by City staff of building permits from 2017-2021 (prepared by BAE as the Inclusionary Zoning Study Permit Database) shows a high level of consistency between the historical trend and future site supply.

AECOM also estimated unbuilt capacity of each density cohort by using the zoning designations to estimate allowable units, from which existing inventory was deducted to yield an estimate of unbuilt capacity.

Density Cohort	Min Land Area Per Unit	Specific Density	Generalized Density	Housing Element Site Inventory				Inclusionary Zoning Study Permit Dataset			
				Total Area (AC)	%	Unbuilt Capacity (Units)	%	Total Area (AC)	%	Permitted Units	%
Low	N/A	N/A	1 unit per lot	3,948	13%	3,948	0%	7	2%	91	0%
	1 – 2.5ac	0.40	Less than 1	0	0%	0	0%	0	0%	0	0%
	40,000sf - 1ac	1.00	1	0	0%	0	0%	0	0%	0	0%
		1.09		0	0%	0	0%	0	0%	0	0%
	15,000sf - 20,000sf	2.18	2	3	0%	5	0%	1	0%	24	0%
		2.49									
		2.90									
	11,000sf	3.96	3	94	0%	348	0%	1	0%	33	0%
	9,000sf	4.84	4	0	0%	0	0%	0	0%	0	0%
	7,500sf	5.81	5	0	0%	0	0%	0	0%	0	0%
	6,000sf	7.26	7	236	1%	1,182	0%	0	0%	0	0%
	5,000sf	8.71	8	61	0%	293	0%	0	0%	0	0%
Low Medium I	4,000sf	10.89	10	29	0%	195	0%	0	0%	0	0%
	3,000sf	14.52	14	618	2%	4,549	0%	1	0%	6	0%
	2,500sf	17.42	17	5,045	16%	37,722	3%	0	0%	5	0%
Low Medium II	2,000sf	21.78	21	2,403	8%	27,378	2%	14	3%	220	1%
	1,500sf	29.04	29	3,637	12%	57,263	5%	23	5%	681	2%
	1,200sf	36.00	36	275	1%	5,734	0%	4	1%	170	0%
	1,150sf	37.88	37	4	0%	88	0%	0	0%	0	0%
	1,000sf	43.00	43	123	0%	3,092	0%	0	0%	0	0%
Medium	800sf	54.45	54	5,922	19%	190,473	15%	139	31%	6,804	18%
High Medium	600sf	72.00	72	80	0%	2,913	0%	0	0%	0	0%
	400sf	108.90	108	8,760	28%	883,269	71%	215	48%	22,702	61%
High	200sf	217.80	217	148	0%	27,939	2%	11	3%	2,629	7%
Other	N/A	N/A	N/A	141	0%	0	0%	30	7%	3,677	10%
Total				**31,528**	**100%**	**1,246,390**	**100%**	**445**	**100%**	**37,042**	**100%**

Appendix G.0

Development Activity by Market Tier, Income Category, Project and Site Size (Building Permits 2017-2021*)

Lot	Height	Unit Count	Low Market Tier		Medium-Low Market Tier		Medium-High Market Tier		High Market Tier	
			Market-Rate	Mixed-Income	Market-Rate	Mixed-Income	Market-Rate	Mixed-Income	Market-Rate	Mixed-Income
Small Lots (Less than 6,000 SF)	Low-Rise (1-3 Stories)	Small Scale (5-12 Units)	1	2	4		2	2	6	
		Medium Scale (13-49 Units)								1
		Large Scale (50 or More units)								
	Mid-Rise (4 - 8 Stories)	Small Scale (5-12 Units)	1	1	5		1	2	2	2
		Medium Scale (13-49 Units)	1		1			5	1	1
		Large Scale (50 or More units)		1				3		2
	High-Rise (9 Stories or Higher)	Small Scale (5-12 Units)								
		Medium Scale (13-49 Units)								
		Large Scale (50 or More units)								
Typical Lots (6,000 - 10,000 SF)	Low-Rise (1-3 Stories)	Small Scale (5-12 Units)	24	6	14	1	33	5	13	2
		Medium Scale (13-49 Units)	1	1	2	2	1	6	1	1
		Large Scale (50 or More units)								
	Mid-Rise (4 - 8 Stories)	Small Scale (5-12 Units)	5	5	10	3	15	4	19	7
		Medium Scale (13-49 Units)	2	10	4	3	12	34	4	11
		Large Scale (50 or More units)		2	1	1		3		1
	High-Rise (9 Stories or Higher)	Small Scale (5-12 Units)								
		Medium Scale (13-49 Units)								
		Large Scale (50 or More units)								
Above-Average Lots (10,000 - 20,000 SF)	Low-Rise (1-3 Stories)	Small Scale (5-12 Units)	14	5	7	1	2		1	
		Medium Scale (13-49 Units)	7	6		3	1	7	6	2
		Large Scale (50 or More units)								
	Mid-Rise (4 - 8 Stories)	Small Scale (5-12 Units)		1	1	1		1	3	1
		Medium Scale (13-49 Units)	4	12	9	18	23	28	10	12
		Large Scale (50 or More units)		3	1	4	2	17		10
	High-Rise (9 Stories or Higher)	Small Scale (5-12 Units)								
		Medium Scale (13-49 Units)								
		Large Scale (50 or More units)					2			
Large Lots (Over 20,000 SF)	Low-Rise (1-3 Stories)	Small Scale (5-12 Units)	7		1				2	
		Medium Scale (13-49 Units)	8	3		5	3	1	3	2
		Large Scale (50 or More units)	1							2
	Mid-Rise (4 - 8 Stories)	Small Scale (5-12 Units)						1	3	
		Medium Scale (13-49 Units)	3	6	3	2	3	3	5	5
		Large Scale (50 or More units)	6	13	10	13	13	26	3	12
	High-Rise (9 Stories or Higher)	Small Scale (5-12 Units)								
		Medium Scale (13-49 Units)								
		Large Scale (50 or More units)					8	2	3	

Data from Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department. Excludes the development less than 4 units as well as applications in the Central City and Central City North Neighborhoods

Appendix G.1

Density Cohorts by Market Tier 1: Low

City of LA Housing Element Site Inventory Distribution by Density Cohorts

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Unbuilt Capacity (units)	Unbuilt Capacity %
Low Medium I	10-17 DU/AC	3,398	22%	25,474	4%
Low Medium II	18-43DU/AC	3,038	20%	45,786	8%
Medium	44-55 DU/AC	2,422	16%	77,441	13%
High Medium	56-109 DU/AC	4,186	27%	426,496	74%
High	110-218 DU/AC	4	0%	675	0%
Others (<10 DU/AC & Specific Zones)	N/A	2,391	15%	3,566	1%
Total		**15,439**	**100%**	**579,437**	**100%**

Recent Development Permit Distribution by Density Cohorts, 2017-2021

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Permitted (units)	Share of Permitted Units %
Low Medium I	10-17 DU/AC	0	0%	5	0%
Low Medium II	18-43 DU/AC	15	11%	360	7%
Medium	44-55 DU/AC	68	53%	1,753	30%
High Medium	56-109 DU/AC	43	34%	3,549	62%
High	110-218 DU/AC	0	0%	0	0%
Others (<10 DU/AC & Specific Zones)	N/A	2	2%	79	1%
Total		**128**	**100%**	**5,746**	**100%**

Recent development based on projects included in the Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department. Excludes the development less than 5 units

Appendix G.2

Density Cohorts by Market Tier 2: Medium-Low

City of LA Housing Element Site Inventory Distribution by Density Cohorts

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Unbuilt Capacity (units)	Unbuilt Capacity %
Low Medium I	10-17 DU/AC	394	10%	2,980	2%
Low Medium II	18-43DU/AC	608	15%	8,458	5%
Medium	44-55 DU/AC	993	25%	31,439	17%
High Medium	56-109 DU/AC	1,386	35%	139,739	76%
High	110-218 DU/AC	0	0%	0	0%
Others (<10 DU/AC & Specific Zones)	N/A	543	14%	550	0%
Total		**3,925**	**100%**	**183,165**	**100%**

Recent Development Permit Distribution by Density Cohorts, 2017-2021

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Permitted (units)	Share of Permitted Units %
Low Medium I	10-17 DU/AC	0	0%	0	0%
Low Medium II	18-29 DU/AC	3	5%	108	2%
Medium	30-55 DU/AC	20	29%	1,397	20%
High Medium	56-109 DU/AC	19	28%	2,452	36%
High	110-218 DU/AC	0	0%	0	0%
Others (<10 DU/AC & Specific Zones) *	N/A	25	37%	2,901	42%
Total		67	100%	6,858	100%

Recent development based on projects included in the Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department. Excludes the development less than 5 units

*Warner Center Specific Plan falls within Medium-Low Market Tier and significant development in that area over the last 5 years skews the distribution on this Market Tier.

Appendix G.3

Density Cohorts by Market Tier 3: Medium-High

City of LA Housing Element Site Inventory Distribution by Density Cohorts

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Unbuilt Capacity (units)	Unbuilt Capacity %
Low Medium I	10-17 DU/AC	786	14%	5,554	2%
Low Medium II	18-43DU/AC	1,094	19%	15,191	5%
Medium	44-55 DU/AC	1,426	25%	49,133	16%
High Medium	56-109 DU/AC	2,198	38%	210,729	69%
High	110-218 DU/AC	135	2%	25,983	8%
Others (<10 DU/AC & Specific Zones)	N/A	164	3%	230	0%
Total		**5,804**	**100%**	**306,819**	**100%**

Recent Development Permit Distribution by Density Cohorts, 2017-2021

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Permitted (units)	Share of Permitted Units %
Low Medium I	10-17 DU/AC	1	0%	6	0%
Low Medium II	18-29 DU/AC	3	2%	111	1%
Medium	30-55 DU/AC	31	20%	2,337	12%
High Medium	56-109 DU/AC	98	64%	12,845	69%
High	110-218 DU/AC	11	7%	2,629	14%
Others (<10 DU/AC & Specific Zones)	N/A	9	6%	649	3%
Total		**153**	**100%**	**18,577**	**100%**

Recent development based on projects included in the Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department. Excludes the development less than 5 units

Appendix G.4

Density Cohorts by Market Tier 4: High

City of LA Housing Element Site Inventory Distribution by Density Cohorts

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Unbuilt Capacity (units)	Unbuilt Capacity %
Low Medium I	10-17 DU/AC	1,114	18%	8,457	5%
Low Medium II	18-43DU/AC	1,702	27%	24,119	14%
Medium	44-55 DU/AC	1,080	17%	32,461	18%
High Medium	56-109 DU/AC	1,071	17%	109,219	62%
High	110-218 DU/AC	9	0%	1,282	1%
Others (<10 DU/AC & Specific Zones)	N/A	1,384	22%	1,430	1%
Total		**6,360**	**100%**	**176,969**	**100%**

Recent Development Permit Distribution by Density Cohorts, 2017-2021

Density Cohort	Maximum Base Density Range (DU/AC)	Land Area (acres)	% Land Area of Total	Permitted (units)	Share of Permitted Units %
Low Medium I	10-17 DU/AC	0	0%	0	0%
Low Medium II	18-29 DU/AC	19	20%	322	7%
Medium	30-55 DU/AC	20	21%	1,487	23%
High Medium	56-109 DU/AC	55	57%	3,856	66%
High	110-218 DU/AC	0	0%	0	0%
Others (<10 DU/AC & Specific Zones)	N/A	2	2%	196	3%
Total		**96**	**100%**	**5,861**	**100%**

Recent development based on projects included in the Inclusionary Zoning Study Permit Database (2017-2021) provided by the Los Angeles Housing Department. Excludes the development less than 5 units

Appendix H.1. Market Tier Analysis

Proposed Neighborhood Tiers vs. CPA Results and Linkage Fee Tiers

The maps on the right compare the results of the neighborhood-level market tiers analysis (Map 1) to:

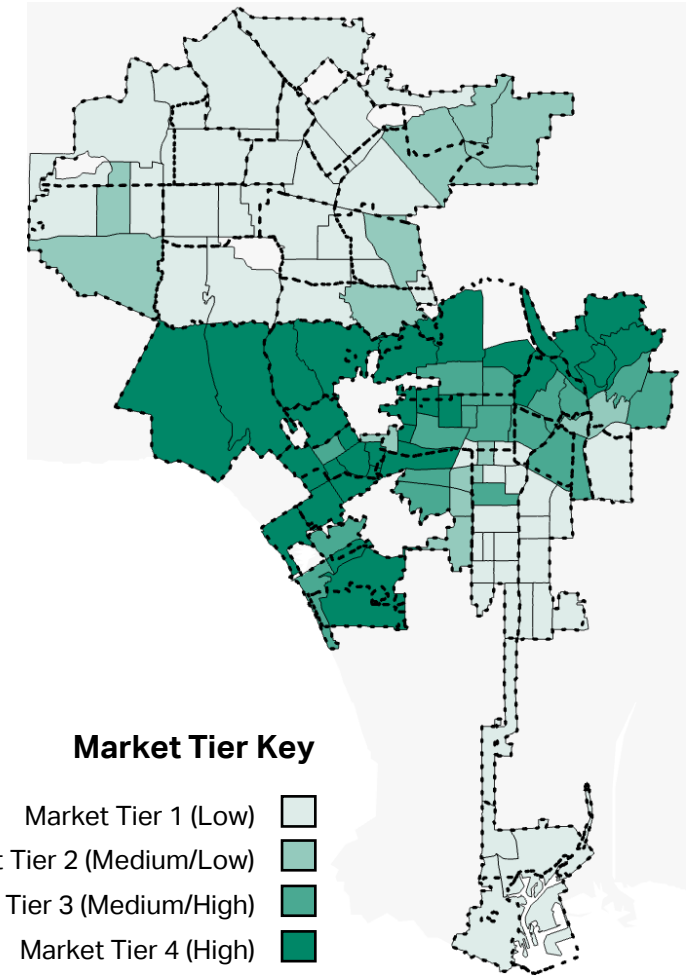
Map 2: The results of the analysis using the same methodology, but at the CPA level. Ultimately, the neighborhood-level approach was selected due to high variability in market strength within several of the CPAs.

Map 3: The right shows the current adopted Affordable Housing Linkage Fee market tiers.

This comparison was conducted for City staff reference.

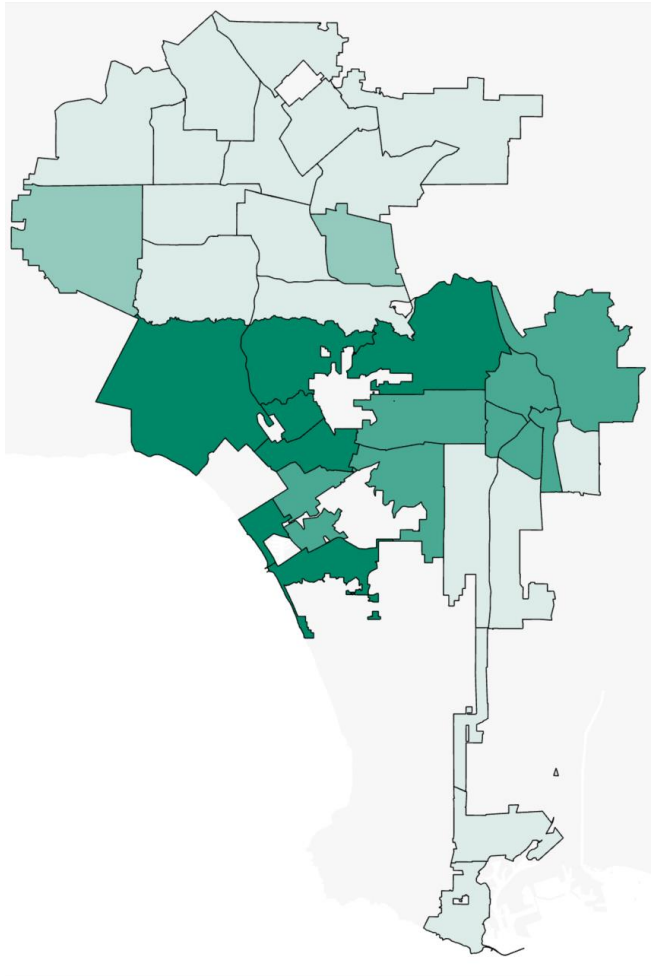
Map 1. Market Tiers by Neighborhood

Dashed CPA boundaries shown for reference



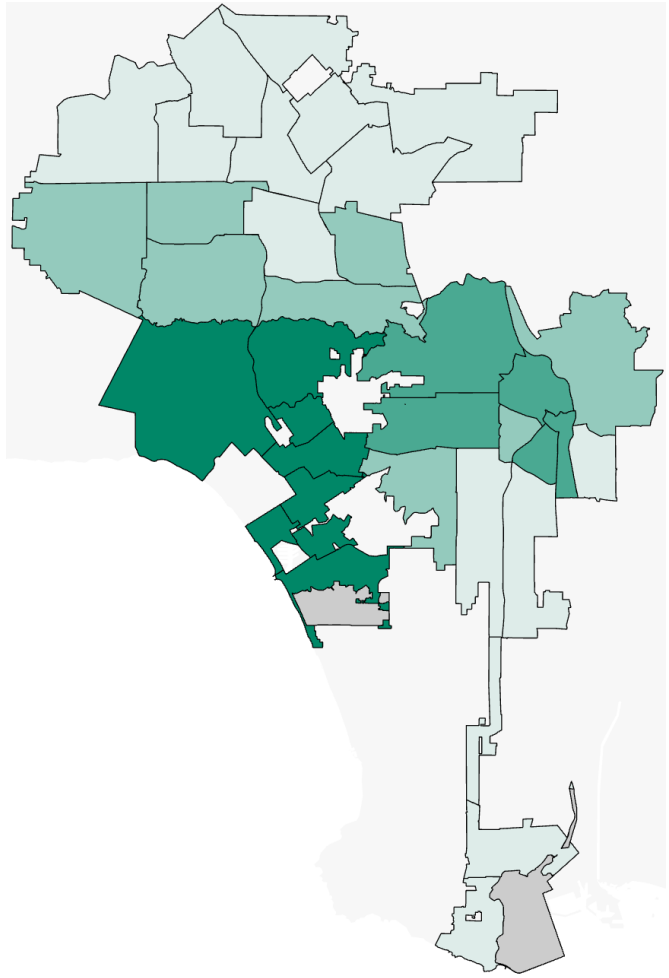
Map 2. Market Tiers by CPA

Market Tiers by CPA using same methodology



Map 3. Current Adopted Linkage Fee Tiers

by CPA



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Appendix H.2. Citywide Market Tiers

Differences between Proposed Neighborhood Tiers, CPA Results, and Linkage Fee Tiers

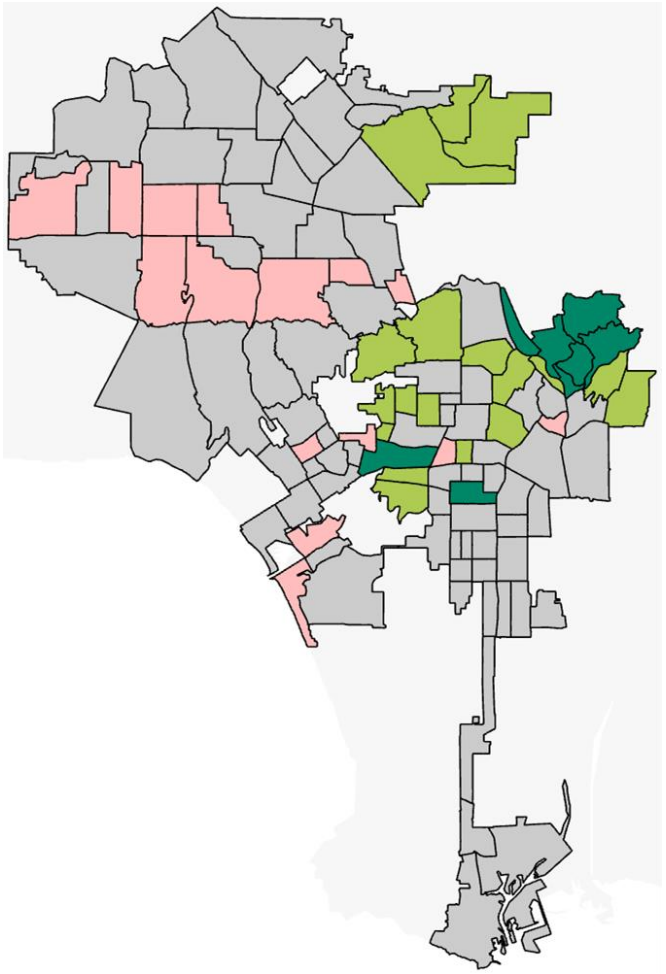
These maps compare the results of current adopted linkage fee tiers (**Map 3**) to the neighborhood-level market tiers analysis (**Map 1**) and CPA-level analysis (**Map 2**).

The differences between the maps are a result of differing underlying methodologies between AECOM's analysis and the Linkage Fee analysis, as well as differing market conditions at the time of AECOM's analysis (2023) and the Linkage Fee analysis (2016).

This comparison was conducted for City staff reference.

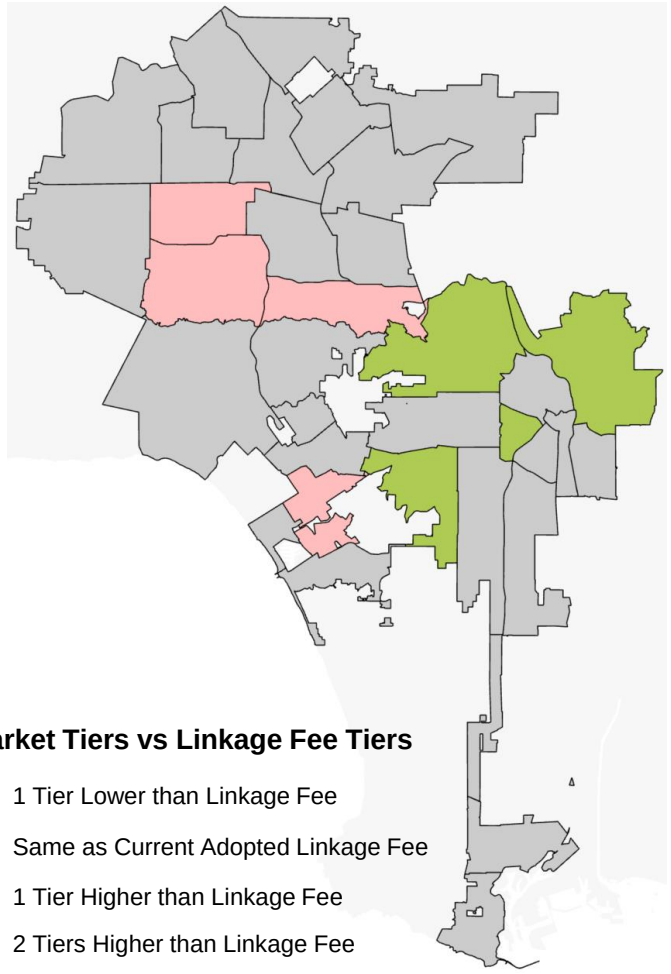
Map 1. Market Tiers by Neighborhood

by Neighborhood



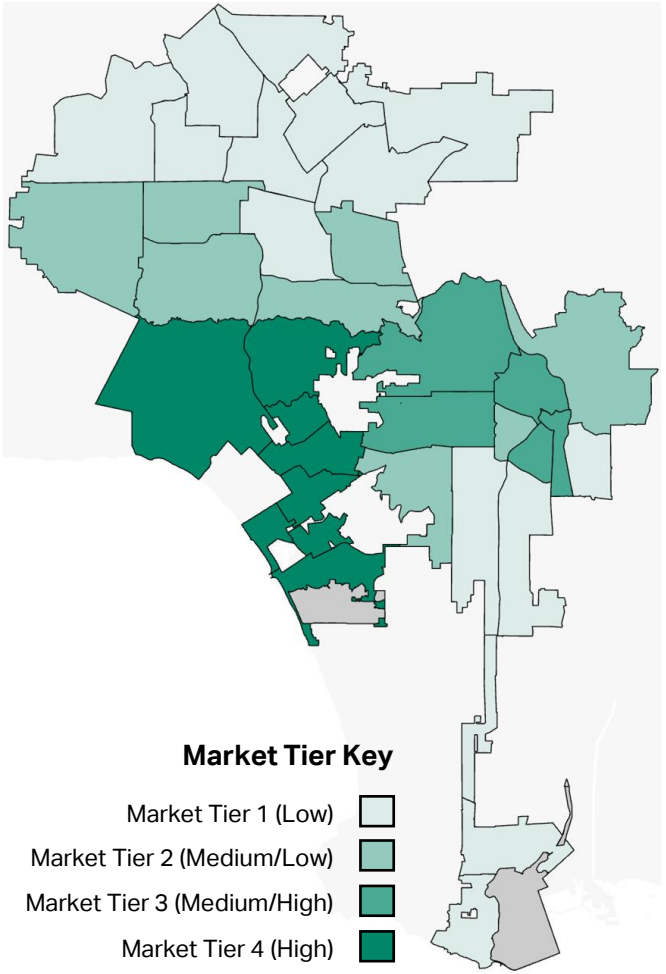
Map 2. Market Tiers by CPA

Market Tiers by CPA using same methodology



Map 3. Current Adopted Linkage Fee Tiers

by CPA



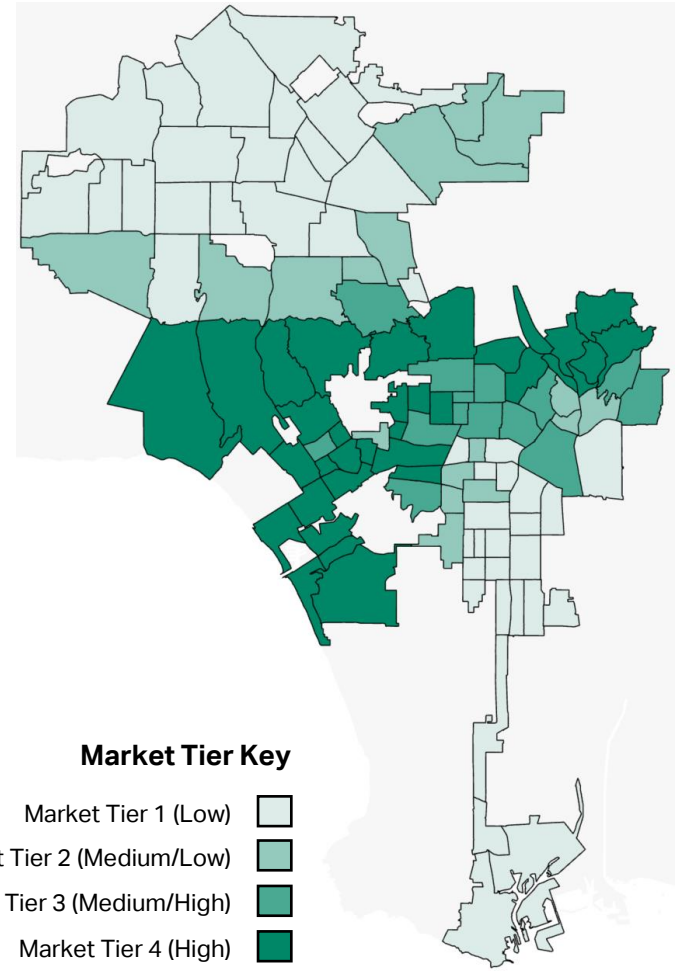
Appendix H.3. Alternate Market Tier Methodology

Weighting Rental and For-Sale Market Tiers Equally

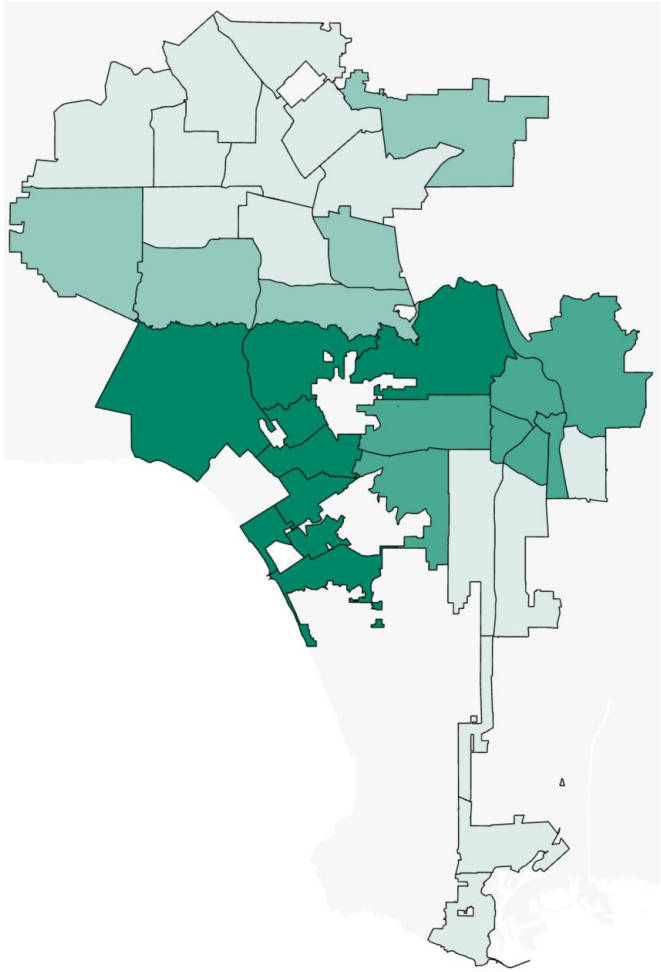
The maps on the right present an alternate methodology for assigning market tier classifications by equally weighting for rent and for sale data.

This comparison was conducted for City staff reference. In general, weighting the for sale and rental data equally – rather than by the change in housing units by tenure as described on page 11 – places slightly more emphasis on for-sale values. This is because many neighborhoods and CPAs experienced significant increases in rental units, while the inventory of for sale units was generally more stable and even declined in some areas.

Map 1. Alternate Market Tiers
by Neighborhood



Map 2. Alternate Market Tiers
by CPA



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Economic and Feasibility Analysis for the Citywide Housing Incentive Program (CHIP): DBO, TOIA, OC, and CT Strategies

Final Report

August 19, 2024

Los Angeles City Planning
City of Los Angeles

Delivering a better world

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Contents

Tables

Figures

1. Introduction and Summary of Findings

The City of Los Angeles Department of City Planning (LACP) engaged AECOM to prepare economic analysis to inform policy development for the City's Regional Housing Needs Allocation (RHNA) Rezoning Program. This report explores the economic feasibility of four proposed program and policy options, which are intended to support the larger effort to expand housing production to meet RHNA goals.

1.1 Background

The State of California requires local jurisdictions to demonstrate through the Housing Element process that they maintain sufficient zoned capacity to accommodate their RHNA allocation for the eight-year Housing Element period.

The City of Los Angeles's 2021-2029 Housing Element, which was adopted in November 2021, includes an Adequate Sites Inventory for which the City has identified a development potential of 230,947 units over the 8-year RHNA planning period. However, the 2021-2029 RHNA allocation for the City of Los Angeles includes a target production of 486,379 units (including buffer). Comparing the RHNA allocation and Housing Element site inventory results in a shortfall of 255,432 units.

As part of the Housing Element update process, the City must provide a RHNA Rezoning Program that outlines strategies and policies expected to close the housing production gap by creating additional housing capacity. The City's proposed RHNA Rezoning Program, introduced in Program 121 of the Housing Element, is intended to help fill the expected housing production gap by creating additional housing capacity. Stated broadly, the program's goals are to:

- Prioritize development in Higher Opportunity Areas as defined by the California Tax Credit Allocation Committee (CTCAC) and California Department of Housing and Community Development (HCD).
- Maximize affordability and community benefits.
- Protect communities vulnerable to displacement and housing pressures.
- Exclude hazard areas such as areas at risk of sea level rise and Very High Fire Hazard Severity Zones (VHFHSZ).

The Rezoning Program proposes a range of strategies to meet its goals, including the following:

1. **State Density Bonus Program.** The Rezoning Program encompasses revisions to the City's local **Density Bonus Ordinance (DBO)** which serves as the City's primary mechanism for implementing State Density Bonus Law (SDBL). Proposed changes to the City's local Density Bonus Ordinance include procedural updates as well as revisions that will affirm consistency between the Los Angeles Municipal Code and State Density Bonus Law.
2. **Mixed Income Incentive Program.** The Mixed Income Incentive Program would introduce the **Opportunity Corridors (OC) Incentive Program** and **the Opportunity Corridors Transition (CT) Area Incentive Program** – two of the core concepts proposed as part of the Rezoning Program. Additionally, the Mixed Income Incentive Program includes the proposed **Transit Oriented Incentive Area (TOIA) Program**, which will enshrine key elements of the Transit Oriented Communities Affordable Housing Incentive Guidelines in the Los Angeles Municipal Code. OC and CT incentives will be reserved for project sites in High and Highest Resource Areas as defined by the

CTCAC/HCD Housing Opportunity Area Maps, while TOIA incentives will be available citywide.

3. **Affordable Housing Incentive Program.** The Affordable Housing Incentive Program will provide tailored land use incentives for One Hundred Percent Affordable Housing Projects and affordable housing projects constructed by Faith Based Organizations in Moderate, High and Highest Resource areas of the City, as defined by the CTCAC/HCD Opportunity Area Maps. Additionally, the ordinance will expand the types of zones eligible for One Hundred Percent Affordable Housing projects to “P” Parking zones and “PF” Public Facilities zones.

1.1.1 Programs Analyzed

This study analyzes four proposed incentive programs, including the **DBO** and three programs incorporated as part of the **Mixed Income Incentive Program**: the **TOIA, OC,** and **CT** programs.

These programs are proposed as incentive-based programs that require applicants proposing multi-family residential development to provide a certain percentage of set-aside affordable units. In return for providing affordable units, applicants receive development bonuses that allow greater densities, floor area ratio (FAR), and heights than are otherwise allowed by base zoning.

Within each program, different levels of incentives are available depending on the percentage of housing units dedicated to affordable housing for low income (LI), very low income (VLI), extremely low income (ELI), and moderate income (MI) households. In addition to the density, FAR, and height bonuses that are the focus of this analysis, projects can also receive other incentives related to setbacks, lot width, open space, lot coverage, and other zoning requirements. Proposed projects that remain within the pre-vetted menu of incentives would also be eligible for streamlined ministerial permit processing. All proposed programs will count above-ground parking as part of floor area ratio (FAR).

Table 1 below summarizes key elements of the DBO, TOIA, OC, and CT programs including policy goal/description; program tiers; maximum density, FAR, and height incentives; and affordable set-aside income levels and calculation methods. **The table shows incentive levels as tested for the purposes of this analysis. Note that the programs are still under development and the table below may not reflect the City’s final policy decisions.**

Table 1. Key Elements of DBO, TOIA, OC, and CT Incentive Programs (as Tested)

Program	Policy Goal/ Description	Program Tiers	Max Density Incentive	Max FAR Incentive*	Max Height Incentive	Affordable Set-Aside Income Levels & Calculation Methods
Density Bonus Ordinance Update (**DBO**)	Procedural updates and revisions to affirm consistency between the Los Angeles Municipal Code and State Density Bonus Law	N/A	100%	50% over base	Increase over base equal to density bonus percentage	VLI, LI, MI Set-asides determined by state law and may be provided through single-affordability pathways (VLI, LI, or MI only), or mixed-affordability pathways (a combination of VLI, LI, and/or MI). Set-asides calculated as share of base units.
Transit Oriented Incentive Areas (**TOIA**)	Encourage construction of affordable housing near bus and train stations. Set-aside requirements and available bonuses increase by incentive tier (T1-T4), where T1 represents the lowest level of transit service and T4 the highest.	TOIA-1	100%	3.00 FAR or 40% over base	1 story/11 feet	ELI, VLI, LI Set-aside requirements to be determined; may vary by Market Tier. Set-asides calculated as share of total dwelling units.
		TOIA-2	120%	3.50 FAR or 45% over base	1 story/11 feet	
		TOIA-3	Unlimited	4.00 FAR or 50% over base	2 stories/22 feet	
		TOIA-4	Unlimited	4.50 FAR or 55% over base	3 stories/33 feet	
Opportunity Corridors Incentive Program (**OC**)	Encourage residential development along selected commercial and residential corridors. Set-aside and incentive tiers mirror TIOA tiers, with increasing incentives available in tiers with better transit access.	OC-1	Unlimited Density within FAR and Height Allowances	3.00 FAR (R zones) 3.50 FAR (C zones)	45' (R zones) 1 story/11 feet up to 5 total stories (C zones)	ELI, VLI, LI Set-aside requirements to be determined; may vary by Market Tier. Set-asides calculated as share of total dwelling units.
		OC-2		3.50 FAR (R zones) 4.00 FAR or 45% over base (C zones)	56' (R zones) 2 story/11 feet up to 6 total stories (C zones)	
		OC-3		4.50 FAR or 50% over base (R and C zones)	3 stories/33 feet up to 7 total stories (R and C zones)	
Opportunity Corridors Transition Area Incentive Program** (**CT**)	Complement OC with adjacent lower-scale infill (or "missing middle") development. Tiers reflect proximity to OC corridor incentive areas, with increasing incentives availabile in tiers closer to OC areas.	CT-1	Up to 6 Units per Lot	1.30 FAR for 5 units per lot + 0.15 FAR for each additional unit	2 stories	ELI, VLI, LI, MI Set-aside requirements to be determined; tested 1- or 2-affordable units per lot.
		CT-2	Up to 10 Units Per Lot	1.30 FAR for 5 units per lot + 0.15 FAR for each additional unit	3 stories	

**Maximum FAR incentive calculated as greatest of the options shown.*
*** A CT project that includes a minimum of 40% of total Residential Units as 2-bedrooms or larger, shall be granted either additional Floor Area up to 0.5 FAR or an additional 11 feet in height.*
Note: The table shows incentive levels as tested for the purposes of this analysis. Note that the programs are still under development and the incentive levels tested may not reflect the City's final policy decisions.
Source: AECOM

1.2 Overview of the Approach

This section provides a brief overview of the approach used in this analysis. Additional details on the framework for the analysis and the methodology are provided in Chapters 2 and 3.

1.2.1 Analytical Framework

AECOM's Market Analysis, which was prepared and submitted in a separate report in May 2024,[1] created a framework for the CHIP Program Economic Analysis by establishing the following three structures:

- **Market Tiers**: AECOM classified the City's local housing markets into 'Market Tiers' that are used to organize and apply various underlying market factors (e.g., rents, sales prices, land costs) that contribute to development potential on residential opportunity sites throughout Los Angeles. The following four Market Tiers were defined, each characterized by their relative market strength:
  - Market Tier 1 (Low)
  - Market Tier 2 (Medium/Low)
  - Market Tier 3 (Medium/High)
  - Market Tier 4 (High)
- **Density Cohorts**: Density cohorts are logical groupings of maximum allowed density levels that represent the wide variety of general zone classes, specific zoning limitations, height districts, and other site-specific regulations and requirements that allow a great diversity of form, scale, and density of housing across Los Angeles.
- **Development Prototypes:** Development prototypes are representative real estate projects that were tested for financial feasibility in the analysis. Prototypes were generally tested under the base condition (i.e., 100%-market-rate, by-right project that does not use CHIP program incentives) and various incentive program scenarios (i.e., projects that provide affordable housing set-asides in return for corresponding density bonuses or other incentives).

1.2.2 Financial Analysis Methodology

The analysis of CHIP program economics uses a pro forma model to evaluate the impacts of proposed program parameters on project returns. The model is designed to consider programming parameters including density bonuses, height and FAR maximums, and affordable set-asides. AECOM worked closely with City Staff to develop various combinations of affordable housing set-asides and corresponding incentives for all four CHIP programs. These combinations are referred to as **incentive program scenarios** throughout this analysis and represent some of the zoning levers that can impact development feasibility.

The measure of financial return used in the analysis is **residual land value (RLV)**. RLV analysis is a common approach used in planning exercises to explore and compare financial outcomes of policy proposals. RLV is the amount that remains after estimated project cost is deducted from estimated project value and represents the amount a developer should be willing to pay for land.

[1] "Task 3: Market Analysis: Market & Economic Study for the Density Bonus Ordinance Update and RHNA Rezoning Program," developed by AECOM for LACP, May 2024.

There are two RLV standards used to gauge the expected financial outcomes of the incentive program scenarios tested in this analysis: “feasibility” and “preferability.”

- **Feasibility**. For the purposes of this analysis, feasibility is a determination of whether the incentive program scenario generates estimated **RLV that is consistent with market land value**. If a scenario generates RLV that is equivalent to or greater than the market standard, it is considered feasible.
- **Preferability**. For the purposes of this analysis, preferability tests whether the incentive program scenario generates **RLV that is greater than a base case scenario**, where the base case scenario is a 100%-market-rate, by-right project that does not use CHIP program incentives. If the incentive program scenario generates an RLV that is equivalent to or greater than the base case, it is considered preferable.

1.2.3 Limitations of the Analysis

This study aims to provide policy makers with insights into the potential economic dynamics of proposed programs and program elements, the trade-offs that may be inherent in different options, and the options that may be available to enhance them. The study is based on estimates, assumptions, and other information developed by AECOM from its independent research effort, general knowledge of the industry, and information provided by and consultations with the Client and the Client’s representatives. Every attempt has been made to broadly reflect the variety of future residential development activity that will be impacted by these programs.

Because of the wide range of development options available to residential developers (both proven options and options yet to be developed), the size and diversity of the City of Los Angeles, its submarkets, and its development opportunity sites, the findings herein represent at best a snapshot of a dynamic and changing market. Actual and future results and trends could differ materially from those set forth here due to various factors, including, without limitation, those discussed in the report. These factors are beyond AECOM’s ability to control or predict. Accordingly, AECOM makes no warranty or representation that any of the projected values or results contained in this study will be achieved.

Note that this report does not include analysis of replacement unit requirements or associated costs. The analysis assumes that development sites are acquired based on their land value, with minimal to no acquisition costs for any existing buildings, and that the scenarios would provide enough affordable housing to meet any requirements for replacement units. Actual costs to replace existing units may vary depending on lot conditions and locations, they could further impact the feasibility and attractiveness of the programs.

The findings in this report are specific to the incentive program parameters tested, as well as to the specific prototypes and site conditions tested. While the report suggests implications for policy, ultimately the appropriate tradeoff between affordability requirements and development feasibility is a policy decision for the City rather than an analytical decision.

1.3 Summary of Findings

This section describes key findings from the analysis, organized by incentive program. As general context, it is important to note the following findings:

- Incentive program scenarios tested are generally most feasible in **Market Tier 4** (high market strength)
- There is more limited feasibility for certain incentive program scenarios in **Market Tier 2** (medium/low market strength) and **Market Tier 3** (medium/high market strength).

- None of the incentive program scenarios tested were feasible in **Market Tier 1** (low market strength).

These findings are broadly consistent with current observed market activity, which indicates that under today's market conditions, development projects are generally only feasible in stronger markets. Current market conditions are particularly challenging for development, given extreme inflationary pressure on construction materials since 2020 and mortgage rates that remain above recent averages.[2]

While market conditions will change over time, as a general observation, the higher density levels associated with incentive zoning programs are more valuable in stronger residential submarkets such as those represented in Market Tiers 2, 3 and especially 4. In other words, in stronger submarkets, the additional units allowed through incentive programs can more easily generate value that exceeds the cost of setting aside additional affordable units. In weaker submarkets, the value generated by the additional units is less likely to overcome market rental or sale conditions and the cost of the affordable housing set-asides.

1.3.1 DBO Update

The City's Density Bonus Ordinance (DBO), an implementation of the State Density Bonus Law (SDBL), has been effective since 2008. Since 2008, more than a dozen state bills have significantly amended State Density Bonus Law (CA Govt. Code Sections 65915-65918). To date, these changes have been implemented in the City through a range of administrative Implementation Memorandums. The proposed update to DBO will bring the City into alignment with revisions to State Density Bonus Law. The update also incorporates density bonuses and affordability requirements available through State Assembly Bill 1287 (AB1287).

A key distinction between DBO and the three programs that comprise the Mixed Income Incentive Program is that affordability set-aside percentages required in DBO are calculated on the base number of units allowed by-right, whereas Mixed Income Incentive Program projects are calculated on the total units, including units granted by the development incentives.

Key findings about the DBO program include:

- **In Market Tiers 3 and 4, many for-rent incentive program scenarios are not only feasible, but preferable to the base case 100% market-rate scenario.** In most for-sale scenarios, the added density does not provide sufficient value to outweigh the additional costs associated with providing additional affordable set-aside units given current market conditions. However, one for-sale scenario (100% density bonus with a 15% VLI/15% MI set aside) was preferable to the base case across multiple prototypes in Market Tier 4.
- **Developers that take advantage of the DBO program in stronger markets are likely to choose set-aside pathways that provide VLI units.** VLI units generate less revenue *per unit* than LI. However, projects that provide VLI units can set aside fewer total affordable units compared to projects that include LI units. In Market Tier 4, the per unit effect of VLI units is offset by the revenue generated by additional market-rate units , compared to projects that provide LI units.[3]

[2] The ULA tax, effective since April 2023, also has an impact on returns for larger (>$5 million in value) projects, although its effect was moderated in the model by assuming that a variety of adjustments in the market would result in a 5% reduction in total costs for projects subject to the ULA.

[3] In Market Tier 1, at the other end of the spectrum, LI unit pathways generate higher residual land values compared to VLI pathways because there is a smaller gap in rents between market-rate and LI units.

1.3.2 Mixed-Income Incentive Program

The Mixed Income Incentive Program focuses on establishing mixed income housing incentives along certain major street corridors, including tools to encourage the construction of various types of "low scale/low rise" housing to create transitions between single-family homes and mid-rise apartment buildings. These "Opportunity Corridor" and "Corridor Transition" incentives will be available for projects located in the City's High and Highest Resource Areas as defined by the CTCAC/HCD Opportunity Area Maps. Additionally, the Mixed Income Incentive Program includes the proposed TOIA program, which will codify key elements of the Transit Oriented Communities Affordable Housing Incentive Guidelines for sites near transit citywide.

Transit Oriented Incentive Area Program

TOIA provides density bonus incentives in exchange for affordable housing set-asides in mixed-income residential projects near transit nodes. Both the set-aside requirements and available bonuses increase by TOIA Tiers, where TOIA Tier 1 represents the furthest distance from a Major Transit Stop and Tier 4 the shortest distance from a Major Transit Stop.

The City is proposing to integrate this program as a local implementation of Density Bonus law, and the TOIA program aims to increase available density bonuses beyond current standards, building off recent changes to state law (AB 1287) which expanded density bonuses in the state density bonus program to up to 100 percent. The proposed TOIA also includes expanding procedures for applicants to request off-menu incentives, which is an option that is not available through the existing Transit Oriented Communities (TOC) program.

Key findings about the TOIA include:

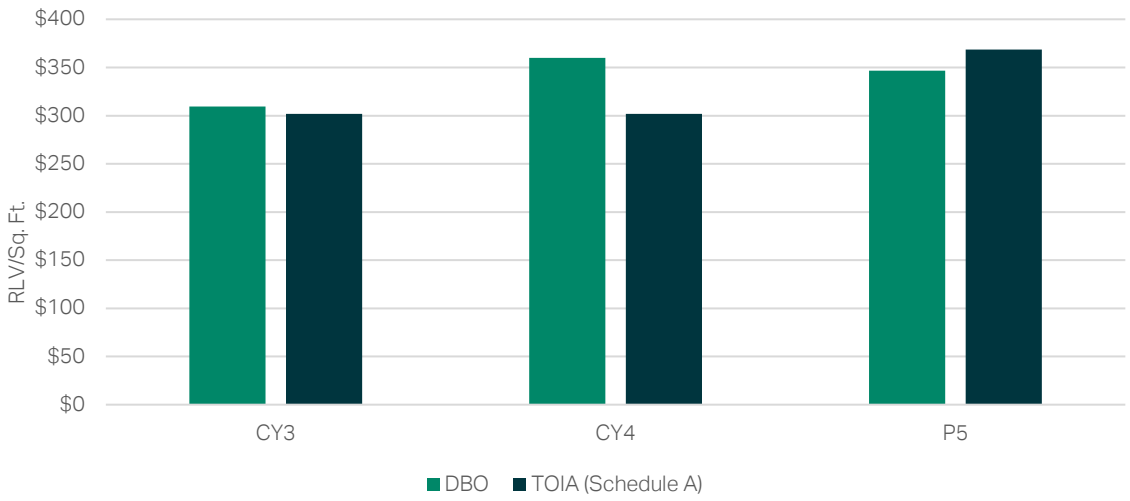
- **Overall, the TOIA incentives and associated set-aside requirements should help produce more market-rate and affordable units than would otherwise be feasible.** The analysis of proposed density bonus and affordability parameters for the City's TOIA program show that the scheduled incentives should provide developer applicants with preferred returns in Market 4 and, to a lesser extent, Market Tier 3 areas.
- **However, the ultimate impact of the program will depend on the set-aside schedule selected.** The City is considering a variety of potential set-aside schedules, which could take the form of a single-tier program structure applied consistently across the City, or a multi-tier program structure with different set-aside requirements applied in each Market Tier. The analysis found that scenario feasibility is very sensitive to increased affordable set-asides.
- **TOIA scenarios in Market Tier 4 result in feasible prototypes across density cohorts, even with increased affordability set-aside requirements.** Under the market conditions modeled, this is the only market tier that clearly supports the higher levels of set-asides tested. Increasing set-aside requirements could result in fewer projects being built, particularly in places with weaker market conditions, offsetting some of the potential affordable housing production gains that the proposed TOIA enhancements seek to provide.
- **TOIA Schedule A – the schedule with the lowest set-asides tested – produces similar development returns compared to DBO in residential zoned areas.**[4] Figure 1 shows the highest residual land values achieved by prototype on residential zoned land in Market Tier 4 under TOIA Schedule A, compared to the DBO program. As tested, DBO projects generate higher RLVs for courtyard projects – suggesting that a profit-

[4] Note that DBO was only tested on residential zoned sites, based on an analysis of recently completed projects that showed that the majority of DBO projects occurred in residential zones (whereas projects in commercial zones were more likely to take advantage of the TOC program, the predecessor to the proposed TOIA program).

seeking developer may be more likely to take advantage of the DBO program where both are available. However, TOIA Schedule A generates higher returns for the P5 prototype.

- **While TOIA offers higher density bonuses than DBO, the financial benefit for applicants is in part offset by the method of calculating affordable set-aside units for TOIA.** The TOIA program calculates affordability set-aside requirements on the total number of units per project. This is a shift from DBO which calculates set-aside requirements as a percentage of units allowed under density limits tied to a site's base zoning condition. In other words, whereas all bonus units are market-rate under DBO, some of the bonus units are required to be set-aside as affordable under TOIA.
- **In some cases, TOIA project feasibility may also be affected by counting above-ground parking against FAR, although developers may partially offset the impact by reducing parking ratios.** TOIA projects are generally limited by FAR rather than density, so counting above-ground parking as part of FAR has a more significant impact on TOIA projects compared to the DBO program, where density is generally the limiting factor. However, reducing FAR incentives for the DBO program could affect this relationship and the relative feasibility of the two programs.

Figure 1. Highest RLV Achieved by Prototype: DBO v. TOIA Schedule A in Market Tier 4



Comparison shows rental prototypes in residential zones.
Source: AECOM

- **Developers who take advantage of the TOIA program in stronger markets are likely to build ELI units.** ELI units generate less revenue *per unit* than LI or VLI. However, ELI projects still generate higher overall returns because projects that provide ELI units are required to provide fewer affordable units, compared to projects that provide LI or VLI units. This is consistent with the City's experience that most projects that have utilized the existing TOC program have built ELI units.[5]

Opportunity Corridors Incentive Program

The City's proposed OC program advances a holistic vision for livable and sustainable communities by increasing housing capacity along major streets located in Higher Opportunity Areas. This strategy will focus new housing opportunities on major corridors, particularly those with transit access, to provide affordable housing options near transit and amenities. Incentives

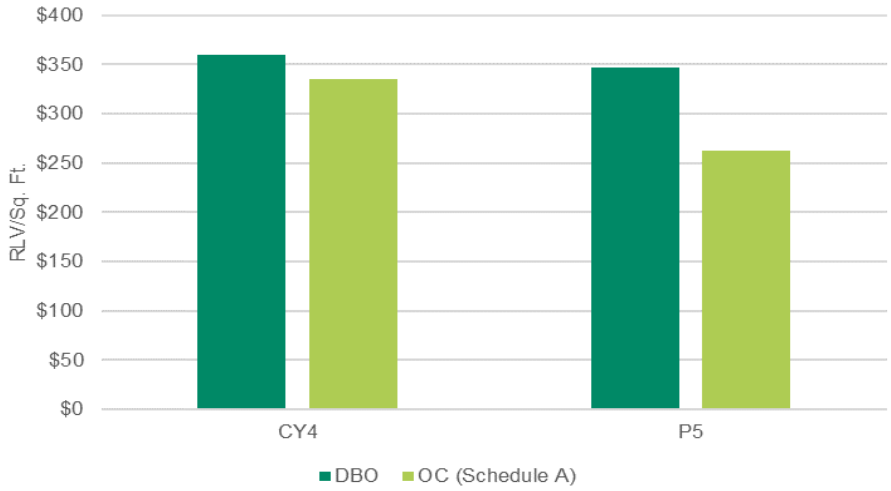
[5] In Market Tier 1, at the other end of the spectrum, ELI unit pathways generate higher residual land values compared to LI/VLI pathways because there is a smaller gap between market-rate and VLI/LI units.

available in the OC program would be provided generally in excess of incentives available in the DBO and TOIA programs.

Key findings about the OC program are described below:

- **The OC incentives and associated set-aside requirements may help produce more market-rate and affordable units than would otherwise be feasible under current market conditions.** The analysis of the proposed OC program indicates the proposed incentives create sufficient value for developer applicants to acquire and redevelop land in Market Tier 4 across OC areas – and, to a lesser extent, in Market Tier 3.
- **Similar to TOIA, the ultimate impact of the OC program will depend on the set-aside schedule selected.** For OC, the City is considering a multi-tier program structure with different set-aside requirements applied in each Market Tier. The analysis tested a variety of set-aside schedules. Similar to TOIA, scenario feasibility is sensitive to increased affordable set-asides, suggesting that increased set-aside requirements could reduce the number of projects built in lower Market Tiers, and offset the affordable housing production gains from the proposed OC enhancements. Under the scenarios and market conditions modeled, only Market Tier 4 clearly supports the higher set-aside levels tested.
- **However, in areas zoned for residential, developers may elect to pursue DBO rather than OC as currently proposed, although the decision will ultimately depend on the underlying zoning and other project specifics.** Figure 2 shows the highest residual land values achieved by prototype on residential zoned land in Market Tier 4 under OC Schedule A, compared to the DBO program. As tested, DBO projects generate slightly higher RLVs for across prototypes–suggesting that a profit-seeking developer may be more likely to take advantage of the DBO program in some cases. Similar to TOIA, while OC offers higher density bonuses than DBO, the financial benefit for applicants is in part offset by the method of calculating affordable set-aside units for OC. In addition, the FAR limits associated with OC limit the total building footprint that the prototypes can achieve, whereas the sites tested for DBO on residential parcels could generally achieve higher densities within the density and FAR bonuses allowed. Ultimately, however, the comparison between programs will depend in part on the specific zoning district where the parcel is located. For example, reducing FAR incentives for the DBO program could affect this relationship and the relative feasibility of the two programs.

Figure 2. Highest RLV Achieved by Prototype: DBO v. OC (Schedule A) in Market Tier 4



Comparison shows rental prototypes in residential zones. CY4 and P5 were tested with OC-1 and OC-2 Tiers, respectively.
Source: AECOM

- **Developers who take advantage of the OC program in stronger market areas are likely to build ELI units.** ELI units generate less revenue *per unit* than LI or VLI. However, ELI projects still generate higher overall returns in Market Tier 4 because projects that provide ELI units are required to provide fewer affordable units, compared to projects that provide LI or VLI units. This is consistent with the City's experience that most projects that have utilized the existing TOC program have built ELI units.[6]

Opportunity Corridor Transition Incentive Program

The City's proposed CT program builds on the proposed OC program's vision for livable and sustainable communities with increased housing capacity along major streets located in Higher Opportunity Areas. The proposed CT is the City's strategy for promoting a diversity of lower-scale housing typologies.

CT is an incentive-based program designed to fill the gap in housing options that exists between detached single-family homes and the type of mid-rise apartment buildings expected to be developed behind Opportunity Corridors. CT tiers generally reflect proximity to OC corridor incentive areas. CT-2 is located closer to the corridors and provides density bonuses up to 10 units per parcel. CT-1 is located farther from the corridors and provides density incentives up to 6 units per parcel.

Key findings about the CT program include:

- **The CT incentive program may produce housing products that are not commonly built in LA under current conditions.** This includes rental rowhouses and courtyard apartments–two housing typologies that have historical precedent in LA but have not been commonly built since at least 2000.[7] Analysis of the proposed Corridor Transition program indicates the proposed incentives create sufficient value for developer applicants to acquire and redevelop land in Market Tiers 3 and 4 in the CT-2 incentive area, and to a more limited extent in the CT-1 area.
- **Affordable set-asides have a bigger impact on feasibility for smaller-scale CT-1 typologies than for larger-scale CT-2 projects.** In this analysis, The CT-2 typologies (courtyard projects) typically generated higher RLVs than the CT-1 typologies (fourplexes, row houses, and townhomes). Townhomes have long been validated by the market and can be constructed efficiently without the use of structured or subterranean parking. However, it is more challenging for smaller-scale CT-1 projects to bear the cost of set-aside units. Even in Market Tier 4, CT-1 feasibility is generally limited to projects that set-aside just one MI unit.
- **To enable a relatively broad range of projects to take advantage of the CT program, the City could consider requiring set asides as follows:**
  - CT-1: 1 MI unit per lot (rental projects), or 2 MI units per lot (for-sale projects).
  - CT-2: 1 ELI unit or 2 VLI units per lot (rental projects), or 2 MI units per lot (for-sale projects)

  At these set-aside levels, prototypes are generally feasible in Market Tier 4 under current market conditions, and a more limited set of prototypes are feasible in Market Tier 2 and 3.

Note that the CT results are not directly comparable with the DBO results, because the CT prototypes are assumed to occur on different size lots (that reflect conditions on CT-eligible

[6] In Market Tier 1, at the other end of the spectrum, ELI unit pathways generate higher residual land values compared to LI/VLI pathways because there is a smaller gap between market-rate and VLI/LI units.

[7] See analysis of housing typologies in "Task 3: Market Analysis: Market & Economic Study for the Density Bonus Ordinance Update and RHNA Rezoning Program," developed by AECOM for LACP, May 2024.

parcels, rather than citywide averages) and, in the case of townhomes and rowhomes, have reduced parking ratios as a result of FAR limitations. In addition, parcels that are eligible for CT may not be eligible for DBO.

1.4 Report Organization

Following this introduction, the remainder of this report is organized as follows:

- **Chapter 2** summarizes key outcomes from the Market Analysis, which created a framework for the CHIP Program Economic Analysis by establishing Market Tiers, Density Cohorts, and Development Prototypes.
- **Chapter 3** describes the methodology used to test the expected financial outcomes of the programs.
- **Chapters 4 through 7** analyze the feasibility of a proposed update to the DBO, TOIA, OC, and CT programs, respectively.
- **Chapter 8** concludes with a discussion of key findings and policy implications.

2. Analytical Framework

Chapter 2 summarizes the methodology of AECOM's Market Analysis, which was prepared and submitted in a separate report in May 2024.[8] The Market Analysis created a framework for the CHIP Program Economic Analysis by establishing the following three structures:

- **Market Tiers**: AECOM classified the City's local housing markets into 'Market Tiers' characterized by their relative market strength. These Market Tiers are used to organize and apply various underlying market factors (e.g., rents, sales prices, land costs) that contribute to development potential on residential opportunity sites throughout Los Angeles.
- **Density Cohorts**: Density cohorts are logical groupings of maximum allowed density levels that represent the wide variety of general zone classes, specific zoning limitations, height districts, and other site-specific regulations and requirements that allow a great diversity of form, scale, and density of housing across Los Angeles.
- **Development Prototypes:** Development prototypes are representative real estate projects that were tested for financial feasibility in the analysis. Prototypes were tested under a base condition (i.e., 100%-market-rate, by-right project that does not use CHIP program incentives) and various incentive program scenarios (i.e., projects that provide affordable housing set-asides in return for corresponding density bonuses or other incentives).

Each of these frameworks is described in detail below. The categories defined within each structure are specific to this study and do not reflect categories currently defined by City regulations. The three frameworks are used throughout the report to define representative properties and streamline the analysis, to help the City understand the potential impact of the proposed incentive programs on as many property types as possible.

2.1 Market Tiers

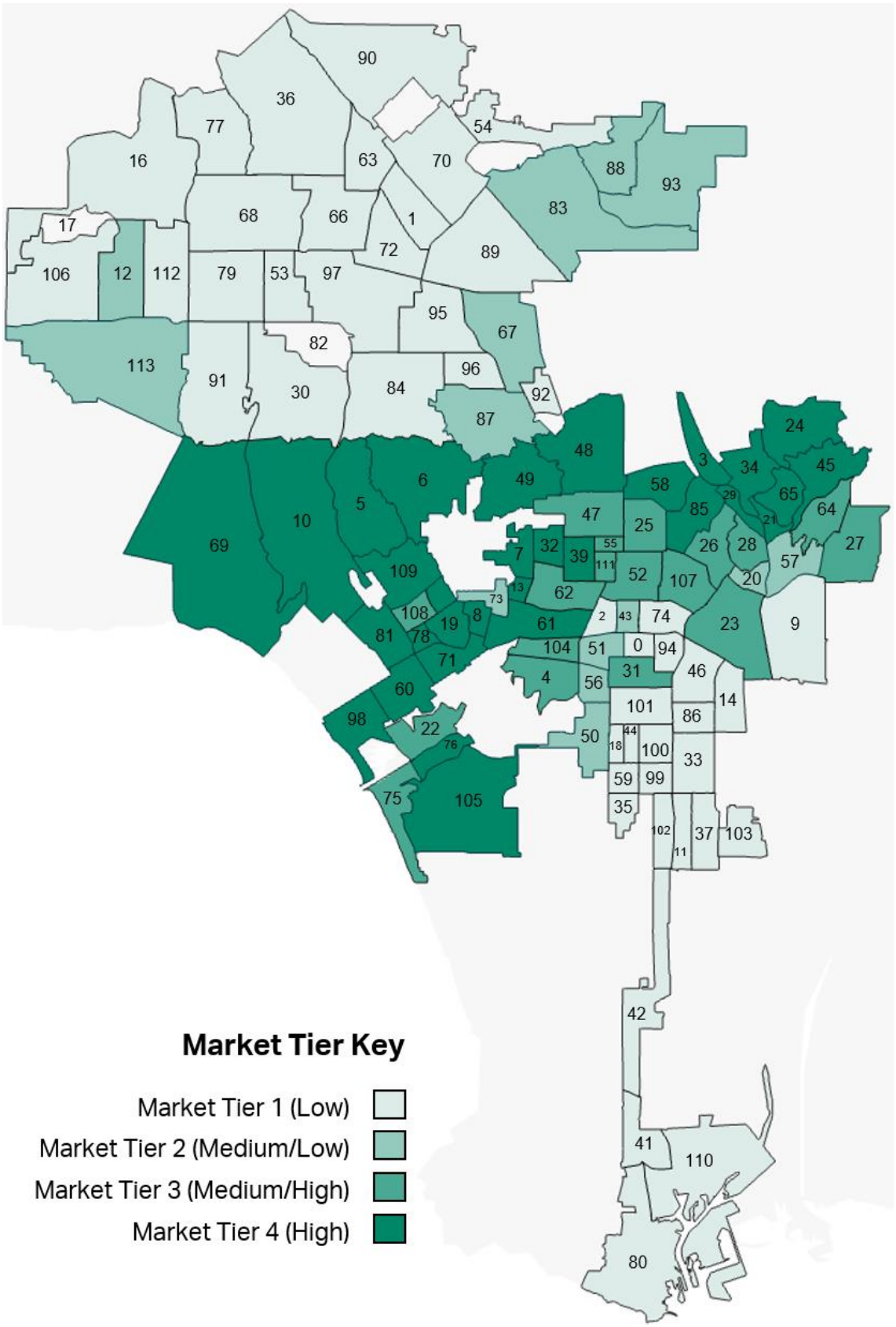
The market tier map used in the feasibility analyses is shown below, as defined in the Market Analysis produced for LACP in May 2024. The Market Analysis report defines and analyzes the following four market tiers, which range from low to high and are intended to represent the relative strength of the residential market in different geographies across the City. As described in the Market Analysis report, the market tiers are based on an index that accounts for rents and for-sale prices of recently built housing, as well as the relative production of rental and for-sale housing over the past 10 years.

- Market Tier 1 (Low)
- Market Tier 2 (Medium/Low)
- Market Tier 3 (Medium/High)
- Market Tier 4 (High)

The legend below the map shows the name of each neighborhood that corresponds to the number labels used in the map, as well as the Community Planning Area (CPA) that each neighborhood falls primarily within. Additional information about the market tier analysis including the geographic unit of analysis, underlying methodology used to define the market tiers, and key findings can be found in the Market Analysis report[9].

[8] "Task 3: Market Analysis: Market & Economic Study for the Density Bonus Ordinance Update and RHNA Rezoning Program," developed by AECOM for LACP, May 2024.

Figure 3. Market Tiers by Neighborhood Area Map



Source: Los Angeles Times, AECOM

Figure 4. Market Tiers by Neighborhood Area Key

#	Neighborhood	Primary CPA
0	Adams-Normandie	South Los Angeles
1	Arleta	Arleta - Pacoima
2	Arlington Heights	West Adams - Baldwin Hills - Leimert
3	Atwater Village	Northeast Los Angeles
4	Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert
5	Bel-Air	Bel Air - Beverly Crest
6	Beverly Crest	Bel Air - Beverly Crest
7	Beverly Grove	Wilshire
8	Beverlywood	West Los Angeles
9	Boyle Heights	Boyle Heights
10	Brentwood	Brentwood - Pacific Palisades
11	Broadway-Manchester	Southeast Los Angeles
12	Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills
13	Carthay	Wilshire
14	Central-Alameda	Southeast Los Angeles
15	Century City	West Los Angeles
16	Chatsworth	Chatsworth - Porter Ranch
17	Chatsworth Reservoir	Chatsworth - Porter Ranch
18	Chesterfield Square	South Los Angeles
19	Cheviot Hills	West Los Angeles
20	Chinatown	Central City North
21	Cypress Park	Northeast Los Angeles
22	Del Rey	Palms - Mar Vista - Del Rey
23	Downtown	Central City
24	Eagle Rock	Northeast Los Angeles
25	East Hollywood	Hollywood
26	Echo Park	Silver Lake - Echo Park - Elysian Valley
27	El Sereno	Northeast Los Angeles
28	Elysian Park	Silver Lake - Echo Park - Elysian Valley
29	Elysian Valley	Silver Lake - Echo Park - Elysian Valley
30	Encino	Encino - Tarzana
31	Exposition Park	South Los Angeles
32	Fairfax	Wilshire
33	Florence	Southeast Los Angeles
34	Glassell Park	Northeast Los Angeles
35	Gramercy Park	South Los Angeles
36	Granada Hills	Granada Hills - Knollwood
37	Green Meadows	Southeast Los Angeles
38	Griffith Park	Hollywood
39	Hancock Park	Wilshire
40	Hansen Dam	Arleta - Pacoima
41	Harbor City	Wilmington - Harbor City
42	Harbor Gateway	Harbor Gateway
43	Harvard Heights	South Los Angeles
44	Harvard Park	South Los Angeles
45	Highland Park	Northeast Los Angeles
46	Historic South-Central	Southeast Los Angeles
47	Hollywood	Hollywood
48	Hollywood Hills	Hollywood
49	Hollywood Hills West	Hollywood
50	Hyde Park	West Adams - Baldwin Hills - Leimert
51	Jefferson Park	West Adams - Baldwin Hills - Leimert
52	Koreatown	Wilshire
53	Lake Balboa	Reseda - West Van Nuys
54	Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
55	Larchmont	Wilshire
56	Leimert Park	West Adams - Baldwin Hills - Leimert
57	Lincoln Heights	Northeast Los Angeles
58	Los Feliz	Hollywood
59	Manchester Square	South Los Angeles
60	Mar Vista	Palms - Mar Vista - Del Rey
61	Mid-City	West Adams - Baldwin Hills - Leimert
62	Mid-Wilshire	Wilshire
63	Mission Hills	Mission Hills - Panorama City - North Hills
64	Montecito Heights	Northeast Los Angeles
65	Mount Washington	Northeast Los Angeles
66	North Hills	Mission Hills - Panorama City - North Hills
67	North Hollywood	North Hollywood - Valley Village
68	Northridge	Northridge
69	Pacific Palisades	Brentwood - Pacific Palisades
70	Pacoima	Arleta - Pacoima
71	Palms	Palms - Mar Vista - Del Rey
72	Panorama City	Mission Hills - Panorama City - North Hills
73	Pico-Robertson	Wilshire
74	Pico-Union	South Los Angeles
75	Playa del Rey	Westchester - Playa del Rey
76	Playa Vista	Westchester - Playa del Rey
77	Porter Ranch	Chatsworth - Porter Ranch
78	Rancho Park	West Los Angeles
79	Reseda	Reseda - West Van Nuys
80	San Pedro	San Pedro
81	Sawtelle	West Los Angeles
82	Sepulveda Basin	Encino - Tarzana
83	Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
84	Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
85	Silver Lake	Silver Lake - Echo Park - Elysian Valley
86	South Park	Southeast Los Angeles
87	Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
88	Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
89	Sun Valley	Sun Valley - La Tuna Canyon
90	Sylmar	Sylmar
91	Tarzana	Encino - Tarzana
92	Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
93	Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
94	University Park	South Los Angeles
95	Valley Glen	Van Nuys - North Sherman Oaks
96	Valley Village	North Hollywood - Valley Village
97	Van Nuys	Van Nuys - North Sherman Oaks
98	Venice	Venice
99	Vermont Knolls	South Los Angeles
100	Vermont-Slauson	South Los Angeles
101	Vermont Square	South Los Angeles
102	Vermont Vista	South Los Angeles
103	Watts	Southeast Los Angeles
104	West Adams	West Adams - Baldwin Hills - Leimert
105	Westchester	Los Angeles International Airport
106	West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills
107	Westlake	Westlake
108	West Los Angeles	West Los Angeles
109	Westwood	Westwood
110	Wilmington	Wilmington - Harbor City
111	Windsor Square	Wilshire
112	Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills
113	Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills

Source: Los Angeles Times, AECOM

2.2 Density Cohort Framework

This analysis uses a framework of density cohorts as a basis for organizing site conditions in a way that generally reflects housing typologies allowed by base zoning conditions.

This organizing framework is helpful in simplifying the wide variety of general zone classes, specific zoning limitations, height districts, other site-specific regulations, requirements and their many combinations, that allowed such a great diversity of form, scale, and density of housing types across the City .The density cohorts are designed to represent categories of typical density ranges (dwelling units per acre, or DU/AC) allowed by base zoning classes across Los Angeles. The specific density ranges for each cohort are based on the density groups identified in Chapter 3 of the City's Framework Element (Policy 3.7.1), as well as an analysis of maximum allowed densities for parcels identified in the City's Housing Element Site Inventory.

Table 2 below shows the five density cohorts explored in this report, which include: Low Medium I, Low Medium II, Medium, High Medium, High. For context on the prevalence of each density cohort within the City, Table 3 also shows the total land area and estimated unbuilt capacity on Housing Element sites by density cohort. The "Other" Cohort includes parcels that do not have a specified maximum density in the site inventory (e.g., MU zones) or are located in zones that are not necessarily for residential uses (e.g., OS zones).

Table 2. Density Cohorts and City of LA Housing Element Site Inventory Distribution

Density Cohort	Max Base Density Range (DUAC)	Land Area (AC)	% of Land Area of Total	Unbuilt Capacity (Units)	Unbuilt Capacity %
Low Medium I	10 - 17	5,693	18.1%	42,465	3.4%
Low Medium II	18 - 29	6,442	20.4%	93,554	7.5%
Medium	30 - 55	5,922	18.8%	190,473	15.3%
High Medium	56 - 109	8,840	28.0%	886,182	71.1%
High Medium	110 - 218	148	0.5%	27,939	2.2%
Others	N/A	4,483	14.2%	5,776	0.5%
Total		31,528	100.0%	1,246,389	100.0%

Source: City of Los Angeles Department of City Planning (LACP), AECOM

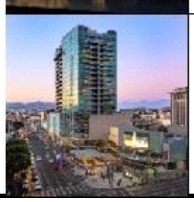
2.3 Development Prototypes

As part of the previous Market Analysis, AECOM created an inventory of housing typologies based on various types of housing currently being developed in the City. This inventory was supplemented by housing concepts more common in other parts of the country (e.g., row houses, triple decker), aspirational housing developments found in other parts of southern California (e.g., medium-density courtyard-style apartments emerging from Pasadena's City of Gardens Ordinance), as well as various historical forms and use concepts more reminiscent of different eras of LA's past (e.g., bungalow courts, "dingbat" apartments).

AECOM worked closely with City staff to distill these housing concepts into a shortlist of housing typologies to consider for feasibility testing. Table 3 below shows the final list of prototypes selected with the City for testing, organized by density cohort. The typologies were selected to be broadly representative of the types of housing development likely to be built in the near future based on recent development trends, real estate trends, and an understanding of the design guidelines, desired built form, proposed program parameters, and policy goals of the CHIP incentive programs analyzed in this report.

Table 3. Overview of Prototypes Tested by Program

Prototype Overview

Density Cohort (Density Range)	Prototype			CHIP Program Testing by Tenure			
	Representative Image	Abbreviation Description (Typical Density)	Parking Strategy (Parking Ratio)	DBO	TOIA	OC	CT
Low Medium II (18-29 DUAC)		4D Plex Style (10-35 DUAC)	Attached Garage & Surface parking (2 Spaces/Unit)		For Rent		For Rent
		TH Townhomes (15 - 30 DUAC)	Tuck-Under Garage (2 Spaces/Unit)	For Sale			For Sale
		RH Rowhouse (15 - 30 DUAC)	Tuck-Under Garage (0.4 Spaces/Bedroom)	For Rent			For Rent
Medium (30-55 DUAC)		CY3 3-Story Courtyard (35 - 75 DUAC)	Subterranean Parking (0.6 Spaces/Bedroom)	For Rent	For Rent		For Rent & For Sale
		CY4 4-Story Courtyard (50 - 105 DUAC)		For Rent	For Rent	For Rent	
High Medium (56-109 DUAC)		P5 5/6-Story Podium (80 - 170 DUAC)	Podium Parking &Subterranean Parking (0.9/BR)	For Rent	For Rent	For Rent	
High (110-218 DUAC)		P7 Single-Use/Mixed-Use 7-Story Podium[1] (155 - 200 DUAC)		For Rent	For Rent	For Rent	
		TW Single-Use/Mixed-Use Tower[1] (110 - 218 DUAC)	Podium Parking &Subterranean Parking (0.9/BR)	For Rent	For Rent		

**Note that the TW prototype is limited to a height of 28 stories. Based on discussion with City staff, this represents the maximum height limit likely to be achieved outside of Downtown Los Angeles.*
Source: AECOM

In finalizing the list of prototypes for testing, a primary goal was to test at least one prototype in each density cohort. This approach ensured that the final list of prototypes is broadly representative of the base conditions present in the City, as well as the range of multifamily development expected to be developed in the City over the next eight years. Note, however, that in some cases the typical density ranges for each prototype span several density cohorts. These prototypical density ranges represent the typical, market-supported range of densities that each prototype can accommodate while maintaining the main characteristics of its base form. Identifying a prototype density range allows flexibility to be built into the model as some prototypes may be able to accommodate additional units associated with an incentive program while retaining the main characteristics of the underlying prototype.

Table 4 below shows the typical unit sizes and unit mixes assumed for each prototype. Note that for CY3, CY4, and P5 prototypes, two versions of each prototype are provided based on market research and the assumption that as allowable density increases, developers prioritize design changes (e.g., smaller unit size or smaller units in the unit mix to achieve a higher density product) rather than construction type changes to improve profitability while keeping the same construction method and associated costs.

Under state law, developer applicants that utilize the DBO are entitled to reduce parking below required minimums. However, in recent general practice developers frequently do not take full advantage of this incentive because of concerns about securing competitive financing for under-parked projects given typical debt and equity underwriting requirements, as well as the ability to market these properties once constructed. Consequently, AECOM's analysis generally reflects typical market parking ratios rather than statutory minimum parking requirements. Parking ratio assumptions (Table 5) were determined by analyzing the same database used to derive the proforma test typologies.[9] Above-ground parking was counted in the FAR for all projects.

Table 4. DBO, TOIA, and OC Parking Assumptions by Prototype

Parking Assumptions							
	4D	TH	CY3	CY4	P5	P7	TW
Associated Density Cohort	Low-Med.II	Low-Med.II	Medium	Medium	High-Med.	High	High
Typology Description	Plex-Style	Townhome	3-story Courtyard-style	4-story Courtyard-style	5/6-Story Podium	7/8-Story Podium	Tower
Use Program	Residential	Residential	Residential	Residential	Residential	Residential	Residential
Parking Strategy	Surface &Tuck-Under	Tuck-Under	Underground	Underground	Underground &Podium	Underground &Podium	Underground &Podium
Parking Ratio (spaces/bedroom)	2 per Unit	2 per Unit	0.60	0.60	0.90	0.90	0.90

For CT, reduced parking assumptions were tested for townhouse and rowhouse prototypes.
Source: CoStar, AECOM

Chapter 3 discusses the methodology for "stepping up" from the base case for each prototype (i.e., 100%-market-rate, by-right projects that do not use CHIP program incentives), to incentive program scenarios (i.e., projects that provide affordable housing set-asides in return for corresponding incentives).

For each incentive program, a subset of relevant prototypes were selected, and the prototypes are assigned a specific site size and zoning designation that represents where the incentive programs are most likely to be utilized. Note that additional adjustments to the prototypes were made during the analysis for each respective CHIP incentive program, to reflect the typical site conditions of properties that are most likely to take advantage of the different programs. These

[9] It should be noted that most examples in the database from which parking assumptions were derived are DBO and TOC projects, and that the parking rates used by these projects were no different from the non-DBO and non-TOC examples. Reduced parking assumptions were tested for rowhouses and townhouses for the CT program; see Section 7.3.3 for discussion.

adjustments are discussed in the following chapters, and detailed information on site sizes and zoning designations by prototype and incentive program is provided in Chapters 4-7.

Table 5. Typical Unit Size (Square Feet) and Mix (Percent of Total Unit Count)

Prototype	Typical Density Range	Unit Size						Unit Mix				
		Avg	0BR	1BR	2BR	3BR	4BR	0BR	1BR	2BR	3BR	4BR
4D	10-35	1,250			1,050	1,200	1,400			20%	40%	40%
TH/RH	15-30	1,720			1,600	1,800				40%	60%	
CY3 (Low Density)	35-50	1,320			1,200	1,600				70%	30%	
CY3 (High Density)	50-75	880	600	800	1,100			20%	40%	40%		
CY4 (Low Density)	50-80	1,190			1,100	1,400				70%	30%	
CY4 (High Density)	80-105	900		700	1,100				50%	50%		
P5 (Low Density)	80-135	1,000		700	1,100	1,400			40%	40%	20%	
P5 (High Density)	105-170	800	600	700	1,100			20%	50%	30%		
P7	155-200	700	500	700	1,000			30%	50%	20%		
TW	110-218	850	600	800	1,200			25%	50%	25%		

Source: AECOM

3. Financial Analysis Methodology

Chapter 3 describes the methodology used to test the likely financial outcomes of the incentive programs. The chapter begins with a discussion of pro forma analysis, including the measures of return used to gauge financial outcomes and the design of the model. The chapter then describes the key inputs and assumptions used in the model.

3.1 Pro Forma Analysis

The analysis of CHIP program development economics uses a pro forma model to evaluate the impacts of proposed program parameters on project returns. The model is designed to consider programming parameters including density bonuses, height and FAR maximums, and affordable set-asides. AECOM worked closely with City Staff to develop various combinations of affordable housing set-asides and corresponding incentives for all four CHIP programs. These combinations are referred to as “incentive program scenarios” throughout this analysis and represent some of the zoning levers that can impact development feasibility.

A pro forma model is a representation of the financial returns of a hypothetical real estate project. The pro forma model includes assumptions about development costs, operating costs and revenues, and typical return expectations for a developer considering investment. The impacts and financial feasibility of different incentive scenarios can be explored through adjusting various model inputs.

The analyses of the various CHIP programs employ a “static” pro forma approach which calculates potential project value at an assumed point of project stabilization. This calculation is made at the assumed year that a for-sale project is fully sold or that a rental project achieves stabilized occupancy and can be sold to an investor who will value based on project cash flows. Static pro forma analysis is a commonly accepted approach to planning-level analysis where comparisons between multiple projects and policy options must be made.[10]

3.1.1 Measures of Return

The measure of financial return used in the analysis is **residual land value (RLV)**. RLV is a common approach used in planning exercises to explore and compare financial outcomes of policy proposals. RLV is the amount that remains after estimated project cost is deducted from estimated project value and represents the amount a developer should be willing to pay for land.

There are two RLV standards used to gauge the expected financial outcomes of the incentive program scenarios tested in this analysis: “feasibility” and “preferability.”

- **Feasibility**. For the purposes of this analysis, feasibility is a determination of **whether the incentive program scenario generates RLV that is consistent with market land value**. If a scenario generates RLV that is equivalent to or greater than the market standard, it is considered feasible.
- **Preferability**. Preferability tests **whether the incentive program scenario generates RLV that is greater than a base case scenario**, where the base case scenario is a 100%-

[10] While a developer may use static pro formas to initially assess a project opportunity, project underwriting by investors and lenders requires a discounted cash flow approach, which estimates project costs and revenues over time up to and past the point of stabilization. A discounted cash flow analysis allows different investor returns and return expectations as well as the time value of money factors to be considered. However, while necessary for investor decision-making, a cash flow model is too sensitive to investor-specific assumptions and in general too complex to allow for efficient comparison of policy options.

market-rate, by-right project that does not use CHIP program incentives. If the incentive program scenario generates an RLV that is equivalent to or greater than the base case, it is considered preferable.

Table 6 summarizes the market land value thresholds used in the pro forma testing by Market Tier and incentive program. As described further in Section 3.3.2, these thresholds are derived from market research on land costs from sets of recent transactions that are relevant to each respective program. When the model resulted in a higher RLV than the market land value, the project is assumed to be feasible. If the model resulted in a lower RLV than the market land value, the project is assumed to be infeasible under current market conditions.

Table 6. Market Land Value ($/Sq. Ft. of Land) Threshold for Feasibility by Program

RLV Baseline				
	DBO	TOIA	OC	CT
Market Tier 1				
Residential	$140	$140	$140	$90
Commercial	-	$115	$115	-
Market Tier 2				
Residential	$145	$145	$145	$160
Commercial	-	$170	$170	-
Market Tier 3				
Residential	$175	$175	$175	$215
Commercial	-	$185	$185	-
Market Tier 4				
Residential	$230	$230	$230	$225
Commercial	-	$240	$240	-

Source: Redfin, CoStar, AECOM

3.1.2 Pro Forma Model Design

The pro forma model developed for this analysis was designed to test the financial impact of various levels of affordable housing set-asides and corresponding incentive levels (the "incentive program scenarios"). The model's workflow involves three general components for each development prototype:

1. **Calculating the built capacity of the base case scenario** for each prototype (for DBO and TOIA only).[11]
2. **"Stepping up" the prototype** to calculate the built capacity of each incentive program scenario, i.e. the maximum unit count assuming the project provides a given level of affordable housing set-aside and takes advantage of corresponding incentives.
3. **Calculating the financial outcomes** of the base case and incentive program scenarios.

[11] For OC, there is no base case because the analysis modeled the feasibility of prototypes that achieved the maximum densities within each incentive area (limited by height and FAR), rather than "stepping up" from a base. For CT, there is no base case calculation because the CT program will primarily be applied to redevelopment of single-family lots or similarly scaled, low-density residential uses. Since the market land value is based on recent transactions of single-family lots, "feasibility" and "preferability" are effectively the same for CT.

These steps are described in more detail below.

Step 1. Calculating the built capacity of each base case scenario

As an initial step of the process, the model determines the likely unit count developed in the base case. This initial built capacity is determined by a combination of zoning regulations, including allowable density, FAR, and building heights based on specific zoning programs, as well as the capacities of the prototypes themselves.

For example, in the DBO program, the CY4 prototype is assumed to be developed on a 15,000 sq ft parcel in R3-1 zone (see Table 20). The lower-density CY4 can accommodate up to 27 units on this site size based on its height and density design. Under the zoning requirement of R3-1, a CY4 prototype can build up to 30 units with a FAR of 3.0, up to 18 units based on an allowable density of 54.45 DUAC, or up to 35 units with a maximum height of 45 feet. Therefore, considering all the restrictions mentioned, the base scenario for a CY4 development would be 18 units. In this case, the "limiting factor" of the built capacity is the allowable density set by the zoning regulations.

Throughout the model, above ground parking square footage is counted towards overall FAR limits, consistent with the City's proposed policies for the CHIP programs.

Step 2. "Stepping up" the prototype

In the second step of the process, the model calculates the total capacity that the developer can access by making use of a given incentive program and picks the corresponding prototype that would result.

When the incentive program scenarios enable more density than what the prototypes at the base can provide, then the model looks for the next tier of prototypes, also called the "stepping up mechanism" in this report. When the scenario "steps up" from one prototype to a higher density one, the model assumes the site dimensions of the new higher density prototype but same underlying zoning.[12] For scenarios involving unlimited density, such as those seen in TOIA and OC projects, the ultimate cap on density is assumed to be a TW height limit of 28 stories.

For example, for a project for which the base scenario is a lower-density CY4 prototype, when the incentive program scenario exceeds 78 DUAC, which is the limit of its density capacity, the model, before upgrading to the prototype to P5, first steps up to a higher density version of CY4 with smaller unit sizes (reduced from 1,190 sf to 900 sf) and a different unit mix (changed from 70% two-bedroom and 30% three-bedroom to 50% one-bedroom and 50% two-bedroom). When the incentive program scenario exceeds 105 DUAC, the project then steps up to a CY5 prototype. In the case of upgrading from one prototype to a completely different prototype (e.g., from CY4 to P5), the site being tested will increase from 15,000 sq ft to 22,500 sq ft, while the underlying zoning remains the same (i.e., R3-1, as used for CY4).

Step 3. Calculating the financial outcomes of each incentive program scenario

In the third step of the process, the model calculates the financial outcomes of base case scenario and each incentive program scenario.

To do this, the model first calculates the set-aside requirement, i.e. the number of affordable units by income level.[13] All fractional calculations are rounded up. For example, the same

[12] Reflects ingenuity of developers for finding adequate development sites, either through site consolidation and/or market knowledge of sites appropriate for prototypes that can accommodate higher densities

[13] For the DBO program, the calculation of the set-aside requirement is based on maximum permissible by-right units—i.e., total potential units before application of a density bonus. For example, for a project in a zone allowing 100 units seeking a 50-unit 50% density bonus and setting aside 10% as affordable, the set-aside requirement is 10

density bonus applied to a project with a base of 75 units results in a total unit count of 112.5, which is rounded to 113. The 8% set-aside requirement then computes to 9.04 units, which is rounded up to 10.

Next, the model incorporates market-tier-specific assumptions (such as rent, cap rate, vacancy rates, etc.) and prototype-specific assumptions (such as construction costs, parking requirements, etc.) to calculate project revenues and costs. The key inputs and assumptions used to calculate revenues and costs are described below in Section 3.2.

Finally, the model deducts the estimated project cost from the estimated property value to arrive at the RLV. As described above, if a scenario generates RLV that is equivalent to or greater than the market standard, it is considered feasible. If the incentive program scenario generates a RLV that is equivalent to or greater than the base case scenario, it is considered preferable.

3.1.3 Incentives Tested

This analysis tests the impact of density, height, and FAR incentives (sometimes referred to as “base incentives”) that are being considered by the City. The specific incentives tested for each respective program are described in Chapters 4-7, below.

Note that in addition to density, height, and FAR incentives, the DBO and Mixed Income Incentive Program also include incentives related to setbacks, lot width, open space, lot coverage, and other zoning requirements that are not tested in this analysis. It is assumed that the development projects tested may take advantage of additional incentives to maximize density, height, and FAR.

3.2 Key Inputs and Assumptions

This section describes the key revenue and cost inputs used in the pro forma analysis.

3.2.1 Revenues

Market-rate Rents

Table 7 shows the market-rate rent assumptions used in the analysis by typology, market tier, and bedroom count. Market rents are based on analysis of recent asking rent rates from CoStar data on 1,407 multifamily projects constructed since 2018 in Los Angeles. To reflect likely rent appreciation that will occur from construction through project stabilization, a 5% premium has been added to the market-based findings.[14]

units (10% of 100) and not 15 units (10% of 150). This is the approach used by the current adopted DBO and the State Density Bonus Law. For the TOIA and OC program, the set-aside requirement is based on total project units including density bonus units. For example, for a project with 100 base units and a 50% density bonus requiring that 8% of units be set aside as Extremely Low Income (ELI), there are 150 total units (50 density bonus units added to the 100 base) of which 12 (8% of 150) are set aside as ELI.

[14] For the CT program analysis, the parking ratio for the prototypes is reduced and the rent is assumed to decrease by 5% from typical market rates based on market research.

Table 7. Market Rent

	$/Sq.Ft.				$/Unit				
Typology	Market Tier 1	Market Tier 2	Market Tier 3	Market Tier 4	Sq.Ft./ Unit	Market Tier 1	Market Tier 2	Market Tier 3	Market Tier 4
4D									
Studio	$3.15	$3.40	$4.45	$5.25	550	$1,730	$1,880	$2,450	$2,890
1-BR	$3.15	$3.40	$4.45	$5.25	700	$2,210	$2,390	$3,120	$3,680
2-BR	$2.90	$3.15	$4.20	$4.75	1,050	$3,030	$3,310	$4,410	$4,960
3-BR	$2.65	$2.90	$3.70	$4.45	1,200	$3,150	$3,470	$4,410	$5,360
4-BR	$2.35	$2.65	$3.40	$4.20	1,400	$3,310	$3,680	$4,780	$5,880
TH/RH									
1-BR	$3.15	$3.40	$4.45	$5.25	800	$2,520	$2,720	$3,560	$4,200
2-BR	$2.90	$3.15	$4.20	$4.75	1,250	$3,625	$3,938	$5,250	$5,938
3-BR	$2.65	$2.90	$3.70	$4.45	1,550	$4,108	$4,495	$5,735	$6,898
4-BR	$2.35	$2.65	$3.40	$4.20	1,900	$4,465	$5,035	$6,460	$7,980
CY3									
Studio	$2.90	$4.20	$4.75	$5.00	600	$1,730	$2,520	$2,840	$2,990
1-BR	$2.65	$3.95	$4.20	$4.45	800	$2,100	$3,150	$3,360	$3,570
2-BR	$2.35	$3.70	$3.95	$4.20	1,200	$2,840	$4,410	$4,730	$5,040
3-BR	$2.10	$3.15	$3.40	$3.70	1,600	$3,360	$5,040	$5,460	$5,880
4-BR	$2.10	$3.15	$3.40	$3.70	1,900	$3,990	$5,990	$6,480	$6,980
CY4									
2-BR	$2.35	$3.70	$3.95	$4.20	1,100	$2,600	$4,040	$4,330	$4,620
3-BR	$2.10	$3.15	$3.40	$3.70	1,400	$2,940	$4,410	$4,780	$5,150
4-BR	$2.10	$3.15	$3.40	$3.70	-	-	-	-	-
P5									
Studio	$3.15	$4.20	$4.45	$5.00	600	$1,890	$2,520	$2,680	$2,990
1-BR	$2.90	$3.95	$4.20	$4.45	700	$2,020	$2,760	$2,940	$3,120
2-BR	$2.65	$3.70	$3.95	$4.20	1,100	$2,890	$4,040	$4,330	$4,620
3-BR	$2.35	$3.40	$3.70	$3.95	1,400	$3,310	$4,780	$5,150	$5,510
P7									
Studio	$3.35	$4.40	$4.75	$5.25	500	$1,680	$2,210	$2,360	$2,630
1-BR	$3.05	$4.10	$4.40	$4.75	700	$2,130	$2,870	$3,090	$3,310
2-BR	$2.75	$3.90	$4.10	$4.40	1,000	$2,730	$3,890	$4,100	$4,410
3-BR	$2.50	$3.55	$3.90	$4.10	1,400	$3,530	$5,000	$5,440	$5,730
4-BR	$2.20	$3.35	$3.55	$3.90	1,700	$3,750	$5,710	$6,070	$6,600
TW									
Studio	$3.15	$3.95	$4.20	$5.25	600	$1,890	$2,360	$2,520	$3,150
1-BR	$2.90	$3.70	$3.95	$5.00	800	$2,310	$2,940	$3,150	$3,990
2-BR	$2.65	$3.40	$3.70	$4.75	1,200	$3,150	$4,100	$4,410	$5,670
3-BR	$2.35	$3.15	$3.40	$4.45	1,700	$4,020	$5,360	$5,800	$7,590
4-BR	$2.35	$2.90	$3.40	$4.45	2,000	$4,730	$5,780	$6,830	$8,930

Source: CoStar, AECOM

Market-rate For-Sale Pricing

Market for-sale pricing is based on a set of 405 recent residential sales transactions drawn from Redfin/MLS. Table 8 shows pricing assumptions categorized by Market Tier, prototype, and bedroom. To reflect likely value appreciation that will occur from construction through project stabilization, a 5% premium has been added to the market-based findings.

Table 8. Market Sale Prices

Typology	$/Sq.Ft.				$/Unit				
	Market Tier 1	Market Tier 2	Market Tier 3	Market Tier 4	Sq.Ft./ Unit	Market Tier 1	Market Tier 2	Market Tier 3	Market Tier 4
4D									
2BR	$475	$550	$625	$650	1,050	$498,750	$577,500	$656,250	$682,500
3BR	$450	$525	$575	$600	1,200	$540,000	$630,000	$690,000	$720,000
4BR	$375	$475	$525	$550	1,400	$525,000	$665,000	$735,000	$770,000
TH/RH									
2BR	$500	$575	$700	$975	1,500	$750,000	$862,500	$1,050,000	$1,462,500
3BR	$450	$525	$650	$925	1,800	$810,000	$945,000	$1,170,000	$1,665,000
CY3									
Studio	$675	$800	$900	$1,150	600	$405,000	$480,000	$540,000	$690,000
1BR	$650	$750	$875	$1,050	800	$520,000	$600,000	$700,000	$840,000
2BR	$625	$725	$850	$1,025	1,200	$750,000	$870,000	$1,020,000	$1,230,000
3BR	$550	$650	$750	$1,000	1,600	$880,000	$1,040,000	$1,200,000	$1,600,000
CY4									
2BR	$625	$725	$850	$1,025	1,100	$687,500	$797,500	$935,000	$1,127,500
3BR	$550	$650	$750	$1,000	1,400	$770,000	$910,000	$1,050,000	$1,400,000
P5									
Studio	$675	$825	$950	$1,150	600	$405,000	$495,000	$570,000	$690,000
1BR	$650	$800	$925	$1,125	700	$455,000	$560,000	$647,500	$787,500
2BR	$625	$750	$900	$1,100	1,100	$687,500	$825,000	$990,000	$1,210,000
3BR	$600	$700	$875	$1,075	1,400	$840,000	$980,000	$1,225,000	$1,505,000
P7									
Studio	$675	$825	$950	$1,150	500	$337,500	$412,500	$475,000	$575,000
1BR	$650	$800	$925	$1,125	700	$455,000	$560,000	$647,500	$787,500
2BR	$625	$750	$900	$1,100	1,000	$625,000	$750,000	$900,000	$1,100,000
3BR	$600	$700	$875	$1,075	1,400	$840,000	$980,000	$1,225,000	$1,505,000
TW									
Studio	$625	$725	$850	$1,100	600	$375,000	$435,000	$510,000	$660,000
1BR	$600	$700	$825	$1,000	800	$480,000	$560,000	$660,000	$800,000
2BR	$525	$625	$725	$900	1,200	$630,000	$750,000	$870,000	$1,080,000

Source: Redfin, AECOM

Affordable Rents

Assumed affordable rents are based on the City's published schedules.[15] and the utility allowance schedule published by the Housing Authority of the City of Los Angeles (HACLA) based on Area Median Income (AMI).[16] The analysis includes Very Low Income (VLI at 50% of AMI), Low Income (LI at 80% AMI), and Moderate Income (MI at 120% AMI) units. The calculations for supportable affordable rents by income tier are shown in Table 9.

Table 9. Affordable Rents

Supportable Affordable Rents (Monthly)				
	ELI 30% AMI	VLI 50% AMI	LI 80% AMI	MI 120% AMI
Allocated Housing Cost(1)				
1-Person Household (Studio)	$663	$1,104	$1,766	$2,406
2-Person Household (1BR)	$758	$1,261	$2,019	$2,750
3-Person Household (2BR)	$853	$1,419	$2,271	$3,093
4-Person Household (3BR)	$946	$1,576	$2,523	$3,437
5-Person Household (4BR)	$1,023	$1,703	$2,725	$3,713
Utilities(2)				
1-Person Household (Studio)	$171	$171	$171	$171
2-Person Household (1BR)	$228	$228	$228	$228
3-Person Household (2BR)	$287	$287	$287	$287
4-Person Household (3BR)	$347	$347	$347	$347
5-Person Household (4BR)	$436	$436	$436	$436
Total Available for Rent Payment				
1-Person Household (Studio)	$492	$933	$1,595	$2,235
2-Person Household (1BR)	$530	$1,033	$1,791	$2,522
3-Person Household (2BR)	$566	$1,132	$1,984	$2,806
4-Person Household (3BR)	$599	$1,229	$2,176	$3,090
5-Person Household (4BR)	$587	$1,267	$2,289	$3,277

Source: Housing Authority of the City of Los Angeles (HACLA); California Housing and Community Development (HCD), AECOM
Notes: (1) Area Median Income limits for Extremely Low, Very Low, Low income, and Moderate tiers from California Department of Housing and Community Development (HCD) - Land Use Schedule VI Effective Date: August 1, 2023. AMI is $98,200.
(2) LACDA Utility Allowance Schedule, effective 12/01/2023; AECOM assumes trash collection is excluded from tenant costs.

Affordable For-Sale Pricing

Assumed pricing for affordable for-sale prices are based on an estimated monthly household cost calculated using the City's published schedules,[17] the utility allowance schedule published by the Housing Authority of the City of Los Angeles (HACLA),[18] and estimates for HOA fees, homeowner insurance, and property tax. Supportable for-sale value is derived after assuming a 5% down payment, which is a typical required minimum for affordable units. The calculations for affordable for-sale pricing are shown in Table 10.

[15] HCD Net Schedule 6: https://housing2.lacity.org/partners/land-use-rent-income-schedules

[16] https://www.hacla.org/sites/default/files/Section%208/S8%20Forms/2022-25a%20Utility%20Allowance%20Schedule%20Forms.pdf

[17] HCD Net Schedule 6: https://housing2.lacity.org/partners/land-use-rent-income-schedules

[18] https://www.hacla.org/sites/default/files/Section%208/S8%20Forms/2022-25a%20Utility%20Allowance%20Schedule%20Forms.pdf

Table 10. Affordable Sale Prices

Supportable Affordable Sales Prices	ELI 30% AMI	VLI 50% AMI	LI 80% AMI	MI 120% AMI
Allocated Housing Cost[1]				
1-Person Household (Studio)	$7,950	$13,245	$21,195	$28,875
2-Person Household (1BR)	$9,090	$15,135	$24,225	$33,005
3-Person Household (2BR)	$10,230	$17,025	$27,255	$37,118
4-Person Household (3BR)	$11,355	$18,915	$30,270	$41,248
Utilities[2]				
1-Person Household (Studio)	$2,052	$2,052	$2,052	$2,052
2-Person Household (1BR)	$2,736	$2,736	$2,736	$2,736
3-Person Household (2BR)	$3,444	$3,444	$3,444	$3,444
4-Person Household (3BR)	$4,164	$4,164	$4,164	$4,164
HOA[3]				
1-Person Household (Studio)	$628	$1,046	$1,674	$2,280
2-Person Household (1BR)	$727	$1,211	$1,938	$2,640
3-Person Household (2BR)	$826	$1,376	$2,202	$3,000
4-Person Household (3BR)	$909	$1,514	$2,422	$3,300
Home Owners Insurance[4]				
1-Person Household (Studio)	$1,007	$1,007	$1,007	$1,007
2-Person Household (1BR)	$1,150	$1,150	$1,150	$1,150
3-Person Household (2BR)	$1,330	$1,330	$1,330	$1,330
4-Person Household (3BR)	$1,853	$1,853	$1,853	$1,853
Property Tax[5]				
1-Person Household (Studio)	$774	$1,660	$2,989	$4,273
2-Person Household (1BR)	$812	$1,823	$3,341	$4,807
3-Person Household (2BR)	$841	$1,974	$3,682	$5,328
4-Person Household (3BR)	$804	$2,068	$3,964	$5,797
Available for Mortgage Payment				
1-Person Household (Studio)	$3,489	$7,481	$13,473	$19,263
2-Person Household (1BR)	$3,665	$8,216	$15,061	$21,672
3-Person Household (2BR)	$3,789	$8,901	$16,597	$24,016
4-Person Household (3BR)	$3,626	$9,317	$17,868	$26,134
Supportable Mortgage[6]				
1-Person Household (Studio)	$61,275	$131,366	$236,603	$338,273
2-Person Household (1BR)	$64,365	$144,276	$264,483	$380,587
3-Person Household (2BR)	$66,535	$156,308	$291,465	$421,735
4-Person Household (3BR)	$63,675	$163,619	$313,773	$458,935
Supportable Sales Price (rounded)				
1-Person Household (Studio)	$64,500	$138,300	$249,100	$356,100
2-Person Household (1BR)	$67,800	$151,900	$278,400	$400,600
3-Person Household (2BR)	$70,000	$164,500	$306,800	$443,900
4-Person Household (3BR)	$67,000	$172,200	$330,300	$483,100

Source: Housing Authority of the City of Los Angeles (HACLA); California Housing and Community Development (HCD), AECOM
Notes: (1) Area Median Income limits for Extremely Low, Very Low, Low income, and Moderate tiers from California Department of Housing and Community Development (HCD) - Land Use Schedule VI Effective Date: August 1, 2023. AMI is $98,200.
(2) LACDA Utility Allowance Schedule, effective 12/01/2023; AECOM assumes trash collection is excluded from tenant costs.
(3) AECOM estimate assuming developer indexes HOA fees to affordability.
(4) Calculated as 0.19% of market value of the unit (derived from medians for home value and insurance rates, 2021 California).
(5) 1.2% of sales price.
(6) 30-year mortgage, 3.95% rate (based on annual average 2013-7/22/2022).
(7) A 5% down payment is a typical minimum for affordable for-sale units.

Exit Capitalization Rates

The assumed capitalization rate for a rental project at stabilization is 4.5%, based on data from CBRE and CoStar.

3.2.2 Costs and Expenses

Hard (Direct) Costs

Assumptions used in the scenario pro forma models for vertical improvement costs were developed from several sources including RS Means, developer interviews, recent completed comparable projects, and selected inputs from AECOM cost estimators. Table 11 summarizes construction costs for building structures and parking structures. The hard costs are universal across different programs.

It is important to note that construction costs have been greatly impacted by inflation since 2020 stemming largely from the global pandemic and the Ukraine war. According to Federal Reserve Economic data (FRED) construction cost index, from 2020 through September 2023, construction costs have inflated at 10% annually resulting in costs that in September 2023 were 42% higher than in January 2020. The costs assumed in the scenario pro forma analysis are based on 2022 RS Means data, escalated by 10% to estimate 2023 costs.

Table 11. Hard Costs

Prototype Code	4D-R	TH	CY3	CY4	P5	P7	TW
Site Improvement Work (Per Site SF)	$5	$10	$10	$10	$10	$10	$10
Building Hard Cost (Per Bldg SF)	$233	$215	$220	$208	$202	$238	$209
Parking Hard Costs (Per Space)							
Surface	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500	$2,500
Tuck-Under	$23,900	$23,200	$23,800	$22,400	$21,800	$25,700	$22,600
Podium	$10,000	$10,000	$36,600	$36,600	$36,600	$34,300	$33,000
Underground	$10,000	$10,000	$49,000	$47,300	$43,600	$44,100	$41,300

Source: RS Means, AECOM

Soft (Indirect) Costs

Soft (indirect) costs include all other necessary expenses required to complete the development process. Indirect costs are generally calculated as a percentage of hard (direct) costs using the assumptions shown in Table 12.

Table 12. Indirect Costs

Indirect Costs	
Architecture and Engineering Fee	6% of all direct costs
Permits and Fees	$35 per gross sf
Legal, Insurance, Warranty	2% of all direct costs
Marketing	$2,000 per unit
General and Administrative	1% of all other indirect costs
Developer Fee	4.5% of all direct costs
Soft Cost Contingency	5% of all other indirect costs

Source: AECOM

Land Costs

Land cost assumptions are based on a market review of recent transactions and used to establish a basis for financial feasibility.[19]

For the DBO, TOIA, OC programs, the land transaction set consists of 278 comparable land transactions drawn from CoStar that occurred in the City of Los Angeles between January 2021 and September 2023.[20] The dataset was filtered to exclude transactions with incomplete data, transactions for sites smaller than 0.11 acres (5,000 square feet) and transactions for sites larger than 5 acres. The size filtering is intended to eliminate outliers, non-standard, and non-representative land transactions from the set. To adjust the nominal value of transactions that took place in 2021 and 2022 to 2023 values, AECOM normalized the dataset by applying County annual land value growth rates based on assessor data.

To assess scenario feasibility, the land value basis is set at the first quartile measure from the transaction set, an approach that sets the threshold for feasibility below the measured median land cost. This is intended to reflect the wide range of land costs observed in each market tier and to generate findings that are broadly representative of the area assessed. Both first quartile and median land values are shown in the tables below.

Table 13. DBO, TOIA and OC Land Costs

		$/Land Square Foot[2]	
	n[1]	1st Q	Median
Market Tier 1			
Residential	24	$140	$160
Commercial	40	$115	$140
Market Tier 2			
Residential	31	$145	$175
Commercial	27	$170	$230
Market Tier 3			
Residential	34	$175	$215
Commercial	17	$185	$405
Market Tier 4			
Residential	56	$230	$275
Commercial	49	$240	$375
Citywide			
Residential	145	$165	$220
Commercial	133	$145	$220

Sources: Redfin, CoStar
(1) Transactions in the City of Los Angeles between 1/1/2021 and 9/2023 on residentially zoned sites tagged as "land" and filtered to exclude transactions with incomplete data and on parcels less than 5,000 sq.ft. or greater than 5 acres.
(2) In $2023. Transactions that took place in 2021 and 2022 normalized to 2023 by applying County annual land value growth rates (from Assessor Data).
(3) The DBO program is only tested on residential parcels.

[19] Assumes minimal or no acquisition costs for the existing building are assumed; the development site is acquired based on its land value. The analysis also assumes that replacement unit requirements do not apply to the tested scenarios, or if any replacement units are required the scenarios would provide enough affordable housing to meet the minimum requirements stipulated in SEC. 151.28 of the Los Angeles Municipal Code.

[20] The ULA tax has been in effect since April 2023. It has been hypothesized that ULA could apply downward pressure on land values. However, in the assessed land transaction set (which includes a relatively low number of land transactions since 4/1/23), there is no evidence that any softening of land values has yet occurred.

For the CT program, land cost assumptions are based on a market review of recent transactions of eligible CT sites. The approach assumes that the CT program will primarily be applied to redevelopment of single-family lots or similarly scaled, low-density residential uses.

AECOM estimated land costs using a set of recent single-family home sales, sourced from Redfin, consisting of 51 transactions in the City between January 2021 and September 2023. These transactions were cross-referenced with a set of eligible CT sites provided by City staff. The set was further filtered to exclude transactions of sites smaller than 4,000 square feet. The size filtering is intended to eliminate outliers, non-standard, and non-representative land transactions from the set.

Single family homes and similar properties found throughout Los Angeles vary widely in parcel size, quality of existing buildings, and type of location. These factors contribute to a wide range of land costs observed in each market tier. To account for this wide range, this analysis uses the median price (sales price/land square feet) of the recent transactions to broadly represent the market value of land in each market tier and determine project feasibility. The median land values for each market tier are shown in the table below. The first quartile of land values is also shown for reference and to indicate redevelopment potential at the lower end of the price range.

The median rather than the first quartile value was used for CT because the program is designed to encourage redevelopment of single-family uses and similarly small-scaled low-density residential uses within Higher Opportunity Areas. Decades of limited development coupled with a scarcity of land suitable for single-family development have led to high single-family home values and a high threshold for feasibility for CT projects.

Table 14. CT Land Costs

MM Land Values		$/Land Square Foot	
	n1	1st Q	Median
Market Tier 1	8	$90	$120
Market Tier 2	2	$160	$170
Market Tier 3	10	$215	$220
Market Tier 4	31	$225	$320
Citywide	51	$195	$235

(1) Transactions of single-family houses in the City of Los Angeles between 03/2022 and 04/2023 on the lots above 4,000 sq.ft.

(2) All numbers are rounded off to the nearest 5

Source: Redfin, AECOM

Financing Costs

Assumptions for construction loan financing are as follows, reflecting typical underwriting assumptions: 65% loan to cost (LTC), 50% average loan balance, 2.5% loan fees, 7.5% interest rate, and a 2-year construction period.

Return Threshold

The assumed threshold yield on cost used is 12-13% of total costs before land depending on tenure types and prototypes or 10% of total costs after including land. While actual threshold return expectations may vary widely by project, by investor, by market, and by perceived risk, this yield on cost threshold is commonly assumed in planning-level analysis.

3.2.3 Policy and Regulatory Costs

Affordable Housing Linkage Fee

The City's Affordable Housing Linkage Fee (AHLF) charges a fee on market-rate development, which is used to fund the creation of affordable housing across the City. As specified in Municipal Code Section 19.18, residential projects dedicate at least 40% of units to MI households, or at least 20% of units to LI households, or at least 11% of units to VLI households, or at least 8% of total units to ELI units, are exempt from the AHLF.

Linkage fees are applied to the base case (100% market-rate) scenarios, assuming fees are drawn from the schedule effective as of July 1, 2023. All TOIA and OC incentive program scenarios are exempt from the AHLF because these programs are structured so that projects achieve affordability levels that meet the AHLF program exemptions.

For DBO and CT, some incentive program scenarios meet the AHLF program exemptions and others do not. This is determined for each scenario based on the percentage of units dedicated to affordable housing by income level.[21]

Under the existing DBO program, City staff have observed that developers will sometimes contribute an additional affordable unit or minimum number of units required to qualify a project for a Linkage Fee exemption. City staff also noted informal feedback from the development community suggesting that paying the Linkage Fee (not qualifying for an exemption) presents enough of a burden on DBO project economics to cause applicants to withdraw proposals. **This analysis assumes the developer would opt to pay the linkage fee rather than build more units or otherwise restructure the project to qualify for exemptions.** Although analyzing the impacts of the Linkage Fee on project economics was not a component of this study, exploratory testing suggests that Linkage Fee payments have a relatively small impact on typical project feasibility.[22]

ULA Tax

The ULA tax became effective in the City on April 1, 2023, and is applied to all transactions valued at over $5 million. The tax rate for transactions between $5 and $10 million is 4% and 5.5% for transactions over $10 million. The impacts of the tax on development costs are complex and will affect different projects differently. For example, a project that includes an initial land acquisition, improvements to the site, and sale of the finished project could incur the ULA tax twice: first on the land sale and second on the sale of the improved project. On the other hand, projects that are valued at less than $5 million will never incur the tax. The tax also does not affect owner-operators directly since it is only incurred upon sale.

The analysis assumes the seller pays the ULA tax but does not "pass it on" to the buyer. For example, on the initial land transaction, the seller absorbs the tax, resulting in a land value that is effectively lower than the market rate for the seller but not the buyer. Likewise, for the transaction of a finished project, the seller absorbs the tax, which again effectively lowers project value for the seller but not the buyer.

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[21] Note that for the DBO program, the set-aside calculation is based on the base density. Therefore, some projects have nominal set-asides that suggest they would be eligible for the AHLF exemption, but may still be subject to the fee based on the actual percentage of affordable units provided. For example, a project with a 50% density bonus and a 15% VLI set-aside may seem to be exempt from the linkage fee. However, after applying the density bonus, VLI units could account for only 10% of the total units built and the developer would be required to pay the linkage fee. It is also important to note that linkage fee exemption thresholds are based on projects offering single-affordability pathways set-asides and are not designed to give partial credit for meeting the exemption standards using set-asides for mixed-affordability pathways.

[22] For example, for the DBO base case scenarios, linkage fees make up an average of 1.3-3.5% of total project costs.

Developers are reportedly contemplating various strategies for offsetting the impact of ULA on project economics. Anecdotally, these include (but are not limited to): longer-term holds that allow owners to pay down debt through cashflow growth; increased use of condominium tract maps to reduce transaction values to below the $5 and $10 million thresholds; and strategies to reduce development and construction costs. It is possible ULA will also apply downward price pressure on land costs (although at the time of this analysis, this land cost decrease had not been observed).

To model the impact of ULA on development economics, the analysis assumes project applicants will deploy a variety of strategies to lower costs for projects that trigger ULA. To reflect this assumption, for project values that trigger compliance with ULA, the analysis assumes a 5% reduction in costs compared to a project that does not trigger ULA compliance.

4. Density Bonus Ordinance (DBO) Incentive Program

4.1 Overview

Chapter 4 tests the economics of the City's Density Bonus Ordinance (DBO), which serves as the City's primary mechanism for implementing California's State Density Bonus Law. Proposed changes to the City's local DBO include procedural updates as well as revisions that will affirm consistency between the Los Angeles Municipal Code and State Density Bonus Law (SDBL).[23] This chapter outlines the major changes to the SDBL and how the City's proposed DBO update aims to incorporate these new legal parameters. The chapter then provides a description of the incentive program scenarios that were tested, and a discussion of the results of the analysis. The chapter concludes with a summary of findings about the proposed DBO update.

4.2 Proposed DBO Update

The City's DBO, an implementation of the SDBL, has been effective since 2008. Since 2008, more than a dozen state bills have significantly amended the SDBL (CA Govt. Code Sections 65915-65918). To date, these changes have been implemented in the City through a range of administrative Implementation Memorandums. The proposed update to DBO will bring the City's local Density Bonus program into full alignment with the current SDBL and will incorporate the most recent changes to the affordable set-aside schedule and additions to the density bonus structure that went into effect on January 1, 2024 under recent legislation, including CA State Assembly Bill 1287 (AB1287). AB 1287 amended SDBL to increase the production of housing units set-aside for Very Low Income and Moderate Income households by enabling additional density bonuses above 50% (the maximum previous to AB 1287) for projects providing additional restricted affordable units.

Under the proposed DBO update, applicants can achieve varying levels of density bonus by providing different set asides of VLI, LI, or MI units. For the purposes of this analysis, the methods of calculating set asides and corresponding density bonuses are organized into two types of "affordability pathways:"

- Single-Affordability Pathways: These projects provide set-aside units at one income level (VLI, LI, *or* MI). By providing the maximum of 25% VLI Incomes units, single-affordability pathway projects will be able to reach a maximum of 88.75% density bonus.
- Mixed-Affordability Pathways: These projects provide a mix of set-aside units at different income levels. By adding MI units to a project that also includes VLI or LI units under a mixed-affordability pathway, projects can achieve density bonuses up to 100%.

Table 15 shows examples of pathways that applicants can take to achieve various levels of density bonus. Note that the set-aside options shown in Table 15 are only a selection of the possible set-aside percentages and associated density bonuses. In many cases there are multiple single- and mixed-affordability pathways for achieving the same level of density bonus.

[23] Note that the City's Value Capture Ordinance (VCO), effective since 2018, complements and extends provisions of DBO by awarding additional density bonus in exchange for additional affordable set-aside. Projects that utilize VCO would be required to obtain a Conditional Use Permit requiring approval from the City Planning Commission, which is a discretionary planning process. The analysis that follows is based on state law and does not consider use of the VCO.

Depending on the affordable set-asides selected, applicants can achieve a density bonus of anywhere from 5% to 100%.

Table 15. Examples of Density Bonuses Available Under the Proposed DBO Update

Density Bonus	Type of Affordability	Aggregated Set Aside %		
		VLI	LI	MI
5%	Single-Affordability			10%
35%	Single-Affordability	11%		
35%	Single-Affordability		20%	
35%	Single-Affordability			40%
50%	Single-Affordability	15%		
50%	Single-Affordability		24%	
50%	Single-Affordability			44%
70%	Single-Affordability	20%		
70%	Mixed-Affordability	5%	24%	
70%	Mixed-Affordability	5%		44%
70%	Mixed-Affordability	15%		5%
70%	Mixed-Affordability		24%	5%
70%	Mixed-Affordability			49%
88.75%	Single-Affordability	25%		
88.75%	Mixed-Affordability	10%	24%	
88.75%	Mixed-Affordability	15%		12%
88.75%	Mixed-Affordability		24%	12%
100%	Mixed-Affordability	15%		15%
100%	Mixed-Affordability		24%	15%

Note: Aggregated set-aside includes the standard density bonus (from pre-AB 1287 SDBL) and the additional density bonus available under AB 1287.
Source: SDBL, AB 1287, AECOM

4.3 Density Bonus Scenarios Tested

To explore the economic feasibility of the proposed updated DBO for projects in the City of Los Angeles, AECOM tested a set of scenarios that covers a wide range of the potential affordability pathways and density bonus combinations allowed. This set of scenarios include increases in density bonuses up to 100%. In all, nearly twenty scenarios were tested consisting of single-affordability pathway, mixed-affordability pathway, for-rent, and for-sale scenarios. The scenarios were selected to reflect a broad range of density bonus and affordable set-aside applications. At the City's request, nearly all the scenarios achieve density bonuses of 50% or greater.[24]

All DBO scenarios assume an FAR incentive of up to 50% over the base, and height incentives matching the density bonus percentage.[25]

[24] There is one tested scenario that features a density bonus less than 50%: Scenario 7-R, which is eligible for a 35% density bonus. This scenario was selected to increase the number of LI-tested scenarios in the set.
[25] Note that the program is still under development and the incentives tested in this report may not reflect the City's final policy decisions.

4.3.1 For-Rent Scenarios

Single Affordability Pathway For-Rent Scenarios

Five for-rent scenarios featuring a single affordability pathway were tested. These are numbered 1-R to 5-R for reference.

Table 16. Single-Tier Affordability For-Rent Density Bonus Scenarios Tested

Scenario		Density Bonus	Affordability			
			Total Set Aside	VLI	LI	MI
1-R	50.0% DB / 15.0% VLI Set-Aside	50.00%	15%	15%	-	-
2-R	70.0% DB / 20.0% VLI Set-Aside	70.00%	20%	20%	-	-
3-R	88.75% DB / 25.0% VLI Set-Aside	88.75%	25%	25%	-	-
4-R	35.0% DB / 20.0% LI Set-Aside	35.00%	20%	-	20%	-
5-R	50.0% DB / 24.0% LI Set-Aside	50.00%	24%	-	24%	-

Source: AECOM

Mixed Affordability Pathway For-Rent Scenarios

Ten for-rent scenarios featuring mixed-affordability pathways were tested.

Table 17. Mixed Affordability For-Rent Density Bonus Scenarios Tested

Scenario		Density Bonus	Affordability			
			Total Set Aside	VLI	LI	MI
6-R	70.0% DB / 5.0% VLI / 24.0% LI Set-Aside	70.00%	29%	5%	24%	-
7-R	85.0% DB / 9.0% VLI / 24.0% LI Set-Aside	85.00%	33%	9%	24%	-
8-R	70.0% DB / 15.0% VLI / 5.0% MI Set-Aside	70.00%	20%	15%	-	5%
9-R	80.0% DB / 15.0% VLI / 9.0% MI Set-Aside	80.00%	24%	15%	-	9%
10-R	88.75% DB / 15.0% VLI / 12.0% MI Set-Aside	88.75%	27%	15%	-	12%
11-R	100.0% DB / 15.0% VLI / 15.0% MI Set-Aside	100.00%	30%	15%	-	15%
12-R	70.0% DB / 24.0% LI / 5.0% MI Set-Aside	70.00%	29%	-	24%	5%
13-R	80.0% DB / 24.0% LI / 9.0% MI Set-Aside	80.00%	33%	-	24%	9%
14-R	88.75% DB / 24.0% LI / 12.0% MI Set-Aside	88.75%	36%	-	24%	12%
15-R	100.0% DB / 24.0% LI / 15.0% MI Set-Aside	100.00%	39%	-	24%	15%

Source: AECOM

4.3.2 For-Sale Scenarios

Single Affordability Pathway For-Sale Scenarios

Two for-sale scenarios featuring a single-affordability pathway were tested, called 1-S, and 2-S. Per the State Density Bonus Law, for-sale projects are only eligible for participation if providing Moderate Income (MI) set-asides.

Table 18. Single Affordability For-Sale Density Bonus Scenarios Tested

Scenario		Density Bonus	Affordability			
			Total Set Aside	VLI	LI	MI
1-S	50.0% DB / 44.0% MI Set-Aside	50.00%	44%	-	-	44%
2-S	72.5% DB / 50.0% MI Set-Aside	72.50%	50%	-	-	50%

Source: AECOM

Mixed Affordability Pathway For-Sale Scenarios

Finally, two mixed affordability, for-sale scenarios were tested. Note that in practice, developers may choose to rent the lower-income units in for-sale projects at designated affordable rent limits, rather than sell them at sales price limits tied to predefined VLI and LI housing allowances. For the purposes of this analysis, all units in for-sale projects were assumed to be for-sale.

Table 19. Mixed Affordability For-Sale Density Bonus Scenarios Tested

Scenario		Density Bonus	Affordability			
			Total Set Aside	VLI	LI	MI
3-S	100% DB / 24% LI / 15% MI Set-Aside	100.00%	39%	-	24%	15%
4-S	100% DB / 15% VLI / 15% MI Set-Aside	100.00%	30%	15%	-	15%

Source: AECOM

4.3.3 Sites and Prototypes Tested

Table 20 shows the sites and prototypes that were tested. The prototypes were selected to represent a wide range of likely development projects that could occur across the City. Note that DBO was only tested on residential zoned sites, based on an analysis of recently completed projects that showed that the majority of DBO projects occurred in residential zones (whereas projects in commercial zones were more likely to take advantage of the TOC program, the predecessor to the proposed TOIA program).[26]

[26] Commercial lots generally have smaller underlying FARs than residential lots, and therefore projects on commercial lots may be more likely to take advantage of TOIA in part because the TOIA program offers better FAR incentives compared to DBO.

Table 20. DBO Sites and Prototypes Tested

DBO Base Case Site and Prototype Assumptions											
Base Housing Typology	**TH-S**	**CY3-R**	**CY3-S**	**CY4-R**	**CY4-S**	**P5-R**	**P5-S**	**P7-R**	**P7-S**	**TW-R**	**TW-S**
Description	Townhouse	3-story Courtyard-style		4-story Courtyard-style		5/6-Story Podium		7/8-Story Podium		Tower	
Use Program	Residential	Residential		Residential		Residential		Residential		Residential	
Parking Strategy	Tuck-Under	Underground		Underground		1-level podium		2-level podium		4-level podium	
Assumed Density Cohort	**Low-Med.II**	**Medium**		**Medium**		**High-Med.**		**High**		**High**	
Housing Tenure	**For Sale**	**Rental**	**For Sale**	**Rental**	**For Sale**	**Rental**	**For Sale**	**Rental**	**For Sale**	**Rental**	**For Sale**
Zone Class of Base Zone	**RD1.5**	**R3**	**R3**	**R3**	**R3**	**R4**	**R4**	**R5**	**R5**	**R5**	**R5**
Assumed Height District	1	1	1	1VL	1VL	1	1	2	2	4	4
Base Zone Maximum Height (ft)	45	45	45	50	45	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Base Zone Maximum FAR	3.0	3.0	3.0	3.0	3.0	3.0	3.0	6.0	6.0	13.0	13.0
Base Zone Minimum Lot Area/Unit (SF)	1,500	800	800	800	800	400	400	200	200	200	200
Base Zone Max Density (DUAC)	29.0	54.5	54.5	54.5	54.5	108.9	108.9	217.8	217.8	217.8	217.8
Site Area											
Land Area (SF)	15,000	7,500	7,500	15,000	15,000	22,500	22,500	30,000	30,000	44,000	44,000
Residential - Gross Building Area (SF)	15,480	11,880	11,880	21,420	21,420	50,000	14,500	68,533	68,533	131,429	131,429
Unit Count and Mix	**9**	**9**	**9**	**18**	**18**	**50**	**50**	**135**	**135**	**219**	**219**
Typical Unit Mix (Lower Density)											
Avg. Unit Size (Lower Density)	**1,720**	**1,320**	**1,320**	**1,190**	**1,190**	**1,000**	**1,000**	**700**	**700**	**850**	**850**
0BR	0%	0%	0%	0%	0%	0%	0%	30%	30%	25%	25%
1BR	0%	0%	0%	0%	0%	40%	40%	50%	50%	50%	50%
2BR	40%	70%	70%	70%	70%	40%	40%	20%	20%	25%	25%
3BR	60%	30%	30%	30%	30%	20%	20%	0%	0%	0%	0%
4BR	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Denser Unit Mix Alternative											
Avg. Unit Size	**NA**	**880**	**880**	**900**	**900**	**800**	**800**	**NA**	**NA**	**NA**	**NA**
0BR		20%	20%	0%	0%	20%	20%				
1BR		40%	40%	50%	50%	50%	50%				
2BR		40%	40%	50%	50%	30%	30%				
3BR		0%	0%	0%	0%	0%	0%				
4BR		0%	0%	0%	0%	0%	0%				
Parking											
Residential Parking Ratio (spaces/BR)	2 Per Unit	0.60	0.60	0.60	0.60	0.90	0.90	0.90	0.90	0.90	0.90
Total Parking Spaces	18	12	12	25	25	81	81	145	145	246	246
Surface/Tuck Under	18	0	0	0	0	0	0	0	0	0	0
Ground level parking (L1)	0	0	0	0	0	33	33	45	45	74	74
Above-ground podium (L2, L3, L4)	0	0	0	0	0	0	0	60	60	172	172
Subterranean parking (levels)	0	12	12	25	25	48	48	40	40	0	0

Source: AECOM

4.4 Results

4.4.1 Base Case Scenarios

The base case scenarios represent residential prototypes allowed under an assumed range of base zoning conditions. These scenarios test prototypes that maximize by-right unit potential under base zoning, with 100% market-rate units and no density bonus or incentives. Base case residual land values provide a basis of comparison for the incentive program scenarios to follow.

The table below shows estimated residual land values (RLV) for each base case prototype, the assumed market land value threshold for each Market Tier, and a determination of "feasibility" (F), i.e., whether the base case generates RLV that is equal to or greater than the market threshold.

As shown, all prototypes generate negative RLV in Market Tier 1 and all are not feasible. In Market Tier 2, RLVs are mostly positive, and some typologies meet the market value threshold (shown in the "Market Land Value/Sq.Ft." rows in the table) for feasibility. In Market Tiers 3 and 4, most typologies meet the market land value thresholds and are feasible. These findings are broadly consistent with observed market activity, which indicates that under today's market conditions, most development projects are only feasible in stronger markets (or with projects that command rents and sale prices typical of stronger markets). CY4-R is the only prototype not feasible in Market Tier 4; however, its RLV ($224/sq. ft.) is just below the market threshold ($230/sq. ft.).

Table 21. DBO Base Case Residual Land Value Estimates

DBO Base Case: Estimated Residual Land Value											
Prototype (Sale and Rent)	TH-S	CY3-R	CY3-S	CY4-R	CY4-S	P5-R	P5-S	P7-R	P7-S	TW-R	TW-S
Density Cohort	Low Med.	Medium	Medium	Medium	Medium	High Med.	High Med.	High	High	High	High
Market Tier 1											
RLV/Land Sq.Ft.	($11)	($295)	($42)	($269)	($20)	($400)	($86)	($542)	($254)	($642)	($415)
Market Land Value/Sq. Ft.	$140										
Feasibility (RLV > Market)											
Market Tier 2											
RLV/Land Sq.Ft.	$61	$84	$108	$84	$118	$94	$185	$187	$186	$100	($5)
Market Land Value/Sq. Ft.	$145										
Feasibility (RLV > Market)							F	F	F		
Market Tier 3											
RLV/Land Sq.Ft.	$183	$163	$287	$155	$279	$212	$512	$366	$590	$326	$474
Market Land Value/Sq. Ft.	$175										
Feasibility (RLV > Market)	F		F		F	F	F	F	F	F	F
Market Tier 4											
RLV/Land Sq.Ft.	$450	$238	$576	$224	$551	$313	$937	$628	$1,190	$1,217	$1,232
Market Land Value/Sq. Ft.	$230										
Feasibility (RLV > Market)	F	F	F		F	F	F	F	F	F	F

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios.
All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

4.4.2 Density Bonus Scenarios

The incentive scenarios described in Section 4.3. were applied to each of the base case prototypes, each resulting in a higher density prototype based on the stepping up mechanism described in Section 3.1.2.[27] The tables below show the results from this testing using

[27] For the DBO program, the calculation of the set-aside requirement is based on maximum permissible by-right units—i.e., total potential units before application of a density bonus. For example, for a project in a zone allowing 100 units seeking a 50-unit 50% density bonus and setting aside 10% as affordable, the set-aside requirement is 10

measures of residual land value, feasibility, and preferability. The RLV of each density bonus prototype is evaluated against the market cost of land for feasibility and against the base case prototype RLV for preferability.

DBO Scenario Feasibility: For-Rent Prototypes

The updated DBO demonstrated broad feasibility across the prototypes tested in all market tiers except for Market Tier 1, where achievable rents and sales prices are generally lower than in higher market tier neighborhoods. Market Tier 1 produced negative residual land values in nearly all of the scenarios tested (Table 22).

In Market Tier 2 (Table 23), several incentive scenarios in the Medium density cohort (base densities 30-55 DUAC) produced financial returns that are preferable to the base case.

In Market Tier 3, all residual land values are positive, resulting in feasibility in every density cohort and for both single-affordability and mixed-affordability pathway scenarios. Feasibility in Market Tier 3 extends to include typologies in the High Medium (base density up to 109 DUAC) and High (base density greater than 109 DUAC) density cohorts. Approximately half of the scenarios tested are preferable when comparing their RLVs to the base case.

In Market Tier 4, residual land values are all positive, resulting in feasible scenarios in 32 (80%) of single-affordability scenarios tested and 53 (96%) of multi-affordability scenarios tested. In addition to covering a broader range of feasible scenarios, Market Tier 4 results differ from Market Tier 3 mainly by also yielding feasibility of the TW (tower) typology in the High density cohort. Most of the scenarios are preferable as well as feasible.[28]

units (10% of 100) and not 15 units (10% of 150). This is the approach used by the current adopted DBO and the State Density Bonus Law.

[28] Note that between the podium prototypes, P5 generates lower residual land values compared to P7 in most scenarios. This is largely because the P7 prototype includes two stories of podium parking, while P5 includes one story of podium parking with the remaining parking spaces underground (and underground parking is more expensive than podium parking).

Table 22. DBO For-Rent Scenarios Market Tier 1 Residual Land Value and Feasibility

Market Tier 1 (Market Land Value: $140 Per Sq. Ft.)											
Scenario		DBO Residual Land Value					DBO Feasibility				
Base Case Typology		CY3-R	CY4-R	P5-R	P7-R	TW-R	CY3-R	CY4-R	P5-R	P7-R	TW-R
Single Affordability Pathways		Medium	Medium	High Med.	High	High	Medium	Medium	High Med.	High	High
Base	*No DB / No Set-Aside*	*($295)*	*($269)*	*($400)*	*($542)*	*($642)*					
Scenario 1-R	50.0% DB / 15.0% VLI Set-Aside	($212)	($278)	($666)	($1,049)	($1,117)					
Scenario 2-R	70.0% DB / 20.0% VLI Set-Aside	($240)	($309)	($662)	($1,222)	($1,245)					
Scenario 3-R	88.75% DB / 25.0% VLI Set-Aside	($274)	($335)	($689)	($1,393)	($1,427)					
Scenario 4-R	35.0% DB / 20.0% LI Set-Aside	($225)	($401)	($469)	($914)	($960)					
Scenario 5-R	50.0% DB / 24.0% LI Set-Aside	($194)	($257)	($641)	($1,014)	($1,065)					
Mixed Affordability Pathways											
Scenario 6-R	70.0% DB / 5.0% VLI / 24.0% LI Set-Aside	($231)	($300)	($668)	($1,188)	($1,260)					
Scenario 7-R	85.0% DB / 9.0% VLI / 24.0% LI Set-Aside	($255)	($333)	($697)	($1,323)	($1,415)					
Scenario 8-R	70.0% DB / 15.0% VLI / 5.0% MI Set-Aside	($232)	($304)	($658)	($1,182)	($1,248)					
Scenario 9-R	80.0% DB / 15.0% VLI / 9.0% MI Set-Aside	($256)	($302)	($659)	($1,249)	($1,316)					
Scenario 10-R	88.75% DB / 15.0% VLI / 12.0% MI Set-Aside	($253)	($311)	($655)	($1,309)	($1,372)					
Scenario 11-R	100.0% DB / 15.0% VLI / 15.0% MI Set-Aside	($228)	($464)	($651)	($1,383)	($1,438)					
Scenario 12-R	70.0% DB / 24.0% LI / 5.0% MI Set-Aside	($214)	($283)	($633)	($1,148)	($1,196)					
Scenario 13-R	80.0% DB / 24.0% LI / 9.0% MI Set-Aside	($238)	($281)	($634)	($1,215)	($1,264)					
Scenario 14-R	88.75% DB / 24.0% LI / 12.0% MI Set-Aside	($235)	($290)	($629)	($1,275)	($1,321)					
Scenario 15-R	100.0% DB / 24.0% LI / 15.0% MI Set-Aside	($217)	($460)	($625)	($1,348)	($1,386)					

Notes: Feasibility rows are blank because all projects tested were infeasible. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 23. DBO For-Rent Scenarios Market Tier 2 Residual Land Value and Feasibility

Market Tier 2 (Market Land Value: $145 Per Sq. Ft.)											
Scenario		**DBO Residual Land Value**					**DBO Feasibility**				
Base Case Typology		CY3-R	CY4-R	P5-R	P7-R	TW-R	CY3-R	CY4-R	P5-R	P7-R	TW-R
Single Affordability Pathways		Medium	Medium	High Med.	High	High	Medium	Medium	High Med.	High	High
Base	*No DB / No Set-Aside*	*$84*	*$84*	*$94*	*$187*	*$100*				F	
Scenario 1-R	50.0% DB / 15.0% VLI Set-Aside	$106	$137	$30	$2	($104)					
Scenario 2-R	70.0% DB / 20.0% VLI Set-Aside	$136	$156	$17	($42)	($100)		P			
Scenario 3-R	88.75% DB / 25.0% VLI Set-Aside	$140	$165	($31)	($91)	($170)		P			
Scenario 4-R	35.0% DB / 20.0% LI Set-Aside	$133	$28	($28)	$12	($84)					
Scenario 5-R	50.0% DB / 24.0% LI Set-Aside	$115	$130	$18	$5	($103)					
Mixed Affordability Pathways											
Scenario 6-R	70.0% DB / 5.0% VLI / 24.0% LI Set-Aside	$124	$140	($33)	($40)	($182)					
Scenario 7-R	85.0% DB / 9.0% VLI / 24.0% LI Set-Aside	$148	$121	($84)	($80)	($253)	P				
Scenario 8-R	70.0% DB / 15.0% VLI / 5.0% MI Set-Aside	$134	$165	$17	($1)	($114)		P			
Scenario 9-R	80.0% DB / 15.0% VLI / 9.0% MI Set-Aside	$158	$162	($5)	($7)	($132)	P	P			
Scenario 10-R	88.75% DB / 15.0% VLI / 12.0% MI Set-Aside	$144	$176	($4)	($10)	($139)		P			
Scenario 11-R	100.0% DB / 15.0% VLI / 15.0% MI Set-Aside	$14	$54	($15)	($8)	($138)					
Scenario 12-R	70.0% DB / 24.0% LI / 5.0% MI Set-Aside	$142	$159	$5	$3	($114)		P			
Scenario 13-R	80.0% DB / 24.0% LI / 9.0% MI Set-Aside	$166	$156	($17)	($3)	($131)	P	P			
Scenario 14-R	88.75% DB / 24.0% LI / 12.0% MI Set-Aside	$152	$169	($15)	($6)	($138)	P	P			
Scenario 15-R	100.0% DB / 24.0% LI / 15.0% MI Set-Aside	$20	$36	($27)	($4)	($138)					

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 24. DBO For-Rent Scenarios Market Tier 3 Residual Land Value and Feasibility

Market Tier 3 (Market Land Value: $175 Per Sq. Ft.)											
Scenario		DBO Residual Land Value					DBO Feasibility				
Base Case Typology		CY3-R	CY4-R	P5-R	P7-R	TW-R	CY3-R	CY4-R	P5-R	P7-R	TW-R
Single Affordability Pathways		Medium	Medium	High Med.	High	High	Medium	Medium	High Med.	High	High
Base	*No DB / No Set-Aside*	*$163*	*$155*	*$212*	*$366*	*$326*			F	F	F
Scenario 1-R	50.0% DB / 15.0% VLI Set-Aside	$167	$214	$195	$321	$204		P	F	F	F
Scenario 2-R	70.0% DB / 20.0% VLI Set-Aside	$206	$247	$184	$317	$259	P	P	F	F	F
Scenario 3-R	88.75% DB / 25.0% VLI Set-Aside	$216	$261	$132	$304	$225	P	P		F	F
Scenario 4-R	35.0% DB / 20.0% LI Set-Aside	$209	$112	$76	$293	$180	P			F	F
Scenario 5-R	50.0% DB / 24.0% LI Set-Aside	$174	$202	$173	$314	$186		P		F	F
Mixed Affordability Pathways											
Scenario 6-R	70.0% DB / 5.0% VLI / 24.0% LI Set-Aside	$190	$222	$117	$308	$143	P	P		F	
Scenario 7-R	85.0% DB / 9.0% VLI / 24.0% LI Set-Aside	$223	$205	$60	$297	$96	P	P		F	
Scenario 8-R	70.0% DB / 15.0% VLI / 5.0% MI Set-Aside	$202	$252	$177	$358	$229	P	P	F	F	F
Scenario 9-R	80.0% DB / 15.0% VLI / 9.0% MI Set-Aside	$235	$248	$149	$370	$226	P	P		P	F
Scenario 10-R	88.75% DB / 15.0% VLI / 12.0% MI Set-Aside	$217	$266	$151	$384	$234	P	P		P	F
Scenario 11-R	100.0% DB / 15.0% VLI / 15.0% MI Set-Aside	$71	$177	$136	$407	$254		P		P	F
Scenario 12-R	70.0% DB / 24.0% LI / 5.0% MI Set-Aside	$208	$240	$156	$351	$211	P	P		F	F
Scenario 13-R	80.0% DB / 24.0% LI / 9.0% MI Set-Aside	$242	$236	$127	$363	$208	P	P		F	F
Scenario 14-R	88.75% DB / 24.0% LI / 12.0% MI Set-Aside	$224	$253	$129	$377	$216	P	P		P	F
Scenario 15-R	100.0% DB / 24.0% LI / 15.0% MI Set-Aside	$75	$154	$114	$400	$236				P	F

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 25. DBO For-Rent Scenarios Market Tier 4 Residual Land Value and Feasibility

Market Tier 4 (Market Land Value: $230 Per Sq. Ft.)											
Scenario		DBO Residual Land Value					DBO Feasibility				
Base Case Typology		CY3-R	CY4-R	P5-R	P7-R	TW-R	CY3-R	CY4-R	P5-R	P7-R	TW-R
Single Affordability Pathways		Medium	Medium	High Med.	High	High	Medium	Medium	High Med.	High	High
Base	*No DB / No Set-Aside*	*$238*	*$224*	*$313*	*$628*	*$1,217*	F		F	F	F
Scenario 1-R	50.0% DB / 15.0% VLI Set-Aside	$222	$283	$337	$1,580	$1,415		P	P	P	P
Scenario 2-R	70.0% DB / 20.0% VLI Set-Aside	$269	$339	$347	$1,730	$1,659	P	P	P	P	P
Scenario 3-R	88.75% DB / 25.0% VLI Set-Aside	$286	$360	$290	$1,862	$1,760	P	P	F	P	P
Scenario 4-R	35.0% DB / 20.0% LI Set-Aside	$270	$194	$166	$1,398	$1,217	P			P	F
Scenario 5-R	50.0% DB / 24.0% LI Set-Aside	$227	$266	$307	$1,528	$1,323		P	F	P	P
Mixed Affordability Pathways											
Scenario 6-R	70.0% DB / 5.0% VLI / 24.0% LI Set-Aside	$249	$296	$246	$1,675	$1,417	P	P	F	P	P
Scenario 7-R	85.0% DB / 9.0% VLI / 24.0% LI Set-Aside	$291	$281	$184	$1,779	$1,470	P	P		P	P
Scenario 8-R	70.0% DB / 15.0% VLI / 5.0% MI Set-Aside	$263	$331	$315	$1,772	$1,580	P	P	P	P	P
Scenario 9-R	80.0% DB / 15.0% VLI / 9.0% MI Set-Aside	$305	$326	$282	$1,854	$1,632	P	P	F	P	P
Scenario 10-R	88.75% DB / 15.0% VLI / 12.0% MI Set-Aside	$284	$347	$283	$1,934	$1,697	P	P	F	P	P
Scenario 11-R	100.0% DB / 15.0% VLI / 15.0% MI Set-Aside	$120	$282	$265	$2,040	$1,793		P	F	P	P
Scenario 12-R	70.0% DB / 24.0% LI / 5.0% MI Set-Aside	$268	$314	$285	$1,720	$1,487	P	P	F	P	P
Scenario 13-R	80.0% DB / 24.0% LI / 9.0% MI Set-Aside	$310	$309	$252	$1,802	$1,539	P	P	F	P	P
Scenario 14-R	88.75% DB / 24.0% LI / 12.0% MI Set-Aside	$289	$330	$253	$1,882	$1,604	P	P	F	P	P
Scenario 15-R	100.0% DB / 24.0% LI / 15.0% MI Set-Aside	$123	$255	$235	$1,988	$1,701		P	F	P	P

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

DBO Scenario Feasibility: For-Sale Prototypes

Feasibility results for the four for-sale prototypes tested are shown for each market tier in Table 26. Residual land values steadily increased with each market tier, starting with Market Tier 1 which produced nearly all negative RLVs, to Market Tier 4 which produced feasible results in every scenario for all but one prototype. However, incentive program scenario preferability is limited, because in most scenarios, the incentive scenarios generate RLVs that fall below the base case RLVs.

For example, in Market Tier 4, where $230/square foot is the typical market land value, the CY3 base case produces a RLV of $576 per land square foot – making the base case feasible. However, all four incentive scenarios return RLVs around $400, which is significantly higher than the market cost of land, but falls short of the $576 threshold. A developer looking for the highest rate of return would in theory elect to develop the base case (100% market-rate) scenario rather than a larger project incorporating affordable set-asides and density bonuses.

Table 26. DBO For-Sale Scenarios Residual Land Value and Feasibility by Market Tier

Scenario		Residual Land Value/Sq.Ft.						Feasibility					
Base Case Prototype		TH-S	CY 3-S	CY 4-S	P5-S	P7-S	TW-S	TH-S	CY 3-S	CY 4-S	P5-S	P7-S	TW-S
Density Cohort		Medium	Medium	Medium	High Med.	High	High	Medium	Medium	Medium	High Med.	High	High
Market Tier 1 (Market Land Value: $140 Per Sq. Ft.)													
Base Scenario	*No DB / No Set-Aside*	*($11)*	*($42)*	*($20)*	*($86)*	*($254)*	*($415)*						
Scenario 1-S	50.0% DB / 44.0% MI Set-Aside	($191)	$7	($12)	($274)	($713)	($782)						
Scenario 2-S	72.5% DB / 50.0% MI Set-Aside	($226)	$16	($6)	($302)	($836)	($916)						
Scenario 3-S	100% DB / 24% LI / 15% MI Set-Aside	($285)	($84)	($172)	($315)	($1,020)	($1,134)						
Scenario 4-S	100% DB / 15% VLI / 15% MI Set-Aside	($264)	($88)	($151)	($295)	($1,025)	($1,136)						
Market Tier 2 (Market Land Value: $145 Per Sq. Ft.)													
Land Cost		$145											
Base Scenario	*No DB / No Set-Aside*	*$61*	*$108*	*$118*	*$185*	*$186*	*($5)*				F	F	
Scenario 1-S	50.0% DB / 44.0% MI Set-Aside	($142)	$111	$105	$29	($210)	($347)						
Scenario 2-S	72.5% DB / 50.0% MI Set-Aside	($177)	$134	$130	($15)	($253)	($412)						
Scenario 3-S	100% DB / 24% LI / 15% MI Set-Aside	($219)	$43	$95	($0)	($291)	($470)						
Scenario 4-S	100% DB / 15% VLI / 15% MI Set-Aside	($182)	$43	$127	$42	($272)	($434)						
Market Tier 3 (Market Land Value: $175 Per Sq. Ft.)													
Base Scenario	*No DB / No Set-Aside*	*$183*	*$287*	*$279*	*$512*	*$590*	*$474*	F	F	F	F	F	F
Scenario 1-S	50.0% DB / 44.0% MI Set-Aside	($84)	$243	$251	$388	$378	$161		F	F	F	F	
Scenario 2-S	72.5% DB / 50.0% MI Set-Aside	($120)	$282	$300	$323	$427	$177		F	P	F	F	F
Scenario 3-S	100% DB / 24% LI / 15% MI Set-Aside	($144)	$196	$418	$381	$553	$304		F	P	F	F	F
Scenario 4-S	100% DB / 15% VLI / 15% MI Set-Aside	($87)	$199	$468	$456	$598	$383		F	P	F	P	F
Market Tier 4 (Market Land Value: $230 Per Sq. Ft.)													
Base Scenario	*No DB / No Set-Aside*	*$450*	*$576*	*$551*	*$937*	*$1,190*	*$1,232*	F	F	F	F	F	F
Scenario 1-S	50.0% DB / 44.0% MI Set-Aside	$15	$422	$451	$859	$1,309	$965		F	F	F	P	F
Scenario 2-S	72.5% DB / 50.0% MI Set-Aside	($20)	$483	$532	$766	$1,504	$1,109		F	F	F	P	F
Scenario 3-S	100% DB / 24% LI / 15% MI Set-Aside	($1)	$394	$837	$876	$1,890	$1,530		F	P	F	P	P
Scenario 4-S	100% DB / 15% VLI / 15% MI Set-Aside	$84	$404	$908	$990	$1,976	$1,678		F	P	P	P	P

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

4.5 Summary and Implications

This analysis of the proposed updated DBO Incentive Program suggests the program creates sufficient incentives to generate broad potential feasibility—with some key considerations.

- **Feasibility is limited in Market Tiers 1 and 2.** The DBO program does not create financially feasible outcomes in Market Tier 1. Base case (100% market-rate) scenarios are also infeasible in Market Tier 1 under current market conditions. Some for-rent projects are feasible–and preferable to the base case–in Market Tier 2, but only for sites with Medium base densities (i.e., 55 DUAC and below), which are typically associated with prototypes that have lower construction costs relative to higher density prototypes.
- **In Market Tiers 3 and 4, most density cohorts meet the market land value thresholds of feasibility, and many for-rent incentive program scenarios are preferable to the base case – consistent with recent development trends**. These findings are broadly consistent with observed market activity, which indicates that under current market conditions, development projects are generally only feasible in stronger markets (or with projects that command rents and sale prices typical of stronger markets). Higher density levels are also more valuable in stronger markets, where the value created by the additional units can more easily exceed the cost of setting aside additional affordable units.
- **Developers that take advantage of the DBO program in stronger markets are likely to choose set-aside pathways that provide VLI units.** VLI units generate less revenue *per unit* than LI. However, in Market Tier 4, the per unit effect on RLV is outweighed by the fact that projects that provide VLI units are required to provide fewer affordable units, compared to projects that provide LI units.[29]
- **There is no clear pattern in how single- versus mixed-affordability pathway projects compare in terms of feasibility or preferability.** The relative RLVs generated by single-tier versus mixed-affordability pathway projects vary by prototype, Market Tier, and the exact combination of income levels and percentages selected, with no single pattern emerging from this analysis. The City is likely to see development projects selecting a variety of strategies, based on site-specific characteristics that will determine for individual projects the tradeoff between the value of increased density, and the cost of providing different affordable set asides.
- **One for-sale scenario (100% density bonus with a 15% VLI/15% MI set aside) was preferable to the base case across multiple prototypes in Market Tier 4.** In most for-sale scenarios, the added density does not provide sufficient value to outweigh the additional costs associated with providing additional affordable set-aside units. However, in Market Tier 4, Scenario 4-S – which included a 100% density bonus and 15% VLI/15% MI set aside – was preferable to the base case across multiple prototypes.
- **Most DBO scenarios tested were limited by density, rather than the other potential limiting parameters built into the model, such as FAR and height**. In other words, most DBO scenarios tested had sufficient FAR available to allow higher density prototypes, so the associated density bonuses tended to be the key factor in determining the ultimate form of the bonus prototype. Exploratory testing found that since DBO scenarios were mostly limited by density rather than FAR, counting above-grade parking towards FAR had minimal impacts on the feasibility of tested scenarios. Note that this finding reflects the specific FAR

[29] In Market Tier 1, LI unit pathways generate higher residual land values compared to VLI pathways because there is a smaller gap between market-rate and LI units.

and height limits tested and could change depending on the FAR and height limits in the final ordinance.

5. Transit Oriented Incentive Areas (TOIA)

5.1 Overview

The Transit Oriented Incentive Area program (TOIA) provides density bonus incentives in exchange for affordable housing set-asides in mixed-income residential projects near transit nodes. Both the set-aside requirements and available bonuses increase by TOIA Tiers, where TOIA Tier 1 (T-1) represents the furthest distance from a Major Transit Stop and Tier 4 (T-4) the shortest distance from a Major Transit Stop. The program was previously known as the Transit Oriented Communities (TOC) program. It was initially created after voters passed Measure JJJ in 2016 and became effective in September 2017.

The City is proposing to integrate this program as a local implementation of Density Bonus law, and the TOIA program aims to increase available density bonuses beyond current standards, building off recent changes to state law (AB 1287) which expanded density bonuses in the state density bonus program to up to 100 percent. The proposed TOIA also includes expanding procedures for applicants to request off-menu incentives, which is an option that is not available through the existing TOC program. In addition, the City is contemplating increasing set-aside requirements in higher market tiers.

5.2 TOIA Incentive Program

The proposed TOIA schedule will allow for 100% density bonuses in Tier 1, 120% in Tier 2, and unlimited density bonuses in Tiers 3 and 4.[30] The City is considering a variety of potential set-aside schedules, which could be applied as either:

- A single-tier program structure with set-aside requirements that apply consistently across the City; or
- A multi-tier program structure with different set-aside requirements applied in each Market Tier.

Table 28 shows a potential structure for a single-tier program. For example, under this structure, a program could provide 8% ELI units, 11% VLI units, or 20% Li units to achieve a 100% density bonus in Tier 1. Table 29 shows a potential structure for a multi-tier program. Note that these programs are still under development and the final set-aside schedule may differ from those shown here.

Note that TOIA program calculates affordability set-aside requirements based on the total number of units per project. This is a shift from DBO which calculates set-aside requirements as a percentage of units allowed under density limits tied to a site's base zoning condition.

[30] Previously, the TOC program allowed for a 50% density bonus in Tier 1, 60% in Tier 2, 70% in Tier 3, and 80% in Tier 4.

Table 27. Proposed TOIA Density Bonuses and Potential Set-Aside Requirements: Single-Tier Program Structure

Proposed TOIA					
Potential Set Aside Schedules	TOIA Tier	Density Bonus	Affordability		
			ELI	VLI	LI
Single-Tier Program Structure	1	100%	8%	11%	20%
	2	120%	9%	12%	21%
	3	unlimited	10%	14%	23%
	4	unlimited	11%	15%	25%

Source: City of Los Angeles, AECOM

Table 28. Proposed TOIA Density Bonuses and Potential Set-Aside Requirements: Multi-Tier Program Structure

Proposed TOIA					
Potential Set Aside Schedules	TOIA Tier	Density Bonus	Affordability		
			ELI	VLI	LI
Market Tier 1	1	100%	9.0%	12.5%	21.0%
	2	120%	10.0%	13.0%	22.0%
	3	unlimited	11.0%	14.0%	23.0%
	4	unlimited	12.0%	15.0%	25.0%
Market Tier 2	1	100%	10.0%	13.0%	21.0%
	2	120%	11.0%	14.0%	22.0%
	3	unlimited	12.0%	15.0%	24.0%
	4	unlimited	13.0%	16.0%	26.0%
Market Tier 3	1	100%	11.0%	14.0%	22.0%
	2	120%	12.0%	15.0%	23.0%
	3	unlimited	13.0%	16.0%	25.0%
	4	unlimited	14.0%	17.0%	27.0%
Market Tier 4	1	100%	12.0%	15.0%	23.0%
	2	120%	13.0%	16.0%	24.0%
	3	unlimited	14.0%	17.0%	25.0%
	4	unlimited	16.0%	19.0%	29.0%

Source: City of Los Angeles, AECOM

In addition to density incentives, the proposed program increases parking and FAR incentives. As shown in Table 29, the Proposed TOIA Schedule adds an additional 0.25 FAR bonus for each TOIA Tier and eliminates the parking minimum, consistent with Assembly Bill 2097 (AB 2097).

Table 29. FAR, Height, and Parking Requirements: Proposed TOIA Programs

Proposed TOIA Incentive Structure				
TOC Tier	Parking	FAR Maximum of:		Add'l Height (above Base)
TOIA 1	No Minimum	3.00 FAR	40% over base	1 story/11 feet
TOIA 2	No Minimum	3.50 FAR	45% over base	1 story/11 feet
TOIA 3	No Minimum	4.00 FAR	50% over base	2 stories/22 feet
TOIA 4	No Minimum	4.50 FAR	55% over base	3 stories/33 feet

Source: City of Los Angeles, AECOM

5.3 TOIA Scenarios Tested

AECOM explored the development feasibility of four potential set-aside schedules, shown in Table 30. [31] The density bonus incentives remain the same across all of the schedules tested, but the affordability set-aside is increased incrementally with each scenario.

Each incentive program scenario indicated by the schedule in Table 30 is tested for feasibility with height and FAR parameters governed by TOIA standards shown in Table 29.

Table 30. TOIA Incentives and Set-asides Tested

TOIA Incentives Tested					
Potential Set Aside Schedules	TOIA Tier	Density Bonus	Affordability		
			ELI	VLI	LI
Schedule A	1	100%	8%	11%	20%
	2	120%	9%	12%	21%
	3	Unlimited	10%	14%	23%
	4	Unlimited	11%	15%	25%
Schedule B	1	100%	9%	12%	21%
	2	120%	10%	13%	22%
	3	Unlimited	11%	15%	24%
	4	Unlimited	12%	16%	26%
Schedule C	1	100%	10%	13%	22%
	2	120%	11%	14%	23%
	3	Unlimited	12%	16%	25%
	4	Unlimited	13%	17%	27%
Schedule D	1	100%	11%	14%	23%
	2	120%	12%	15%	24%
	3	Unlimited	13%	17%	26%
	4	Unlimited	14%	18%	28%

Source: City of Los Angeles, AECOM

[31] Note that Schedule A aligns with the set asides of the proposed single-tier program structure shown in Table 28. Schedules B, C, and D respectively align with the set-asides of the proposed multi-tier program structure for Market Tiers 1, 2, and 3 shown in Table 29.

5.3.1 Sites and Prototypes Tested

Table 31 shows the sites and prototypes that were tested. The prototypes were selected with City staff to represent a range of density cohorts likely to be developed in transit-oriented areas (i.e., excluding some of the lower-density prototypes tested for DBO), and include a set of 5 distinct typologies, of which 3 are tested assuming a residential base zone and 4 assuming a commercial base zone. Only rental prototypes are tested.

Where an unlimited density bonus is available, AECOM assumed densities increase until either the maximum FAR was reached, or until a 28-story tower was reached (i.e., the maximum density project for which a prototype is available within the framework for this analysis).

Table 31. TOIA Test Site and Prototype Assumptions

TOIA Site and Prototype Assumptions								
	TOIA Residential Zones				TOIA Commercial Zones			
Base Housing Typology	**4D**	**CY3**	**CY4**	**P5**	**CY4**	**P5**	**P7**	**TW**
Description	2-Duplex buildings	3-story Courtyard-style	4-story Courtyard-style	5/6-Story Podium	4-story Courtyard-style	5/6-Story Podium	7/8-Story Podium	Tower
Use Program	Residential	Residential	Residential	Residential	Residential	Residential	Mixed-Use	Mixed-Use
Parking Strategy	Surface & tuck-under	Under-ground	Under-ground	1-level podium	Under-ground	1-level podium	2-level podium	4-level podium
Associated Density Cohort	**Low-Medium**	**Medium**	**Medium**	**High-Medium**	**Medium**	**High-Medium**	**High-Medium**	**High-Medium**
Zone Class of Base Zone	**RD1.5**	**R3**	**R3**	**R4**	**C1, CM**	**C2, C4, C5**	**C2, C4, C5**	**C2, C4, C5**
Assumed Height District	1	1	1VL	1	1VL	1	2	4
Base Zone Maximum Height (ft)	45	45	50	Unlimited	45	Unlimited	Unlimited	Unlimited
Base Zone Maximum # of Stories	Unlimited	Unlimited	Unlimited	Unlimited	3	Unlimited	Unlimited	Unlimited
Base Zone Maximum FAR	3.0	3.0	3.0	3.0	1.5	1.5	6.0	13.0
Base Zone Minimum Lot Area/Unit (SF)	1,500	800	800	400	400	400	400	400
Base Zone Max Density (DUAC)	29.0	54.5	54.5	108.9	108.90	108.9	108.9	108.9
Site Area								
Land Area (SF)	7,500	7,500	15,000	22,500	15,000	22,500	30,000	44,000
Residential - Gross Building Area (SF)	5,000	11,880	21,420	50,000	4,850	14,500	68,533	131,429
Retail - Gross Building Area (SF)	0	0	0	0	0	0	6,000	9,900
Total Gross Building Area (SF)	5,000	11,880	21,420	50,000	4,850	14,500	74,533	141,329
Unit Count and Mix	**4**	**9**	**18**	**50**	**15**	**25**	**74**	**109**
Typical Unit Mix (Lower Density)								
Avg. Unit Size (Lower Density)	**1,250**	**1,320**	**1,190**	**1,000**	**1,190**	**1,000**	**700**	**850**
0BR	0%	0%	0%	0%	0%	0%	30%	25%
1BR	0%	0%	0%	40%	0%	40%	50%	50%
2BR	20%	70%	70%	40%	70%	40%	20%	25%
3BR	40%	30%	30%	20%	30%	20%	0%	0%
4BR	40%	0%	0%	0%	0%	0%	0%	0%
Denser Unit Mix Alternative								
Avg. Unit Size	**NA**	**880**	**900**	**800**	**900**	**800**	**NA**	**NA**
0BR		20%	0%	20%	0%	20%		
1BR		40%	50%	50%	50%	50%		
2BR		40%	50%	30%	50%	30%		
3BR		0%	0%	0%	0%	0%		
4BR		0%	0%	0%	0%	0%		
Parking Strategy								
Residential Parking (spaces/BR)	2 per unit	0.60	0.60	0.90	0.60	0.90	0.90	0.90
Total Parking Spaces	8	12	25	81	20	41	103	162
Surface/Tuck Under	8	0	0	0	0	0	0	0
Ground level parking (L1)	0	0	0	33	0	33	30	49
Above-ground podium (L2, L3, and L4)	0	0	0	0	0	0	60	113
Subterranean parking	0	12	25	48	20	8	13	0

Source: AECOM

5.4 Results

5.4.1 Base Case Feasibility

The base case is a test of each typology with 100% market-rate units and no density bonus. Base case residual land values provide a basis of comparison with the incentive scenarios to follow. Table 32 below shows estimated residual land value (RLV) for each typology, the assumed market land value threshold for each Market Tier (shown in the “Market Land Value/Sq.Ft.” row in the table), and a determination of whether the scenario is “feasible,” i.e., whether the base case generates RLV that is equal to or greater than the market threshold.

As shown, nearly all typologies generate negative RLV in Market Tier 1. In Market Tier 2, RLVs are more positive but none meet the market value threshold for feasibility. In Market Tier 3, all but the TW-based sites and density cohorts generate positive RLVs, and the High Medium site in the residential zone is feasible with the RLV of $212 exceeding the $175 threshold. Notably, two additional residential sites in the Medium density cohort (CY3 and CY4) generate RLVs that are close to meeting the benchmark threshold.

In Market Tier 4, all base typologies generate positive RLV, two meet the market land value thresholds and are feasible (P5 and TW), and two more are close to meeting the benchmark threshold (CY3 and CY4).

Table 32. TOIA Base Case Prototypes Feasibility

Prototype	4D-R	CY3-R	CY4-R	P5-R	CY4-R	P5-R	P7-R	TW-R
Site Zoning	Residential				Commercial			
Density Cohort	Low Med II	Medium	Medium	Med. High	Medium	Med. High	High	High
Market Tier 1								
RLV/Land Sq.Ft.	$7	($295)	($269)	($400)	($222)	($201)	($456)	($484)
Market Land Value/Sq.Ft.	$140	$140	$140	$140	$115	$115	$115	$115
Feasibility (RLV > Market)								
Market Tier 2								
RLV/Land Sq.Ft.	$62	$84	$84	$94	$72	$46	($55)	($113)
Market Land Value/Sq.Ft.	$145	$145	$145	$145	$170	$170	$170	$170
Feasibility (RLV > Market)								
Market Tier 3								
RLV/Land Sq.Ft.	$173	$163	$155	$212	$131	$104	$43	($1)
Market Land Value/Sq.Ft.	$175	$175	$175	$175	$185	$185	$185	$185
Feasibility (RLV > Market)				F				
Market Tier 4								
RLV/Land Sq.Ft.	$255	$238	$224	$313	$188	$155	$161	$408
Market Land Value/Sq.Ft.	$230	$230	$230	$230	$240	$240	$240	$240
Feasibility (RLV > Market)	F	F		F				F

Note: "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

5.4.2 TOIA Scenario Feasibility

This section summarizes the feasibility results of the TOIA incentive program schedules described in Section 5.3. The tables below show the results using measures of residual land value, feasibility, and preferability, where the RLV of each density bonus prototype is evaluated against the market cost of land for feasibility and against the base case prototype RLV for preferability. Results are presented by Market Tier.

None of the scenarios tested were feasible in Market Tiers 1 and 2 and RLVs are generally negative (Table 33 and Table 34). Increasing the set-aside requirements makes the RLVs more negative (i.e., RLVs are more negative for Schedule B compared to Schedule A, and so on).

Table 35 shows the results for Market Tier 3, organized by residential versus commercial prototype, set aside schedule, TOIA Tier, and affordability level selected to achieve the density bonus. Under Schedule A, several scenarios are feasible (compared to the market and value) and/or preferable (compared to the base case scenario) – representing an improvement over the base case scenario where only the residential-zoned P5-R prototype was feasible. Under Schedules B and C, only one tested scenario is feasible/preferable.

Table 36 shows the results for Market Tier 4. In Market Tier 4, the higher density prototypes are broadly feasible and in many cases preferable, even with increased standards up to Schedule C and D. Some lower and medium density projects are also feasible/preferable. Given current market conditions and the prototypes modeled, Market Tier 4 appears to be the only market tier that can support these higher set aside schedules.

Table 33. TOIA Scenario Residual Land Value and Feasibility Market Tier 1

TOIA Incentives Tested (Residential) - Market Tier 1			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$140							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$7	($295)	($269)	($400)				
Schedule A	1	8% ELI	($396)	($499)	($499)	($596)				
	2	9% ELI	($396)	($541)	($541)	($617)				
	3	10% ELI	($694)	($631)	($631)	($617)				
	4	11% ELI	($702)	($668)	($668)	($626)				
	1	11% VLI	($382)	($499)	($499)	($593)				
	2	12% VLI	($423)	($538)	($538)	($609)				
	3	14% VLI	($701)	($623)	($623)	($625)				
	4	15% VLI	($707)	($660)	($660)	($630)				
	1	20% LI	($381)	($481)	($481)	($579)				
	2	21% LI	($381)	($523)	($523)	($587)				
	3	23% LI	($673)	($583)	($583)	($596)				
	4	25% LI	($673)	($612)	($612)	($597)				

TOIA Incentives Tested (Commercial) - Market Tier 1			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$115							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	($209)	($189)	($436)	($459)				
Schedule A	1	8% ELI	($433)	($433)	($851)	($882)				
	2	9% ELI	($526)	($526)	($813)	($968)				
	3	10% ELI	($392)	($617)	($860)	($1,709)				
	4	11% ELI	($634)	($626)	($916)	($1,739)				
	1	11% VLI	($438)	($438)	($844)	($883)				
	2	12% VLI	($523)	($523)	($813)	($961)				
	3	14% VLI	($401)	($625)	($863)	($1,716)				
	4	15% VLI	($629)	($630)	($913)	($1,743)				
	1	20% LI	($427)	($427)	($803)	($861)				
	2	21% LI	($500)	($500)	($780)	($932)				
	3	23% LI	($361)	($596)	($824)	($1,632)				
	4	25% LI	($586)	($597)	($871)	($1,654)				

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 34. TOIA Scenario Residual Land Value and Feasibility Market Tier 2

TOIA Incentives Tested (Residential) - Market Tier 2			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$145							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$62	$84	$84	$94				
Schedule A	1	8% ELI	($54)	$21	$21	$52				
	2	9% ELI	($54)	$25	$25	$17				
	3	10% ELI	($59)	($140)	($140)	$17				
	4	11% ELI	($72)	($159)	($159)	$4				
	1	11% VLI	($40)	$6	$6	$40				
	2	12% VLI	($122)	$13	$13	$11				
	3	14% VLI	($95)	($147)	($147)	($18)				
	4	15% VLI	($104)	($170)	($170)	($28)				
	1	20% LI	($80)	($18)	($18)	($0)				
	2	21% LI	($80)	($27)	($27)	($21)				
	3	23% LI	($123)	($148)	($148)	($46)				
	4	25% LI	($127)	($165)	($165)	($50)				

TOIA Incentives Tested (Commercial) - Market Tier 2			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$170							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$89	$62	($31)	($82)				
Schedule A	1	8% ELI	$32	$32	($85)	($184)				
	2	9% ELI	$26	$26	($206)	($208)				
	3	10% ELI	$125	$17	($225)	($329)				
	4	11% ELI	($144)	$4	($255)	($372)				
	1	11% VLI	$11	$11	($98)	($203)				
	2	12% VLI	$14	$14	($224)	($218)				
	3	14% VLI	$91	($18)	($250)	($385)				
	4	15% VLI	($159)	($28)	($275)	($428)				
	1	20% LI	($17)	($17)	($119)	($234)				
	2	21% LI	($5)	($5)	($234)	($250)				
	3	23% LI	$89	($46)	($260)	($407)				
	4	25% LI	($158)	($50)	($289)	($456)				

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 35. TOIA Scenario Residual Land Value and Feasibility Market Tier 3

TOIA Incentives Tested (Residential)			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$175							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$173	$163	$155	$212				F
Schedule A	1	8% ELI	$21	$150	$150	$213				P
	2	9% ELI	$21	$166	$166	$175				
	3	10% ELI	$98	($15)	($15)	$175				
	4	11% ELI	$85	($30)	($30)	$161				
	1	11% VLI	$35	$130	$130	$197				F
	2	12% VLI	($56)	$150	$150	$164				
	3	14% VLI	$55	($27)	($27)	$131				
	4	15% VLI	$45	($46)	($46)	$122				
	1	20% LI	($13)	$95	$95	$142				
	2	21% LI	($13)	$95	$95	$117				
	3	23% LI	$12	($39)	($39)	$88				
	4	25% LI	$8	($53)	($53)	$84				
Schedule B	1	9% ELI	$21	$136	$136	$175				
	2	10% ELI	$21	$128	$128	$175				
	3	11% ELI	$85	($21)	($21)	$161				
	4	12% ELI	$47	($46)	($46)	$124				
	1	12% VLI	($56)	$130	$130	$164				
	2	13% VLI	($56)	$117	$117	$131				
	3	15% VLI	$45	($40)	($40)	$122				
	4	16% VLI	$13	($50)	($50)	$89				
	1	21% LI	($13)	$95	$95	$117				
	2	22% LI	($13)	$95	$95	$113				
	3	24% LI	$12	($44)	($44)	$88				
	4	26% LI	($17)	($66)	($66)	$59				
Schedule C	1	10% ELI	$21	$136	$136	$175				
	2	11% ELI	$21	$128	$128	$161				
	3	12% ELI	$47	($43)	($43)	$124				
	4	13% ELI	$9	($58)	($58)	$86				
	1	13% VLI	($56)	$121	$121	$131				
	2	14% VLI	($56)	$117	$117	$131				
	3	16% VLI	$13	($59)	($59)	$89				
	4	17% VLI	$13	($68)	($68)	$89				
	1	22% LI	($13)	$91	$91	$113				
	2	23% LI	($82)	$71	$71	$88				
	3	25% LI	$8	($52)	($52)	$84				
	4	27% LI	($17)	($74)	($74)	$59				
Schedule D	1	11% ELI	$21	$99	$99	$161				
	2	12% ELI	($84)	$115	$115	$124				
	3	13% ELI	$9	($58)	($58)	$86				
	4	14% ELI	$9	($74)	($74)	$86				
	1	14% VLI	($56)	$121	$121	$131				
	2	15% VLI	($56)	$85	$85	$122				
	3	17% VLI	$13	($62)	($62)	$89				
	4	18% VLI	$3	($81)	($81)	$79				
	1	23% LI	($82)	$66	$66	$88				
	2	24% LI	($82)	$71	$71	$88				
	3	26% LI	($17)	($65)	($65)	$59				
	4	28% LI	($42)	($87)	($87)	$34				

TOIA Incentives Tested (Commercial)			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$185							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$152	$124	$73	$35				
Schedule A	1	8% ELI	$148	$148	$108	$36				
	2	9% ELI	$163	$163	($16)	$31				
	3	10% ELI	$246	$175	($26)	$105	P			
	4	11% ELI	($21)	$161	($48)	$58				
	1	11% VLI	$123	$123	$88	$10				
	2	12% VLI	$147	$147	($39)	$14				
	3	14% VLI	$206	$131	($59)	$32	P			
	4	15% VLI	($40)	$122	($76)	($16)				
	1	20% LI	$84	$84	$51	($41)				
	2	21% LI	$117	$117	($65)	($39)				
	3	23% LI	$194	$88	($86)	($29)	P			
	4	25% LI	($52)	$84	($111)	($87)				
Schedule B	1	9% ELI	$110	$110	$64	($12)				
	2	10% ELI	$125	$125	($63)	($28)				
	3	11% ELI	$195	$124	($73)	($6)	P			
	4	12% ELI	($58)	$86	($95)	($53)				
	1	12% VLI	$90	$90	$39	($28)				
	2	13% VLI	$114	$114	($64)	($39)				
	3	15% VLI	$176	$89	($98)	($55)				
	4	16% VLI	($62)	$89	($115)	($108)				
	1	21% LI	$80	$80	$30	($66)				
	2	22% LI	$67	$67	($91)	($76)				
	3	24% LI	$174	$84	($112)	($87)				
	4	26% LI	($65)	$59	($137)	($149)				
Schedule C	1	10% ELI	$110	$110	$80	$8				
	2	11% ELI	$125	$125	($43)	($0)				
	3	12% ELI	$215	$161	($53)	$58	P			
	4	13% ELI	($43)	$124	($68)	($6)				
	1	13% VLI	$123	$123	$70	($13)				
	2	14% VLI	$147	$147	($41)	($23)				
	3	16% VLI	$202	$122	($82)	($16)	P			
	4	17% VLI	($59)	$89	($99)	($55)				
	1	22% LI	$80	$80	$38	($50)				
	2	23% LI	$92	$92	($82)	($60)				
	3	25% LI	$194	$88	($96)	($61)	P			
	4	27% LI	($65)	$59	($127)	($112)				
Schedule D	1	11% ELI	$97	$97	$37	($42)				
	2	12% ELI	$111	$111	($91)	($47)				
	3	13% ELI	$163	$86	($100)	($53)				
	4	14% ELI	($70)	$86	($115)	($100)				
	1	14% VLI	$90	$90	$36	($51)				
	2	15% VLI	$81	$81	($80)	($63)				
	3	17% VLI	$176	$89	($121)	($108)				
	4	18% VLI	($80)	$79	($138)	($146)				
	1	23% LI	$55	$55	$17	($82)				
	2	24% LI	$67	$67	($107)	($85)				
	3	26% LI	$165	$59	($122)	($112)				
	4	28% LI	($78)	$34	($153)	($175)				

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 36. TOIA Scenario Residual Land Value and Feasibility Market Tier 4

TOIA Incentives Tested (Residential)			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$230							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$255	$238	$224	$313	F	F		F
Schedule A	1	8% ELI	$101	$275	$275	$368		P	P	P
	2	9% ELI	$101	$302	$302	$327		P	P	P
	3	10% ELI	$251	$145	$145	$327	F			P
	4	11% ELI	$236	$135	$135	$313	F			P
	1	11% VLI	$116	$251	$251	$349		P	P	P
	2	12% VLI	$16	$282	$282	$313		P	P	P
	3	14% VLI	$200	$126	$126	$277				F
	4	15% VLI	$190	$113	$113	$266				F
	1	20% LI	$59	$205	$205	$280				F
	2	21% LI	$59	$214	$214	$252				F
	3	23% LI	$143	$100	$100	$219				
	4	25% LI	$138	$90	$90	$214				
Schedule B	1	9% ELI	$101	$260	$260	$327		P	P	P
	2	10% ELI	$101	$261	$261	$327		P	P	P
	3	11% ELI	$236	$138	$138	$313	F			P
	4	12% ELI	$195	$118	$118	$272				F
	1	12% VLI	$16	$251	$251	$313		P	P	P
	2	13% VLI	$16	$246	$246	$277		P	P	F
	3	15% VLI	$190	$112	$112	$266				F
	4	16% VLI	$154	$108	$108	$230				F
	1	21% LI	$59	$205	$205	$252				F
	2	22% LI	$59	$214	$214	$247				F
	3	24% LI	$143	$93	$93	$219				
	4	26% LI	$110	$74	$74	$186				
Schedule C	1	10% ELI	$101	$260	$260	$327		P	P	P
	2	11% ELI	$101	$261	$261	$313		P	P	P
	3	12% ELI	$195	$114	$114	$272				F
	4	13% ELI	$154	$105	$105	$231				F
	1	13% VLI	$16	$241	$241	$277		P	P	F
	2	14% VLI	$16	$246	$246	$277		P	P	F
	3	16% VLI	$154	$91	$91	$230				F
	4	17% VLI	$154	$88	$88	$230				F
	1	22% LI	$59	$200	$200	$247				F
	2	23% LI	($19)	$186	$186	$219				
	3	25% LI	$138	$84	$84	$214				
	4	27% LI	$110	$64	$64	$186				
Schedule D	1	11% ELI	$101	$219	$219	$313				P
	2	12% ELI	($13)	$246	$246	$272		P	P	F
	3	13% ELI	$154	$97	$97	$231				F
	4	14% ELI	$154	$87	$87	$231				F
	1	14% VLI	$16	$241	$241	$277		P	P	F
	2	15% VLI	$16	$210	$210	$266				F
	3	17% VLI	$154	$87	$87	$230				F
	4	18% VLI	$143	$73	$73	$220				
	1	23% LI	($19)	$172	$172	$219				
	2	24% LI	($19)	$186	$186	$219				
	3	26% LI	$110	$69	$69	$186				
	4	28% LI	$82	$49	$49	$158				

Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

TOIA Incentives Tested (Commercial)			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$240							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$219	$184	$206	$463				F
Schedule A	1	8% ELI	$260	$260	$354	$830	P	P	P	P
	2	9% ELI	$295	$295	$674	$895	P	P	P	P
	3	10% ELI	$388	$327	$695	$1,677	P	P	P	P
	4	11% ELI	$138	$313	$702	$1,614		P	P	P
	1	11% VLI	$231	$231	$327	$779			P	P
	2	12% VLI	$276	$276	$625	$853	P	P	P	P
	3	14% VLI	$341	$277	$631	$1,536	P	P	P	P
	4	15% VLI	$112	$266	$642	$1,469		P	P	P
	1	20% LI	$182	$182	$268	$653			P	P
	2	21% LI	$235	$235	$537	$714			P	P
	3	23% LI	$315	$219	$533	$1,322	P		P	P
	4	25% LI	$84	$214	$525	$1,230			P	P
Schedule B	1	9% ELI	$218	$218	$323	$793			P	P
	2	10% ELI	$254	$254	$637	$854	P	P	P	P
	3	11% ELI	$354	$313	$659	$1,614	P	P	P	P
	4	12% ELI	$114	$272	$676	$1,529		P	P	P
	1	12% VLI	$231	$231	$307	$747			P	P
	2	13% VLI	$276	$276	$623	$801	P	P	P	P
	3	15% VLI	$335	$266	$599	$1,469	P	P	P	P
	4	16% VLI	$91	$230	$610	$1,414			P	P
	1	21% LI	$177	$177	$252	$637			P	P
	2	22% LI	$207	$207	$512	$682			P	P
	3	24% LI	$315	$219	$517	$1,271	P		P	P
	4	26% LI	$69	$186	$500	$1,188			P	P
Schedule C	1	10% ELI	$218	$218	$306	$767			P	P
	2	11% ELI	$254	$254	$611	$817	P	P	P	P
	3	12% ELI	$332	$272	$632	$1,529	P	P	P	P
	4	13% ELI	$97	$231	$639	$1,466			P	P
	1	13% VLI	$195	$195	$272	$725			P	P
	2	14% VLI	$240	$240	$591	$779			P	P
	3	16% VLI	$306	$230	$577	$1,414	P		P	P
	4	17% VLI	$87	$230	$588	$1,341			P	P
	1	22% LI	$177	$177	$242	$611			P	P
	2	23% LI	$179	$179	$496	$656			P	P
	3	25% LI	$293	$214	$492	$1,230	P		P	P
	4	27% LI	$68	$186	$484	$1,131			P	P
Schedule D	1	11% ELI	$204	$204	$275	$726			P	P
	2	12% ELI	$240	$240	$574	$791			P	P
	3	13% ELI	$298	$231	$596	$1,466	P		P	P
	4	14% ELI	$83	$231	$613	$1,403			P	P
	1	14% VLI	$195	$195	$267	$693			P	P
	2	15% VLI	$204	$204	$568	$744			P	P
	3	17% VLI	$306	$230	$545	$1,341	P		P	P
	4	18% VLI	$67	$220	$556	$1,286			P	P
	1	23% LI	$149	$149	$226	$586				P
	2	24% LI	$179	$179	$471	$640			P	P
	3	26% LI	$282	$186	$476	$1,188	P		P	P
	4	28% LI	$52	$158	$458	$1,090			P	P

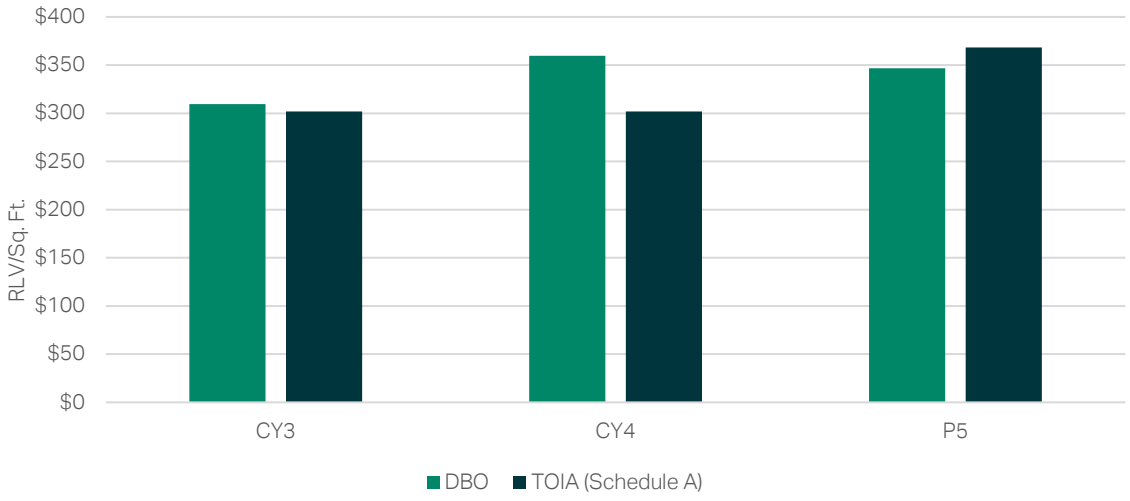
Note: "P" indicates preferable scenarios, "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

5.5 Summary and Implications

Findings and implications for policy are summarized below:

- **Overall, the TOIA incentives and associated set-aside requirements should help produce more market-rate and affordable units than would otherwise be feasible.** The analysis of proposed density bonus and affordability parameters for the City's TOIA program show that the scheduled incentives should provide developer applicants with preferred returns in Market 4 and, to a lesser extent, Market Tier 3 areas.
- **Scenario feasibility is very sensitive to increased affordable set-asides.** Based on current market conditions, no scenarios tested in Market Tiers 1 and 2 were feasible. In Market Tier 3, the number of feasible scenarios decreases quickly in schedules where higher levels of affordable set-asides are required.
- **TOIA scenarios in Market Tier 4 result in feasible prototypes across density cohorts, even with increased affordability standards.** Under the market conditions modeled, this is the only market tier that clearly supports higher levels of set-asides (up to Schedule C/D). Increasing set-aside requirements could result in fewer projects being built, particularly in places with weaker market conditions, offsetting some of the potential affordable housing production gains that the proposed TOIA enhancements seek to provide.
- **In residentially zoned areas, TOIA Schedule A produces similar development returns compared to DBO.** Figure 5 shows the highest residual land values achieved by prototype on residential zoned land in Market Tier 4 under TOIA Schedule A, compared to the DBO program. As tested, DBO projects generate higher RLVs for courtyard projects – suggesting that a profit-seeking developer may be more likely to take advantage of the DBO program where both are available. However, TOIA Schedule A generates higher returns for the P5 prototype.[32]

Figure 5. Highest RLV Achieved by Prototype: DBO v. TOIA Schedule A in Market Tier 4



Comparison shows rental prototypes in residential zones.
Source: AECOM

- **While TOIA offers higher density bonuses than DBO, the financial benefit for applicants is in part offset by the method of calculating affordable set-aside units for**

[32] DBO projects were not tested on sites with commercial zoning so cannot be compared.

TOIA. The TOIA program calculates affordability set-aside requirements on the total number of units per project. This is a shift from DBO which calculates set-aside requirements as a percentage of units allowed under density limits tied to a site's base zoning condition. In other words, whereas under DBO, all bonus units are market-rate, under TOIA some of the bonus units are required to be set-aside as affordable.

- **In some cases, TOIA project feasibility may also be affected by counting above-ground parking against FAR, although developers may partially offset the impact by reducing parking ratios**. TOIA projects are generally limited by FAR rather than density, so counting above-ground parking as part of FAR has a more significant impact on TOIA projects compared to the DBO program, where density is generally the limiting factor. This analysis assumes that projects will provide parking ratios consistent with the parking ratio of projects recently developed under the existing TOC program.[33] These parking ratios reflect an assumption that parking will be provided as a function of both market demand for parking spaces (which impacts a project's achievable rents, overall marketability, competitive position, etc.) as well as underwriting practices that favor parking standards of previous successful projects that lenders see as market-proven concepts (which impacts a project's ability to attract favorable financing). In some cases, developers may chose to further reduce parking ratios to maximize living area.[34]
- **Developers who take advantage of the TOIA program in strong market tiers are likely to build ELI units.** ELI units generate less revenue *per unit* than LI or VLI. However, ELI projects still generate higher overall returns because projects that provide ELI units are required to provide fewer affordable units, compared to projects that provide LI or VLI units. This is consistent with the City's experience that most projects that have utilized the existing TOC program have built ELI units.[35]

[33] Recently developed projects under the former TOC program served as the basis for development comparables.

[34] The financial implications of reducing parking vary. On a per-space basis, parking is assumed in this analysis to cost approximately $50,000 per underground space and $35,000 per above-ground podium space. Reducing underground parking results in direct cost savings (although the market rents that the developer may achieve may decline slightly as well), so generally increases overall project feasibility. For P5, P7, and TW, where a podium is provided, the developer could replace the parking spaces with additional residential uses to enhance the revenue stream. However, building residential space entails its own construction costs (as well as revenues), and in some cases the building may need to be redesigned to accommodate appropriate residential areas.

[35] In Market Tier 1, at the other end of the spectrum, ELI unit pathways generate higher residual land values compared to LI/VLI pathways because there is a smaller gap between market-rate and VLI/LI units.

6. Opportunity Corridors (OC) Incentive Program

6.1 Overview

The City's proposed Opportunity Corridors incentive program (OC) advances a holistic vision for livable and sustainable communities by increasing housing capacity along major streets located in Higher Opportunity Areas. This strategy will focus new housing opportunities on major corridors, particularly those with transit access, to provide affordable housing options near transit and amenities. Incentives available in the OC program would be provided generally in excess of incentives available in the DBO and TOIA programs.

The proposed OC program is intended to help the City fulfill Affirmatively Further Fair Housing (AFFH) requirements by creating substantial new housing capacity in Higher Opportunity Areas and in Racially Concentrated Areas of Affluence.

6.2 Opportunity Corridor Incentive Program

OC encourages more dense housing development along major thoroughfares located in jobs-rich and transit-rich locations in Higher Opportunity Areas, providing density in exchange for affordable housing set-asides. Given that corridors include commercial and residential zoned areas with varying scales and site considerations, the strategy proposes a tiered incentive-based approach, with incentives designed to reflect differences in commercially (C) zoned stretches compared to residential (R) zoned areas, as well as to reflect the importance of transit-rich locations.

The OC program proposes two main criteria for site eligibility: proximity to transit and location within High or Highest Resource Areas designated by the California Tax Credit Allocation Committee (CTCAC). Eligible sites are categorized into three OC incentive tiers with affordability requirements and FAR and height incentives that largely mirror those available in the proposed TOIA program. Density bonuses for each tier are limited by development standards such as FAR and height regulations. OC site eligibility requirements are shown in Table 37, and key incentive options are shown in Table 38.

Table 37. Opportunity Corridors Incentive Area Eligibility Requirements

OC Area Eligibility Requirements			
Incentive Area	Site Requirements[a]	Eligible Underlying Zones[b]	TCAC Opportunity Areas
OC-1	Sites fronting on corridors with Frequent Bus Service	Commercial Zones and Residential Zones (R2, RD6, RD5, RD4, RD3, RD2, RD1.5, RW2, R3, RAS3, R3, RAS4, R5)	High and Highest Resource Areas
OC-2	Sites fronting on High Quality Transit Service Corridors[b]		
OC-3	Sites fronting on an Avenue or Boulevard and located within a ≤ 2640 ft (0.5 mile) radius from intersection of Metro Rail and Rapid Bus Station[c]		

Notes:
a. To be an eligible Opportunity Corridor Housing Development, the project must be located on a lot, any portion of which, must meet the eligibility criteria in Section 2, Paragraph (g), including transit eligibility and site requirements, which require a lot to be fronting or have direct pedestrian access to the eligible Opportunity Corridor. Sites that are contiguous or have a lot tie with lots that meet the aforementioned criteria are eligible to receive the Opportunity Corridor Incentives.
b. Frequent Bus Service. Corridors with bus lines that have a 30 minute or less service frequency during peak hours.
c. Corridors within one-half mile (2,640 ft) from a major transit stop or a transit corridor with 15 minutes or less service frequency during peak commute hours.
Source: City of Los Angeles

Table 38. Proposed Opportunity Corridor Program Incentives

Proposed OC Program Base Incentives						
OC Area	OC-1		OC-2		OC-3	
Base Zone	Residential	Commercial	Residential	Commercial	Residential	Commercial
FAR Maximum of:	3.00 FAR	3.50 FAR	3.50 FAR	4.00 FAR	4.50 FAR	
				45% over base	50% over base	
Add'l Height (above Base)	Up to total 45'	1 story/11 feet up to 5 total stories	Up to total 56'	2 stories/22 feet up to 6 total stories	3 stories/33 feet up to 7 total stories	
DUAC Bonus	Unlimited		Unlimited		Unlimited	
Parking	No minimum required		No minimum required		No minimum required	

Source: City of Los Angeles, AECOM

6.3 Incentive Program Scenarios and Prototypes

As noted above, the proposed OC program uses the TOIA incentive structure as a framework, and the City proposes to align OC set-aside requirements to TOIA set-aside requirements as well. AECOM explored the feasibility of four potential OC set-aside schedules, shown in Table 39.

AECOM tested one prototype in a commercial zone and one prototype in a residential zone for each of the three OC incentive areas. The prototypes were selected to represent the housing typologies that maximizes building envelope under the incentives offered for each OC inventive area and zoning category. OC-1 is modeled as CY4 in residential zones and P5 in commercial zones, OC-2 as P5 in residential zones and P6 in commercial zones, and OC-3 as P7 in both residential and commercial zones. Each typology reflects the maximum height and FAR allowed for its respective tier and zoning designation. The prototypes and associated sites for each of these six scenarios are shown in Table 40.

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Table 39. Proposed OC Incentives Tested

OC Incentives Tested					
Potential Set Aside Schedules	OC Tier	TOIA Tier*	Affordability		
			ELI	VLI	LI
Schedule A	1	2	9%	12%	21%
	2	3	10%	14%	23%
	3	4	11%	15%	25%
Schedule B	1	2	10%	13%	22%
	2	3	11%	15%	24%
	3	4	12%	16%	26%
Schedule C	1	2	11%	14%	23%
	2	3	12%	16%	25%
	3	4	13%	17%	27%
Schedule D	1	2	12%	15%	24%
	2	3	13%	17%	26%
	3	4	14%	18%	28%

Note: See Table 38 for incentives associated with each OC tier.
**None of the proposed OC tiers are proposed to align with TIOA Tier 1.*
Source: City of Los Angeles

Table 40. Sites and Prototypes Tested by OC Tier

Opportunity Corridor (OC) Testing Prototypes Assumptions						
Opportunity Corridor (OC) Incentive Area	**Residential Zones**			**Commercial Zones**		
	OC-1	**OC-2**	**OC-3**	**OC-1**	**OC-2**	**OC-3**
Maximum FAR (includes base incentives only)	3.0	3.5	4.5	3.5	4.0	4.5
Maximum # stories	4	5	7	5	6	7
Resulting Development Prototype						
Typology	**CY4**	**P5**	**P7**	**P5**	**P6**	**P7**
Description	4-story Courtyard-style	5-Story Podium	7-Story Podium	5-Story Podium	6-Story Podium	7-Story Podium
Use Program	All Residential	All Residential	All Residential	All Residential	All Residential	Mixed-Use
Parking Strategy	Underground parking	1-level podium parking	2-level podium parking	1-level podium parking	1-level podium parking	2-level podium parking
Site Area						
Land Area (SF)	6,500	13,000	19,500	10,000	15,000	20,000
Gross Building Area (SF without Parking)	16,875	37,333	59,733	28,800	50,133	65,600
Gross Building Area (SF with Parking)	17,330	45,133	87,033	34,800	59,133	89,600
Net Leasable Area (NLA, unit space only)	13,500	28,000	44,800	21,600	37,600	46,200
Unit Count and Mix						
Total Number of Units	**15**	**35**	**64**	**27**	**47**	**66**
Unit Mix						
0BR	0	7	19	5	9	20
1BR	8	18	32	14	24	33
2BR	8	11	13	8	14	13
3BR	0	0	0	0	0	0
4BR	0	0	0	0	0	0
Approximate Mix as a % of Total						
0BR	0%	20%	30%	20%	20%	30%
1BR	50%	50%	50%	50%	50%	50%
2BR	50%	30%	20%	30%	30%	20%
3BR	0%	0%	0%	0%	0%	0%
4BR	0%	0%	0%	0%	0%	0%
Density and Intensity						
Effective Density (DUAC)	101	117	143	118	136	144
Effective FAR (Without Parking)	2.6	2.9	3.1	2.9	3.3	3.3
Effective FAR (With Parking)	2.7	3.5	4.5	3.5	3.9	4.5
Affordable Set-Aside Level	**Equivalent to TOIA-2**	**Equivalent to TOIA-3**	**Equivalent to TOIA-4**	**Equivalent to TOIA-2**	**Equivalent to TOIA-3**	**Equivalent to TOIA-4**
Parking	**Underground**	**Podium & Underground**	**Podium & Underground**	**Podium & Underground**	**Podium & Underground**	**Podium & Underground**
Residential Parking (spaces/BR)	0.6	0.9	0.9	0.9	0.9	0.9
Total Parking Spaces	20	63	76	48	84	95
Above-Ground Podium	0	19	68	15	22	60
Underground	20	44	8	33	62	35

Source: AECOM

6.4 Results

This section describes the results of the OC analysis. For the OC analysis, no base case was tested because the analysis modeled the maximum densities within each incentive area (limited by height and FAR) that each prototype could achieve, rather than "stepping up" up from a base. A feasible scenario is one that generates a residual land value that is consistent with the observed market values.

In Market Tiers 1 and 2 (Table 41), all scenarios generate fail to meet the land value standard for feasibility. Increasing the set aside requirements further reduce the RLV.

Table 41. OC Scenario Residual Land Value and Feasibility in Market Tier 1 and 2

OC Incentives Tested - Market Tier 1				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$140		$115	
Potential Set Aside Schedules	OC Tier	TOIA Tier	Affordability				
Schedule A	OC-1	2	9% ELI	($557)		($530)	
			12% VLI	($527)		($534)	
			21% LI	($518)		($498)	
	OC-2	3	10% ELI	($550)		($628)	
			14% VLI	($549)		($628)	
			23% LI	($524)		($589)	
	OC-3	4	11% ELI	($460)		($646)	
			15% VLI	($449)		($636)	
			25% LI	($400)		($585)	

OC Incentives Tested - Market Tier 2				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$145		$170	
Potential Set Aside Schedules	OC Tier	TOIA Tier	Affordability				
Schedule A	OC-1	2	9% ELI	$40		$19	
			12% VLI	$72		($6)	
			21% LI	($3)		($3)	
	OC-2	3	10% ELI	($4)		$2	
			14% VLI	($24)		($22)	
			23% LI	($52)		($26)	
	OC-3	4	11% ELI	$14		($161)	
			15% VLI	$8		($167)	
			25% LI	$18		($155)	

Note: "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

Table 42 shows the results for Market Tier 3, organized by residential versus commercial zoned prototypes, set aside schedule, OC tier, and affordability level selected to achieve the density bonus. Under Schedule A and B, OC-1 (tested with CY4 prototype) is feasible on residential zoned parcels.

Table 42. OC Scenario Residual Land Value and Feasibility in Market Tier 3

OC Incentives Tested - Market Tier 3				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$175		$185	
Potential Set Aside Schedules	OC Tier	TOIA Tier	Affordability				
Schedule A	OC-1	2	9% ELI	$166		$155	
			12% VLI	$198	F	$124	
			21% LI	$106		$119	
	OC-2	3	10% ELI	$132		$157	
			14% VLI	$106		$128	
			23% LI	$65		$113	
	OC-3	4	11% ELI	$135		($38)	
			15% VLI	$124		($49)	
			25% LI	$124		($49)	
Schedule B	OC-1	2	10% ELI	$166		$155	
			13% VLI	$198	F	$124	
			22% LI	$106		$119	
	OC-2	3	11% ELI	$132		$137	
			15% VLI	$89		$114	
			24% LI	$65		$76	
	OC-3	4	12% ELI	$135		($38)	
			16% VLI	$119		($54)	
			26% LI	$124		($69)	
Schedule C	OC-1	2	11% ELI	$166		$155	
			14% VLI	$106		$124	
			23% LI	$106		$63	
	OC-2	3	12% ELI	$66		$137	
			16% VLI	$89		$114	
			25% LI	$65		$76	
	OC-3	4	13% ELI	$111		($62)	
			17% VLI	$119		($81)	
			27% LI	$104		($69)	
Schedule D	OC-1	2	12% ELI	$166		$85	
			15% VLI	$106		$51	
			24% LI	$106		$63	
	OC-2	3	13% ELI	$66		$81	
			17% VLI	$89		$114	
			26% LI	$22		$69	
	OC-3	4	14% ELI	$111		($95)	
			18% VLI	$91		($81)	
			28% LI	$104		($81)	

Note:
1. "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
2. The sites of OC-1, OC-2, and OC-3 are tested with the prototypes of CY4, P5, and P7 respectively.
Source: AECOM

Table 43 shows the results for Market Tier 4. In Market Tier 4, many scenarios are feasible across potential set-aside schedules and OC tiers. In general, ELI projects generate the highest RLVs, suggesting that developers will choose options to build fewer ELI units v. more VLI or LI units.

Table 43. OC Scenario Residual Land Value and Feasibility in Market Tier 4

OC Incentives Tested - Market Tier 4				RLV	Feasibility	RLV	Feasibility
				Residential*		Commercial*	
Market Land Value/Sq.ft.				$230		$240	
Potential Set Aside Schedules	OC Tier	TOIA Tier	Affordability				
Schedule A	OC-1	2	9% ELI	$303	F	$287	F
			12% VLI	$335	F	$251	F
			21% LI	$222		$237	
	OC-2	3	10% ELI	$263	F	$309	F
			14% VLI	$232	F	$274	F
			23% LI	$177		$247	F
	OC-3	4	11% ELI	$290	F	$119	
			15% VLI	$274	F	$103	
			25% LI	$259	F	$87	
Schedule B	OC-1	2	10% ELI	$303	F	$287	F
			13% VLI	$335	F	$251	F
			22% LI	$222		$237	
	OC-2	3	11% ELI	$263	F	$287	F
			15% VLI	$213		$258	F
			24% LI	$177		$205	
	OC-3	4	12% ELI	$290	F	$119	
			16% VLI	$267	F	$96	
			26% LI	$258	F	$64	
Schedule C	OC-1	2	11% ELI	$303	F	$287	F
			14% VLI	$235	F	$251	F
			23% LI	$222		$174	
	OC-2	3	12% ELI	$191		$287	F
			16% VLI	$213		$258	F
			25% LI	$177		$205	
	OC-3	4	13% ELI	$263	F	$92	
			17% VLI	$267	F	$66	
			27% LI	$234	F	$64	
Schedule D	OC-1	2	12% ELI	$303	F	$211	
			15% VLI	$235	F	$170	
			24% LI	$222		$174	
	OC-2	3	13% ELI	$191		$225	
			17% VLI	$213		$258	F
			26% LI	$129		$197	
	OC-3	4	14% ELI	$263	F	$56	
			18% VLI	$236	F	$66	
			28% LI	$234	F	$50	

Note:
1. "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
2. The sites of OC-1, OC-2, and OC-3 are tested with the prototypes of CY4, P5, and P7 respectively.
Source: AECOM

6.5 Summary and Implications

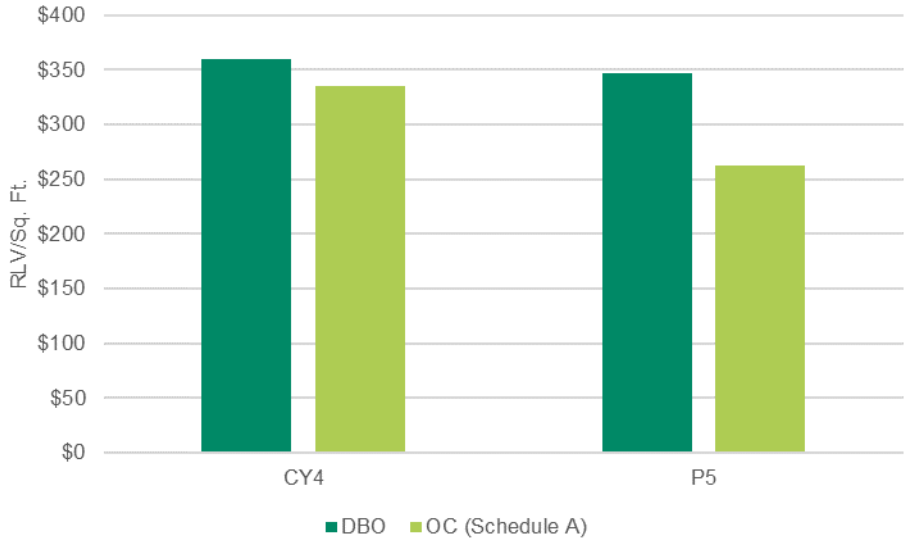
Findings and implications for policy are summarized below:

- **The OC incentives and associated set-aside requirements may help produce more market-rate and affordable units than would otherwise be feasible.** The analysis of the proposed OC program indicates the proposed incentives create sufficient value for developer applicants to acquire and redevelop land in Market Tier 4 across OC areas – and, to a lesser extent, in Market Tier 3.
- **OC scenarios in Market Tier 4 result in feasible prototypes across OC tiers, even with increased affordability standards.** Under the market conditions modeled, only Market Tier

4 clearly supports higher levels of set-asides (up to Schedule C/D). Similar to TOIA, scenario feasibility is sensitive to increased affordable set-asides, suggesting that increasing set-aside requirements could result in fewer projects being built in areas with less optimal market conditions, offsetting some of the potential affordable housing production gains that the proposed OC enhancements seek to provide.

- **However, in areas zoned for residential, developers may choose to take advantage of DBO rather than OC as currently proposed, although the decision will ultimately depend on the underlying zoning and other project specifics.** Figure 6 shows the highest residual land values achieved by prototype on residential zoned land in Market Tier 4 under OC Schedule A, compared to the DBO program. As tested, DBO projects generate slightly higher RLVs for across prototypes–suggesting that a profit-seeking developer may be more likely to take advantage of the DBO program in some cases. Similar to TOIA, while OC offers higher density bonuses than DBO, the financial benefit for applicants is in part offset by the method of calculating affordable set-aside units for OC. In addition, the FAR limits associated with OC limit the total building footprint that the prototypes can achieve, whereas the sites tested for DBO on residential parcels could generally achieve higher densities within the density and FAR bonuses allowed. Ultimately, however, the comparison between programs will depend in part on the specific zoning district where the parcel is located.[36]

Figure 6. Highest RLV Achieved by Prototype: DBO v. OC (Schedule A) in Market Tier 4



Comparison shows rental prototypes in residential zones. CY4 and P5 were tested with OC-1 and OC-2 Tiers, respectively.
Source: AECOM

- **Developers who take advantage of the OC program in stronger market areas are likely to build ELI units.** ELI units generate less revenue *per unit* than LI or VLI. However, ELI projects still generate higher overall returns in Market Tier 4 because projects that provide ELI units are required to provide fewer affordable units, compared to projects that provide LI

[36] The P7 prototype was also tested under both OC-3 and DBO. However, the results are not directly comparable because the OC-3 project is limited to a total of 7 stories, while the DBO project was assumed to step up to a 28-story tower in the model. This level of density will not be possible on all sites. DBO projects in commercial zoning districts were not tested.

or VLI units. This is consistent with the City's experience that most projects that have utilized the existing TOC program have built ELI units. [37]

[37] In Market Tier 1, at the other end of the spectrum, ELI unit pathways generate higher residual land values compared to LI/VLI pathways because there is a smaller gap between market-rate and VLI/LI units.

7. Opportunity Corridor Transition (CT) Incentive Area Program

7.1 Overview

This chapter focuses on the development economics and financial feasibility of housing typologies envisioned to be developed through the City's proposed Opportunity Corridor Transition Incentive Area Program (CT). CT builds on the proposed Opportunity Corridor program's vision for livable and sustainable communities with increased housing capacity along major streets located in Higher Opportunity Areas. This strategy will incentivize new low-rise housing opportunities in areas in parcels behind the Opportunity Corridor Incentive Areas, allowing higher densities than would be permitted under base zoning conditions in exchange for providing affordable units.

The proposed CT is the City's strategy for promoting lower scale housing typologies, also known as "missing middle housing." Missing middle is a term used to refer to the gap in housing options between detached single-family homes and mid-rise apartment buildings. Examples of missing middle typologies include bungalow courts, multiplex buildings (duplex/triplex to six-plex), townhomes, courtyard-style apartments, and walk-up rowhouses. Many of these were commonly built before the 1950s and already exist in various places throughout the Los Angeles area, but there are also areas in the City where they are not currently found. Over the years, fewer missing middle housing options were developed due to more restrictive zoning requirements, changes in market conditions, and increased single-family home development.

CT is an incentive-based program designed to fill the gap in housing options that exists between detached single-family homes and the type of mid-rise apartment buildings expected to be developed along Opportunity Corridors. CT takes a form-based approach that removes limitations to facilitate missing middle construction, while ensuring new development respects the scale of existing neighborhoods.

7.2 Corridor Transition Incentive Program

CT promotes low-scale, medium-density housing development in Higher Opportunity Areas. The incentive program proposes increasing allowable density in exchange for affordable housing set-asides. CT builds on the proposed Opportunity Corridor program, using a similar tiered incentive-based approach, with incentives designed to reflect differences in distance between more dense mid-rise development along corridors and less dense single-family homes.

The CT program proposes three main criteria for site eligibility: proximity to Opportunity Corridor Incentive areas, base zone designation, and location within CTCAC-designated High or Highest Resource Areas. Eligible sites are categorized into two CT incentive areas, with CT-1 being the lower incentive tier and CT-2 offering more generous incentives. Density bonuses for each tier are limited to 6 units per parcel in CT-1 and 10 units per parcel in CT-2. Additional FAR is awarded commensurate with the number of units built, but new development is constrained by height limits. The City is also considering allowing increased height and/or FAR for projects with more than 40% two-bedroom units. CT site eligibility requirements are shown on Table 44 and key incentive options are shown on Table 45.

Table 44. Corridor Transition Incentive Area Eligibility Requirements

CT Area Eligibility Requirements		
	CT-1	CT-2
Site Requirements	350 ft buffer from sites eligible Opportunity Corridor Incentives except RC-1	150 ft buffer from sites eligible for Opportunity Corridor Incentives except RC-1
Eligible Underlying Zones	Residential properties in R2 and RD zones	
TCAC Opportunity Areas	Within High and Highest Resource Areas	

Source: City of Los Angeles, AECOM

Table 45. Proposed Corridor Transition Incentives

Proposed CT Program Incentives		
	CT-1	CT-2
FAR	1.30 FAR for 5 units (per lot) + 0.15 FAR for each additional unit	
Density Bonus	Up to 6 units per lot	Up to 10 units per lot
Max Height	2 stories	3 stories
Parking	No requirement	

Note: A Project that includes a minimum of 40% of total Residential Units as 2-bedrooms or larger, shall be granted either additional Floor Area up to 0.5 FAR or an additional 11 feet in height.

Source: City of Los Angeles, AECOM

7.3 CT Program Scenario Tested

7.3.1 Incentive Areas

The analysis is organized by the two proposed CT incentive areas. CT-1 areas are allowed up to 6 units per parcel, and CT-2 areas up to 10 units per parcel. The program parameters allow for CT projects to take a variety of forms. For example, CT-1 projects could include a single-lot project with 6 units, or a double-lot project with 12 units. A C-2 project could include a single-lot project with 8 units or a double-lot project with 16 units. Other key parameters include a 2-story limit for CT-1 and a 3-story limit for CT-2. Both CT-1 and CT-2 allow up to a maximum number of units within an FAR that is commensurate to the number of units provided (Table 45).

AECOM developed prototypes that reflect the allowable range of unit counts, i.e., 5 and 6 units per lot for CT-1 and 8 and 10 units per lot for CT-2. These are shown in Table 46. It should be noted that while these prototypes are examples of the forms that CT projects map take, they are not a comprehensive set of possible applications.

7.3.2 Affordable Set-Aside Requirements

To explore the amount of affordability that can be supported by the CT program, AECOM tested a range of affordable set-aside options. Given the small-scale nature of missing middle typologies and the round-up methodology for fulfilling affordable set-aside requirements

described in California State Law, the set-aside analysis uses a set-aside schedule tied to a specific number of units rather than the percentage-based approach used for the other incentive programs.

As shown in Table 46, 1-unit and 2-unit set aside options were tested. Each set-aside level is tested at each affordability level (i.e., ELI, VLI, LI, and MI rental projects and MI for-sale projects). As shown, this results in effective set-aside percentages (calculated as affordable units divided by total units) that range from 11% to 20% in scenarios tested for CT-1, and 20% to 40% for scenarios tested for CT-2.

Table 46. CT Test Scenarios

Corridor Transition	Effective Set-Aside (% of total)					
Incentive Area	CT-1			CT-2		
Prototype (Rent or Sale)	4D-R	RH-R	TH-S	CY3-R	CY3-S	CY3-R
Lot Configuration	1	2	2	2	2	1
Units per Lot	5	6	6	8	8	10
Total Units	5	12	12	16	16	10
Set-Aside Scenarios	**Effective Set-Aside (% of total)**					
1-Unit Set-Aside Per Lot						
Moderate (For Sale)	-	-	17%	-	13%	-
Moderate (For Rent)	20%	17%	-	13%	-	10%
LI	20%	17%	-	13%	-	10%
VLI	20%	17%	-	13%	-	10%
ELI	20%	17%	-	13%	-	10%
2-Unit Set-Aside Per Lot						
Moderate (For Sale)	-	-	33%	-	25%	-
Moderate (For Rent)	40%	33%	-	25%	-	20%
LI	40%	33%	-	25%	-	20%
VLI	40%	33%	-	25%	-	20%
ELI	40%	33%	-	25%	-	20%

Source: AECOM

7.3.3 Sites and Prototypes Tested

The CT prototypes and site sizes are shown in Table 47. Prototypes were selected in coordination with City staff to align with the envisioned scale of CT projects and typical eligible lot size.

The specific parameters of the proposed CT program have some implications for development that require adjustments to the prototypes compared to those used for the analysis of other programs. Specifically, under the CT program, the proposed FAR allowances require the RH-R and TH-S prototypes to provide reduced parking ratios.[38] For-sale townhomes (TH-S) are assumed to provide 1.0 parking spaces per unit and rental rowhomes (RH-R) have an average parking ratio of 0.83, meaning that some units would not have an assigned parking space.

[38] Note: above-ground parking is included in the FAR across all programs. For other prototypes and programs, however, the FAR allowances generally do not pose a significant constraint on the parking ratios tested.

Reduced parking ratios are expected to have a negative impact on rents. A review of existing, comparable real estate projects showed that small-scale rental properties with less than 1.0 space per unit typically achieve rents ranging from 2 to 8 percent less compared to projects with more typical parking ratios. For the purposes of this analysis, it is assumed that the RH-R prototype with reduced parking would command 5% lower rents compared to the typical market rents shown in Chapter 3, Table 7.

The impact of reduced parking on for-sale products is less conclusive. Based on a review of comparable projects, existing ownership townhomes with 1.0 space per unit in Los Angeles are generally built in high-value places where land is priced at a premium, and development has lower-than-average unit sizes and commands a higher sales price per square foot. Based on this observation, no change was made to for-sale revenues compared to the typical for-sale prices shown in Chapter 3, Table 8.

In addition to FAR, the maximum height is a limiting factor for the CT program. The most typical townhome in Los Angeles is three stories; as shown in Table 45, the maximum height in CT-1 is two stories, requiring a slightly reduced unit average unit size and more living space to be provided on the ground-floor than in a typical townhome. In the CT-2 zone, the FAR and height limitations are expected to require parking to be provided below ground, which significantly increases costs and affects feasibility. The City’s proposed multi-bedroom unit incentive – which would grant projects either an additional Floor Area up to 0.5 FAR or an additional 11 feet in height if they provide a minimum of 40% of total Residential Units as 2-bedrooms or larger – could help alleviate these constraints.

Table 47. Corridor Transition Sites and Prototypes

Corridor Transition Sites and Prototypes						
	CT Incentive Area 1			CT Incentive Area 2		
	CT1-5-R	CT1-6-R	CT1-6-S	CT2-8-R	CT2-8-S	CT2-10-R
	4D-Rent 2-Duplex	RH-Rent Row House	TH-Sale Townhome	CY3-Rent 3-Story Courtyard	CY3-Sale 3-Story Courtyard	CY3-Rent 3-Story Courtyard
Development Configuration						
Lot configuration	Single-lot	Double-lot	Double-lot	Double-lot	Double-lot	Single-Lot
Number of Units per Lot	5	6	6	8	8	10
Total Number of Units	5	12	12	16	16	10
Site Size AC	0.14	0.28	0.28	0.25	0.25	0.13
Site Size SF	6,000	12,000	12,000	11,000	11,000	5,500
Resulting Prototype						
Net Leaseable/Sellable Area SF*	6,850	14,850	15,900	17,800	18,350	10,600
Building Efficiency Ratio	95%	95%	100%	95%	97%	96%
Gross Building Area SF	7,179	16,832	17,340	18,737	18,918	11,042
Maximum FAR allowed with Bonus	1.30	1.45	1.45	1.75	1.75	2.00
Effective FAR	1.20	1.40	1.45	1.70	1.72	2.01
Effective Density (DUAC)	36	44	44	63	63	79
Height (stories)	2	2	2	3	3	3
Avg Unit Size	1,250	1,238	1,325	1,113	1,147	1,060
0BR	0	0	0	0	0	0
1BR	700	800	800	800	950	800
2BR	1,050	1,250	1,250	1,200	1,200	1,200
3BR	1,200	1,550	1,550	1,500	1,500	1,500
4BR	1,400	1,900	1,900	1,900	1,900	1,900
Unit Mix	5	12	12	16	16	10
0BR	0	0	0	0	0	0
1BR	0	3	0	5	7	5
2BR	1	5	9	9	6	3
3BR	2	4	3	2	3	2
4BR	2	0	0	0	0	0
Parking	10	10	12	17	17	10
Spaces Per BR	0.63	0.40	0.44	0.59	0.61	0.59
Spaces per Unit	2.00	0.83	1.00	1.06	1.06	1.00
Parking Strategy	Surface &Tuck-Under	Tuck-Under	Tuck-Under	Underground	Underground	Underground

Source: AECOM

7.4 Results

This section describes the results of the feasibility testing. Note that for the CT program, only one RLV standard ("feasibility") is used to gauge the expected financial outcomes of the incentive program scenarios. This is because the CT program will primarily be applied to redevelopment of single-family lots or similarly scaled, low-density residential uses. Accordingly, the market land value assumptions are based on recent transactions of single-family family lots. The base case (100% market-rate) scenario would also most likely be a single-family home, so "feasibility" and "preferability" are effectively the same for the CT analysis.

7.4.1 Residual Land Value and Feasibility Analysis

The following four tables summarize tested residual land value and feasibility for each CT incentive area in Market Tiers 1 through 4. A feasible scenario is one that generates a residual land value that is consistent with observed market values.

In Market Tier 1, residual land values are mostly negative and none of the scenarios meet the $120 market land value threshold for feasibility (Table 48).

Table 48. CT Scenario Residual Land Value and Feasibility (Market Tier 1)

Market Tier 1 (Market Land Value: $140 Per Sq. Ft.)												
	Residual Land Value ($/Land SF)						Feasibility					
Incentive Area	CT-1			CT-2			CT-1			CT-2		
Prototype	4D-R	RH-R	TH-S	CY3-R	CY3-S	CY3-R	4D-R	RH-R	TH-S	CY3-R	CY3-S	CY3-R
Units per Lot	5	6	6	8	8	10	5	6	6	8	8	10
Total Units	5	12	12	16	16	10	5	12	12	16	16	10
Market Land Value ($/SF)	$120											
1-Unit Set-Aside Per Lot												
Moderate (For Sale)			$1		$86							
Moderate (For Rent)	($68)	$20		($174)		($148)						
LI	($92)	($4)		($199)		($172)						
VLI	($117)	($19)		($208)		($197)						
ELI	($135)	($35)		($225)		($194)						
2-Unit Set-Aside Per Lot												
Moderate (For Sale)			($18)		$41							
Moderate (For Rent)	($95)	$12		($165)		($146)						
LI	($148)	($31)		($201)		($179)						
VLI	($203)	($83)		($252)		($233)						
ELI	($239)	($117)		($286)		($268)						

Note: Feasibility rows are blank because all scenarios are infeasible. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

In Market Tier 2 (Table 49), several courtyard (CY) scenarios with one affordable set-unit unit are feasible. The 10-unit CY3-R prototype is also feasible with two MI or LI set-aside units.

Table 49. CT Scenario Residual Land Value and Feasibility (Market Tier 2)

Market Tier 2 (Market Land Value: $170 Per Sq. Ft.)												
Market Tier 2	**Residual Land Value ($/Land SF)**						**Feasibility**					
Incentive Area	**CT-1**			**CT-2**			**CT-1**			**CT-2**		
Prototype	**4D-R**	**RH-R**	**TH-S**	**CY3-R**	**CY3-S**	**CY3-R**	**4D-R**	**RH-R**	**TH-S**	**CY3-R**	**CY3-S**	**CY3-R**
Units per Lot	**5**	**6**	**6**	**8**	**8**	**10**	**5**	**6**	**6**	**8**	**8**	**10**
Total Units	5	12	12	16	16	10	5	12	12	16	16	10
1-Unit Set-Aside Per Lot												
Moderate (For Sale)			$72		$229						F	
Moderate (For Rent)	$37	$90		$197		$284				F		F
LI	$12	$64		$171		$259				F		F
VLI	($16)	$50		$165		$233						F
ELI	($34)	$33		$147		$241						F
2-Unit Set-Aside Per Lot												
Moderate (For Sale)			$39		$165							
Moderate (For Rent)	($4)	$72		$162		$231						F
LI	($61)	$28		$128		$201						F
VLI	($119)	($28)		$74		$146						
ELI	($158)	($65)		$38		$109						

Notes: "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

In Market Tier 3 (Table 50), CT-2 courtyard prototypes are feasible across a broader range of set-aside scenarios. The RH-R prototype is also feasible with one MI set-aside unit.

Table 50. CT Scenario Residual Land Value and Feasibility (Market Tier 3)

Market Tier 3 (Market Land Value: $220 Per Sq. Ft.)												
Market Tier 3	**Residual Land Value ($/Land SF)**						**Feasibility**					
Incentive Area	**CT-1**			**CT-2**			**CT-1**			**CT-2**		
Prototype	**4D-R**	**RH-R**	**TH-S**	**CY3-R**	**CY3-S**	**CY3-R**	**4D-R**	**RH-R**	**TH-S**	**CY3-R**	**CY3-S**	**CY3-R**
Units per Lot	**5**	**6**	**6**	**8**	**8**	**10**	**5**	**6**	**6**	**8**	**8**	**10**
Total Units	5	12	12	16	16	10	5	12	12	16	16	10
1-Unit Set-Aside Per Lot												
Moderate (For Sale)			$193		$399						F	
Moderate (For Rent)	$178	$235		$271		$376		F		F		F
LI	$153	$209		$244		$350				F		F
VLI	$126	$197		$242		$324				F		F
ELI	$141	$180		$224		$338				F		F
2-Unit Set-Aside Per Lot												
Moderate (For Sale)			$134		$311						F	
Moderate (For Rent)	$132	$182		$227		$313				F		F
LI	$74	$139		$196		$286						F
VLI	$15	$83		$141		$231						F
ELI	($24)	$46		$105		$194						

Notes: "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

In Market Tier 4 (Table 51), there are multiple feasible projects across each prototype tested in CT-1 and CT-2. In particular, two MI set-aside units per lot is feasible across all for-sale prototypes. One MI set-aside unit per lot is feasible for all CT-1 rental prototypes, and one LI set-aside unit is feasible for 4D-R. One ELI unit or two VLI units is feasible for the highest density rental CT-2 projects.

Table 51. CT Scenario Residual Land Value and Feasibility (Market Tier 4)

Market Tier 4 (Market Land Value: $320 Per Sq. Ft.)												
	Residual Land Value ($/Land SF)						Feasibility					
Incentive Area	CT-1			CT-2			CT-1			CT-2		
Prototype	4D-R	RH-R	TH-S	CY3-R	CY3-S	CY3-R	4D-R	RH-R	TH-S	CY3-R	CY3-S	CY3-R
Units per Lot	5	6	6	8	8	10	5	6	6	8	8	10
Total Units	5	12	12	16	16	10	5	12	12	16	16	10
1-Unit Set-Aside Per Lot												
Moderate (For Sale)			$458		$675				F		F	
Moderate (For Rent)	$322	$339		$359		$489	F	F		F		F
LI	$326	$313		$332		$463	F			F		F
VLI	$299	$308		$341		$436				F		F
ELI	$281	$290		$323		$464				F		F
2-Unit Set-Aside Per Lot												
Moderate (For Sale)			$343		$554				F		F	
Moderate (For Rent)	$235	$262		$307		$415						F
LI	$180	$223		$286		$401						F
VLI	$156	$166		$230		$344						F
ELI	$116	$129		$192		$306						

Notes: "F" indicates feasible scenarios, and blank indicates infeasible scenarios. All RLVs are rounded, and the determination of feasibility is based on the actual numbers before rounding.
Source: AECOM

7.4.2 Summary and Implications

Key policy implications of this analysis include:

- **The CT incentive program may produce housing products that are not currently commonly built in LA today.** These products include rental rowhouses and courtyard apartments–two housing typologies that have historical precedent in LA but have not been commonly built since at least 2000.[39] Analysis of the proposed Corridor Transition program indicates the proposed incentives create sufficient value for developer applicants to acquire and redevelop land in Market Tiers 3 and 4 in the CT-2 incentive area, and to a more limited extent in the CT-1 area.
- **Affordable set-asides have a bigger impact on feasibility for smaller-scale CT-1 typologies than for larger-scale CT-2 projects.** In this analysis, The CT-2 typologies (courtyard projects) typically generated higher RLVs than the CT-1 typologies (fourplexes, row houses, and townhomes). Townhomes have long been validated by the market and can be constructed efficiently without the use of structured or subterranean parking. However, it is more challenging for smaller-scale CT-1 projects to bear the cost of set-aside units. Even in Market Tier 4, CT-1 feasibility is generally limited to projects that set-aside just one MI unit.
- **To enable a relatively broad range of projects to take advantage of the CT program, the City could consider requiring set asides as follows:**
  - CT-1: 1 MI unit per lot (rental projects), or 2 MI units per lot (for-sale projects).

[39] See analysis of housing typologies in "Task 3: Market Analysis: Market & Economic Study for the Density Bonus Ordinance Update and RHNA Rezoning Program," developed by AECOM for LACP, May 2024.

- CT-2: 1 ELI unit or 2 VLI units per lot (rental projects), or 2 MI units per lot (for-sale projects)

At these set-aside levels, prototypes are generally feasible in Market Tier 4 under current market conditions, and a more limited set of prototypes are feasible in Market Tiers 2 and 3.

Note that the CT results are not directly comparable with the DBO results, because the CT prototypes are assumed to occur on different size lots (that reflect conditions on CT-eligible parcels, rather than citywide averages) and, in the case of townhomes and rowhomes, have reduced parking ratios as a result of FAR limitations.

8. Conclusion

This analysis tested key elements of the City of Los Angeles' Rezoning Program, which is intended to create additional housing capacity and expand housing production. The updated DBO program is likely to expand housing opportunities across the City by enabling a broad range of different development types. The Mixed-Income Incentive Program is intended to complement DBO by incentivizing housing development near transit and encouraging the construction of various types of "low scale/low rise" housing.

This report offers analysis that is intended to inform City policy decisions about the appropriate tradeoff between affordability requirements and development incentives in different parts of the City. Key conclusions from the analysis include:

- **The updated DBO program and the Mixed-Income Incentive Program will create new opportunities for market-rate and affordable housing development across the City.** In many scenarios and Market Tiers, development projects that utilize the programs are likely to be feasible and preferable to base case projects.
- **The feasibility of incentive program scenarios varies significantly by Market Tier.** Incentive program scenarios tested are generally most feasible in Market Tier 4 (high market strength). There is more limited feasibility in Market Tier 3, and some scenarios are feasible under the DBO and CT programs in Market Tier 2 (medium/low market strength). None of the incentive program scenarios tested were feasible in Market Tier 1 (low market strength).
- **The ultimate impact of the Mixed-Income Incentive Program will depend on the set-aside schedules selected.** In general, scenario feasibility is sensitive to increased affordable set-asides, particularly in Market Tiers 2 and 3. Under the scenarios and market conditions modeled, only Market Tier 4 clearly supports the higher set-aside levels tested.
- **In addition to set-aside levels, other program parameters such as the methodology for calculating set-asides and FAR have a significant effect on project feasibility.** In particular, while TOIA and OC offer higher density bonuses than DBO, the financial benefit for applicants is in part offset by the method of calculating affordable set-aside units for TOIA and OC based on the total number of units per project. This is a shift from DBO which calculates set-aside requirements as a percentage of units allowed under density limits tied to a site's base zoning condition. Based on the incentive program parameters tested, TOIA and OC project feasibility may also be more affected than DBO project feasibility by counting above-ground parking against FAR. However, developers may partially offset the impact of this policy by reducing parking ratios.
- **Ultimately, the program that individual developers elect to pursue will depend in part on base zoning and other factors specific to the site.** Sites that are eligible for the Mixed-Income Incentive Program will also be eligible for DBO. This report finds that under the program parameters tested, DBO may offer higher RLVs than TOIA or OC for some projects on residentially zoned sites.[40] However, the relative benefits of each program will depend in part on the underlying zoning districts. For example, commercially zoned lots generally have smaller underlying FARs than residentially zoned lots, and therefore projects on commercial lots may be more likely to take advantage of TOIA in part because the TOIA program offers better FAR incentives compared to DBO.

[40] The CT results were not directly comparable with the DBO results, because the CT prototypes are assumed to occur on different size lots (that reflect conditions on CT-eligible parcels, rather than citywide averages) and, in the case of townhomes and rowhomes, have reduced parking ratios as a result of FAR limitations.

Final Consultant Deliverable

Potential Impact of 1:1 RSO-Affordable Replacement Requirement

Final Report

July 31, 2024

Los Angeles City Planning,
City of Los Angeles

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Contents

Tables

Figures

Definitions of Key Terms

Affordable Units. For the purposes of this analysis, “affordable units” refers specifically to units that are subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower or very low income. Also referred to as “Covenanted Affordable Units,” “Lower Income Restricted Affordable Units,” and “Deed Restricted Affordable Units”.

California Senate Bill 330 (SB 330) - Housing Crisis Act of 2019 (HCA). This bill aims to increase residential unit development, protect existing housing inventory, and expedite permit processing. The HCA prohibits net loss of residential units when redeveloping a site.

California Senate Bill 8 (SB 8) – Amendment to Housing Crisis Act of 2019 (HCA). Extended the sunset on the Housing Crisis Act of 2019 by five years, to January 1, 2030, and provides several changes and clarifications regarding the HCA’s demolition and replacement provisions.

CHAS database. United States Department of Housing and Urban Development (HUD) Comprehensive Housing Affordability Strategy (CHAS) database.

Existing RSO Tenants. Tenants living in a building or unit covered under the provisions of the RSO.

Newly Constructed Units. Housing units within a redevelopment project.

Pre-existing RSO Units. Housing units subject to the provisions of the RSO within the past five years.

Protected Units. Housing Units that have been either: subject to an affordability covenant within the past five years; subject to rent or price control within the past five years (including RSO); occupied by low or very low income households within last five years; or withdrawn from rent or lease per the Ellis Act within the past 10 years.

Rent Stabilization Ordinance (RSO). Chapter XV, Article 1 (Sections 151.00 to 151.35) of the Los Angeles Municipal Code. The ordinance regulates rent increases and evictions on certain rental properties (generally multifamily units built on or before October 1, 1978, and new rental units replacing pre-existing units covered under RSO).

RSO Sites. Parcels that contain or have contained a building with residential units subject to the provisions of the RSO within the past five years. For the purpose of this analysis, “RSO Sites” also refers to sites with units withdrawn from rent or lease per the Ellis Act within the past 10 years.

RSO Redevelopment Projects. Also referred to as **RSO Projects.** Projects that necessitate the removal or demolition of existing RSO units on the site of the new development, or projects located on RSO Sites (as defined above).

RSO Replacement Units. Housing units within a redevelopment project that are fulfilling replacement requirements such as affordability to lower income residents and/or coverage under RSO, as set by Los Angeles Municipal Code Section 151.28 (Ellis Act Provisions - Rental of Replacement Units), California Senate Bill 8, California Senate Bill 330, and Density Bonus and Transit Oriented Communities Incentive Program requirements.

RSO-Affordable replacement. The number of newly constructed affordable units built for each pre-existing RSO unit in an RSO redevelopment project. Commonly expressed as a ratio “e.g., 1:1” in which the first number represents the number of required affordable units, and the second number represents one pre-existing RSO unit. Sometimes expressed as a percentage, representing the affordable units as a percentage of pre-existing RSO units.

1. Introduction

1.1 Project Background and Objectives

The City of Los Angeles Department of City Planning (LACP) has engaged AECOM to prepare economic analysis to inform development of a variety of potential housing strategies to preserve and increase the inventory of affordable housing in Los Angeles. This report contains analysis of a proposal to adjust the City's requirements for replacement of pre-existing RSO units subject to the City's Rent Stabilization Ordinance (RSO). The proposed change would require that each existing RSO unit that is demolished for new development be replaced by at least one new covenanted affordable unit. This proposal is referred to as a "1:1 RSO-Affordable" replacement throughout the report. Current policy requires that development projects that involve demolition of RSO units ("RSO redevelopment projects") include at least the same number of units as were affordable to lower income households when the units were occupied, and that if the income level of current tenants is unknown, a percentage of replacement units must be made affordable in accordance with the citywide percentage of low-income households reported in the CHAS database as of September 2023.

For this report, AECOM used a database of recent (2020-2023) development projects provided by the City to answer three key questions:

1. **How many projects are potentially impacted by the change in policy?**
   > Many RSO redevelopment projects take advantage of incentive zoning programs offered by the City and under those programs some projects are already effectively providing at least 1:1 RSO-Affordable replacement. These projects would not be affected by the policy change. The analysis identified the subset of projects that are not already providing 1:1 RSO-Affordable replacement, to understand how many units would likely be affected by the policy change.
2. **For RSO redevelopment projects, what characteristics may indicate when increasing the RSO-Affordable replacement requirement from the CHAS-based percentage to 1:1 (i.e., 100%) would create significant additional financial burden on the project?**
   > To answer this question, AECOM analyzed the database to identify common characteristics of projects that are not already providing 1:1 RSO-Affordable replacement. Based on characteristics of past projects, the analysis identified a threshold ratio of RSO replacement units to development project size (i.e., the total number of units in the new development) when it appears that projects may face significant additional financial burdens from the new policy.
3. **How many RSO redevelopment projects may be additionally burdened by the potential change in replacement policy? How many units?**
   > To evaluate the total potential impact of the new policy, AECOM estimated the number of projects (and units) that fall beyond the identified threshold.

Note that the findings in this report are based on an analysis of past projects. Because of the wide range of development options available to residential developers (both proven options and options yet to be developed), the size and diversity of the City of Los Angeles, its submarkets, and its development opportunity sites, the findings herein represent a snapshot of a dynamic and changing situation.

The remainder of this report provides an overview of the existing policy context, a description of the project methodology, a summary of key findings, and a technical appendix with additional analysis.

2. Existing Policy Context

2.1 Existing Policy for Replacement of RSO Units

Pursuant to LAMC Section 151.28[1], if a building with housing units covered by the Rent Stabilization Ordinance ("pre-existing RSO units") is redeveloped with new housing units that are rented within five years of the pre-existing units' withdrawal from the market, the RSO will apply to all newly constructed rental units on that property. Alternatively, if the new development provides covenanted affordable units at least equal in number to the pre-existing RSO units or 20% of the new development's total units (whichever is greater), the newly constructed affordable units can apply for an exemption from the RSO, but any remaining market-rate units will be subject to RSO provisions. Exemptions related to owner occupancy can be found in LAMC Section 151.28.

Pursuant to The Housing Crisis Act of 2019, as amended by SB 8 and AB 1218 (California Government Code Section 66300 et seq.), new housing development projects must replace any existing, demolished or removed protected units[2,3]. "Protected units" include units that have either been: subject to an affordability covenant within the past five years; subject to rent or price control within the past five years; occupied by lower or very low income households within last five years; or withdrawn from rent or lease per the Ellis Act within the past 10 years.

If the current tenants' incomes are *known* (e.g., a tenant submits their income information and exercises their right to return), developments replacing protected units (including RSO units) must include at least the same number of units of equivalent size (number of bedrooms) made affordable at the same or lower income category as the existing households at the time the units were occupied.

If the income level of current tenants is *unknown*, a percentage of replacement units must be made affordable in accordance with the citywide percentage of low-income households reported in the CHAS database (70% as of September 2023).

RSO redevelopment projects generally use one of the City's incentive zoning programs to maximize density in return for providing affordable set-aside units. When replacing protected units, distribution of the affordable units across specific low-income categories has historically depended on the incentive program; Density Bonus (DB) only included requirements for VLI and LI income levels, whereas Transit Oriented Communities (TOC) included requirements for ELI, VLI, and LI income levels.[4] The affordable replacement units must be distributed across these income level categories in accordance with the income distributions reported in the CHAS data. As of September 2023, those requirements were as follows:

- **DB projects: 51% very low income and 19% low income.**
    - DB projects provide a percentage of units as on-site affordable housing to qualify for incentives including a by-right density increase and a reduction in parking requirements.

[1] Los Angeles Municipal Code §151.28 Ellis Act Provisions - Rental of Replacement Units. Sub-section A. Replacement Units Subject to the RSO. https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-196145

[2] City of Los Angeles Memo: Implementation of State Law SB 330 – Housing Crisis Act of 2019 https://clkrep.lacity.org/onlinedocs/2020/20-0047_rpt_PLAN_02-13-2020.pdf

[3] Los Angeles Housing Department. Replacement Unit Determination – Housing Crisis Act of 2019 (as amended by SB 8 and AB 1218). https://housing2.lacity.org/partners/sb-8-determinations

[4] Note that the policy described in this section applied to development projects completed between 2020 and 2023, which were the basis for for this analysis; recent policy updates have changed the income level requirements.

- **TOC projects: 32% extremely low income, 19% very low income, and 19% low income.**
    - Projects located in close proximity to major transit stops (TOC Tiers 1-4) provide a percentage of units as on-site affordable housing to qualify for incentives including a density increase and reduction in parking requirements.

Therefore, if the income of the tenants in the existing units are unknown, RSO redevelopment projects are currently required to provide 70% RSO-Affordable replacement (a ratio of 0.7:1 affordable units to existing RSO units, rounded up to the nearest whole number).

2.1.1 Considerations for Updating Replacement Policy

When new developments replace existing RSO units with affordable units at the percentage set by CHAS (currently 70%), the remaining replacement units (currently 30%) can be leased at market-rate rents if they are in compliance with the RSO. The City is studying the implications of requiring RSO redevelopment projects to provide 1:1 RSO-Affordable replacement (a 1:1 ratio of new affordable units to pre-existing RSO units).

Of projects subject to RSO replacement requirements and in the land covenants database (RSO redevelopment projects) many already provide lower income restricted affordable units that meet or exceed the 1:1 RSO-Affordable replacement ratio, either to take advantage of DB and TOC program incentives or to exempt replacement units from coverage under RSO. By analyzing the characteristics of RSO projects that do and do not already meet the proposed 1:1 RSO-Affordable replacement ratio, this study seeks to understand whether an updated requirement would ultimately impact production of new housing projects and affordable units.

3. Methodology and Approach

3.1 Data

The City of Los Angeles Housing Department (LAHD) provided AECOM with a database of all projects with covenanted units built in the City during the years 2020-2023. The database includes detailed data for individual projects, including:

- Basic project information such as project address, number of units, and number of stories.
- An overview of the newly constructed units identifying how many affordable and market-rate units are provided.
- Each project's participation in housing incentive programs, if any, such as DB and TOC.
- Whether the new project was built on an RSO site.
- Pre-existing conditions of redeveloped RSO sites (e.g., how many RSO units were demolished).

AECOM reviewed the LAHD-provided database of projects with covenanted affordable units, which contained information for 840 total new projects, providing a total of 46,529 new units. Nearly 17,500 of these new units were covenanted affordable units, either as part of a fully affordable project (projects with 80% or more of its units designated affordable) or a mixed-income incentive project. There were 303 RSO Replacement Projects in the database, accounting for over a third of all projects. These projects demolished a total of 1,561 RSO units and replaced them with 12,656 total new units, of which 4,581 were covenanted affordable units. However, this total includes fully affordable projects and other projects that would not be subject to the policy change and were excluded from the analysis.

After excluding projects that would not be subject to an increased RSO-Affordable replacement standard[5], 209 mixed-income RSO redevelopment projects from 2020-2023 were included in AECOM's analysis. The selected projects are located on sites containing a total of 1,091 pre-existing RSO units, and the RSO redevelopment projects account for 8,959 newly constructed units, of which 1,161 are covenanted affordable.

Table 1. Newly Developed Projects with Covenanted Affordable Units (2020-2023)

	New Projects Developed		New Affordable Units Provided		New Market-Rate Units Provided		Total New Units Provided		Total Pre-Existing RSO Units	
RSO Site Status	#	%	#	%	#	%	#	%	#	%
Non RSO Replacement Projects & N/A	537	64%	12,866	74%	21,007	72%	33,873	73%	0	0%
RSO Replacement Projects **Excluded** from the Analysis[5]	94	11%	3420	20%	277	1%	3697	8%	470	30%
RSO Replacement Projects **Included** in the Analysis[5]	209	25%	1161	7%	7798	27%	8959	19%	1091	70%
Total	**840**	**100%**	**17,447**	**100%**	**29,082**	**100%**	**46,529**	**100%**	**1,561**	**100%**

Source: Land Use Recorded Covenants (2020-2023), AECOM

3.2 Analytic Approach

The 209 mixed-income RSO redevelopment projects were analyzed to understand which projects are already achieving the 1:1 RSO-affordable replacement standard and how this correlates with general characteristics, such as project scales, densities, and affordability levels provided. Specifically, the following project characteristics were analyzed:

1. **Incentive program utilized**: Application of DB, TOC, or other incentive programs.
2. **Affordability levels provided**: Mix of units included in the mixed-income RSO redevelopment project that are affordable to extremely low income, very low income, low income, moderate income, and workforce income households, based on percentages of Area Median Income (AMI) below:
    a. Extremely Low Income: 30% of AMI
    b. Very Low Income: 50% of AMI
    c. Low Income: 80% of AMI
    d. Moderate Income: 120% of AMI

[5] Projects with the following characteristics would not be subject to an increased RSO-Affordable replacement standard and were therefore excluded from this analysis:

1. Non-RSO projects.
2. "Fully" affordable projects (projects with 80%+ set-aside of affordable units): Fully affordable projects are typically funded through subsidy programs and are not subject to the same market conditions as mixed income projects, in which affordable units are typically cross-subsidized by market-rate units. Excluded projects included those funded under the Affordable Housing Trust Fund and the Jordan Downs Public Housing Redevelopment project.
3. Unpermitted Dwelling Units (UDU) projects: These are non-compliant projects and are not subject to typical affordability requirements.
4. Projects with Missing/Invalid Data.

e. Workforce Income: 150% of AMI

3. **Market Tier**: Market Tiers categorize neighborhoods or Community Plan Areas into different tiers based on their rent levels, sale prices, tenure status, and anticipated future changes. Low Market Tier (Market Tier 1) includes areas with lower rent levels and sale prices, typically characterized by more affordable housing options. In contrast, High Market Tier (Market Tier 4) comprises neighborhoods with higher development premiums, often indicating more expensive and desirable real estate with strong market demand.
4. **Neighborhood**: Project location by neighborhood, using the neighborhood map originally created by the *Los Angeles Times* in its Mapping LA project, a well-regarded and frequently referenced project that since 2009 has sought to reflect geographical, historic, and socioeconomic associations that define communities
5. **Pre-existing RSO units**: Number of pre-existing RSO units (i.e., the number of demolished RSO units)
6. **Project scale**: Total number of newly constructed units
7. **Density cohort** (Table 2): Density cohorts categorize allowable density levels based on the base zoning regulations, referencing the Land Use Standards and Typical Development Characteristics outlined in the City's Framework Element[6]. These cohorts correspond to selected development prototypes designed for different density capacities, providing a structured approach to urban planning and land use management.

Table 2. Density Cohorts

Density Cohorts		
Density Cohort	Density Range	Examples of Typical Zone Classes
Low Medium I	10-17	RD3, RD4, R2
Low Medium II	18-29	R1.5, RD2
Medium	30-55	RW2, R3, RAS3, C1, CM
High Medium	56-109	R4, RAS4, CR, C1.5, C2, C4, C5, MR1, M1, MR2, M2, M3
High	110-218	R5

Source: The City of Los Angeles Department of City Planning (LACP), AECOM

8. **RSO-new unit ratio**: Categorization by the ratio of pre-existing RSO units to total newly constructed units (expressed as percentages)

4. Key Findings

This section describes key findings from the analysis, including the general characteristics of RSO redevelopment projects, the relationship between these project characteristics and affordable housing replacement, and the estimated impact of a policy requiring 1:1 RSO-Affordable replacement.

[6] *Los Angeles Department of City Planning. Chapter 3: Multi-family residential. Retrieved June 6, 2024, from* https://planning.lacity.gov/cwd/framwk/chapters/03/03202.htm

4.1 General Characteristics of RSO Redevelopment Projects

Table 3, below shows RSO projects by development condition including incentive program, market tier, density cohort, and neighborhood. Table 4 show project characteristics including RSO replacement standard achieved, number of pre-existing RSO units, and number of newly constructed units. Table 5 shows affordable units provided by income level. Key findings from these tables are described below.

In total among all the RSO redevelopment projects analyzed, the City has achieved an overall RSO-Affordable replacement ratio slightly over 1:1. As discussed in the previous section, 209 mixed-income projects on sites containing a total of 1,091 pre-existing RSO units were identified. These mixed-income RSO redevelopment projects account for 8,959 newly constructed units, of which 1,161 are covenanted affordable.

On a per-project basis, 61% of RSO redevelopment projects, accounting for 67% of housing units, already provide at least 1:1 RSO Affordable replacement. As these projects already meet the 1:1 RSO-Affordable replacement requirement under consideration, they would not be negatively impacted by the potential change in policy. Within these projects, the vast majority of affordable units (92%) are designated for extremely low income and very low income residents. More than a quarter of projects (26%) provide a 1:25:1 RSO-Affordable Replacement Unit Ratio or higher; 22% provide a 1.5:1 ratio or higher, and 13% provide a 2:1 ratio or higher.

The remaining RSO redevelopment projects – 39% of RSO redevelopment projects, accounting for 33% of units – provided less than 1:1 RSO-Affordable replacement. These projects may have been additionally burdened if required to provide 1:1 RSO-Affordable replacement. Within RSO redevelopment projects providing less than 1:1 RSO-Affordable replacement, a majority of affordable units (87%) are designated for extremely low income and very low income residents.

Key characteristics of mixed-income RSO redevelopment projects include:

- **Nearly all mixed-income RSO redevelopment projects (99%) utilized DB[7] or TOC incentives, and a majority of these (77%) utilized the TOC incentive program.** The remainder of the projects in the database used other incentives including Value Capture Ordinance (VCO).
- **More than 40% of mixed-income RSO redevelopment projects are located in neighborhoods that fall into Market Tier 3 (High Medium Market Tier).** The remaining projects are almost evenly distributed across market tiers.
- **Eighty percent of mixed-income RSO redevelopment projects are located on sites zoned for medium and high medium density.** Five percent of projects are located on low medium density sites and three percent are located on high density sites.
- **Together, the Westlake, Hollywood, North Hollywood, and Koreatown neighborhoods contain over one-third of the City's mixed-income RSO redevelopment projects.** Westlake alone accounts for 9% of total units in the City's new mixed-income RSO redevelopment projects.
- **Most mixed-income RSO redevelopment projects (71%) replaced small scale buildings with 1-5 pre-existing RSO units**. Only three projects were developed on sites with greater than 25 pre-existing RSO units.
- **Nearly all mixed-income RSO redevelopment projects (94%) are mid-scale to large-scale projects with 11 or more newly constructed units.**

[7] Including DBO projects that only used a parking reduction incentive.

Table 3. Selected RSO Projects: Development Condition Characteristics

	Number of Total New Projects		Number of Total Units in New Projects		Number of Affordable Units Provided		Number of RSO Units Demolished	
By Programs								
DB	45	22%	2,085	23%	275	24%	275	25%
TOC	161	77%	6,482	72%	823	71%	808	74%
Other	3	1%	392	4%	63	5%	8	1%
By Market Tier								
Market Tier 1 (Low)	39	19%	1,346	15%	181	16%	186	17%
Market Tier 2 (Low Medium)	32	15%	1,385	15%	199	17%	157	14%
Market Tier 3 (High Medium)	89	43%	4,048	45%	515	44%	464	43%
Market Tier 4 (High)	46	22%	1,870	21%	235	20%	263	24%
N/A*	3	1%	310	3%	31	3%	21	2%
By Density Cohort								
Low Medium	11	5%	116	1%	24	2%	32	3%
Medium	85	41%	2,195	25%	313	27%	358	33%
High Medium	81	39%	5,053	56%	626	54%	503	46%
High	7	3%	181	2%	27	2%	53	5%
Others**	25	12%	1,414	16%	171	15%	145	13%
By Neighborhoods* **								
Westlake	19	9%	1252	14%	153	13%	135	12%
Hollywood	17	8%	472	5%	74	6%	89	8%
North Hollywood	15	7%	481	5%	69	6%	88	8%
Koreatown	19	9%	734	8%	86	7%	78	7%
Palms	10	5%	697	8%	73	6%	65	6%
East Hollywood	12	6%	584	7%	77	7%	62	6%
Pico-Union	11	5%	570	6%	58	5%	55	5%
Northridge	1	0%	64	1%	11	1%	36	3%
Westchester	6	3%	150	2%	25	2%	34	3%
Westwood	6	3%	112	1%	19	2%	31	3%
Echo Park	6	3%	377	4%	43	4%	29	3%
Hyde Park	5	2%	410	5%	50	4%	27	2%
Exposition Park	5	2%	277	3%	35	3%	26	2%
Century City	1	0%	91	1%	11	1%	26	2%
Toluca Lake	7	3%	163	2%	26	2%	25	2%
Other Neighborhoods	66	32%	2215	25%	320	28%	264	24%
N/A*	3	1%	310	3%	31	3%	21	2%
All Projects	**209**	**100%**	**8,959**	**100%**	**1,161**	**100%**	**1,091**	**100%**

**N/A (not available) refers to the projects that have insufficient or incorrect geodata and cannot be identified in the map.*

*** Includes projects that have insufficient or incorrect geodata, or are located in single-family zones (e.g., R1), or the allowable densities are not fixed but vary depending on the specific location (e.g., MU(EC), CW, etc.).*

***Neighborhoods are based on LA Times Neighborhoods; only those with 25 or more RSO units demolished are included in the table (sorted by the number of RSO units demolished), while the rest are grouped under "Other Neighborhoods." The complete list can be found in the appendix.*

Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 4. Selected RSO Projects: Project Characteristics

	Number of Total New Projects		Number of Total Units in New Projects		Number of Affordable Units Provided		Number of RSO Units Demolished	
By RSO Replacement Standard Achieved								
1:1 Ratio or Higher	128	61%	5,999	67%	741	64%	475	44%
1.25:1 Ratio or Higher	55	26%	3,553	40%	428	37%	174	16%
1.5:1 Ratio or Higher	45	22%	3,046	34%	371	32%	131	12%
2:1 Ratio or Higher	27	13%	2,090	23%	262	23%	64	6%
By RSO Unit Scale (Pre-existing RSO Units)								
1-5 Unit	148	71%	4,738	53%	604	52%	436	40%
6-10 Unit	38	18%	1,738	19%	248	21%	274	25%
11-25 Unit	20	10%	2,110	24%	251	22%	283	26%
26-50 Unit	3	1%	373	4%	58	5%	98	9%
51 And More Unit	0	0%	0	0%	0	0%	0	0%
By Project Scale (Newly Constructed Units)								
1-5 Unit	5	2%	23	0%	6	1%	14	1%
6-10 Unit	8	4%	63	1%	17	1%	19	2%
11-25 Unit	79	38%	1,408	16%	220	19%	251	23%
26-50 Unit	60	29%	2,050	23%	255	22%	272	25%
51 And More Unit	57	27%	5,415	60%	663	57%	535	49%
All Development Projects	**209**	**100%**	**8,959**	**100%**	**1,161**	**100%**	**1,091**	**100%**

Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 5. Affordable Units Provided by Income Level and 1:1 RSO-Affordable Replacement

	Number of Affordable Units Provided	
1:1 Replacement Standard Achieved	**741**	**64%**
Extreme Low Income	432	58%
Very Low Income	260	35%
Low Income	40	5%
Moderate Income	0	0%
Workforce Income	4	1%
N/A (Missing Income Level Data)	5	1%
1:1 Replacement Standard Not Achieved	**420**	**36%**
Extreme Low Income	211	50%
Very Low Income	157	37%
Low Income	47	11%
Moderate Income	2	1%
Workforce Income	0	0%
N/A (Missing Income Level Data)	3	1%

Source: Land Use Recorded Covenants (2020-2023), AECOM

4.2 Relationship between Project Characteristics and Affordable Housing Replacement

Next, projects were categorized based on their RSO-Affordable replacement ratio, and analyzed to understand the number of affordable units in each income category for projects that provide 1:1 RSO-Affordable replacement ("1:1 Replacement Standard Achieved") and projects that provide less than 1:1 RSO-Affordable replacement ("1:1 Replacement Standard Not Achieved").

A cross tabulation analysis sought to identify any potential correlation between various project characteristics and 1:1 RSO-Affordable Replacement, and whether any patterns clearly identify a threshold beyond which projects are significantly less likely to achieve 1:1 RSO-Affordable replacement.

Analysis revealed RSO-new unit ratio as the only project characteristic to reflect a clear trend with achievement of 1:1 RSO-Affordable replacement, and a clearly identified threshold (20%) above which projects are significantly less likely to achieve 1:1 RSO-Affordable replacement. **Therefore, this analysis finds that mixed-income RSO redevelopment projects with an RSO-new unit ratio above 20% are significantly more likely to be impacted by a change in policy to require 1:1 RSO-Affordable replacement.**

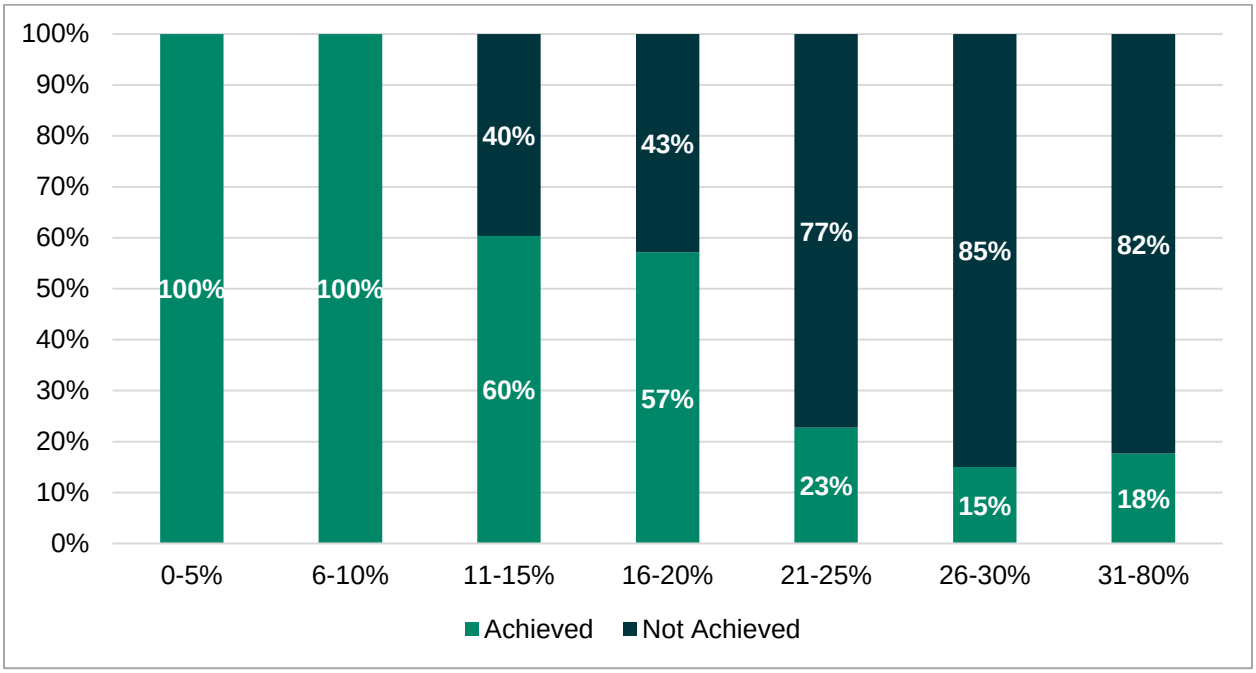
The analysis of projects by RSO-New Unit Ratio is detailed below, while the analysis for the remaining project characteristics considered can be found in Appendix *A.1. Analysis by Other Project Characteristics*.

4.2.1 RSO-Affordable Replacement by RSO-New Unit Ratio

RSO-New Unit Ratio: *Categorization by the ratio of pre-existing RSO units to total newly constructed units (expressed as percentages)*

- Analysis by RSO-new unit ratio revealed the strongest relationship between a project characteristic and whether projects already provide 1:1 RSO-Affordable replacement.
- All projects with an RSO-new unit ratio of 0-10% (pre-existing RSO units equal to 10% or less of total newly constructed units) already provide 1:1 RSO-Affordable replacement.
- Approximately 60% of projects with an RSO-new unit ratio of 11-20% already provide 1:1 RSO-Affordable replacement.
- Approximately 20% of projects with an RSO-new unit ratio of 21-80% already provide 1:1 RSO-Affordable replacement.
- This analysis shows that the difficulty of achieving 1:1 RSO-Affordable replacement generally increases with a project's RSO-new unit ratio and suggests that projects with an RSO-new unit ratio above 20% are significantly less likely to achieve 1:1 RSO-Affordable replacement, compared to projects with lower ratio.

Figure 1. 1:1 RSO-Affordable Replacement by RSO-New Unit Ratio



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 6. 1:1 RSO-Affordable Replacement by RSO-New Unit Ratio

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
RSO-New Unit Ratio	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
0-5%	22	100%	0	0%	22
6-10%	47	100%	0	0%	47
11-15%	32	60%	21	40%	53
16-20%	16	57%	12	43%	28
21-25%	5	23%	17	77%	22
26-30%	3	15%	17	85%	20
31-80%	3	18%	14	82%	17

Source: Land Use Recorded Covenants (2020-2023), AECOM

4.3 Estimated Impact of Policy Change

Using the identified threshold of a 20% RSO-new unit ratio, this analysis estimates that a 1:1 RSO-Affordable replacement Requirement would likely have caused significant additional financial burden, and potentially may have impacted project feasibility, for the 48 RSO redevelopment projects that did not already provide 1:1 RSO-Affordable replacement; and had an RSO-new unit ratio over 20%. This estimate assumes that the other 33 projects that did not provide 1:1 RSO-Affordable replacement but had an RSO-new unit ratio under 20%, would in most cases have found ways to adapt densities or other project characteristics to accommodate the increased affordability requirement. Note that this estimate does not incorporate any site specific economic or physical feasibility analysis.

Key findings about the potential impact of the policy change include:

- Overall, 48 projects built between 2020 and 2023 could have been impacted if they were required to provide 1:1 RSO-Affordable replacement.
- These potentially impacted projects involved demolition of 374 RSO units and provided 1,306 total new housing units, including 231 new affordable housing units.
- These 48 projects accounted for 16% of all RSO redevelopment projects in the Land Covenants database (10% of total units), 6% of all approved projects (3% of total units) in the Land Covenants database, and 2% of all housing units permitted in the City of Los Angeles between 2020 and 2023.[8]

Table 7. Impacted RSO Projects

	Impacted RSO Projects	All RSO Projects	Impacted RSO Projects as a Share of all RSO Projects	Covenanted Approved Projects	Impacted RSO Project as a Share of all Covenanted Approved Projects
New Projects	**48**	303	16%	840	6%
Units in New Projects	**1,306**	12,656	10%	46,529	3%
Affordable Units Provided	**231**	4,581	5%	17,447	1%
RSO Units Demolished	**374**	1,561	24%	1,561	24%

Source: Land Use Recorded Covenants (2020-2023), AECOM

[8] According to Los Angeles General Plan Housing Element Annual Progress Report (2020-2023), more than 77,700 total housing units were permitted between 2020 and 2023.

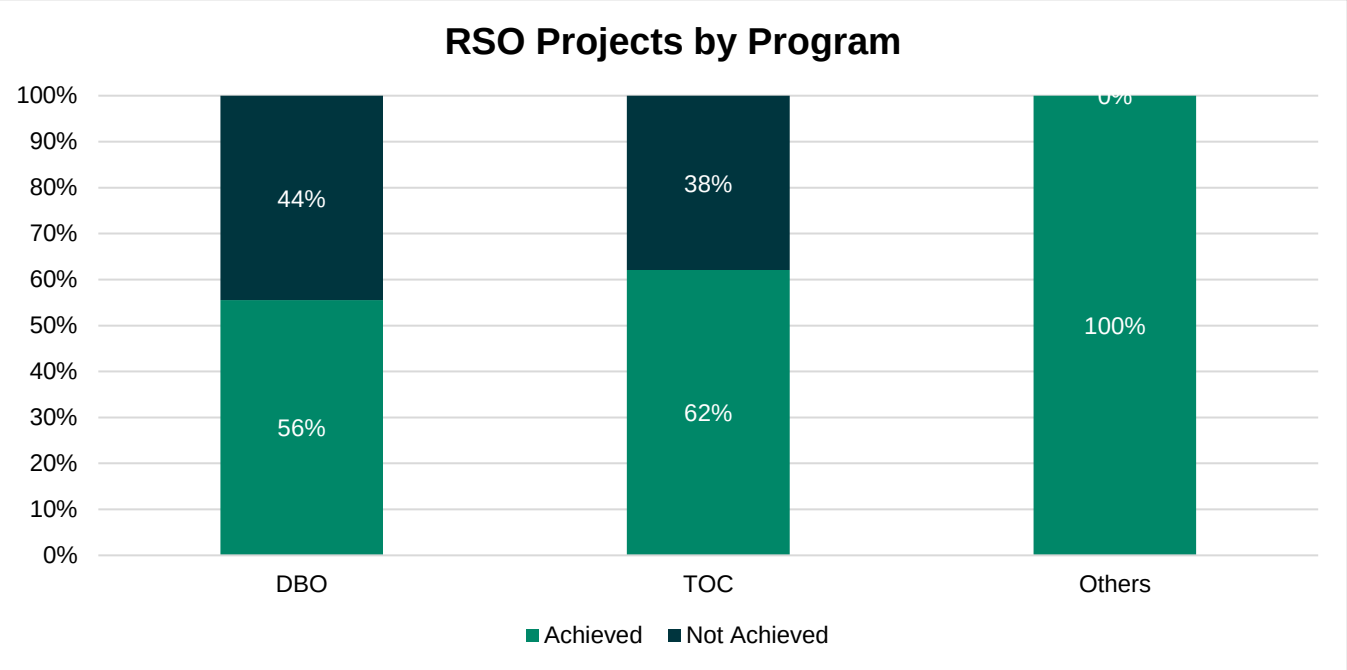
A.1 Analysis by Other Project Characteristics

A.1.1 Characteristic 1: Incentive Program Utilized

***Incentive Program Utilized**: Application of DB, TOC, or other incentive programs*

- For both DB and TOC projects, a majority of projects are already providing 1:1 RSO-Affordable replacement.
- A slightly higher share of TOC projects (62%) than DB projects (56%) are already providing 1:1 RSO-Affordable replacement.
- While 100% of projects using "other" incentive programs already provide 1:1 RSO-Affordable replacement, this category includes just 3 projects.
- The specific incentive program utilized does not appear to be an effective characteristic for determining which projects would be impacted by a 1:1 RSO-Affordable replacement requirement.

Figure 2. 1:1 RSO-Affordable Replacement by Incentive Program Utilized



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 8. 1:1 RSO-Affordable Replacement by Incentive Program Utilized

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
Incentive Program	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
DBO	25	56%	20	44%	45
TOC	100	62%	61	38%	161
Others	3	100%	0	0%	3

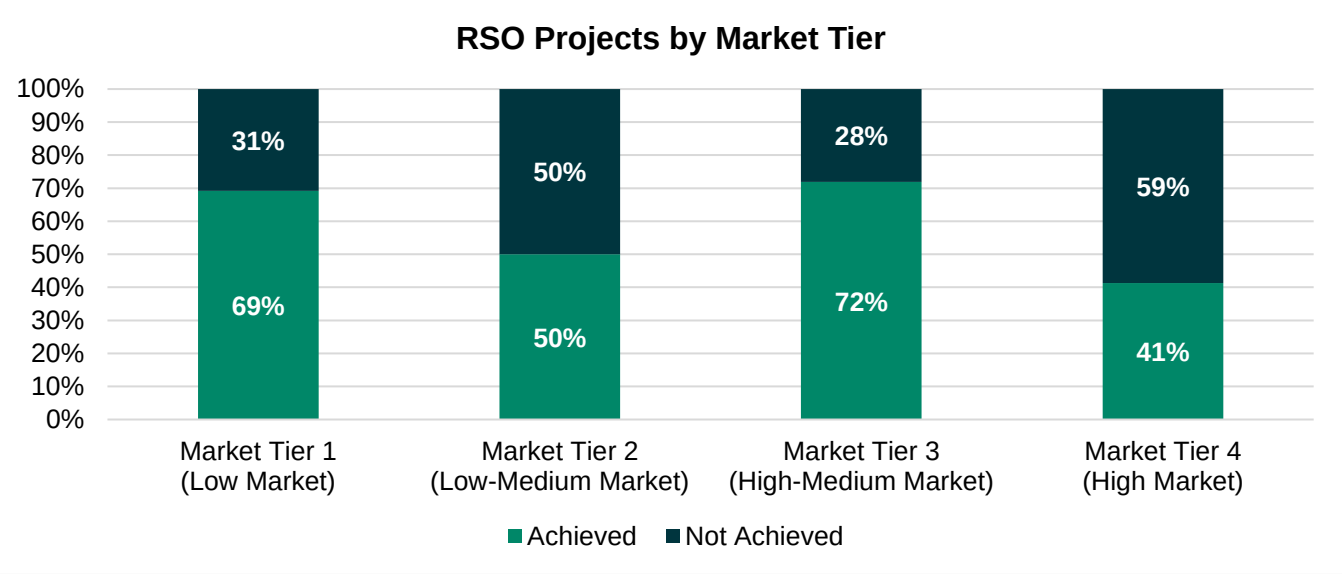
Source: Land Use Recorded Covenants (2020-2023), AECOM

A.1.2 Characteristic 2: Market Tier

Market Tier: *Categorization of local housing markets based on their rent levels, sale prices, tenure status, and anticipated future changes.*

- The share of projects already providing 1:1 RSO-Affordable replacement varies across market tiers but without an observable pattern.
- In market tiers 1 and 3, around 70% of projects already provide 1:1 RSO-Affordable replacement.
- Half of projects in market tier 2 already provide 1:1 RSO-Affordable replacement.
- Market tier 4 has the lowest share of projects (41%) that already provide 1:1 RSO-Affordable replacement.
- Market tier does not appear to be an effective characteristic for determining which projects would be impacted by a 1:1 RSO-Affordable replacement requirement.
- The large geographies encompassed by Market Tiers may obscure some of the nuance between geographies. For a more granular analysis of RSO-Affordable Replacement by geography, refer to Characteristic 3: Neighborhood.

Figure 3. 1:1 RSO-Affordable Replacement by Market Tier



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 9. 1:1 RSO-Affordable Replacement by Market Tier

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
Market Tier	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
Market Tier 1 (Low)	27	69%	12	31%	39
Market Tier 2 (Low-Medium)	16	50%	16	50%	32
Market Tier 3 (High-Medium)	64	72%	25	28%	89
Market Tier 4 (High)	19	41%	27	59%	46
N/A	2	67%	1	33%	3

N/A (not available) refers to the projects that have insufficient geodata and cannot be identified in the map.

Source: Land Use Recorded Covenants (2020-2023), AECOM

A.1.3 Characteristic 3: Neighborhood

Neighborhood: *Neighborhood boundaries as identified by the LA Times Mapping LA project*

- The share of projects already providing 1:1 RSO-Affordable replacement varies across neighborhoods, with highest 1:1 RSO-Affordable replacement rates (70-90%) in the neighborhoods of East Hollywood, Koreatown, Pico-Union, Toluca Lake, Echo Park and Exposition Park. No projects in Century City or Northridge, and under 20% of projects in Westwood and Westchester, provided 1:1 RSO-Affordable replacement. Note that neighborhoods in the table are ordered by total number of RSO units demolished (see Table 3 above).
- As a categorical variable, neighborhood was not considered as a potential threshold for the analysis; however, this analysis provides insight into where higher levels of affordable units are already being provided.

Table 10. 1:1 RSO-Affordable Replacement by Neighborhood

Neighborhoods*	Market Tier	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
		# of Projects	%	# of Projects	%	# of Projects
Westlake	3	13	68%	6	32%	19
Hollywood	3	10	59%	7	41%	17
North Hollywood	2	6	40%	9	60%	15
Koreatown	3	15	79%	4	21%	19
Palms	4	6	60%	4	40%	10
East Hollywood	3	10	83%	2	17%	12
Pico-Union	1	8	73%	3	27%	11
Northridge	1		0%	1	100%	1
Westchester	4	1	17%	5	83%	6
Westwood	4	1	17%	5	83%	6
Echo Park	3	6	100%		0%	6
Hyde Park	2	3	60%	2	40%	5
Exposition Park	3	4	80%	1	20%	5
Century City	4		0%	1	100%	1
Toluca Lake	1	5	71%	2	29%	7
Other Neighborhoods	-	38	58%	28	42%	66
N/A*	-	2	67%	1	33%	3

N/A (not available) refers to the projects that have insufficient geodata and cannot be identified in the map.

**Neighborhoods are based on LA Times Neighborhoods; only those with 25 or more RSO units demolished are included in the table (sorted by the number of RSO units demolished), while the rest are grouped under "Other Neighborhoods." The complete list can be found in the appendix.*

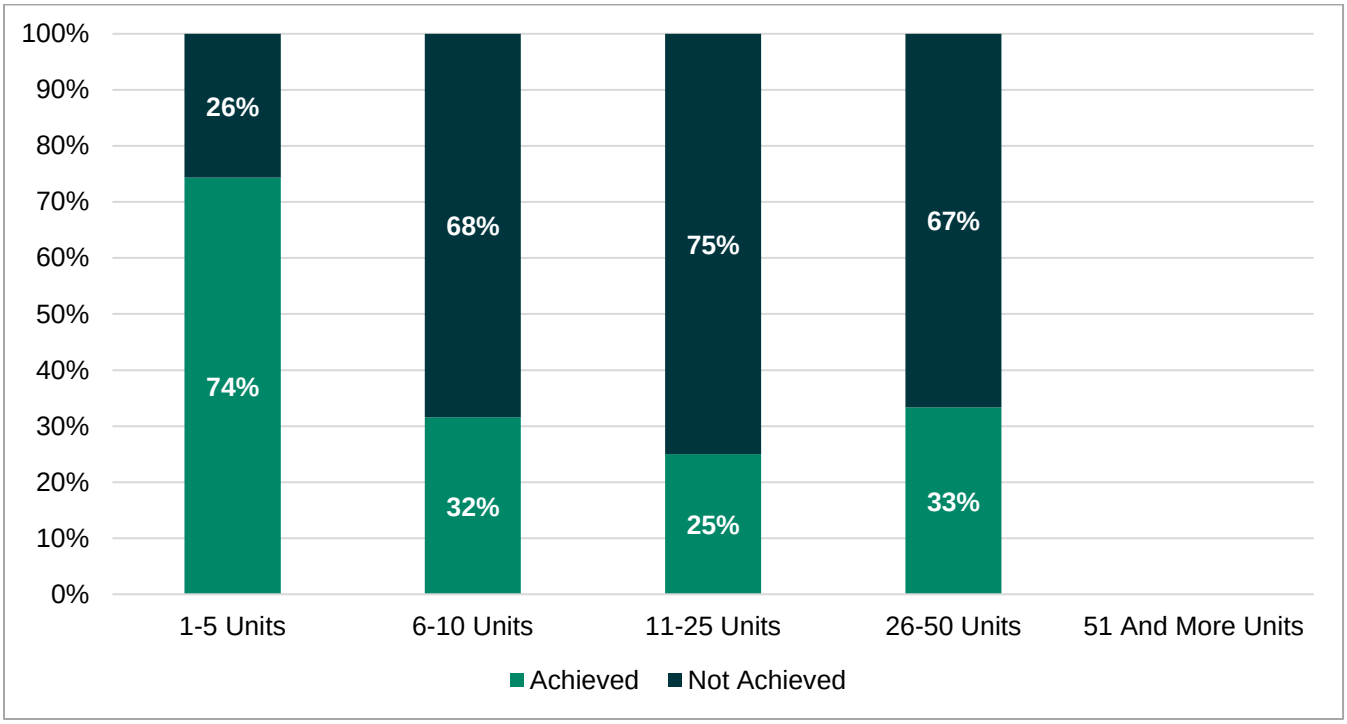
Source: Land Use Recorded Covenants (2020-2023), AECOM

A.1.4 Characteristic 4: RSO Site Condition

RSO Site Condition: *Categorization by number of pre-existing RSO units (i.e., the number of demolished RSO units)*

- Sites with 1-5 pre-existing RSO units have, by far, the highest share of RSO redevelopment projects already providing 1:1 RSO-Affordable replacement. This is expected, given that these projects are able to meet 1:1 RSO-Affordable replacement through provision of a much lower quantity of affordable units compared to projects that demolished more RSO units.
- The share of projects already providing 1:1 RSO-Affordable replacement is similar across categories of sites with 6-10, 11-25, and 26-50 pre-existing RSO units.
- The number of projects analyzed across categories varies significantly, with only 3 projects analyzed for sites with 26-50 pre-existing RSO units.

Figure 3. 1:1 RSO-Affordable Replacement by RSO Site Condition



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 11. 1:1 RSO-Affordable Replacement by RSO Site Condition

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
RSO Site Condition	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
1-5 Units	110	74%	38	26%	148
6-10 Units	12	32%	26	68%	38
11-25 Units	5	25%	15	75%	20
26-50 Units	1	33%	2	67%	3
51 And More Units	0	0%	0	0%	0

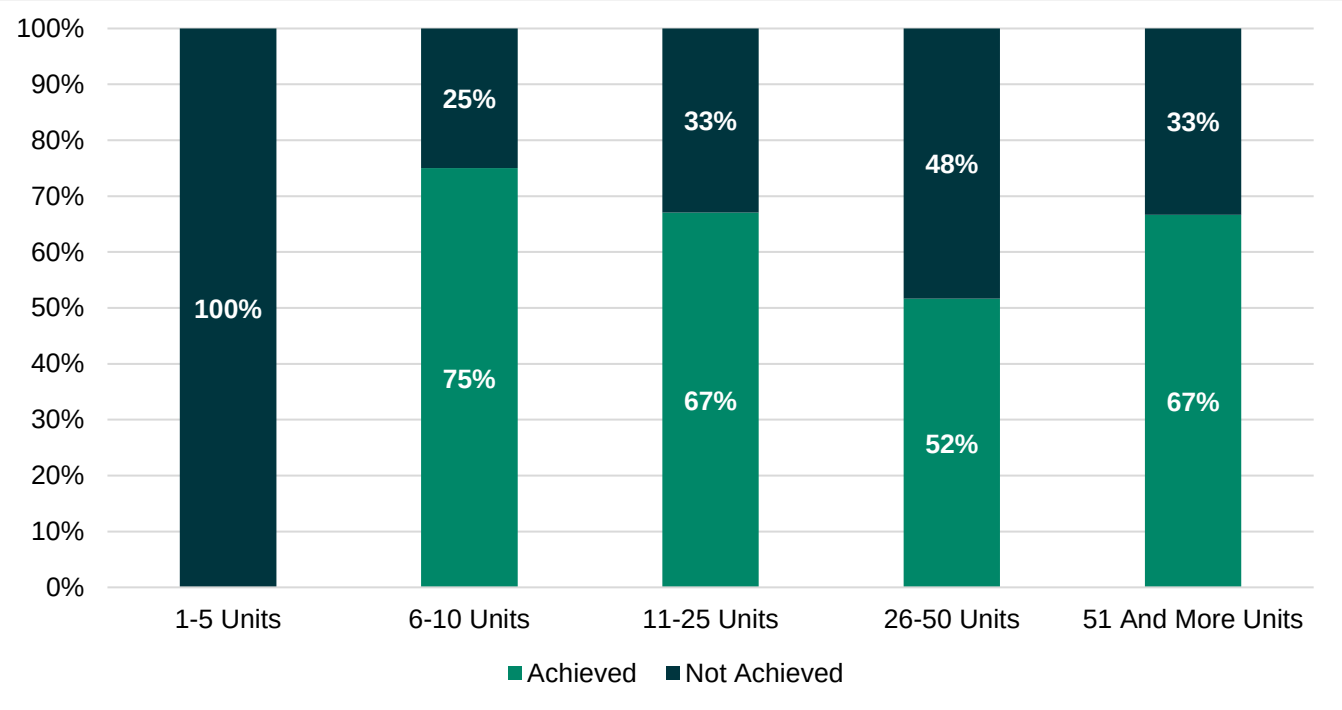
Source: Land Use Recorded Covenants (2020-2023), AECOM

A.1.5 Characteristic 5: Project Scale

Project Scale: *Categorization by total number of newly constructed units*

- In the three categories with a substantial number of projects analyzed (11-25 units, 26-50 units, and 51+ units), a majority of projects (between 52% and 67%) already provide 1:1 RSO-Affordable replacement. There is not an observable pattern to indicate that projects above or below a certain project scale are more likely to already provide a 1:1 RSO-Affordable replacement.
- For projects with 11 units or greater, project scale does not appear to be an effective characteristic for determining which projects would be impacted by a 1:1 RSO-Affordable replacement requirement.

Figure 4. 1:1 RSO-Affordable Replacement by Project Scale



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 12. 1:1 RSO-Affordable Replacement by Project Scale

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
Project Scale	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
1-5 Units	0	0%	5	100%	5
6-10 Units	6	75%	2	25%	8
11-25 Units	53	67%	26	33%	79
26-50 Units	31	52%	29	48%	60
51 And More Units	38	67%	19	33%	57

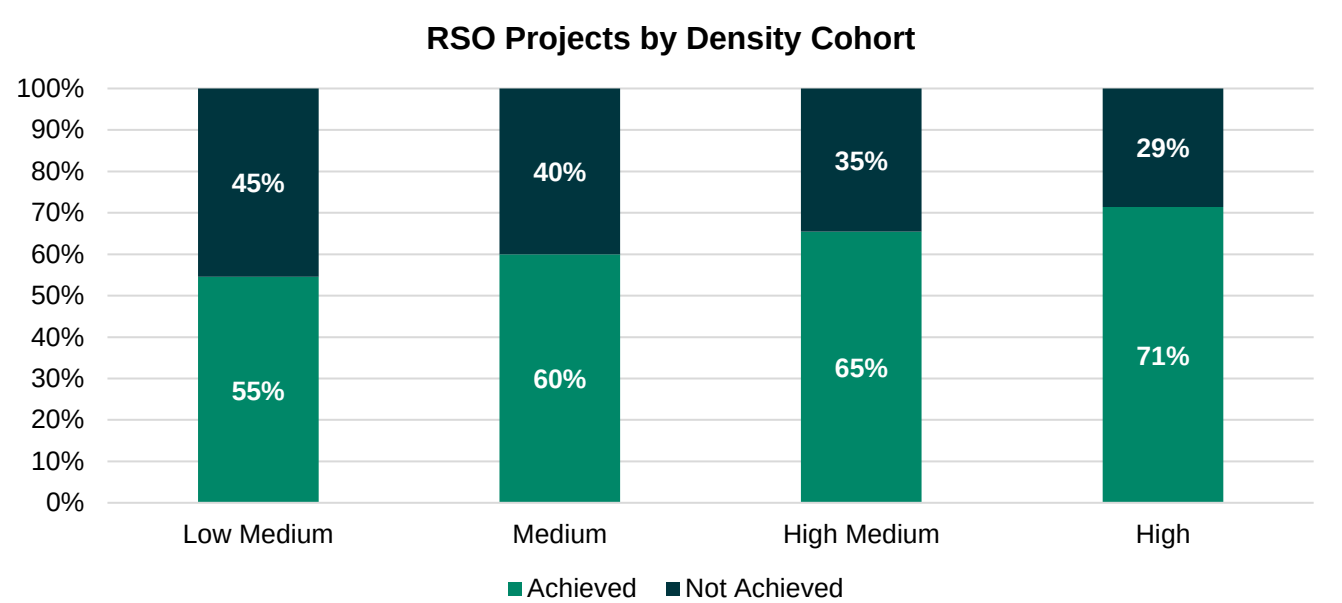
Source: Land Use Recorded Covenants (2020-2023), AECOM

A.1.6 Characteristic 6: Density Cohort

Density Cohort: *Categorization by allowed density under base zoning conditions into cohorts of Low Medium, Medium, High Medium, and High*

- More than half of projects in the Low Medium density cohort already provide 1:1 RSO-Affordable replacement.
- In both categories with a substantial number of projects analyzed (Medium and High Medium density cohorts) 60% and 65 of projects already provide 1:1 RSO-Affordable replacement, respectively.
- Analysis indicates that projects in higher density cohorts are somewhat more likely to already provide a 1:1 RSO-Affordable replacement, but the smaller number of projects analyzed in Low Medium and High density cohorts detract from the significance of this pattern.
- Density cohort does not appear to be an effective characteristic for determining which projects would be impacted by a 1:1 RSO-Affordable replacement requirement.

Figure 5. 1:1 RSO-Affordable Replacement by Density Cohort



Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 13. 1:1 RSO-Affordable Replacement by Density Cohort

	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
Density Cohort	**# of Projects**	**%**	**# of Projects**	**%**	**# of Projects**
Low Medium	6	55%	5	45%	11
Medium	51	60%	34	40%	85
High Medium	53	65%	28	35%	81
High	5	71%	2	29%	7
N/A	13	52%	12	48%	25

Source: Land Use Recorded Covenants (2020-2023), AECOM

A.2 RSO Projects by Replacement Standard Achieved and RSO Unit Ratio

Table 14. RSO Projects by Replacement Standard Achieved and RSO Unit Ratio

RSO Replacement Project by RSO Replacement Standard									
RSO Unit Ratio	1 to 1		1.25 to 1		1.5 to 1		2 to 1		Total
	Achieved	Not Achieved	Achieved	Not Achieved	Achieved	Not Achieved	Achieved	Not Achieved	
1-10%	60		46	14	40	20	26	34	60
11-20%	55	31	8	78	4	82	1	85	86
21-30%	10	34	1	43	1	43		44	44
31-40%	3	7		10		10		10	10
41-50%		4		4		4		4	4
51-60%		2		2		2		2	2
61-70%		1		1		1		1	1
71-80%		1		1		1		1	1
81-90%		1		1		1		1	1
91-100%				0		0		0	0
All	128	81	55	154	45	164	27	182	209
% of All	61%	39%	26%	74%	22%	78%	13%	87%	100%

Source: Land Use Recorded Covenants (2020-2023), AECOM

A.3 Impacted RSO Projects

Table 15. Impacted RSO Projects by Project Scale

	Impacted RSO Projects	RSO Analysis Projects	Impacted RSO Project Share	All RSO Projects	Impacted RSO Project Share	Mixed-Income Projects	Impacted RSO Project Share	Covenanted Approved Projects	Impacted RSO Project Share
New Projects	**48**	209	23%	303	16%	569	8%	840	6%
1-5 Unit	**5**	5	100%	6	83%	44	11%	46	11%
6-10 Unit	**2**	8	25%	10	20%	40	5%	42	5%
11-25 Unit	**21**	79	27%	127	17%	160	13%	239	9%
26-50 Unit	**13**	60	22%	79	16%	140	9%	211	6%
51 And More Unit	**7**	57	12%	81	9%	185	4%	297	2%
N/A	**0**	0	N/A	0	N/A	0	N/A	5	N/A
Units in New Projects	**1,306**	8,959	15%	12,656	10%	31,633	4%	46,529	3%
1-5 Unit	**23**	23	100%	25	92%	171	13%	176	13%
6-10 Unit	**17**	63	27%	79	22%	321	5%	337	5%
11-25 Unit	**382**	1408	27%	2268	17%	2773	14%	4,185	9%
26-50 Unit	**406**	2050	20%	2746	15%	5015	8%	7,773	5%
51 And More Unit	**478**	5415	9%	7538	6%	23353	2%	34,058	1%
N/A	**0**	0	N/A	0	N/A	0	N/A	0	N/A
Affordable Units Provided	**231**	1,161	20%	4,581	5%	3,854	6%	17,447	1%
1-5 Unit	**6**	6	100%	8	75%	45	13%	50	12%
6-10 Unit	**3**	17	18%	32	9%	54	6%	69	4%
11-25 Unit	**68**	220	31%	1072	6%	378	18%	1,772	4%
26-50 Unit	**72**	255	28%	937	8%	576	13%	3,278	2%
51 And More Unit	**82**	663	12%	2532	3%	2801	3%	12,278	1%
N/A	**0**	0	N/A	0	N/A	0	N/A	0	N/A
RSO Units Demolished	**374**	1,091	34%	1,561	24%	1,091	34%	1,561	24%
1-5 Unit	**14**	14	100%	16	88%	14	100%	16	88%
6-10 Unit	**6**	19	32%	30	20%	19	32%	30	20%
11-25 Unit	**106**	251	42%	371	29%	251	42%	371	29%
26-50 Unit	**100**	272	37%	351	28%	272	37%	351	28%
51 And More Unit	**148**	535	28%	793	19%	535	28%	793	19%
N/A	**0**	0	N/A	0	N/A	0	N/A	0	N/A

N/A: insufficient data available.

Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 16. Impacted RSO Projects by Market Tier

	Impacted RSO Projects	RSO Analysis Projects	Impacted RSO Project Share	All RSO Projects	Impacted RSO Project Share	Mixed-Income Projects	Impacted RSO Project Share	Covenanted Approved Projects	Impacted RSO Project Share
New Projects	**48**	209	23%	303	16%	569	8%	840	6%
Market Tier 1 (Low)	**7**	39	18%	105	7%	143	5%	323	2%
Market Tier 2 (Low-Medium)	**8**	32	25%	45	18%	69	12%	96	8%
Market Tier 3 (High-Medium)	**13**	89	15%	101	13%	228	6%	274	5%
Market Tier 4 (High)	**19**	46	41%	49	39%	122	16%	136	14%
N/A	**1**	3	33%	3	33%	7	14%	11	9%
Units in New Projects	**1,306**	8,959	15%	12,656	10%	31,633	4%	46,529	3%
Market Tier 1 (Low)	**157**	1,346	12%	3,631	4%	6,507	2%	15,021	1%
Market Tier 2 (Low-Medium)	**185**	1,385	13%	1,791	10%	4,385	4%	5,876	3%
Market Tier 3 (High-Medium)	**441**	4,048	11%	4,971	9%	14,000	3%	18,257	2%
Market Tier 4 (High)	**490**	1,870	26%	1,953	25%	6,188	8%	6,822	7%
N/A	**33**	310	11%	310	11%	553	6%	553	6%
Affordable Units Provided	**231**	1,161	20%	4,581	5%	3,854	6%	17,447	1%
Market Tier 1 (Low)	**29**	181	16%	2,275	1%	814	4%	8,851	0%
Market Tier 2 (Low-Medium)	**36**	199	18%	600	6%	666	5%	2,137	2%
Market Tier 3 (High-Medium)	**78**	515	15%	1,359	6%	1,630	5%	5,181	2%
Market Tier 4 (High)	**82**	235	35%	316	26%	696	12%	1,230	7%
N/A	**6**	31	19%	31	19%	48	13%	48	13%
RSO Units Demolished	**374**	1,091	34%	1,561	24%	1,091	34%	1,561	24%
Market Tier 1 (Low)	**65**	186	35%	469	14%	186	35%	469	14%
Market Tier 2 (Low-Medium)	**52**	157	33%	211	25%	157	33%	211	25%
Market Tier 3 (High-Medium)	**114**	464	25%	580	20%	464	25%	580	20%
Market Tier 4 (High)	**135**	263	51%	280	48%	263	51%	280	48%
N/A	**8**	21	38%	21	38%	21	38%	21	38%

N/A (not available) refers to the projects that have insufficient or incorrect geodata and cannot be identified in the map.

Source: Land Use Recorded Covenants (2020-2023), AECOM

A.4 Analysis by Neighborhood (Complete)

Table 17. RSO Projects by Neighborhood (Complete)

Neighborhoods	Project Count	%	Total Units	%	Total Affordable Units	%	Total RSO Rental Units	%
Westlake	19	9%	1252	14%	153	13%	135	12%
Hollywood	17	8%	472	5%	74	6%	89	8%
North Hollywood	15	7%	481	5%	69	6%	88	8%
Koreatown	19	9%	734	8%	86	7%	78	7%
Palms	10	5%	697	8%	73	6%	65	6%
East Hollywood	12	6%	584	7%	77	7%	62	6%
Pico-Union	11	5%	570	6%	58	5%	55	5%
Northridge	1	0%	64	1%	11	1%	36	3%
Westchester	6	3%	150	2%	25	2%	34	3%
Westwood	6	3%	112	1%	19	2%	31	3%
Echo Park	6	3%	377	4%	43	4%	29	3%
Hyde Park	5	2%	410	5%	50	4%	27	2%
Exposition Park	5	2%	277	3%	35	3%	26	2%
Century City	1	0%	91	1%	11	1%	26	2%
Toluca Lake	7	3%	163	2%	26	2%	25	2%
Sawtelle	4	2%	209	2%	28	2%	23	2%
Mid-City	7	3%	220	2%	25	2%	23	2%
Beverly Grove	2	1%	95	1%	12	1%	21	2%
No Data	3	1%	310	3%	31	3%	21	2%
Baldwin Hills/Crenshaw	4	2%	121	1%	17	1%	20	2%
Pico-Robertson	4	2%	89	1%	11	1%	13	1%
Larchmont	3	1%	83	1%	10	1%	12	1%
Boyle Heights	4	2%	72	1%	10	1%	12	1%
Florence	2	1%	107	1%	20	2%	11	1%
Studio City	3	1%	51	1%	8	1%	11	1%
Van Nuys	3	1%	65	1%	9	1%	10	1%

Tujunga	2	1%	51	1%	8	1%	10	1%
Cheviot Hills	1	0%	24	0%	5	0%	8	1%
Panorama City	1	0%	26	0%	6	1%	8	1%
Valley Village	2	1%	27	0%	5	0%	6	1%
Vermont Square	2	1%	99	1%	19	2%	6	1%
West Adams	1	0%	22	0%	5	0%	6	1%
Rancho Park	1	0%	43	0%	5	0%	6	1%
Los Feliz	2	1%	102	1%	14	1%	6	1%
Mar Vista	2	1%	36	0%	5	0%	6	1%
Harvard Heights	2	1%	287	3%	50	4%	5	0%
Sherman Oaks	1	0%	36	0%	4	0%	5	0%
Watts	1	0%	39	0%	4	0%	4	0%
Brentwood	1	0%	17	0%	3	0%	4	0%
Mid-Wilshire	1	0%	19	0%	2	0%	4	0%
Fairfax	1	0%	14	0%	3	0%	4	0%
Harbor Gateway	1	0%	5	0%	2	0%	3	0%
Canoga Park	1	0%	16	0%	3	0%	3	0%
Glassell Park	1	0%	4	0%	1	0%	3	0%
Venice	1	0%	56	1%	6	1%	3	0%
Del Rey	1	0%	15	0%	2	0%	2	0%
Vermont-Slauson	1	0%	23	0%	2	0%	2	0%
Vermont Knolls	1	0%	27	0%	3	0%	2	0%
West Los Angeles	1	0%	92	1%	11	1%	1	0%
Valley Glen	1	0%	23	0%	2	0%	1	0%
Citywide Total	**209**	**100%**	**8,959**	**100%**	**1,161**	**100%**	**1,091**	**100%**

**N/A (not available) refers to the projects that have insufficient or incorrect geodata and cannot be identified in the map.*

***Neighborhoods are sorted by the number of RSO units demolished.*

Source: Land Use Recorded Covenants (2020-2023), AECOM

Table 18. RSO-Affordable Replacement by Neighborhood (Complete)

Neighborhoods*	Achieved 1:1 RSO-Affordable Replacement		Not Achieved 1:1 RSO-Affordable Replacement		Total
	Project Count	%	Project Count	%	
Westlake	13	68%	6	32%	19
Hollywood	10	59%	7	41%	17
North Hollywood	6	40%	9	60%	15
Koreatown	15	79%	4	21%	19
Palms	6	60%	4	40%	10
East Hollywood	10	83%	2	17%	12
Pico-Union	8	73%	3	27%	11
Northridge		0%	1	100%	1
Westchester	1	17%	5	83%	6
Westwood	1	17%	5	83%	6
Echo Park	6	100%		0%	6
Hyde Park	3	60%	2	40%	5
Exposition Park	4	80%	1	20%	5
Century City		0%	1	100%	1
Toluca Lake	5	71%	2	29%	7
Sawtelle	2	50%	2	50%	4
Mid-City	6	86%	1	14%	7
Beverly Grove		0%	2	100%	2
No Data	2	67%	1	33%	3
Baldwin Hills/Crenshaw	2	50%	2	50%	4
Pico-Robertson	2	50%	2	50%	4
Larchmont	2	67%	1	33%	3
Boyle Heights	3	75%	1	25%	4
Florence	2	100%		0%	2
Studio City	1	33%	2	67%	3

Van Nuys	2	67%	1	33%	3
Tujunga	1	50%	1	50%	2
Cheviot Hills		0%	1	100%	1
Panorama City		0%	1	100%	1
Valley Village	1	50%	1	50%	2
Vermont Square	2	100%		0%	2
West Adams		0%	1	100%	1
Rancho Park		0%	1	100%	1
Los Feliz	1	50%	1	50%	2
Mar Vista	1	50%	1	50%	2
Harvard Heights	2	100%		0%	2
Sherman Oaks		0%	1	100%	1
Watts	1	100%		0%	1
Brentwood		0%	1	100%	1
Mid-Wilshire		0%	1	100%	1
Fairfax		0%	1	100%	1
Harbor Gateway		0%	1	100%	1
Canoga Park	1	100%		0%	1
Glassell Park		0%	1	100%	1
Venice	1	100%		0%	1
Del Rey	1	100%		0%	1
Vermont-Slauson	1	100%		0%	1
Vermont Knolls	1	100%		0%	1
West Los Angeles	1	100%		0%	1
Valley Glen	1	100%		0%	1
Citywide Total	**128**	**61%**	**81**	**39%**	**209**

**N/A (not available) refers to the projects that have insufficient or incorrect geodata and cannot be identified in the map.*

***Neighborhoods are sorted by the number of RSO units demolished.*

Source: Land Use Recorded Covenants (2020-2023), AECOM

AECOM

Appendix A: Mixed Affordability Pathways for TOIA and OC

Appendix to the Economic and Feasibility Analysis for the Citywide Housing Incentive Program (CHIP)

September 16, 2024

Los Angeles City Planning
City of Los Angeles

Delivering a better world

A1. Overview

The newly proposed housing incentive program offers both single-affordability (where only one affordability level is provided) and mixed-affordability (where a mix of different affordability levels is offered) as pathways to achieve density bonuses under the Transit Oriented Incentive Areas (TOIA) and Opportunity Corridors (OC) Incentive Programs. The Economic and Feasibility Analysis for the Citywide Housing Incentive Program (CHIP) report ("the CHIP report") includes analysis of single-affordability pathways only. This appendix to the report analyzes four additional, mixed-income pathways for TOIA and OC. The goal of these pathways is to promote deeper affordability and accommodate a variety of income groups within a project.

A1.1 Mixed-Affordability Scenarios Tested

The proposed mixed-affordability pathways tested in the CHIP report are based on the Draft Citywide Housing Incentive Program Ordinance (June 27, 2024 Version). The proposed program structure offers two sets of options tailored for lower market tiers (Market Tiers 1 and 2) and two sets of options for higher market tiers (Market Tiers 3 and 4), which are tested in this appendix. These four scenarios are outlined in Table A-1 below.

Table A-1. Additional Scenarios for Mixed-Affordability Pathway

Scenarios		Affordability*					
		Set-Aside	ALI	ELI	VLI	LI	MI
Lower Market Tiers (MK1 & 2)	Scenario L1	12%	-	4%	8%	-	-
	Scenario L2	23%	1%	4%	-	-	18%
Higher Market Tiers (MK3 & 4)	Scenario H1	14%	-	5%	9%	-	-
	Scenario H2	26%	4%	4%	-	-	12%

**ALI: Acutely Low Income; ELI: Extremely Low Income; VLI: Very Low Income; LI: Low Income; MI: Moderate Income*
Source: LACP, AECOM

Note that in the single-affordability pathway, affordability requirements vary according to the TOIA and OC tiers. However, in the mixed-affordability scenarios, based on the proposed ordinance, affordability requirements do not vary by tier. In other words, developers who opt for the mixed-income pathway will receive incentives aligned with their respective TOIA and OC tiers (refer to Tables 29 and 38 in the CHIP report, which summarize the proposed incentive structure).

A1.2 Modifications to Existing Prototypes and Assumptions

In general, the analysis of the mixed-income scenarios used the original prototypes and their associated assumptions as described in the CHIP report. However, the proposed ordinance requires that all projects utilizing mixed-affordability options include at least one three-bedroom covenanted unit at the lowest affordability level. Some of the previously tested prototypes did not include a three-bedroom configuration. To align with the proposed policy, a three-bedroom unit at the lowest allowable area median income (AMI) level (i.e., a three-bedroom ELI unit for lower market tiers and a three-bedroom ALI unit for higher market tiers) was added to these scenarios. The remaining units were distributed according to the original unit mix. Table A-2

shows the unit mix tested for each prototype for the mixed-income scenarios; the yellow highlighted cells indicate modifications that were made to reflect the proposed three-bedroom requirement. For consistency with the original report, only for-rent prototypes were tested.

Table A-2. Updated Unit Mix for Mixed-Affordability Pathway

Housing Typology	4D	CY3	CY4	P5	P7	TW
Typical Unit Mix (Lower Density)						
Avg. Unit Size	**1,250**	**1,320**	**1,190**	**1,000**	**Varied**	**Varied**
0BR	0%	0%	0%	0%	30%	25%
1BR	0%	0%	0%	40%	50%	50%
2BR	20%	70%	70%	40%	20%	25%
3BR	40%	30%	30%	20%	1 Unit	1 Unit
4BR	40%	0%	0%	0%	0%	0%
Denser Unit Mix Alternative (Higher Density)						
Avg. Unit Size		**Varied**	**Varied**	**Varied**		
0BR		20%	0%	20%		
1BR		40%	50%	50%		
2BR		40%	50%	30%		
3BR		1 Unit	1 Unit	1 Unit		
4BR		0%	0%	0%		

Source: LACP, AECOM
Note: Cells highlighted in yellow indicate modified prototypes that include one covenanted 3-bedroom unit. In cases where no 3-bedroom unit was included in the original, the average unit size remains unchanged due to minimal impact.

The analysis of mixed-affordability pathways described in this appendix used the same market rents, development costs, developer return expectations, and other assumptions that were used in the CHIP report to test the single-affordability pathways. The cost and revenue assumptions varied by market tier according to the established methodology in the CHIP report and were not adjusted to account for potential variations in market conditions within California Tax Credit Allocation Committee (TCAC) opportunity areas. Table A-3 shows the assumed affordable rents, which are based on the City's published schedules and the utility allowance schedule published by the Housing Authority of the City of Los Angeles (HACLA).

Table A-3. Affordable Rent Schedule

	Acutely Low 15% AMI	Extremely Low 30% AMI	Very Low 50% AMI	Moderate 120% AMI
AMI % for calculating qualifying inc	15%	30%	50%	120%
Share of Qualifying Income Towarc	30%	30%	30%	35%
Qualifying Income[2]				
1-Person Household (Studio)	$10,350	$26,500	$44,150	$82,500
2-Person Household (1BR)	$11,800	$30,300	$50,450	$94,300
3-Person Household (2BR)	$13,300	$34,100	$56,750	$106,050
4-Person Household (3BR)	$14,750	$37,850	$63,050	$117,850
5-Person Household (4BR)	$15,950	$40,900	$68,100	$127,300
Available for Rent Payment				
1-Person Household (Studio)	$88	$492	$933	$2,235
2-Person Household (1BR)	$67	$530	$1,033	$2,522
3-Person Household (2BR)	$46	$566	$1,132	$2,806
4-Person Household (3BR)	$22	$599	$1,229	$3,090
5-Person Household (4BR)	-$37	$587	$1,267	$3,277

Source: Housing Authority of the City of Los Angeles (HACLA); California Housing and Community Development (HCD), AECOM
Notes: (1) Area Median Income limits for Extremely Low, Very Low, Low income, and Moderate tiers from California Department of Housing and Community Development (HCD) - Land Use Schedule VI Effective Date: August 1, 2023. AMI is $98,200.
(2) LACDA Utility Allowance Schedule, effective 12/01/2023; AECOM assumes trash collection is excluded from tenant costs.

A2. Testing Results

A2.1 Residual Land Value and Feasibility Analysis for TOIA

This section shows the feasibility results of the TOIA incentive program schedules for the mixed-affordability pathways. Similar to the results for all other programs, and as described in the CHIP report, the tables below present the outcomes using measures of residual land value (RLV). Depending on the results of each scenario and prototype, one of three potential feasibility levels is indicated: infeasible, feasible, or preferable.

The affordability sets tested in the main report and the newly added mixed-affordability pathways in this appendix are generally comparable, so the base cases for those scenarios remain unchanged (see Table 32 of the CHIP report for the base case scenarios).

As illustrated in Table A-4 and Table A-5, none of the scenarios tested in the lower market tiers (Market Tiers 1 and 2) were feasible. In general, the RLV values for these tiers are significantly negative. In Market Tier 3, feasibility is also very limited, with only CY4 proving feasible in commercial zones. In Market Tier 4, while residential parcels still have limited feasibility, many prototypes in the commercial zones become feasible.

Implications of these results are discussed below in Section A3.

Table A-4. TOIA Additional Scenario Residual Land Value and Feasibility Market Tier 1

TOIA Incentives Tested (Residential) - Market Tier 1			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			**4D-R**	**CY3-R**	**CY4-R**	**P5-R**	**4D-R**	**CY3-R**	**CY4-R**	**P5-R**
Residential										
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$140							
Potential Set Aside Schedules	**TOIA Tier**	**Affordability**								
Base Case Scenario	-	**-**	$7	($295)	($269)	($400)				
Scenario L1	1	4%ELI + 8%VLI	($449)	($528)	($528)	($622)				
	2		($449)	($561)	($561)	($622)				
	3		($698)	($639)	($639)	($622)				
	4		($698)	($672)	($672)	($622)				
Scenario L2	1	1%ALI + 4%ELI + 18%MI	($478)	($472)	($472)	($558)				
	2		($478)	($507)	($507)	($558)				
	3		($634)	($561)	($561)	($558)				
	4		($634)	($597)	($597)	($558)				

TOIA Incentives Tested (Commercial) - Market Tier 1			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			**CY4-R**	**P5-R**	**P7-R**	**TW-R**	**CY4-R**	**P5-R**	**P7-R**	**TW-R**
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$115							
Potential Set Aside Schedules	**TOIA Tier**	**Affordability**								
Base Case Scenario	-	**-**	($209)	($189)	($436)	($459)				
Scenario L1	1	4%ELI + 8%VLI	($449)	($449)	($886)	($927)				
	2		($546)	($546)	($836)	($1,002)				
	3		($408)	($622)	($877)	($1,715)				
	4		($639)	($622)	($911)	($1,715)				
Scenario L2	1	1%ALI + 4%ELI + 18%MI	($419)	($419)	($775)	($837)				
	2		($491)	($491)	($753)	($905)				
	3		($341)	($558)	($792)	($1,538)				
	4		($561)	($558)	($819)	($1,538)				

Table A-5. TOIA Additional Scenario Residual Land Value and Feasibility Market Tier 2

TOIA Incentives Tested (Residential) - Market Tier 2			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$145							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$62	$84	$84	$94				
Scenario L1	1	4%ELI + 8%VLI	($151)	($37)	($37)	($3)				
	2		($151)	($20)	($20)	($3)				
	3		($80)	($153)	($153)	($3)				
	4		($80)	($166)	($166)	($3)				
Scenario L2	1	1%ALI + 4%ELI + 18%MI	($261)	($30)	($30)	$1				
	2		($261)	($27)	($27)	$1				
	3		($76)	($119)	($119)	$1				
	4		($76)	($141)	($141)	$1				

TOIA Incentives Tested (Commercial) - Market Tier 2			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
Base Typology			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$170							
Potential Set Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$89	$62	($31)	($82)				
Scenario L1	1	4%ELI + 8%VLI	($3)	($3)	($144)	($256)				
	2		($20)	($20)	($248)	($262)				
	3		$94	($3)	($256)	($361)				
	4		($153)	($3)	($258)	($361)				
Scenario L2	1	1%ALI + 4%ELI + 18%MI	($23)	($23)	($103)	($227)				
	2		($13)	($13)	($217)	($234)				
	3		$111	$1	($227)	($310)				
	4		($119)	$1	($223)	($310)				

Table A-6. TOIA Additional Scenario Residual Land Value and Feasibility Market Tier 3

TOIA Incentives Tested (Residential) - Market Tier 3			Residual Land Value/Sq.Ft.				Feasibility			
Base Typology			**4D-R**	**CY3-R**	**CY4-R**	**P5-R**	**4D-R**	**CY3-R**	**CY4-R**	**P5-R**
Residential										
Residential			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
Market Land Value/Sq.ft.			$175							
Potential Set Aside Schedules	**TOIA Tier**	**Affordability**								
Base Case Scenario	-	-	$173	$163	$155	$212				F
Scenario H1	1	5%ELI + 9%VLI	($87)	$74	$74	$97				
	2		($87)	$83	$83	$97				
	3		$21	($55)	($55)	$97				
	4		$21	($74)	($74)	$97				
Scenario H2	1	4%ALI + 4%ELI + 12%MI	($213)	$51	$51	$111				
	2		$35	($41)	($41)	$111				
	3		$35	($41)	($41)	$111				
	4		$35	($60)	($60)	$111				

TOIA Incentives Tested (Commercial) - Market Tier 3			Residual Land Value/Sq.Ft.				Feasibility			
Commercial										
Base Typology			**CY4-R**	**P5-R**	**P7-R**	**TW-R**	**CY4-R**	**P5-R**	**P7-R**	**TW-R**
Density Cohort			Medium	Med. High	High	High	Medium	Med. High	High	High
Market Land Value/Sq.ft.			$185							
Potential Set Aside Schedules	**TOIA Tier**	**Affordability**								
Base Case Scenario	-	-	$152	$124	$73	$35				
Scenario H1	1	5%ELI + 9%VLI	$44	$44	($9)	($88)				
	2		$80	$80	($99)	($90)				
	3		$176	$97	($105)	($39)				
	4		($55)	$97	($96)	($39)				
Scenario H2	1	4%ALI + 4%ELI + 12%MI	$84	$84	$19	($78)				
	2		$194	$111	($99)	($12)	P			
	3		$194	$111	($99)	($12)	P			
	4		($41)	$111	($84)	($12)				

Table A-7. TOIA Additional Scenario Residual Land Value and Feasibility Market Tier 4

TOIA Incentives Tested (Residential) - Market Tier 4			Residual Land Value/Sq.Ft.				Feasibility			
'			4D-R	CY3-R	CY4-R	P5-R	4D-R	CY3-R	CY4-R	P5-R
			Residential							
			Low Med.	Medium	Medium	Med. High	Low Med II	Medium	Medium	Med. High
'alue/Sq.ft.			$230							
Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$255	$238	$224	$313	F	F		F
Scenario H1	1	5%ELI + 9%VLI	($20)	$191	$191	$241				F
	2		($20)	$210	$210	$241				F
	3		$165	$99	$99	$241				F
	4		$165	$86	$86	$241				F
Scenario H2	1	4%ALI + 4%ELI + 12%MI	($163)	$159	$159	$247				F
	2		$171	$103	$103	$247				F
	3		$171	$103	$103	$247				F
	4		$171	$89	$89	$247				F

TOIA Incentives Tested (Commercial) - Market Tier 4			Residual Land Value/Sq.Ft.				Feasibility			
			Commercial							
'			CY4-R	P5-R	P7-R	TW-R	CY4-R	P5-R	P7-R	TW-R
t			Medium	Med. High	High	High	Medium	Med. High	High	High
'alue/Sq.ft.			$240							
Aside Schedules	TOIA Tier	Affordability								
Base Case Scenario	-	-	$219	$184	$206	$463				F
Scenario H1	1	5%ELI + 9%VLI	$145	$145	$221	$656				P
	2		$204	$204	$552	$727			P	P
	3		$309	$241	$582	$1,459	P	P	P	P
	4		$99	$241	$626	$1,459		P	P	P
Scenario H2	1	4%ALI + 4%ELI + 12%MI	$183	$183	$236	$615				P
	2		$320	$247	$540	$1,388	P	P	P	P
	3		$320	$247	$540	$1,388	P	P	P	P
	4		$103	$247	$592	$1,388		P	P	P

A2.2 Residual Land Value and Feasibility Analysis for OC

The following tables present the feasibility results for the OC program with the mixed-affordability pathway. Only OC-3, represented by a seven-story podium prototype (P7), is feasible in both residential and commercial zones.

Implications of these results are discussed below in Section A3.

Table A-8. OC Additional Scenario Residual Land Value and Feasibility in Market Tier 1 and 2

OC Incentives Tested - Market Tier 1				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$140		$115	
Potential Set Aside Schedules	**OC Tier**	**TOIA Tier**	**Affordability**				
Scenario L1	OC-1	2	4%ELI + 8%VLI	($590)		($575)	
	OC-2	3		($553)		($621)	
	OC-3	4		($478)		($654)	
Scenario L2	OC-1	2	1%ALI + 4%ELI + 18%MI	($564)		($551)	
	OC-2	3		($529)		($575)	
	OC-3	4		($399)		($578)	

OC Incentives Tested - Market Tier 2				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$145		$170	
Potential Set Aside Schedules	**OC Tier**	**TOIA Tier**	**Affordability**				
Scenario L1	OC-1	2	4%ELI + 8%VLI	($36)		($70)	
	OC-2	3		($23)		$1	
	OC-3	4		($7)		($179)	
Scenario L2	OC-1	2	1%ALI + 4%ELI + 18%MI	($93)		($114)	
	OC-2	3		($78)		($29)	
	OC-3	4		$28		($144)	

Table A-9. OC Additional Scenario Residual Land Value and Feasibility in Market Tier 3 and 4

OC Incentives Tested - Market Tier 3				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$175		$185	
Potential Set Aside Schedules	**OC Tier**	**TOIA Tier**	**Affordability**				
Scenario H1	OC-1	2	5%ELI + 9%VLI	$79		$54	
	OC-2	3		$62		$58	
	OC-3	4		$88		($83)	
Scenario H2	OC-1	2	4%ALI + 4%ELI + 12%MI	$50		($23)	
	OC-2	3		$19		$119	
	OC-3	4		$108		($62)	

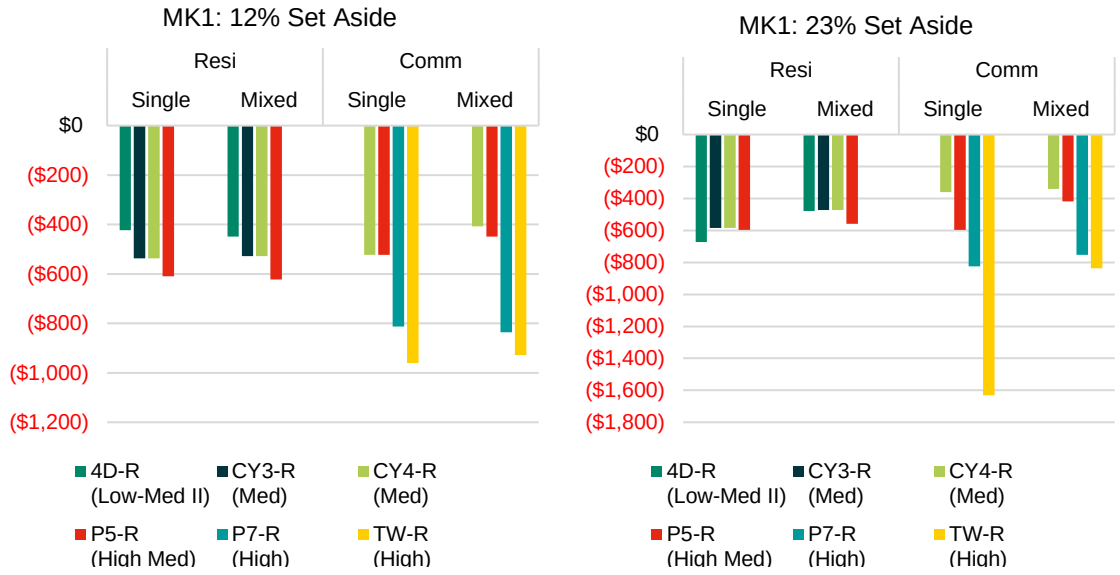
OC Incentives Tested - Market Tier 4				RLV	Feasibility	RLV	Feasibility
				Residential		Commercial	
Market Land Value/Sq.ft.				$230		$240	
Potential Set Aside Schedules	**OC Tier**	**TOIA Tier**	**Affordability**				
Scenario H1	OC-1	2	5%ELI + 9%VLI	$203		$175	
	OC-2	3		$185		$198	
	OC-3	4		$238	F	$69	
Scenario H2	OC-1	2	4%ALI + 4%ELI + 12%MI	$166		$84	
	OC-2	3		$130		$256	F
	OC-3	4		$249	F	$80	

A3. Summary and Implications

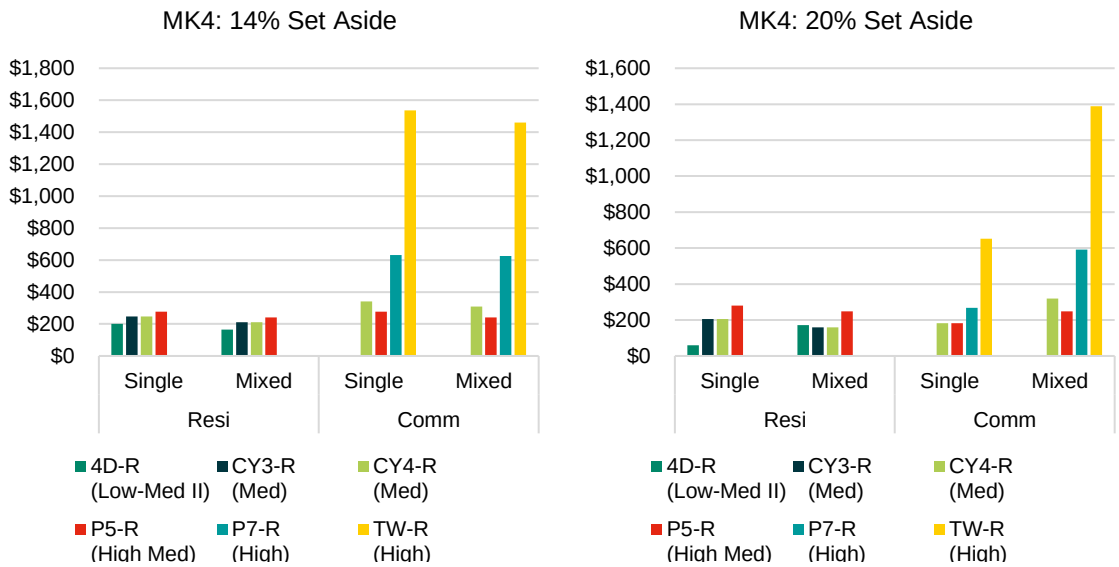
Given the similarities between TOIA and OC, the implications of mixed-affordability options are also comparable. The key policy implications of this analysis include:

- **The overall trends and patterns observed in the new mixed-affordability scenarios are similar to the single-affordability sets.** Similar to trends observed in the CHIP report, scenarios in Market Tiers 1 and 2 remain generally infeasible, while feasibility begins to emerge in Market Tier 3 and many scenarios are feasible in Market Tier 4.
- **With the same set-aside level, the mixed affordability pathways tested generally produce similar residual land values compared to single affordability pathways.** Figure A-1 compares the RLVs of TOIA programs within a given market tier for the same set-aside level, comparing single-affordability options to multi-affordability options.[1] In some cases, across various prototypes in Market Tier 4, feasibility decreases when scenarios shift to multi-affordability levels. However, in Market Tier 1, the change is less consistent—some scenarios show a slight improvement in feasibility when a mixed-affordability option is implemented (though the RLVs are still negative).

Figure A-1. Comparisons between Single-Affordability and Mixed- Affordability Pathways by Market Tier: TOIA



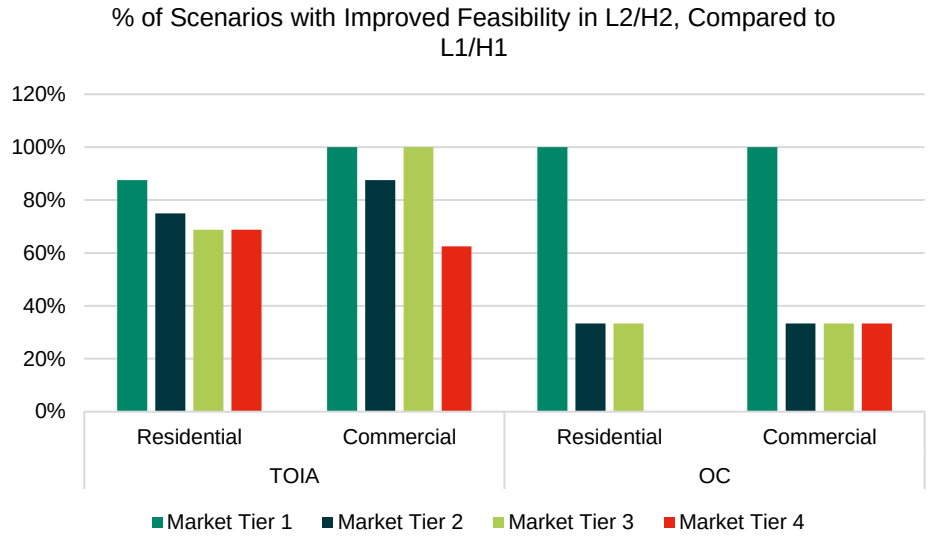
[1] Results shown are the maximum RLVs generated for each prototype among the various TOIA Tiers tested, for the set aside levels shown.



**Results shown are maximum RLVs generated for each prototype among the various TOIA Tiers tested, for the set aside levels shown.*

- **Results differ by TOIA and OC tier, but not in a consistent direction.** Unlike the set-aside structures proposed in the main report, which are tiered based on the TOIA levels, the structure for these new scenarios does not differentiate between TOIA tiers. However, each TOIA or OC tier provides different incentive structures (such as density bonuses, FAR, and height). For some scenarios tested, the RLVs differ by TOIA/OC tier, reflecting the difference in incentives. In other cases, different TOIA/OC tiers generate very similar (or exactly the same) RLVs, because the differences in incentives do not significantly affect the development products.
- **For TOIA, pathways that include ALI, ELI, and MI units (L2) generally offer improved feasibility compared to pathways that only include ELI and VLI units (L1).** Figure A-2 illustrates how many scenarios show improved feasibility when transitioning from L1/H1 (ELI + VLI) to L2/H2 (ALI + ELI + MI). In TOIA, more than half of the scenarios demonstrate improved feasibility using the L2 pathways compared to L1, suggesting that for the projects MI units often offset the reduced rents from ALI units, regardless of the total set-aside level. In general, larger scale scenarios (P7, TW prototypes) are better able to absorb an ALI unit, and therefore benefit more from the L2 pathway.
- **However, in the case of OC, fewer projects are likely to choose pathways that include ALI and MI units (H2) compared to pathways that only include ELI and VLI units (H1).** Most of these scenarios that experience greater feasibility from H2 compared to H1 involve larger scale projects in OC Tiers 1 and 2.Smaller-scale projects appear more sensitive to the addition of ALI units.

Figure A-2. Feasible Scenarios: L2/H2 Compared to L1/H1



- **Although not tested, Higher Opportunity Areas may have higher rents compared to low opportunity areas, enabling projects in these areas to better absorb ALI units.** The ALI unit pathways are intended to apply primarily in Higher Opportunity Areas. The assumptions used for this analysis average rents and land values by market tier. However, Higher Opportunity Areas may differ from the average, for example with higher rent levels and lower parking ratios due to closer proximity to transit access, which can, in turn, increase feasibility.
- **The requirement for 3-bedroom units to be restricted to the lowest affordability level in a given pathway (ALI or ELI) may be an important factor affecting feasibility results.** The rent schedule for affordable units is set on a per-unit basis based on assumptions about household size. Effectively, smaller affordable units command a higher price compared to larger affordable units. For instance, in Prototype 7, ALI rents for studio units are $0.18 per square foot compared to $0.02 per square foot for 3-bedroom units. Since ALI rents are typically far below market-level rents, allowing developers to set aside smaller units for ALI while allocating 3-bedroom units to higher affordability levels could potentially improve feasibility.[2]

The tradeoffs between mixed-affordability and single-affordability pathways as tested are complex, given the introduction of ALI and three-bedroom unit requirements to the mixed-affordability pathways. However, taken together, these findings suggest that ALI requirements have a significant impact on feasibility. The City may expect more ALI units to be built in larger projects, and that providing flexibility in the AMI level for the required 3-bedroom unit could help improve uptake of the mixed-income pathways.

A4. Proposed Policy Changes

Based on the analysis from the main report and this appendix, LACP has proposed modifications to the TOIA and OC programs (Table A-10). The proposed changes include:

- Reducing the set-aside level for the VLI and LI in Tier 1
- Consolidating TOIA 1 and 2 into a single tier that retains the incentive structure of TOIA 2

[2] Note this finding does not account for any potential impact of Section 8 vouchers on feasibility.

- Lowering the ELI set-aside level for all tiers

Table A-10. Proposed Update to TOIA and OC Programs

TABLE 12.22 A.38(c)(3)(iii) Single Affordability Options for Meeting Restricted Affordable Units					
Market Tier	Incentive Program		Minimum Percent of Total Units Provided		
	Transit Oriented Incentive Area	Opportunity Corridors	Income Level		
			ELI	VLI	LI
Low and Medium Market Tiers	T1 (Previously TOIA 1 and 2)*	OC-1	9%	12%	21%
	T2 (Previously TOIA 3)	OC-2	10%	14%	23%
	T3 (Previously TOIA 4)	OC-3	11%	15%	25%
High Medium and High Market Tiers	T1 (Previously TOIA 1 and 2)*	OC-1	11%	14%	23%
	T2 (Previously TOIA 3)	OC-2	12%	16%	25%
	T3 (Previously TOIA 4)	OC-3	13%	17%	27%

Source: LACP, AECOM
*Note: * Previous TOIA 1 and TOIA 2 are consolidated into new T1. New T1 has previous TOIA 2 incentive structures.*

By comparison, the prior TOIA and OC program details are replicated in Table A-11, based on Table 12.22 of the main CHIP report.

Table A-11. Previously Studied TOIA and OC Programs

TABLE 12.22 A.38(c)(3)(iii) Single Affordability Options for Meeting Restricted Affordable Units					
Market Tier	Incentive Program		Minimum Percent of Total Units Provided as		
	Transit Oriented Incentive Area	Opportunity Corridors Incentive	Income Level		
			ELI	VLI	LI
Low and Medium Market Tiers	TOIA 1	-	9%	12.5%	21%
	TOIA 2	OC-1	10%	13%	22%
	TOIA 3	OC-2	11%	14%	23%
	TOIA 4	OC-3	12%	15%	25%
High Medium and High Market Tiers	TOIA 1	-	11%	14%	22%
	TOIA 2	OC-1	12%	15%	23%
	TOIA 3	OC-2	13%	16%	25%
	TOIA 4	OC-3	14%	17%	27%

Source: LACP, AECOM

While AECOM has not modeled these specific updates to TOIA and OC, our expectation is that the proposed program changes will generally improve the financial feasibility of these programs by reducing the overall affordable set asides, effectively increasing the density bonus for TOIA 1, and specifically reducing ELI set asides.

First, the feasibility of scenarios was observed to be highly sensitive to increased affordable set-asides. Thus, decreasing ELI, VLI, and LI set-aside requirements even marginally will likely improve feasibility.

Second, feasibility is likely to be improved by the proposed revisions to TOIA tiers. The prior TOIA 1 and 2 tiers offered limited density bonuses, with slightly higher density allowed in TOIA 2 and thus slightly better feasibility outcomes. The prior TOIA 3 and 4 tiers allowed unlimited density. Consolidating TOIA 1 and 2 and maintaining the higher density incentive of TOIA 2 would likely improve feasibility.

Finally, ELI units generate less revenue per unit compared to VLI or LI units, so reducing the ELI set-aside percentage will likely improve feasibility.

AECOM

Appendix B: Extension of Affordable Housing Covenant Length

Appendix to the Economic and Feasibility Analysis for the Citywide Housing Incentive Program (CHIP)
September 16, 2024

Los Angeles City Planning
City of Los Angeles

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B1. Introduction

This technical appendix to the Economic and Feasibility Analysis for the Citywide Housing Incentive Program report ("the CHIP report") discusses considerations related to the potential feasibility impact of extending the affordability covenant length from 55 years to 99 years. This analysis focuses on mixed-income, unsubsidized projects in the City of Los Angeles ("The City"). Housing subsidy programs generally impose their own requirements for affordable housing covenant length. As such, this analysis focuses on the potential impact of the covenant length extension on mixed-income projects built without subsidies under incentive and inclusionary programs.

This appendix aims to provide policy makers with guidance on the impact of extending affordability covenants. The analysis is based on AECOM's review of existing industry practices, underwriting and investment requirements, and financial metrics, while also integrating previous analyses on the same topic.

B2. Background

In the City, there are various policy mechanisms governing affordability covenants, such as the Density Bonus Ordinance, Transit-Oriented Communities (TOC), Affordable Replacement Requirement (such as AB 2556 and the Housing Crisis Act), as well as Zoning Changes and discretionary decisions by the Department of City Planning or the City Council.[1] These covenants require affordable units to remain accessible for 55 years, aligning with recent state legislation and local initiatives like Measure JJJ and TOC. This extension is a significant shift from the previous standard of 30 years, for example under the Low-Income Housing Tax Credit (LIHTC) program, which remains the largest affordable housing development program in the nation. Under LIHTC, properties are monitored every three to five years for compliance over a 30-year term, though many agreements now align with the 55-year standard due to evolving state regulations. To ensure compliance, each covenant must specify the number of affordable units, income levels, methods for calculating qualifying income, and guidelines for determining affordable rents or sales prices.[2]

Other peer jurisdictions both within and outside of California have affordable housing incentive programs or inclusionary housing requirements that are comparable to those of the City. Additionally, the State of California offers various incentives to developments that include established set-asides of affordable housing. A survey of these jurisdictions shows that the most common affordable housing covenant length is 55 years. Table B-1 summarizes the programs and their covenant lengths.

[1] Los Angeles Housing Department, *Land Use Covenants*, accessed August 29, 2024.
[2] League of California Cities, *Affordable Housing Covenants: Ensuring Continued Affordability*, September 7, 2022.

Table B-1. Survey of Other Jurisdictions[3]

Jurisdiction	Program	Covenant Length	Notes
Los Angeles County	Inclusionary Housing Ordinance	55 years	Local Inclusionary Housing Requirement
City of New York	Inclusionary Housing Zoning	Perpetuity	Subareas of the city have mandatory or incentive inclusionary housing programs. Both require perpetual covenants
City of San Francisco	Inclusionary Affordable Housing Program	55 years	Local Inclusionary Housing Requirement
City of San Francisco	Affordable Housing Bonus Program	Perpetuity	Incentive program that offers a range of density bonuses from 30-100%
City of San Diego	Inclusionary Housing Ordinance	55 years	Local Inclusionary Housing Requirement
City of Long Beach	Inclusionary Housing Ordinance	55 years	Local Inclusionary Housing Requirement
City of Pasadena	Inclusionary Housing Ordinance	Perpetuity	Local Inclusionary Housing Requirement
City of San Jose	Inclusionary Housing Ordinance	55 years	Local Inclusionary Housing Requirement
State of California	Density Bonus Law	55 years	Minimum can be extended by local ordinance or financing requirement
State of California	SB 35	55 years	Provides streamlined review and CEQA exemptions for mixed-income developments

A similar analysis on affordability covenant length was conducted by HR&A Advisors, who evaluated the impact of extending the affordability covenant for mixed-income projects from multiple jurisdictions that receive density bonuses or other incentives. HR&A concluded that extending affordability covenants from 55 years to 99 years will not significantly impact the financial feasibility of mixed-income projects.[4] This assessment was driven by the financial mechanics of the time-value of money as well as review of relevant literature.

B3. Considerations

Developers typically evaluate the feasibility of development opportunities through financial analysis and an assessment of risks. The financial analysis considers initial investment, operating cash flows during a holding period, and future disposition proceeds, calculating expected returns in comparison to the return metric thresholds set by each developer. Significant risks can be priced into this analysis or lead a developer to stop evaluation and pursue other opportunities. As such, there are mechanisms through which extending the affordability covenant length could impact development feasibility and by extension the production of new affordable housing. These are summarized in Task B-2.

[3] Los Angeles County: http://planning.lacounty.gov/density
City of New York: https://www.nyc.gov/site/hpd/services-and-information/inclusionary-housing.page
City of San Fransisco: https://www.sf.gov/sites/default/files/2024-08/Inclusionary%20Affordable%20Housing%20Monitoring%20and%20Procedures%20Manual%20Final%207.25.24.pdf
City of San Diego: https://docs.sandiego.gov/council_reso_ordinance/rao2020/O-21167.pdf
City of Long Beach: https://www.longbeach.gov/lbcd/hn/inclusionaryhousing/
City of Pasadena: https://library.municode.com/ca/pasadena/codes/code_of_ordinances?nodeId=TIT17_ZONING_CODE_ART4SIPLGEDEST_CH17.42INHORE
City of San Jose: https://www.sanjoseca.gov/home/showpublisheddocument/111688/638512186576000000
State Density Bonus Program: https://www.calcities.org/docs/default-source/city-attorneys/5.2023-spring-curtin_morrison_2022-housing-legislation-and-state-density-bonus-law.pdf?sfvrsn=437bf36_3
SB 35: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB35

[4] HR&A Advisors, Downtown Los Angeles Community Benefit Program, October 2019.

Table B-2. Potential Feasibility Impacts

Mechanism	Description	Likely Impact of Extended Covenant Length	Commentary
Modeled Operating Cash Flows	Cash flows from property operation could theoretically increase upon expiration of affordability covenants, impacting expected returns.	Not Significant	*Operating cash flows beyond 55 years provide little to no impact on expected returns due to discounting (See discussion of discounting and the time value of money below). In addition, most developer financial models do not extend beyond 30 years.*
Modeled Reversionary Value	The value received in future sale of the property could be impacted by expectations around future use; for example, a developer may anticipate increased rents upon expiration of affordability covenants, increasing the expected value.	Not Significant	*Most real estate investment models do not extend beyond 30 years and holding periods are not likely to extend beyond 25 years. As a result, the next buyer is unlikely to consider covenant expiration as an investment strategy.*
Underwriting Risks	Debt and equity underwriters may view affordability covenants negatively due perceived risks related to future sale or enforcement, impacting access to financing or modeled financing terms.	Not Significant	*As most loans are no longer than a 30-year term, it is unlikely that extending the covenant beyond 55 years would significantly impact a project's ability to obtain financing or the terms of financing.*
Unknown Risks	Developers may add their own risk premium or avoid further financial evaluation due to unknown risks related to financing, future sale, enforcement, or other factors.	Low	*Confusion or uncertainty may be particularly likely for mixed-income developers who are unfamiliar with affordability covenants, but this ultimately impacts all covenant lengths including the current 55 years.*

Source: AECOM.

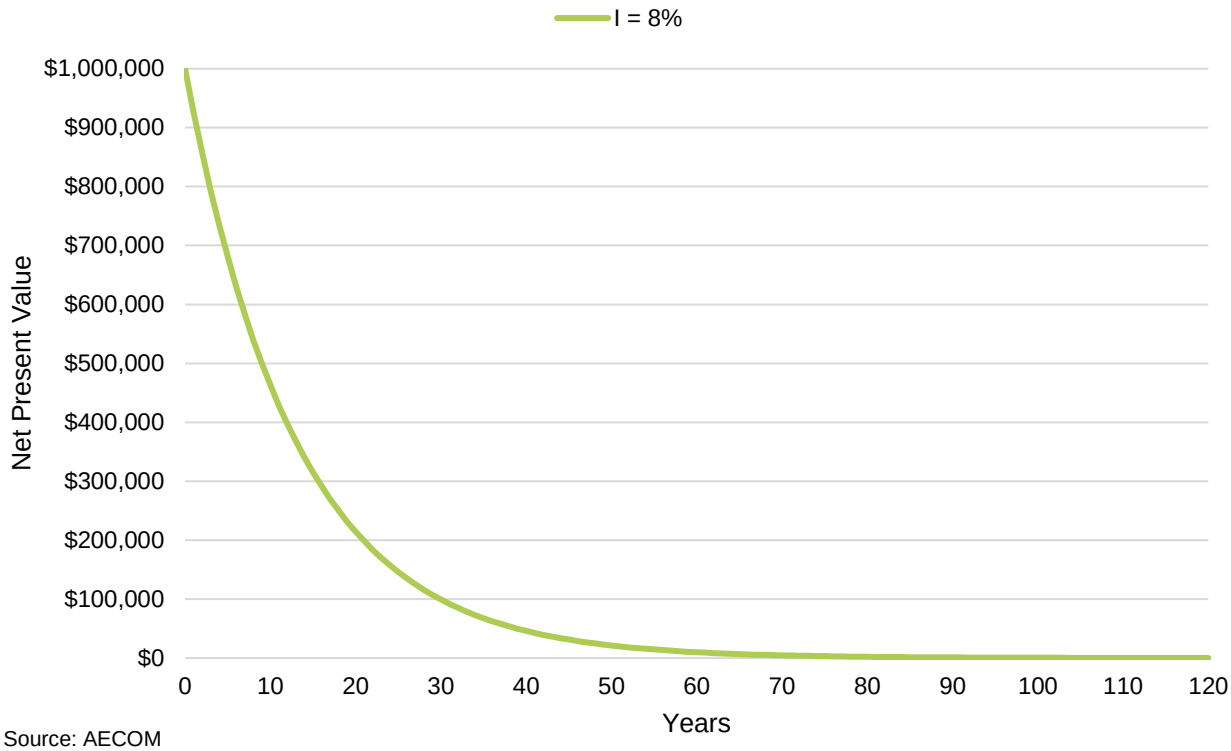
Lessening the impact of cash flows far into the future is the principle of **time-value of money**, wherein developers and investors value near-term revenues more highly than future revenues. This decreases the impact of future cash flows on project returns as developers apply discount rates equivalent to the opportunity cost of their investment plus a spread of additional risks appropriate to the project.

The time-value of money is determined through the process of discounting future cash flows using a discount rate. The discount rate typically reflects the expected return on an investment that carries a similar level of risk. Additionally, it includes a risk premium to account for the uncertainties associated with a particular project.

Figure 1 illustrates the long-term impact of the time-value concept. Starting at the Net Present Value (NPV) of a $1,000,000 investment under various discount rates over a period of 120 years. At an 8% discount rate, the NPV of this investment is $14,511 after 55 years, while after 99 years it decreases to $491. This demonstrates the significant reduction in NPV over time, as the value in present dollars diminishes by 98.5% and 99.9% respectively.

This illustrative example highlights the low potential impacts of extending an affordable housing covenant beyond 55 years on the modeled operating cash flows a developer is likely to estimate when making an investment decision. It is unlikely to have an impact in the long term on the financial viability of a new development.

Figure B-1. Time Value of Money Impacts on Returns



Source: AECOM

B4. Recommendations

The discussion above suggests that the impact of longer covenants on feasibility and project valuation is likely to be minimal. At the same time, there may be advantages to extending the covenant length. UCLA's Lewis Center for Regional Policy Studies suggests that a longer affordability period could decrease the need for funds to preserve existing affordable housing and thus free up additional resources for new construction or acquisition.[5]

In addition, a covenant extension might present benefits such as stability in revenue from reduced turnover (from the developer perspective) as well as long-term predictability in the supply of affordable housing (from the community and resident perspective).

Table B-3 summarizes the advantages and disadvantages of different covenant lengths.

[5] UCLA Lewis Center for Regional Policy Studies, Increasing the Duration of Affordability Requirements for New Affordable Housing, 2020.

Table B-3. Affordability Covenant Length Considerations

Covenant Length	Advantages	Disadvantages
Remaining at 55 years	• Lower potential for developer to price unknown or unproven risks related to longer affordability covenants. • Small proportion of developers with a holding period longer than 25 years may model marginally higher reversionary value or land value, due to future buyer anticipating the expiration of affordability covenants.	• Possible removal from affordable housing inventory at 55 years. • Owner may be less likely to make significant capital investments in property as term gets closer to 55 years, potentially impacting resident quality of life.
Increasing from 55 years to 99 years	• No significant impact on most developer evaluations of financial feasibility. • Forestall possible removal from affordable housing inventory at 55 years.	• Lose potential for developer to expect higher reversionary value from expiration of affordability covenants. • Potential confusion if length inconsistent with other incentive programs or policy standards.

Based on AECOM's review of literature and the financial mechanics of affordable housing developments, we conclude the following:

- **There is limited financial difference between 55-year and 99-year covenants to a developer considering project feasibility**, as developers do not consider the impact of revenues this far into the future when evaluating feasibility. However, there may be a marginal impact to affordable housing production due downward expectations on future reversionary value, which may impact developers with longer holding periods.
- **While overall risk to project feasibility is low when increasing covenant lengths, there is greater risk that mixed-income developers will price unknowns or alter decision-making**, **compared to developers of fully affordable and/or subsidized projects** who are more familiar with such policy requirements.
- **Given these factors, AECOM does not anticipate a measurable impact on affordable housing production in Los Angeles should the City increase affordability covenants from 55 years to 99 years in CHIP programs.** This impact may become more notable if there are other perceived financial differences between available incentive programs such as Density Bonus (DB) or Transit Oriented Incentive Areas (TOIA).

While covenant extensions are one strategy to preserve affordability, they do not represent a comprehensive solution. Attaining long-term affordability requires robust legal mechanisms, well-designed resale restrictions, and effective maintenance and management of existing affordable housing units.[6] These measures will help ensure that inclusionary and incentive program units remain affordable in the future.

[6] Robert Hickey, Lisa Sturtevant, and Emily Thaden, *Achieving Lasting Affordability through Inclusionary Housing* (2014; Lincoln Institute of Land Policy).

Task 11. Rent Stabilization Ordinance (RSO) Housing Analysis

Additional Analysis of the Impact of Increased RSO Replacement Requirements on Development Feasibility

City of Los Angeles Planning Department

September 20, 2024

Delivering a better world

FINAL CONSULTANT DELIVERABLE

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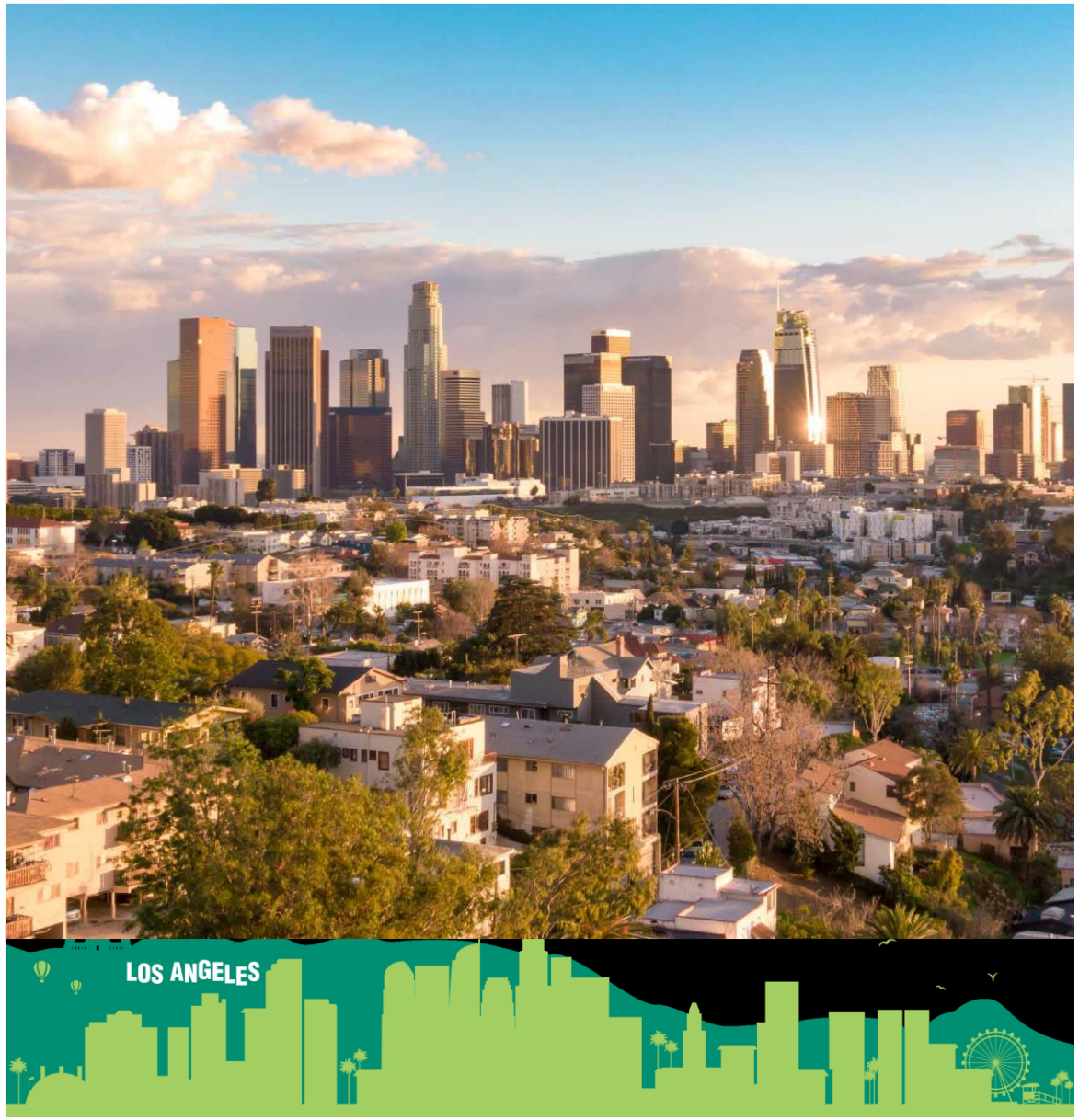
Table of Contents



1. Overview and Approach

Overview

Purpose

The City of Los Angeles Department of City Planning (LACP) engaged AECOM to prepare **a high-level analysis of the potential impact of increasing the replacement requirement for affordable housing units to demolished Rent Stabilization Ordinance (RSO) Units**. The analysis and findings are intended to show how increasing the replacement ratio might affect the feasibility of RSO redevelopment projects. This document summarizes the approach and findings from the study. A technical report, currently under development, will provide additional detail on the methodology and implications.

Current Policy

In general, redevelopment projects that involve demolition of RSO units and other protected units are required to either extend the RSO to all new rental units or provide covenanted affordable housing units as stipulated by the following two policies:

Pursuant to LAMC Section 151.281, if a building with housing units covered by the Rent Stabilization Ordinance is redeveloped with new housing units that are rented within five years of the pre-existing units' withdrawal from the market, the RSO will apply to all newly constructed rental units on that property. Alternatively, if the new development provides covenanted affordable units at least equal in number to the pre-existing RSO units or 20% of the new development's total units (whichever is greater), the newly constructed affordable units can apply for an exemption from the RSO, but any remaining market-rate units will be subject to RSO provisions.

Pursuant to The Housing Crisis Act of 2019, as amended by SB 8 and AB 1218 (California Government Code Section 66300 et seq.), new housing development projects must replace any existing, demolished or removed protected units, which include units that have either been: subject to an affordability covenant within the past five years; subject to rent or price control within the past five years; occupied by lower or very low income households within last five years; or withdrawn from rent or lease per the Ellis Act within the past 10 years.

The replacement ratio of existing RSO or protected units to new affordable housing units depends on whether the income levels of residents is known or unknown.

If the current tenants' incomes are *known* (e.g., a tenant submits their income information and exercises their right to return), developments replacing protected units (including RSO units) must include at least the same number of units of equivalent size (number of bedrooms) made affordable at the same or lower income category as the existing households at the time the units were occupied.

If the income level of current tenants is *unknown*, a percentage of replacement units must be made affordable in accordance with the citywide percentage of low-income households reported in the CHAS database (69% as of September 5, 2023).

RSO redevelopment projects generally use one of the City's incentive zoning programs, Density Bonus Ordinance (DBO) and Mixed-Income Incentive Programs (MIIP) (Suite of programs that includes the Transit Oriented Incentive Area (TOIA), Opportunity Corridor Incentive (OC), and Corridor Transition (CT) Programs) to maximize density in return for providing affordable set-aside units.

Scenarios Tested

Additional Policy Scenarios Tested

This analysis tested sixteen RSO replacement ratio scenarios, that range from current requirements to higher replacement ratios with additional affordable housing set-asides. The **RSO replacement ratio** represents the number of newly constructed affordable units built for each pre-existing RSO unit in an RSO redevelopment project.

This analysis tested the following scenarios, which represent a range of options for the City's consideration:

Scenarios 1A through 1F: Under these scenarios, the number of affordable housing units is based on the replacement ratio. This ranges from 0.69:1 replacement ratio (Scenario 1A; current effective policy) to 2:1 (Scenario 1F). Thus, under Scenario 1A, if 100 RSO units were demolished, 69 affordable housing units would be required in the redevelopment project. Under Scenario 1F, the redevelopment project would be required to include 200 affordable units.

Scenarios 2A through 2F: These scenarios represent the same range of replacement ratios (0.69:1 in Scenario 2A to 2:1 in Scenario 2F). However, these scenarios assume that RSO replacement units would not count towards the affordable housing set-aside requirements associated with incentive zoning programs.

Scenarios 3A through 3B and **Scenarios 4A through 4B:** In these scenarios, different RSO replacement ratios are applied based on whether the demolished RSO units are assumed to be vacant or occupied, either 1:1, 1.5:1, or 2:1.

See Section 3 for additional information on these sixteen scenarios.

Table 1. Scenarios Tested

	Scenarios	RSO Replacement Ratio	Application of Incentive Programs
Scenario 1	Scenario 1A	.69:1	RSO replacement units count towards set-asides for incentive programs.
	Scenario 1B	1:1	
	Scenario 1C	1.25:1	
	Scenario 1D	1.5:1	
	Scenario 1E	1.75:1	
	Scenario 1F	2:1	
Scenario 2	Scenario 2A	.69:1	RSO replacement units do not count towards set-asides for incentive programs. Total set-asides calculated as the sum of RSO replacement units and incentive program set-asides.
	Scenario 2B	1:1	
	Scenario 2C	1.25:1	
	Scenario 2D	1.5:1	
	Scenario 2E	1.75:1	
	Scenario 2F	2:1	
Scenario 3	Scenario 3A	Vacant units replaced at 1:1; 69% of occupied units at 1.5:1	RSO replacement units count towards set-asides for incentive programs.
	Scenario 3B	Vacant units replaced at 1:1; 69% of occupied units at 1.5:1; 31% of occupied units at 1:1	
Scenario 4	Scenario 4A	Vacant units replaced at 1:1; 69% of occupied units at 2:1	RSO replacement units count towards set-asides for incentive programs.
	Scenario 4D	Vacant units replaced at 1:1; 69% of occupied units at 2:1; 31% of occupied units at 1:1	

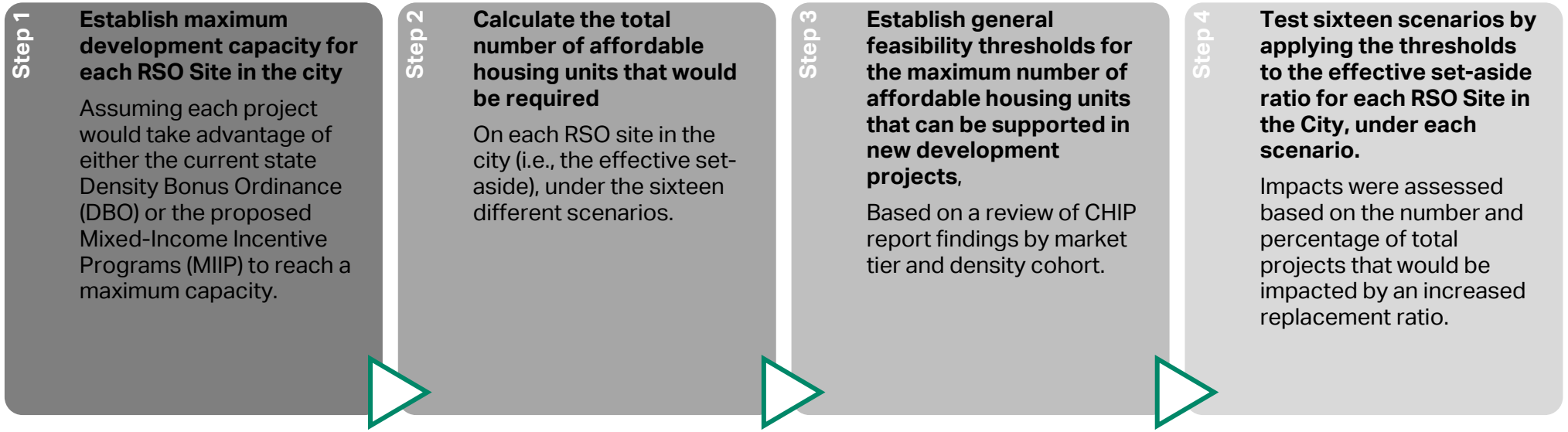
Analysis Steps

Dataset

LACP provided AECOM with a database of all properties in the City that have existing RSO units and are eligible for incentive programs, including information on market tier, density cohort and incentive program.

Analysis Steps

The analysis followed four general steps and was based upon the "Economic and Feasibility Analysis for the Citywide Housing Incentive Program DBO, TOIA, OC, and CT Strategies" report ("CHIP Report") submitted by AECOM to LACP in 2024 that analyzed potential affordable housing set-aside requirements and development incentives for several City programs.



For the purposes of this analysis, AECOM did not evaluate other factors that may affect redevelopment feasibility, such as specific site conditions or existing tenant incomes.

Feasibility Thresholds

Establishing Feasibility Thresholds

Findings from the CHIP Report suggest that DBO projects within Market Tier 4 can set aside as much as **25% of base units as affordable housing** (for VLI households), while MIIP projects within Market Tier 4 can set aside as much as **15% of total units for affordable housing** (for VLI households). These set-asides were used to establish the thresholds for the replacement ratios to be applied to the RSO data set. In general, projects in Market Tier 3 can support slightly lower set-asides. To reflect this difference in market conditions, the thresholds for feasibility in Market Tier 3 were assumed to be 5% lower than in Market Tier 4.

The following thresholds were used for the corresponding programs and Market Tiers:

- **DBO Market Tier 4: 25% Effective Set Aside Ratio**
- **DBO Market Tier 3: 20% Effective Set Aside Ratio**
- **MIIP Market Tier 4: 15% Effective Set Aside Ratio**
- **MIIP Market Tier 3: 10% Effective Set Aside Ratio**

For the purposes of this analysis, RSO sites in Market Tiers 1 and 2 and density cohorts Low, Low Medium I, and Low Medium II were excluded. The CHIP Report found that new development is generally infeasible under current market conditions in Market Tiers 1 and 2 and Low Medium II density cohorts. The CHIP Report did not include analysis of Low Medium I and II density cohorts, so it was not possible to establish feasibility thresholds for projects in those density cohorts.

See Section 3 for more information on the findings from the CHIP Report that informed this analysis.

Key Terms

Definitions

Rent Stabilization Ordinance (RSO). Chapter XV, Article 1 (Sections 151.00 to 151.35) of the Los Angeles Municipal Code. The ordinance regulates rent increases and evictions on certain rental properties (generally multifamily units built on or before October 1, 1978, and new rental units replacing pre-existing units covered under RSO).

RSO sites. Parcels that contain or have contained a building with residential units subject to the provisions of the RSO within the past five years. For the purpose of this analysis, "RSO sites" also refers to sites with units withdrawn from rent or lease per the Ellis Act within the past 10 years.

RSO redevelopment projects. Also referred to as **RSO projects.** Projects that necessitate the removal or demolition of existing RSO units on the site of the new development, or projects located on RSO sites (as defined above).

RSO-affordable replacement ratio (replacement ratio). The number of newly constructed affordable units built for each pre-existing RSO unit in an RSO redevelopment project. Commonly expressed as a ratio "e.g., 1:1" in which the first number represents the number of required affordable units, and the second number represents one pre-existing RSO unit. Sometimes expressed as a percentage, representing the affordable units as a percentage of pre-existing RSO units.

Effective set-aside ratio. The number of affordable housing units that would be required on redeveloped RSO sites relative to the maximum total units, determined by the replacement ratio and affordable housing set-aside requirements by relevant scenario and incentive program.

RSO replacement units. Housing units within a redevelopment project that are fulfilling replacement requirements such as affordability to lower income residents.

Affordable units. For the purposes of this analysis, "affordable units" refers specifically to units that are subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower or very low income.

Market tier. This analysis draws upon previous findings from the Market Analysis Report associated with the CHIP Report that defines and analyzes four market tiers that range from low to high and are intended to represent the relative strength of the residential market in different geographies across the City based on an index that accounts for rents and for-sale prices of recently built housing, as well as the relative production of rental and for-sale housing over the past 10 years. Market Tier 1 is the weakest market, while Market Tier 4 is the strongest. See Section 3 for map of neighborhoods by Market Tier.

Density cohort. This analysis uses a framework of density cohorts as a basis for organizing site conditions in a way that generally reflects housing typologies allowed by base zoning conditions. The following designations are used to delineate the possible densities and corresponding typologies analyzed in this memo:

Table 2. Density Cohorts

Density Cohort	Base Density Range
Low Medium I	10-17 DU/AC
Low Medium II	18-29 DU/AC
Medium	30-55 DU/AC
High Medium	56-109 DU/AC
High	110-218 DU/AC

2. Key Findings

Interpreting Results

Interpreting Results

It is important to note that many other factors not tested in this analysis could affect actual project feasibility, including existing site conditions, neighborhood/location, and the specific affordability pathway selected by the developer.

These findings are based on analysis of incentive zoning programs[1], assuming mixed-income, unsubsidized development. The analysis is based on maximum development capacity under the respective incentive programs, but projects might choose not to build to maximum capacity or otherwise unable to do so due to other project or site-specific constraints.

Additionally, this analysis did not consider redevelopment of residential typologies found at densities below 10 DU/AC or projects with fewer than 5 DU.

[1] Different incentive programs can support different set-aside levels, in part because of the differing way that the incentives are calculated. Specifically, the DBO program calculates set-aside units as a percentage of base total units according to zoning specifications of a particular parcel. The MIIP program calculates set-asides as a percentage of total units, including additional market rate units made available through density bonus incentives.

Key Findings: RSO Redevelopment Feasibility

Potential Impacts on RSO Development Feasibility

Using the thresholds for maximum affordable set-asides established based on the CHIP Report, the analysis determined the number and percentage of RSO sites that would be feasible to redevelop under these requirements. Table 3 shows the number and percentage of sites in each scenario whose replacement ratios fall above or below the threshold. Out of 66,744 sites in the RSO data set, 16,191 (or ~24%) were located in Market Tiers 3 and 4 and density cohorts Medium, Medium High, and High Projects in the RSO data set, and thus included in the analysis.

Under current policy (Scenario 1A), 3,393 sites accounting for 21% of all RSO sites that are eligible for incentive programs are below the feasibility threshold, and potentially feasible. This suggests that redevelopment of these sites is potentially feasible based solely on the number of affordable units required compared to the maximum development capacity. As noted above, many other factors not tested in this analysis could affect actual project feasibility.

More stringent requirements further reduce the percentage of projects that are likely to be feasible. For example, in Scenario 1F (2:1 replacement ratio), redevelopment of 458 sites or 3% of RSO sites analyzed is potentially feasible. In Scenario 2A-2F, which assume that RSO replacement units would not count towards the affordable housing set-aside requirements associated with incentive zoning programs, fewer than 1% of sites fall below the threshold for feasibility. In Scenarios 3 and 4, where different RSO replacement ratios are applied based on whether the demolished RSO units are assumed to be vacant or occupied, approximately 10% of sites fall below the threshold for feasibility.

Table 3. RSO Sites by Scenario and Likely Feasibility

	Scenario 1						Scenario 2						Scenario 3		Scenario 4	
	1A Replace RSO .69:1	1B Replace RSO 1:1	1C Replace RSO 1.25:1	1D Replace RSO 1.5:1	1E Replace RSO 1.75:1	1F Replace RSO 2:1	2A Affordable + RSO .69:1	2B Affordable + RSO 1:1	2C Affordable + RSO 1.25:1	2D Affordable + RSO 1.5:1	2E Affordable + RSO 1.75:1	2F Affordable + RSO 2:1	3.A	3.B	4.A	4.B
Possibly Feasible (Below Threshold)	3,393	2,537	1,052	852	475	458	63	53	24	19	16	14	1,808	1,479	1,697	1,435
Unlikely Feasible (Above Threshold)	12,798	13,654	15,139	15,339	15,716	15,733	16,128	16,138	16,167	16,172	16,175	16,177	14,383	14,712	14,494	14,756
% Possibly Feasible (Below Threshold)	21.0%	15.7%	6.5%	5.3%	2.9%	2.8%	0.4%	0.3%	0.1%	0.1%	0.1%	0.1%	11.2%	9.1%	10.5%	8.9%
% Unlikely Feasible (Above Threshold)	79.0%	84.3%	93.5%	94.7%	97.1%	97.2%	99.6%	99.7%	99.9%	99.9%	99.9%	99.9%	88.8%	90.9%	89.5%	91.1%

Sources: LACP and AECOM, 2024.

Key Findings: Maximum Capacity

Potential Impacts on Maximum Capacity

Table 4 shows the total maximum units that could be built on the RSO sites analyzed. Total maximum units represents the maximum buildout capacity of each site based on zoning and maximum program incentives.

Out of 1,301,922 total maximum units in the RSO data set, 426,471 (or ~33%) were located in Market Tiers 3 and 4 and Density Cohorts Medium, Medium High, and High Projects in the RSO data set, and thus included in the analysis.

Under current policy (Scenario 1A), approximately 104,259 units accounting for 24% of the potential maximum capacity on the RSO sites tested are potentially feasible based on this analysis. In comparison, **under Scenario 1F, approximately 24,752 units are potentially feasible**, representing a decline of more than 75% in the total maximum units that could be built on the RSO sites considered in this analysis. **Scenario 2A-2F would represent a greater decline in maximum capacity, while the impact of Scenarios 3 and 4 on potential maximum capacity is more moderate**.

Table 4. Total Maximum Units on RSO Sites by Scenario and Likely Feasibility

	Scenario 1						Scenario 2						Scenario 3		Scenario 4	
	1A Replace RSO .69:1	1B Replace RSO 1:1	1C Replace RSO 1.25:1	1D Replace RSO 1.5:1	1E Replace RSO 1.75:1	1F Replace RSO 2:1	2A Affordable + RSO .69:1	2B Affordable + RSO 1:1	2C Affordable + RSO 1.25:1	2D Affordable + RSO 1.5:1	2E Affordable + RSO 1.75:1	2F Affordable + RSO 2:1	3.A	3.B	4.A	4.B
Below Threshold (Potentially Feasible)	104,259	76,652	42,829	35,764	25,874	24,752	14,160	13,692	1,315	1,114	1,020	970	60,631	51,475	56,660	49,333
Above Threshold (Unlikely Feasible)	322,212	349,819	383,643	390,708	400,598	401,720	412,312	412,780	425,157	425,358	425,452	425,502	365,840	374,997	369,812	377,139
% Below Threshold (Potentially Feasible)	24.4%	18.0%	10.0%	8.4%	6.1%	5.8%	3.3%	3.2%	0.3%	0.3%	0.2%	0.2%	14.2%	12.1%	13.3%	11.6%
% Above Threshold (Unlikely Feasible)	75.6%	82.0%	90.0%	91.6%	93.9%	94.2%	96.7%	96.8%	99.7%	99.7%	99.8%	99.8%	85.8%	87.9%	86.7%	88.4%

Sources: LACP and AECOM, 2024.

Key Findings: RSO Unit Preservation

Potential Impacts on RSO Unit Preservation

Table 5 shows the number and percentage of RSO units on the RSO sites analyzed. These represent the existing protected units on the sites considered for this study.

Out of 401,881 RSO units in the RSO data set, 142,220 (or ~35%) were located in Market Tiers 3 and 4 and Density Cohorts Medium, Medium High, and High Projects in the RSO data set, and thus considered in this analysis.

Under current policy (Scenario 1A), **approximately 13,291 RSO units, representing 9% RSO units analyzed, are on sites that could potentially be redeveloped** based on the thresholds applied**. More stringent requirements would further reduce the number of RSO units on sites that may be feasible for redevelopment.**

Table 5. Potentially Impacted RSO Units by Scenario and Likely Feasibility

	Scenario 1						Scenario 2						Scenario 3		Scenario 4	
	1A Replace RSO .69:1	1B Replace RSO 1:1	1C Replace RSO 1.25:1	1D Replace RSO 1.5:1	1E Replace RSO 1.75:1	1F Replace RSO 2:1	2A Affordable + RSO .69:1	2B Affordable + RSO 1:1	2C Affordable + RSO 1.25:1	2D Affordable + RSO 1.5:1	2E Affordable + RSO 1.75:1	2F Affordable + RSO 2:1	3.A	3.B	4.A	4.B
RSO Units that could potentially redevelop (Below Threshold)	13,291	8,070	3,790	2,866	1,949	1,818	1,170	1,077	65	49	35	23	6,079	5,108	5,532	4,833
RSO Units unlikely to redevelop (Above Threshold)	128,929	134,150	138,430	139,354	140,271	140,402	141,050	141,143	142,155	142,171	142,185	142,197	136,141	137,112	136,688	137,387
% RSO Units that could potentially redevelop (Below Threshold)	9.3%	5.7%	2.7%	2.0%	1.4%	1.3%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	4.3%	3.6%	3.9%	3.4%
% RSO Units unlikely to redevelop (Above Threshold)	90.7%	94.3%	97.3%	98.0%	98.6%	98.7%	99.2%	99.2%	100.0%	100.0%	100.0%	100.0%	95.7%	96.4%	96.1%	96.6%

Sources: LACP and AECOM, 2024.

3. Appendix

Takeaways from the CHIP Report

CHIP Report Findings

To establish a threshold of feasibility by which to assess the impact of the current baseline and potentially increased Replacement Ratios, AECOM analyzed the results of the CHIP report by market tier, density cohort, and incentive program. Takeaways from the CHIP report include:

- **There are substantial differences in feasibility based on incentive programs, density cohorts, market tiers, and effective set-aside ratios.**
- **Under current market conditions, very few projects tested in Market Tiers 1 and 2 were found to be feasible.** Note that these findings reflect historically high construction prices and interest rates, among other factors, and only reflect the feasibility of typical prototypes tested. Historically, RSO redevelopment projects have occurred throughout the City, including in Market Tiers 1 and 2, as detailed in "Potential Impact of RSO-Affordable Replacement Requirement Report" ("RSO Report") submitted by AECOM to LACP on July 31, 2024.
- **Under current market conditions, very few projects tested in low/low medium density cohorts (under 30 Dwelling Units/Acre) were found to be feasible.**
- **Different incentive programs can support different set-aside levels, in part because of the differing way that the incentives are calculated.** Specifically, the DBO program calculates set-aside units as a percentage of base total units according to zoning specifications of a particular parcel. The MIIP program calculates set-asides as a percentage of total units, including additional market rate units made available through density bonus incentives.

The CHIP report tested a wide variety of potential development projects with varying set aside percentages. In addition to set aside percentage (i.e. the percent of units set aside as affordable units), the tested projects also reflected variations in the affordability level of the set-aside units, density cohort, incentive program, and market tier. The tables to the right show the **percent of tested projects that were found to be financially feasible** for selected affordability pathways in Market Tier 4 by incentive program (DBO v. MIIP), set aside percentage, and density cohort. The tables focus on a select set of affordability pathways – setting aside Very Low Income, or VLI units – that were generally found to be most feasible.

Table 6: Percentage of Projects Found Financially Feasible for VLI-Only Pathways, by Set-Aside Level and Density Cohort in Market Tier 4: DBO v. MIIP Programs

DBO Market Tier 4 (VLI-Only Pathways)				
% Set Aside	Percentage of Projects Found Feasible			
	Low-Med II	Med	High Med	High
0%	0%	71%	86%	100%
5%	0%	100%	100%	100%
9%	0%	100%	0%	100%
15%	0%	80%	100%	100%
20%	0%	100%	100%	100%
25%	0%	100%	100%	100%

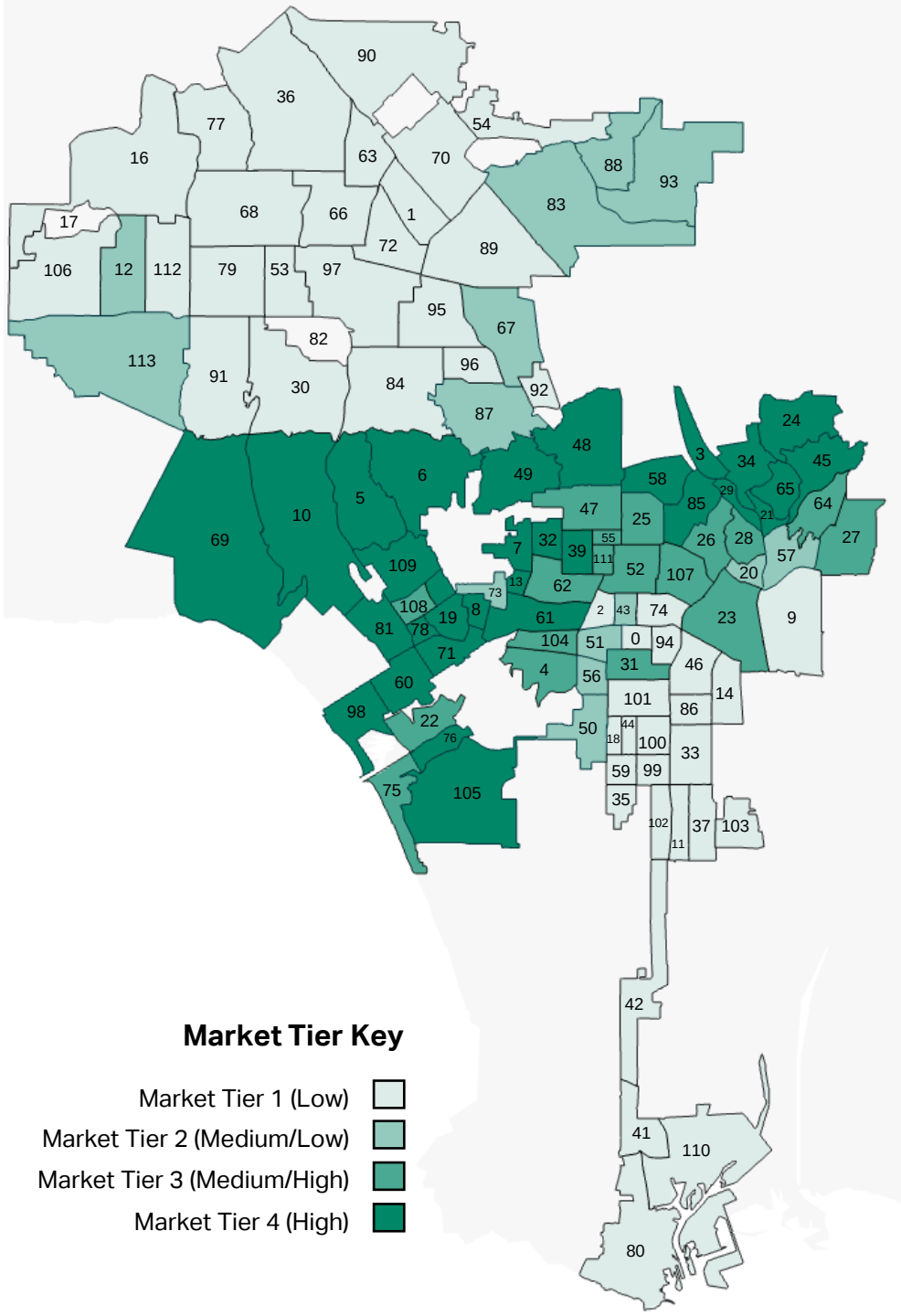
MIIP Market Tier 4 (VLI-Only Pathways)				
% Set Aside	Percentage of Projects Found Feasible			
	Low-Med II	Med	High Med	High
0%	3%	15%	27%	26%
10%	0%	50%	0%	0%
11%	0%	50%	50%	50%
12%	0%	58%	50%	33%
13%	0%	57%	43%	29%
14%	0%	35%	60%	30%
15%	0%	8%	50%	29%
16%	0%	6%	38%	31%
17%	0%	6%	33%	28%
18%	0%	0%	0%	38%
20%	0%	25%	0%	0%
25%	0%	0%	0%	0%
33%	0%	0%	0%	0%
40%	0%	0%	0%	0%

Source: AECOM, 2024.

Market Tiers by Neighborhood

The map on the right shows the market tier classifications for each neighborhood that was used for the purposes of this analysis. The legend below shows the name of each neighborhood that corresponds to the number labels used in the map, as well as the CPA that each neighborhood falls primarily within. For more information on the market tier methodology, see AECOM's "Task 3: Market Analysis" submitted to LACP on June 28, 2024.

#	Neighborhood	Primary CPA
0	Adams-Normandie	South Los Angeles
1	Arleta	Arleta - Pacoima
2	Arlington Heights	West Adams - Baldwin Hills - Leimert
3	Atwater Village	Northeast Los Angeles
4	Baldwin Hills/Crenshaw	West Adams - Baldwin Hills - Leimert
5	Bel-Air	Bel Air - Beverly Crest
6	Beverly Crest	Bel Air - Beverly Crest
7	Beverly Grove	Wilshire
8	Beverlywood	West Los Angeles
9	Boyle Heights	Boyle Heights
10	Brentwood	Brentwood - Pacific Palisades
11	Broadway-Manchester	Southeast Los Angeles
12	Canoga Park	Canoga Park - Winnetka - Woodland Hills - West Hills
13	Carthay	Wilshire
14	Central-Alameda	Southeast Los Angeles
15	Century City	West Los Angeles
16	Chatsworth	Chatsworth - Porter Ranch
17	Chatsworth Reservoir	Chatsworth - Porter Ranch
18	Chesterfield Square	South Los Angeles
19	Cheviot Hills	West Los Angeles
20	Chinatown	Central City North
21	Cypress Park	Northeast Los Angeles
22	Del Rey	Palms - Mar Vista - Del Rey
23	Downtown	Central City
24	Eagle Rock	Northeast Los Angeles
25	East Hollywood	Hollywood
26	Echo Park	Silver Lake - Echo Park - Elysian Valley
27	El Sereno	Northeast Los Angeles
28	Elysian Park	Silver Lake - Echo Park - Elysian Valley
29	Elysian Valley	Silver Lake - Echo Park - Elysian Valley
30	Encino	Encino - Tarzana
31	Exposition Park	South Los Angeles
32	Fairfax	Wilshire
33	Florence	Southeast Los Angeles
34	Glassell Park	Northeast Los Angeles
35	Gramercy Park	South Los Angeles
36	Granada Hills	Granada Hills - Knollwood
37	Green Meadows	Southeast Los Angeles
38	Griffith Park	Hollywood
39	Hancock Park	Wilshire
40	Hansen Dam	Arleta - Pacoima
41	Harbor City	Wilmington - Harbor City
42	Harbor Gateway	Harbor Gateway
43	Harvard Heights	South Los Angeles
44	Harvard Park	South Los Angeles
45	Highland Park	Northeast Los Angeles
46	Historic South-Central	Southeast Los Angeles
47	Hollywood	Hollywood
48	Hollywood Hills	Hollywood
49	Hollywood Hills West	Hollywood
50	Hyde Park	West Adams - Baldwin Hills - Leimert
51	Jefferson Park	West Adams - Baldwin Hills - Leimert
52	Koreatown	Wilshire
53	Lake Balboa	Reseda - West Van Nuys
54	Lake View Terrace	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
55	Larchmont	Wilshire
56	Leimert Park	West Adams - Baldwin Hills - Leimert
57	Lincoln Heights	Northeast Los Angeles
58	Los Feliz	Hollywood
59	Manchester Square	South Los Angeles
60	Mar Vista	Palms - Mar Vista - Del Rey
61	Mid-City	West Adams - Baldwin Hills - Leimert
62	Mid-Wilshire	Wilshire
63	Mission Hills	Mission Hills - Panorama City - North Hills
64	Montecito Heights	Northeast Los Angeles
65	Mount Washington	Northeast Los Angeles
66	North Hills	Mission Hills - Panorama City - North Hills
67	North Hollywood	North Hollywood - Valley Village
68	Northridge	Northridge
69	Pacific Palisades	Brentwood - Pacific Palisades
70	Pacoima	Arleta - Pacoima
71	Palms	Palms - Mar Vista - Del Rey
72	Panorama City	Mission Hills - Panorama City - North Hills
73	Pico-Robertson	Wilshire
74	Pico-Union	South Los Angeles
75	Playa del Rey	Westchester - Playa del Rey
76	Playa Vista	Westchester - Playa del Rey
77	Porter Ranch	Chatsworth - Porter Ranch
78	Rancho Park	West Los Angeles
79	Reseda	Reseda - West Van Nuys
80	San Pedro	San Pedro
81	Sawtelle	West Los Angeles
82	Sepulveda Basin	Encino - Tarzana
83	Shadow Hills	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
84	Sherman Oaks	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
85	Silver Lake	Silver Lake - Echo Park - Elysian Valley
86	South Park	Southeast Los Angeles
87	Studio City	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
88	Sunland	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
89	Sun Valley	Sun Valley - La Tuna Canyon
90	Sylmar	Sylmar
91	Tarzana	Encino - Tarzana
92	Toluca Lake	Sherman Oaks - Studio City - Toluca Lake - Cahuenga Pass
93	Tujunga	Sunland - Tujunga - Lake View Terrace - Shadow Hills - East La Tuna Canyon
94	University Park	South Los Angeles
95	Valley Glen	Van Nuys - North Sherman Oaks
96	Valley Village	North Hollywood - Valley Village
97	Van Nuys	Van Nuys - North Sherman Oaks
98	Venice	Venice
99	Vermont Knolls	South Los Angeles
100	Vermont-Slauson	South Los Angeles
101	Vermont Square	South Los Angeles
102	Vermont Vista	South Los Angeles
103	Watts	Southeast Los Angeles
104	West Adams	West Adams - Baldwin Hills - Leimert
105	Westchester	Los Angeles International Airport
106	West Hills	Canoga Park - Winnetka - Woodland Hills - West Hills
107	Westlake	Westlake
108	West Los Angeles	West Los Angeles
109	Westwood	Westwood
110	Wilmington	Wilmington - Harbor City
111	Windsor Square	Wilshire
112	Winnetka	Canoga Park - Winnetka - Woodland Hills - West Hills
113	Woodland Hills	Canoga Park - Winnetka - Woodland Hills - West Hills



Scenario Details: Scenarios 1A-1F

Scenarios 1A-1F: Increased Replacement Ratios

LACP provided AECOM with a database of all DBO and MIIP eligible sites with RSO units sorted by market tier, density cohort and incentive program. After conducting data cleaning and analysis, the following sixteen scenarios were tested based on maximum RSO units and incentive program:

Scenario 1: Increased Replacement Ratios

Scenario 1 determines the number of RSO replacement units required to be built based on (1) existing RSO units to be replaced and (2) affordable set-asides for a particular project and incentive program. RSO units are assumed to count towards the incentive program set-asides, reflecting current policy.

- **Replace RSO .69:1:** Assumes replacement of 69% of all RSO units with affordable housing units in a development. This replacement ratio reflects general current practice.
- **Replace RSO 1:1:** 100% of all RSO units replaced with affordable housing units in a development.
- **Replace RSO 1.25:1:** 125% of all RSO units replaced with affordable housing units in a development.
- **Replace RSO 1.5:1:** 150% of all RSO units replaced with affordable housing units in a development.
- **Replace RSO 1.75:1:** 175% of all RSO units replaced with affordable housing units in a development.
- **Replace RSO 2:1:** 200% of all RSO units replaced with affordable housing units in a development.

Scenario Details: Scenarios 2A-2F

Scenarios 2A-2F: Increased Replacement Ratios + Incentive Units Counted Separately

Scenario 2 assumes that replacement units do not count towards affordable units required by the incentive program, meaning affordable units will be provided due to the RSO replacement ratio, as well as set-asides from each incentive program. Affordable units provided in exchange for density bonuses and other incentives will not count towards RSO replacement units. Affordable units set-asides are calculated for each incentive program (DBO, TOIA & OC, and CT). For CT, the analysis assumes a feasible approach of one moderate unit for each of the three programs. Additionally, it assumes that DB projects are maximizing density and providing the commensurate affordability, with 15% allocated to Very Low Income (VLI) and 15% to Moderate Income (Mod)[2]. These incentive programs units are then added to the number of RSO replacement units for each scenario.

- **Affordable + RSO .69:1:** 69% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.
- **Affordable + RSO 1:1:** 100% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.
- **Affordable + RSO 1.25:1:** 125% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.
- **Affordable + RSO 1.5:1:** 150% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.
- **Affordable + RSO 1.75:1:** 175% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.
- **Affordable + RSO 2:1:** 200% of all RSO units replaced with affordable housing units + affordable unit set-aside from respective incentive program.

[2]See next page for details on affordability assumptions.

Affordability Assumption Table

Program	Market Tier	ELI Set-Aside	VLI Set-Aside	Mod Set-Aside
RC1	4	11%		
	3	11%		
	2	9%		
	1	9%		
RC2	4	11%		
	3	11%		
	2	9%		
	1	9%		
RC3	4	11%		
	3	11%		
	2	9%		
	1	9%		
TOIA	4	11%		
	3	11%		
	2	9%		
	1	9%		
DB	N/A		15%	15%
CT1	N/A			1 unit
CT2	N/A			2 units
CT3	N/A			3 units

Scenario Details: Scenarios 3A-4B

Scenarios 3A-3B and 4A-4B: Increased Replacement Ratios Based on Occupancy

Scenarios 3 and 4 determine the number of RSO replacement units by randomly classifying projects into vacant (48%) and occupied (52%) units. This split is based on data for vacant vs. occupied RSO units proposed for redevelopment from LAHD Replacement Unit Determinations data between January 2022 and August 2024. After classifying the projects as vacant or occupied, different replacement ratios are then applied to each scenario.

Scenario 3: Vacant vs Occupied; 1.5:1 Replacement Ratios

- **3.A:** Determines the number of RSO replacement units by replacing 100% of vacant units at a ratio of 1:1 and replacing 69% of occupied units at 1.5:1
- **3.B:** Determines the number of RSO replacement units by replacing 100% of vacant units at a ratio of 1:1 and replacing 69% of occupied units at 1.5:1 and 31% of occupied units at 1:1

Scenario 4: Vacant vs Occupied; 2:1 Replacement Ratios

- **4.A:** Determines the number of RSO replacement units by replacing 100% of vacant units at a ratio of 1:1 and replacing 69% of occupied units at 2:1
- **4.B:** Determines the number of RSO replacement units by replacing 100% of vacant units at a ratio of 1:1 and replacing 69% of occupied units at 2:1 and 31% of occupied units at 1:1

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