APPENDIX B – LOS ANGELES AFFORDABLE HOUSING LINKAGE FEE NEXUS STUDY

TABLE 9: SUMMARY OF COMMERCIAL FEE PRO FORMAS

Low Market scenarios not shown here due to lack of general feasibility under conservative assumptions. Detailed pro formas including Low Market are shown in Appendix.

	Office		Retail		Hotel		Industrial		Warehouse	
	630 W Harry Bridges Blvd		5601 N Van Nuys		1133 N Vine St		3105 S La Cienega			
										
	Medium	**High**	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**
Assumptions for Baseline (a)										
Prototypical Building Size	23,000	23,000	14,000	14,000	45,000	45,000	12,000	12,000	16,000	16,000
Site Size (sf)	21,850	21,850	33,600	33,600	15,750	15,750	20,400	20,400	23,420	23,420
Total Number of Stories (Bldg)	4	4	1	1	5	5	1	1	1	1
Total Number of Stories (Parking)	Surface	Surface	Surface	Surface	1	1	Surface	Surface	Surface	Surface
FAR	1.05	1.05	0.42	0.42	2.86	2.86	0.59	0.59	0.68	0.68
Parking Type	Surface		Surface		Underground		Surface		Surface	
Total Dev Cost/SF (inc. land)	*$ 371*	*$ 517*	*$ 423*	*$ 577*	*$ 436*	*$ 486*	*$ 222*	*$ 257*	*$ 191*	*$ 252*
Rent (psf or per hotel REVPAR)	$ 35.00	$ 50.00	$ 35.00	$ 50.00	$ 205.00	$ 240.00	$ 18.00	$ 21.00	$ 14.00	$ 20.00
Return On Cost - Baseline	20.0%	23.1%	17.9%	34.6%	52.6%	60.3%	25.8%	27.2%	22.9%	32.8%
Yield on Cost - Baseline	6.6%	6.8%	7.1%	7.4%	9.2%	9.6%	6.9%	7.0%	6.8%	7.3%
Baseline Feasible? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Fee/Sq. Ft. (a)	**$ 14.50**	**$ 33.00**	**$ 7.00**	**$ 28.00**	**$ 5.00**	**$ 25.00**	**$ 14.00**	**$ 19.50**	**$ 5.00**	**$ 25.00**
New Fee for Prototype Project	$ 333,500	$ 759,000	$ 98,000	$ 392,000	$ 225,000	$ 1,125,000	$ 168,000	$ 234,000	$ 80,000	$ 400,000
Return On Cost with Fees	15.0%	15.0%	15.9%	27.9%	50.7%	51.6%	18.3%	18.2%	19.5%	20.1%
Yield on Cost with Fees	6.3%	6.3%	7.0%	7.0%	9.0%	9.1%	6.5%	6.5%	6.6%	6.6%
Feasible with Fee? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Res Fee, as % of Total Dev Cost	3.9%	6.1%	1.8%	4.7%	1.3%	5.0%	6.1%	7.3%	2.8%	9.2%

Notes:

a) See Appendix for detailed assumptions and proformas for each land use type.

b) Financial feasibility evaluated on 2 metrics

ROC =	15.0%				
YOC :	Retail:	Office:	Hotel:	Industrial	Warehouse:
	7.0%	6.0%	9.0%	6.5%	6.5%

APPENDIX B-2: BUILDING PERMIT DATA RE-CATEGORIZED BY PROPOSED COMMERCIAL FEE LAND USES

Permitted Commercial by Proposed Fee Category Fee Category (a)(b)	5-Year Total	% of	# of	Median	Minimum	Maximum Size	Annual Avg.
1. Office							
Commercial Office	4,382,264	15.3%	98	19,145	5,031	439,380	876,453
Subtotal	***4,382,264***	***15.3%***	***98***				**876,453**
2. Retail							
Retail Store	1,988,039	6.9%	94	12,004	5,010	152,865	397,608
Amusement Building	395,643	1.4%	20	25,510	5,669	112,269	79,129
Restaurant	387,297	1.3%	26	10,330	5,072	45,954	77,459
Service Station/Repair	144,613	0.5%	6	7,045	5,220	110,777	28,923
Cinema/Live Theater	60,590	0.2%	2	30,295	24,782	35,808	12,118
Senior Independent Housing (ground floor retail)	23,409	0.1%	1	23,409	N/A	N/A	4,682
Consumer Services	14,190	0.0%	1	14,190	N/A	N/A	2,838
Single - room Occupancy (ground floor retail)	12,506	0.0%	2	6,253	5,511	6,995	2,501
Artist-in-Residence/Loft (ground floor retail)	5,370	0.0%	1	5,370	N/A	N/A	1,074
Subtotal	***3,031,657***	***10.6%***	***153***				**606,331**
3. Industrial							
Manufacturing	174,799	0.6%	10	11,673	5,558	46,398	34,960
Subtotal	**174,799**	***0.6%***	***10***				**34,960**
4. Hotel							
Hotel/Motel	1,740,870	6.1%	9	80,797	8,915	881,148	348,174
Subtotal	***1,740,870***	***6.1%***	***9***				**348,174**
5. Institutional							
School	1,379,845	4.8%	38	26,760	5,054	172,443	275,969
School Dormitory	285,050	1.0%	3	85,192	62,025	137,833	57,010
Church	175,289	0.6%	5	29,541	6,725	71,817	35,058
Subtotal	***1,840,184***	***6.4%***	***46***				**368,037**
6. Medical & Social Services							
Medical/Dental Clinic	212,566	0.7%	7	16,408	6,135	73,320	42,513
Hospital	279,659	1.0%	1	279,659	N/A	N/A	55,932
Public Administration Building	103,078	0.4%	5	15,986	7,358	51,856	20,616
Subtotal	***595,303***	***2.1%***	***13***				**119,061**
7. Warehouse/Utility/Light Industrial							
Warehouse	1,601,643	5.6%	31	16,212	5,010	271,130	320,329
Public Utility Facility	12,636	0.0%	2	6,318	5,425	7,211	2,527
Airport Building	538,633	1.9%	16	17,003	5,000	128,367	107,727
Subtotal	***2,152,912***	***7.5%***	***49***				**430,582**
SUBTOTAL EMPLOYMENT-GENERATING USES	**13,917,989**	**48.5%**	**378**				**2,783,598**
Not Classifed for Fee Purposes							
Private Garage	9,976,975	34.7%	82	64,855	5,098	677,569	883,550
Public Garage	4,417,752	15.4%	24	122,605	5,180	1,374,661	883,550
Miscellaneous Structure	403,697	1.4%	9	11,085	6,165	284,548	57,010
Subtotal	***14,798,424***	***51.5%***	***115***				**2,959,685**
TOTAL ALL PERMITS	**28,716,413**	**100.0%**	**493**				**5,743,283**

Notes:
(a) Includes permits for "New" buildings > 5,000 sf issued by City of LA from 1-1-2011 thru 12-31-15.
(b) Fee categories adapted from 2013 Santa Monica Commercial Nexus Study and Linkage Fee Analysis.
(c) Includes Commercial Office square footage specifically noted as creative or production-oriented in LADBS database.
Sources: Los Angeles Department of Building and Safety; BAE, 2016.

f

bae urban economics

In association with PlaceWorks

Los Angeles Affordable Housing Linkage Fee Nexus Study

Prepared for City of Los Angeles

September 21, 2016

Photo Credit: Steve Lacap, KSA Design Studio

bae urban economics

September 21, 2016

Vincent P. Bertoni, Director of Planning
200 N. Spring Street, Room 525
Los Angeles, CA 90012

Rushmore D. Cervantes, General Manager
Los Angeles Housing + Community Investment Department
1200 West 7th Street, 9th Floor
Los Angeles, CA 90017

Dear Mr. Bertoni and Mr. Cervantes:

We are pleased to submit the Los Angeles Affordable Housing Linkage Fee Nexus Study. The Study analyzes the relationship between new development and affordable housing impacts for two kinds of fees: those that could be charged to new commercial development, and those that could be charged to new market-rate residential development. We have also profiled how these fees are structured and implemented in numerous other "case study" cities, provided feasibility testing across common land uses in Los Angeles segmented by market condition, and suggested methods for structuring a fee program to implement both kinds of fees over the next few years in the City of Los Angeles.

We have enjoyed working with your staff and members of the development and affordable housing communities. Please let us know if you have any comments or questions regarding this report.

Sincerely,

Janet Smith-Heimer, MBA
President, BAE

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Tables

Figures

Acknowledgements

We grateful acknowledge the input received from the following attendees at three workshops convened to comment on this study's analysis and findings:

Workshop Attendees

Alan Greenlee, Executive Director

Ann Sewill, Vice President Housing and Economic Opportunity
Bea Hsu, Senior Vice President, Development
Bradley Karvasek, 1st Vice President Development
Christine Rangel, Director of Government Affairs
Cynthia Strathmann, Executive Director
Daniel Falcon, Senior Vice President & Director of Los Angeles Operations
Jim Andersen, Senior Vice President
Joan Ling, Lecturer in Urban Planning
Kasey Burke, President

Lisa Payne, Policy Director

Marie Rumsey, Director of Legislative Affairs
Nancy Lewis
Oliver Baker, Development Associate
Paul Keller, Founding Principal and CEO
Robin Hughes, President and CEO
Simon Kaplan, Associate Development Manager
Sissy Trinh, Founder and Executive Director
Stephanie Klasky-Gamer, President and CEO
Steve Coulter, Policy Director
Steven Oh, Vice President, Development
Scott Oullette, Director of Land Acquisition
Ellen Golla, Land Acquisition Manager
Matt Modrzejewski
Randy Johnson

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Southern California Association of Nonprofit Housing (SCANPH)
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Nancy Lewis Associates
CIM Group
Mack Urban
Abode Communities
Mack Urban
Southeast Asian Community Alliance
LA Family Housing
Los Angeles Business Council
Related California
Williams Homes
Daniel Bernstein & Associates, Inc.
California Home Builders
Brookfield Residential

City Staff

This study was prepared under the guidance of the following:

City of Los Angeles Department of City Planning

Claire Bowin, Senior City Planner
Matthew Glesne, Housing Planner

Los Angeles Housing + Community Investment Department

Claudia Monterrosa, Director, Public Policy & Research
Marisol Romero, Housing, Planning & Economic Analyst

Consultant Team

This study was prepared by the following members of the consultant team:

BAE Urban Economics

Janet Smith-Heimer, President
Sherry Okun-Rudnak, Principal
Jessica Hitchcock, Vice President
Stephanie Hagar, Vice President
Josh Rohmer, Vice President
Aaron Barker, Associate

PlaceWorks

Karen Gulley, Principal
Brant Birkeland, Associate

Introduction

The City of Los Angeles faces an extraordinary housing crisis. In recent years, economic growth and strong demand for housing in Los Angeles have created substantial price and rent increases, causing more and more middle and lower income households to be priced out of the marketplace. The result has been an ever-widening gap for many households, between the cost of their housing and their incomes. This cycle has led to the need to produce more affordable housing units, at the same time that funding to subsidize affordable housing, has fallen.

A few key statistics tell the story:

- Over 61 percent of renter households in the City of Los Angeles pay more than 30 percent of their income on housing (rent and utilities), per the 2010-2014 American Community Survey. These approximately 490,000 households are considered cost-burdened and in need of affordable housing to lower this cost to an affordable level.[1]
- Between 2006 and 2013, the median renter household income decreased by nearly four percent after adjusting for inflation. This means that on average, the median renter household in Los Angeles received a pay cut of nearly $200 every year between 2006 and 2013. At the same time, LA median rents went the opposite direction, rising by almost 11 percent for the period after inflation. This mismatch between incomes and rents in LA grew more rapidly than any other major US city in the 2006 – 2013 period.[2]
- In 2014, the median LA household income ($54,440) could afford a $179,000 house, compared to the median home sale price in that same year of $560,000.[3]
- The 2016 Homeless Count found 28,464 homeless persons in the City of Los Angeles, and increase of almost 11 percent over 2015.[4]

These statistics are exacerbated by the fact that the City of Los Angeles has also lost much of its affordable housing funding in recent years, shrinking from $100 million in 2010 to $26 million in 2014. The decline in funding was primarily due to the demise of redevelopment (CRA/LA), as well as a drop in federal housing funds. Notably, Los Angeles is also the only large California city without a permanent source of local funding for production of affordable housing, which means that funding declines and the growing housing crisis have impacted Los Angeles dramatically.

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[1] US Census, American Community Survey, 2010-2014
[2] *Renting in America's Largest Cities*: *NYU Furman Center/Capital One National Affordable Rental Housing Landscape* (NYU Furman Center, 2015)
[3] *Housing Element 2013 – 2021* (City of Los Angeles, Adopted December 3, 2013)
[4] *2016 Greater Los Angeles Homeless County* (Los Angeles Homeless Services Authority, 2016)

As part of addressing the affordable housing crisis, Mayor Garcetti proposed that this study be prepared so that both a commercial affordable housing fee and a residential affordable housing fee can be fully considered.

Purpose of Nexus Study

The purpose of the Nexus Study is to conduct a legally defensible analysis of the relationships between commercial and market-rate housing development projects, the new employment generated, the new worker households, their income distributions, and an estimate of those households that will need affordable housing. The analysis also evaluates the cost to provide this housing for households earning up to 120 percent of Area Median Income, and analyzes the maximum fee per square foot of new development necessary to provide this housing.

The Study also evaluates the these "maximum legal" fees in terms of their feasibility by land use prototype across three market conditions to reflect the range and diversity of real estate economics in the City of Los Angeles. This analysis also accommodates current and proposed other impact fees and their effects on project feasibility. Finally, the Study estimates potential revenues if fees were adopted, and analyzes considerations for implementation.

Three additional issues are also considered in this report: the effects of the planned increase in Los Angeles's minimum wage by 2021, the option to provide affordable units on-site within market rate projects instead of a fee payment, and how the affordable housing fee might interact with the provision of units on-site in the case of density bonus projects.

Study Process and Approach

Process

This study was commissioned in late spring 2016 by the City of Los Angeles. The consultant team of BAE Urban Economics, specialists in urban economics, along with PlaceWorks, specialists in public engagement, were engaged to conduct a nexus study for both commercial and residential fees along with outreach to the development and advocacy communities in Los Angeles.

For each step in the study process, BAE conducted extensive research and analysis, as cited and documented in this report. Wherever possible, BAE developed data to support assumptions, as identified herein. In addition, BAE used a blend of standard methodologies to analyze nexus for employment generating uses, culled from court-tested and related analysis conducted across California during the past 20 years. In addition, wherever possible, this study's methodologies have sought to expand and more comprehensively document many of the foundational variables utilized by other cities, to tailor this study specifically to the Los Angeles real estate, employment, and housing markets.

To obtain input and preview preliminary findings from the study, a series of three workshops were held. Over 60 development companies, industry representatives, and policy advocates were invited. A list if attendees is included in the preface to this report.

Approach

This study includes extensive analysis of real estate project feasibility, to ensure that fees are set at levels that do not unduly constrain market rate projects. The feasibility analysis was prepared in an intentionally conservative manner, to accommodate the wide variation in project economics across Los Angeles. Wherever possible, the lower end of the range of revenue-related variables, and the higher end of the range of cost-related variables, was used. This approach was taken for two reasons: arguably, Los Angels is at the peak of the real estate cycle in 2016, and also, deeming a fee amount as feasible without a conservative approach would mean the fee could create downward pressure on market rate development.

It is also important to note that Los Angeles, a major city without a permanent mechanism to fund affordable housing, will be essentially "starting from scratch." Real estate economic theory suggests that over the long term, external costs such as impact fees, are absorbed by lower-than-otherwise land values (i.e., "land residual"), so imposing an affordable housing fee, over time, will likely have this effect. For many markets, this is experienced as a slower than otherwise land value appreciation trend, and is often offset by the land residual derived from rising rents/sale prices. Nevertheless, that change of moving from no fee to a fee, will strike some as an undue burden, especially in the short run. This report highlights how this situation has been addressed in other cities, including strategies such as exempting all projects already in the entitlement pipeline (which would have been organized and initiated without knowledge of the fee), phasing in the fee over several years so that the market can adjust, and providing for targeted waivers and exemptions to accommodate cases where the fee may have unintended negative consequences.

Overview of Report

The following report is divided into two halves: a commercial fee study and a residential fee study. For each development type, the report follows a similar outline. First, case studies of other California cities as well as selected major cities elsewhere in the US with these fees, are summarized. Next, the "nexus" or relationship between new development in employment-generating uses, the resulting affordable housing need, and the translation of these findings to a maximum legal fee, are presented. Maximum fees are then tested for financial feasibility across three levels of market conditions affecting Los Angeles. Several potential fee structures and corresponding estimates of potential annual fee revenues are provided. The report also analyzes several additional considerations for fee structuring and implementation.

About Commercial Fees

Overview of Commercial Fees

Commercial impact fees for affordable housing have a long, established history in major cities across the US. The concept of a commercial linkage fee, in general, is to charge a fee on new commercial development projects over a specific size, to mitigate the impacts of new jobs created by the project within high-cost local housing markets. For some types of commercial development, these impacts can be substantial: new workers who cannot find affordable housing must commute long distances, or pay more than 30 percent of their household's income for housing, or double up in overcrowded units, or even live with all of these conditions present at once.

Fees collected in many cities with established programs provide a significant local funding source for new affordable housing production. Although it may not technically be required, given recent court cases, this study was structured to comply with the California Mitigation Fee Act. This means this study demonstrates the direct relationship ("nexus") between the fees charged and the new workers' impacts. In addition, fees can not make up deficiencies in the local housing market created by other factors.

Summary of Case Studies

Appendix A profiles commercial linkage fee programs established in cities throughout California, including larger cities (e.g., San Francisco, Sacramento, Oakland, and San Diego), as well as smaller cities such as West Hollywood and Palo Alto. In addition, outside of California, the cities of Boston and Seattle are profiled.

It should be noted that these profiles are not exhaustive; numerous other smaller cities in California have adopted or are currently considering adopting commercial impact fees for affordable housing. However, given the large size of the City of Los Angeles, but with real estate markets specific to its economic base, the selected case studies seek to profile both large city experiences, along with smaller cities located nearby facing similar affordable housing challenges.

The table on the next page summarizes the case studies, with detail provided in Appendix A.

TABLE 1: SUMMARY OF COMMERCIAL FEES FOR AFFORDABLE HOUSING

	Popoulation (a)	Fee/ Sq.Ft.	Threshold	Fees Collected	Annual Rev. Per Capita (b)	Notes
Large Cities in CA with Fee						
San Francisco (1996/2015)	829,072		25,000 sq. ft.	$3.4 M/year	$4.04	Original program established in 1981
Entertainment		$22.42		(avg since 1988)		Exempts certain projects with
Hotel		$17.99		$27 million		pharmacy or grocery
Integrated PDR		$18.89		in FY 14/15		
Institutional		$0.00				
Office		$24.03				
PDR		$0.00				
R&D		$16.01				
Retail		$22.42				
Small Enterprise Workspace		$18.89				
San Diego (1990/2016)	1,341,510			$1.6 M/year	$1.16	New fee rates effective January 2017
Office		$2.12		(avg 2006-2014)		
Hotel		$1.28				
R&D		$0.80				
Retail		$1.28				
Oakland (2002)	402,339		25,000 sq. ft.	$171,000/year	$0.42	Fees became effective in 2005
Office		$5.44		(avg since 2005)		City anticipates approx. $2.5 M
Warehouse		$5.44				in the next 12-18 months
Sacramento (1989)	476,075			$1.0 M/year	$2.19	
Citywide				(avg 1989-2013)		
Office		$2.50				
Hotel		$2.38				
R&D		$2.12				
Commercial		$2.00				
Manufacturing		$1.57				
Warehouse/Office		$0.91				
Warehouse		$0.68				
North Natomas						
Highway Commercial		$2.74				
Community/Neighborhood Commercial		$2.06				
Office/Business		$2.06				
M-50		$1.74				
M-20		$1.44				
Light Industrial		$1.12				
Smaller CA Cities with Fee						
West Hollywood (1989/2014)	35,053		10,000 sq. ft.	$214,000 / year	$6.11	
Commercial Development		$8.00		(avg since 2002)		
Palo Alto (1984/2016)	65,998		1,500 sq. ft.,	$2.3 M/year	$34.85	Updated nexus study in 2016
Office/R&D		$35.00		(in FY 2014-15)		
Hotel		$30.00				
Retail/Restaurant/Other		$19.85				
Major Cities Outside of CA with Fee						
Boston (1986/2013)	639,594		100,000 sq. ft.	$5.1 M/year	$8.05	
Commercial Development		$8.34		(avg 1986-2012)		
Seattle (2015) (c)	637,850			NA (new)		Incentive zoning program structured
Downtown Harborfront 1		$0.00				to generate units. Many exemptions
Downtown Harborfront 2		$14.83				for desired projects.
Downtown Mixed Commercial		$9.78				
Downtown Office Core		$14.50				
Downtown Retail Core		$13.50				
Downtown Mixed Residential		$14.34				
International District Mixed		$8.00				
International District Residential		$9.30				
Pike Market Mixed		$0.00				
Pioneer Square Mixed		$11.08				
Seattle Mixed		$6.69				
Industrial Commercial		$8.00				
Commercial 2		$0.00				
Industrial Commercial 85-160 (Low/Med/High)		$10.00				
All other zones (Low)		$5.00				
All other zones (Medium)		$7.00				
All other zones (High)		$8.00				

Notes:
(a) All population figures from 2010-2014 American Community Survey.
(b) Per capita annual average revenue based on 2010-2014 ACS population estimates. Revenues are not adjusted for inflation, changes in fee rates, or other factors.
(c) Amounts shown are averages for each general zone type. The complete fee schedule is contained in Section 23.58B.040 of the Seattle Municipal Code.
Source: BAE, 2016.

Key points which emerge from the case studies include:

Fee Charges and Structure

- Commercial fees for affordable housing charged by larger cities with a diverse real estate market range from a low of $0.68 per square foot for warehouse space in the City of Sacramento, to a high of $24.03 per square foot for office space in San Francisco.
- Palo Alto, a smaller city with very strong market conditions, charges $35.00 per square foot for office space, and is considering raising this charge to $60.00 per square foot.
- Each city has tailored its commercial fees to match its typical commercial development project categories. The categories of land use subject to commercial fees are typically small in number (e.g., 4 or 5 categories).
- Some cities have a "fee zone" approach, with fees for the same land use category varying by location. Others have a single fee per land use category.
- Some cities avoid the challenges of land use categorization by charging a flat fee for all commercial uses. West Hollywood, the only city in the set of commercial fee case studies in the greater Los Angeles region, uses this approach (e.g., a flat fee, with a recent increase that was phased in over a two-year period).
- In general, cities collect these types of fees either prior to, or at the point of building permit issuance. Several cities allow partial payment at permit issuance, with the balance paid at Certificate of Occupancy.
- Many cities have built-in annual increases for commercial fees, tied to the CPI or the Construction Cost Index published by *Engineering News Record*. Staff generally report a preference for this approach, instead of relying on a city council's periodic review.

Waivers, Exemptions, and Refunds

- Most cities waive the fee for 100 percent affordable housing projects.
- Most cities offer a "units in lieu of fee" and/or land donation in lieu of fee option.
- All cities waive publicly-owned projects.
- Some cities waive non-profit buildings, and/or churches, schools (public and private), universities and colleges, and other similar categories of land use.
- Some cities exempt smaller buildings. For example, San Francisco does not charge a fee on commercial buildings smaller than 25,000 square feet.
- Many cities have created lower fees or offer exemptions to decrease the potential dampening effects of fees on certain types of development that are strongly desired to meet other policy objectives. An example of this approach includes San Francisco's exemptions for local grocery stores and pharmacies that provide needed neighborhood services.
- Some cities have established clear refund processes if projects are subsequently not constructed, while others allow for refund requests decided on a case-by-case basis.

- During economic downturns, cities have either created special deferral programs or lowered fees across the board. These approaches demonstrate that these kinds of fees can be customized to adapt to downturns in the economic cycle.
- All cities in California have a "hardship" exemption available per legal requirements. Some cities render a hardship decision administratively; others have a more formal process.

Revenues and Reporting

- Estimates of revenues collected from commercial fees range from less than $1 million to over $5 million per year, depending on the city's fee structure, size, and amount of commercial development activity.
- When analyzed on a per-capita basis to normalize for a particular city's size, fee revenues range from a low of $0.42 per capita in Sacramento (which has a very low fee schedule), to a mid-range of $6.11 in West Hollywood, to a high of $34.85 per capita in Palo Alto (which has a very active commercial development market with high real estate values).
- Most cities do not specifically track the use of the fees to build affordable housing projects, because the funds go into a trust fund and are used in combination with other sources that may have varying AMI targets or restrictions.
- San Francisco last reported its sources and uses of commercial linkage fees along with other revenue sources comprising its Affordable Housing Fund as part of a larger annual report for FY 2014-2015. Its reporting does clearly show both source and use of each funding stream within its Affordable Housing Fund, along with remaining balances at year end.
- Sacramento has the clearest public information source of the cities profiled. Sacramento produces an online map showing commercial linkage fees' resulting funded project locations.
- Most cities have general guidelines for use of commercial fee funds such as maximum AMI levels that can be served in new affordable units, rather than targeting the funds specifically to serve households with the greatest need (e.g., at-risk of homelessness/extremely low income/very low income). The City of Los Angeles, with great need for new affordable units serving extremely low and very low income households, may wish to develop policies to target commercial fee funds.

Los Angeles Commercial Fee Nexus Analysis

Overview of Methodology

The commercial fee analysis conducted for this report is based on the premise that new commercial land uses generate new employment for workers that will have a range of household incomes. Due to high housing costs in Los Angeles, new workers with extremely low, very low, low, or moderate household incomes will be unable to afford most market-rate housing in the City without incurring substantial cost burdens. This situation – the increment of growth in new worker households facing the lack of affordable housing options - is considered the impact of new commercial development. The commercial fee would mitigate these impacts by generating revenue to support the construction of housing affordable to the new lower-income worker households.

This section provides an overview of the steps used to determine the maximum legal commercial fee, based on the relationship ("nexus") between new commercial space and the worker households generated by it who face affordable housing challenges in the City of Los Angeles. Each step is summarized below and discussed in more detail in the following sections.

Step 1: Define Land Uses

Based on City of Los Angeles building permit data and data from the California Employment Development Department, the Nexus Analysis identifies eight commercial land uses that comprise the vast majority of probable future employment-generating commercial land uses in the City, each of which are analyzed in the subsequent steps.

Step 2: Determine Employment Densities

For each land use identified in Step 1, the Nexus Analysis determines the average employment density and resulting number of workers per 100,000 square feet of each land use type.

Step 3: Estimate Worker Households

Since most households in Los Angeles include more than more worker, the Nexus Analysis grouped the employees generated by each land use into households to determine the total number of worker households generated by each land use type.

Step 4: Identify Industry Sectors by Land Use

The Nexus Analysis identifies the industry sectors that would occupy each of the eight commercial land uses covered in the analysis.

Step 5: Estimate Income Distribution for Worker Households

Based on the industry sectors identified in Step 4, the analysis uses a data set published by the US Census (the Public Use Microdata Sample or PUMS) to construct the likely household income distribution for each land use.

Step 6: Estimate New Worker Households by Household Income

This step estimates the number of new worker households by income level by applying the worker household income distribution for each land use from Step 5 to the total number of worker households from Step 3.

Step 7: Calculate Financing Gap per Affordable Unit

This step determines the per unit "financing gap" that affordable housing developers encounter when securing a permanent loan for their projects. Step 7 of the Nexus Study calculates the net operating income (NOI) generated by units affordable to extremely low-, very low-, low-, and moderate-income households. Using conventional financing assumptions, the analysis determines the supportable permanent loan amount based on the NOI from units at each income level.

The cost to house a lower-income household is the difference between the cost to develop an affordable unit and the amount the of the permanent loan that the developer can borrow to finance the unit. Using data on recent affordable housing developments in the City of Los Angeles, the Nexus Analysis determines the average cost to build an affordable rental unit in the City. The supportable permanent loan amounts (by AMI income band) as identified in Step 7 are deducted from the average per-unit development cost to determine the financing gap for units serving households at each income level up to 120 percent of AMI.

Step 8: Calculate the Maximum Legal Fee

The final step in calculating the impact fee is to apply the financing gap per unit for each income level (from Step 7) to the total housing need by income level (from Step 6). The resulting sum constitutes the maximum legal commercial fee.

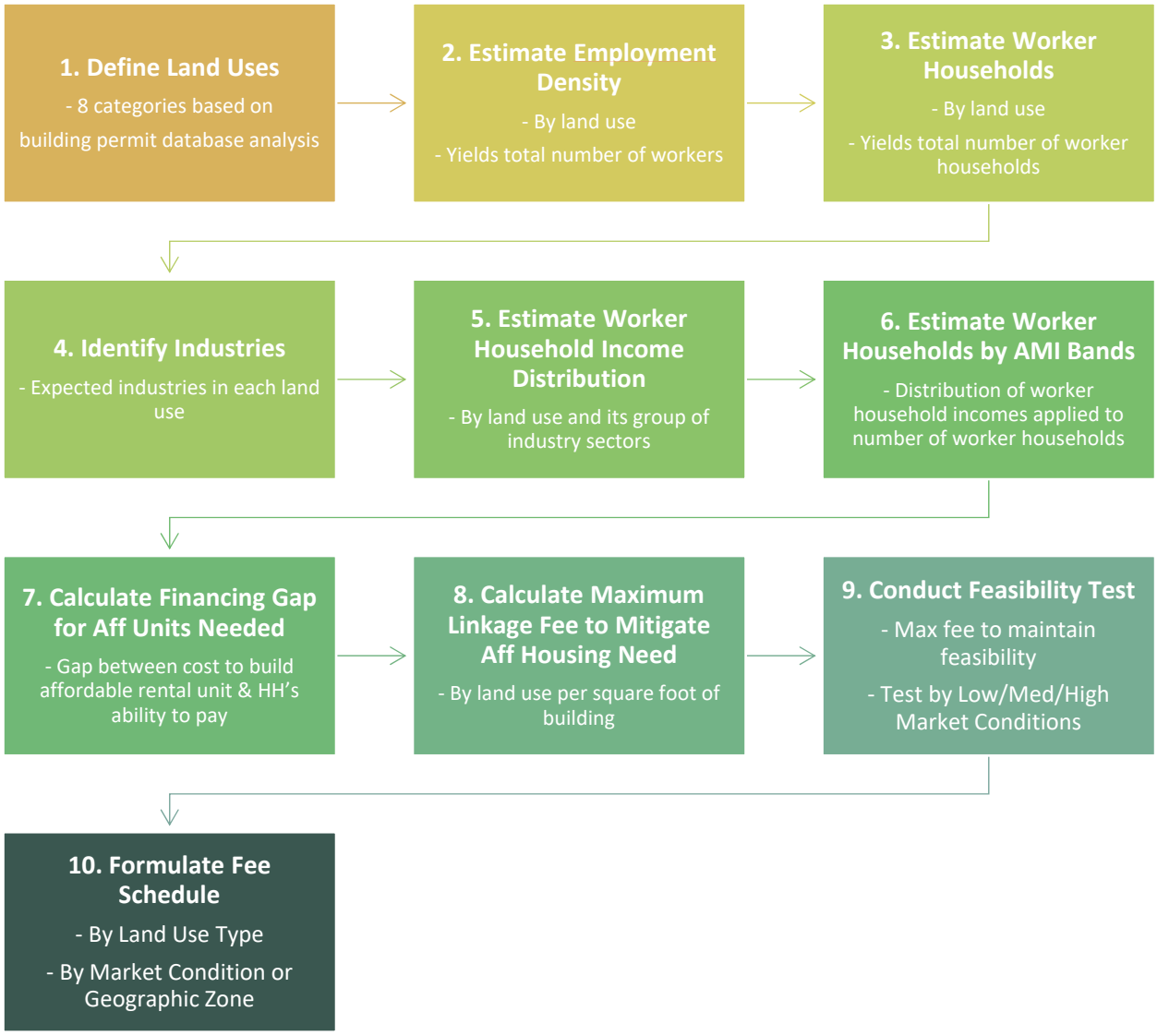
Step 9 Test Feasibility of Maximum Legal Fee Under Different Market Conditions

The City of Los Angeles has a wide range of neighborhoods and corresponding market conditions. In order to ensure that market-rate commercial development is not effected by any fee that may be adopted, this step identifies three general levels of market condition throughout the City, and analyzes the financial return from a development project, in order to identify "feasible" levels of fee by land use.

10: Formulate Feasible Fee Schedule

This step involves a summary fee schedule tested for feasibility, along with policy recommendations for phasing it in, administration, and other options for consideration.

FIGURE 1: SUMMARY OF COMMERCIAL FEE NEXUS METHODOLOGY



Commercial Land Uses

Step 1: Define Land Uses

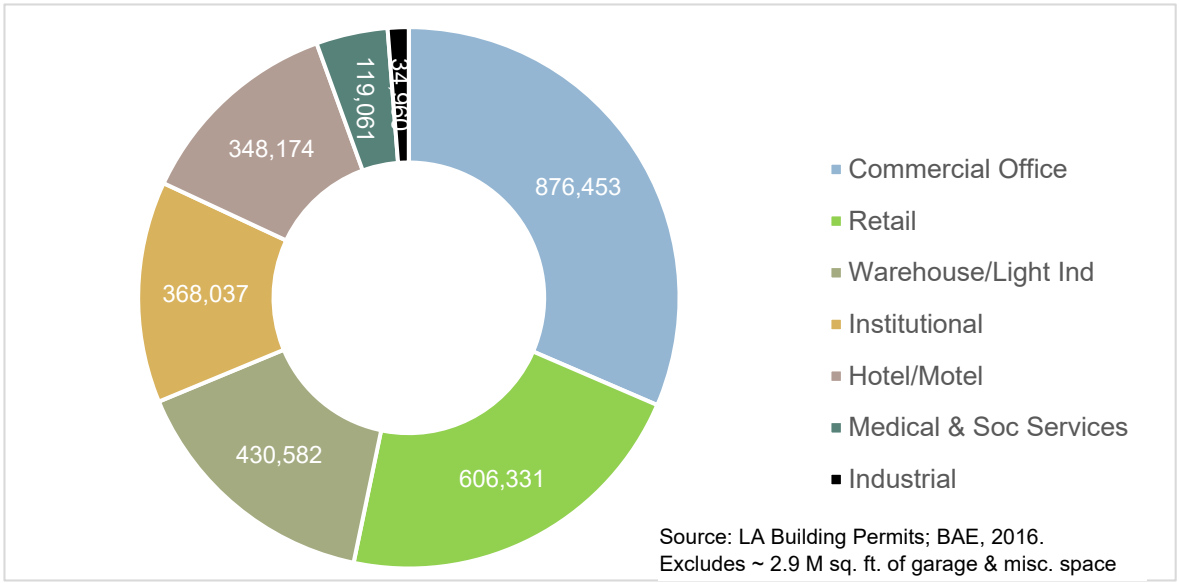
In order to formulate commercial land use categories that reflect actual development in Los Angeles, the City's building permit data was analyzed for the 2011 to 2015 period (see Appendix B for summary data). The City permitted an average of approximately 5.7 million square feet of commercial space per year, including an average pf 2.8 million square feet per year in employment-generating commercial uses. The balance of 2.9 million square feet was permitted for public and private garage space, which is not generally considered an employment-generating use, and thus excluded from the following analysis.

Based on a review of employment by industry sector for Los Angeles County, the categories of commercial fees used by other cities in California (see Case Studies chapter), and permit trends for Los Angeles, commercial employment-generating land uses were classified into eight categories including.

- Office
- Retail
- Hotel/Motel
- Industrial
- Warehouse/Utility/Light Industrial
- Medical &Social Services (including hospitals)
- Institutional (churches and schools)

The graph below shows annual average of new construction, employment-generating space permitted by the categories of land use within the past five years, in order of amount of space.

FIGURE 2: AVERAGE ANNUAL PERMITTED NEW SPACE IN EMPLOYMENT-GENERATING USES, CITY OF LA, 2011 - 2015



Step 2: Determine Employment Densities

For the purposes of the following analysis leading to the maximum fee calculations, the Nexus Study assumes a building totaling 100,000 square feet for each commercial land use. This is not intended to portray a typical building permitted or developed in the City of Los Angeles; it is a method to allow for per square foot comparisons across commercial land uses.

For each land use identified in Step 1, the Nexus Study determined the average employment density (i.e., square feet of building area per employee), in order to determine the number of workers per 100,000 square feet of each land use type. BAE reviewed several studies to estimate average employment densities for each land use type, including the City of Los Angeles Affordable Housing Benefit Study (2011), the Southern California Association of Governments Employment Density Study (2001), Environmental Impact Reports for several recent projects in the City of Los Angeles, and the commercial linkage fee nexus studies for each of the commercial linkage fees discussed in the best practices section of this report. These studies demonstrated wide variation in the assumed employment density for each land use type. The employment densities assumed in this study are generally based on either the median value or most common value for each land use type, with some outlier values omitted. In some cases, the employment densities used in this study may be slightly lower than would typically be expected for new construction in order to avoid overstating the number of workers that would be generated by new development, thereby maintaining a more conservative analysis.

In particular, many office tenants are demonstrating a preference for more open floor plans with fewer square feet per employee than is typical of more traditional office space, some occupying 150 square feet per employee or less. However, while employment densities in some new office space in Los Angeles will be in line with this trend, other new developments will be configured with a more traditional layout with lower employment densities. The Nexus Study assumes 350 square feet per office employee, as is common in more traditional office space, in order to reflect the higher end of the range of potential configurations among new office developments and avoid overestimating the number of employees per 100,000 square feet of office development.

As shown below, the assumed average employment density for each of the eight commercial land uses ranges from 350 square feet per employee for office uses to 1,100 square feet per employee for construction, warehousing, and wholesale trade land uses.

New Worker Households and Affordable Housing Need

Step 3: Estimate Worker Households

Since most households in Los Angeles include more than one worker, the Nexus Study groups the employees generated by each land use into households to determine the total number of worker households generated by each land use type. According to the US Census American Community Survey, as of 2014 the City of Los Angeles had 1,849,845 workers living in households and 1,047,928 households with at least one worker, averaging approximately 1.77 workers per household with workers. Therefore, the Nexus Study estimates the number of employee households that each land use generates by dividing the total number of workers by 1.77. As shown below, the estimated number of households per 100,000 square feet ranges from 51.5 for construction, warehousing, and wholesale trade uses to 161.9 for office uses.

TABLE 2: EMPLOYEES AND HOUSEHOLDS PER 100,000 SQUARE FEET

	Office	Retail	Industrial	Hotel/ Motel	Warehouse	Hospital	Institutional
Average Sq. Ft./employee	350	450	900	1,000	1,100	500	500
Total Employees	285.7	222.2	111.1	100.0	90.9	200.0	200.0
Total Employee Households	**161.9**	**125.9**	**62.9**	**56.6**	**51.5**	**113.3**	**113.3**
Assumptions							
Building Size		100,000					
Employees per Household (a)		1.77					

Note:
(a) Employees per household from 2014 ACS reported average number of workers per household in the City of Los Angeles.
Sources: ACS, 2014; BAE, 2016.

Step 4: Identify Industry Sectors by Land Use

Worker occupations, salaries, and associated household incomes tend to vary between industries, and therefore the Nexus Study identifies the industry sectors that would occupy each of the eight commercial land uses as a first step in identifying affordable housing need among worker households.

Federal, State, and local governmental agencies typically categorize business establishments based on the North American Industry Classification System (NAICS), which assigns numerical codes to each industry sector. NAICS codes group all industries into 20 major industry categories, each identified with a two-digit code. Within each two-digit NAICS sector, more detailed sub-categories of industries are identified by three-digit NAICS codes, which are themselves comprised of more detailed subcategories of industries, up to the six-digit NAICS code level, with more digits associated with more detailed subcategories. For example, NAICS sector 72, Accommodation and Food Services, is comprised of NAICS code sectors 721 (Accommodation) and 722 (Food Services and Drinking Places). NAICS codes 721 and 722

are comprised of more detailed industries, identified by NAICS codes with four to six digits, depending on the level of specificity of the subcategories.

BAE analyzed each two-digit NAICS code and each subcategory to determine the industry sectors most likely to occupy each of the eight commercial land uses. To the extent possible, the Nexus Study places each two-digit NAICS code into one of the eight land uses. However, some two-digit NAICS codes are too broad to fall into one of the eight uses, and were split at the three-digit level to between two land uses. The industry sectors that are expected to occupy each commercial land use type are shown in Table 3.

In addition, the analysis excludes several industry sectors that were not grouped into any of the eight land uses, as shown in Table 3. These uses include sectors that are not expected to generate a significant amount of future new development in Los Angeles (i.e., Agriculture, Forestry, Fishing, and Hunting; Mining, Quarrying, and Oil and Gas Extraction; and Utilities), and do not fit within any of the eight land uses. In addition, the analysis excludes the Public Administration industry on the basis that the City will not charge a fee for space that it will occupy. The "Other Services" industry was excluded because it includes a large range of industries that vary widely in types of employment and likely incomes of workers. However, to the extent that the industries within the "Other Services" sector may occupy any of the eight analyzed commercial land uses, the employment and income profile of workers in these industries is assumed to be similar to the employment and income profile of workers in other industries within each land use type.

TABLE 3: INDUSTRIES BY LAND USE TYPE AND TOTAL EMPLOYMENT, LA COUNTY, 2014

NAICS Number	NAICS Industry Name	2014 LA County Employment	% of Employees in Land Use Type
Office			
51	Information	200,536	20.1%
52	Finance and Insurance	132,161	13.2%
53	Real Estate and Rental and Leasing	75,867	7.6%
54	Professional, Scientific, and Technical Services	276,431	27.7%
55	Management of Companies and Enterprises	58,823	5.9%
561	Administrative and Support Services	255,191	25.5%
Total		999,009	100.0%
Retail			
44-45	Retail Trade (not including industry 454, non-store retailers)	399,641	53.9%
722	Food Services and Drinking Places	341,173	46.1%
Total		740,814	100.0%
Industrial			
31-33	Manufacturing	361,187	97.3%
562	Waste Management and Remediation Services	9,839	2.7%
Total		371,026	100.0%
Hotel/Motel			
721	Accommodation	44,483	100.0%
Total		44,483	100.0%
Warehouse			
23	Construction	120,360	23.2%
42	Wholesale Trade	220,465	42.5%
48-49	Transportation and Warehousing	177,920	34.3%
Total		518,745	100.0%
Hospital			
62	Health Care and Social Assistance	657,846	100.0%
Total		657,846	100.0%
Institutional			
61	Educational Services	355,512	80.1%
71	Arts, Entertainment, and Recreation	88,498	19.9%
Total		444,010	100.0%
SUBTOTAL - ALL CLASSIFIED INDUSTRIES		**3,775,933**	
Industries Not Classified			
11	Agriculture, Forestry, Fishing and Hunting	5,194	
21	Mining, Quarrying, and Oil and Gas Extraction	4,646	
22	Utilities	28,269	
81	Other Services (except Public Administration)	147,919	
92	Public Administration	163,290	
Total		349,318	
TOTAL - ALL INDUSTRIES		**4,125,251**	

Sources: California Employment Development Department, Quarterly Census of Employment and Wages, 2014; BAE, 2016.

Step 5: Estimate Household Income Distribution of New Worker Households

As discussed above, worker households[5] in Los Angeles often have more than one employed person. In some instances, economists estimate household income for workers by simply multiplying worker earnings by industry by the average number of workers per worker household. This methodology relies on the unsatisfactory assumption that on average workers make the same amount of money as other workers in their household. Given the diversity of household composition, this assumption is not appropriate. For example, a household may have a teacher and a doctor, with significantly different individual earnings.

To address this issue, this analysis makes use of a detailed and rich data set published by the U.S. Census known as the Public Use Microdata Sample (PUMS). Derived from a five percent sample of all households per the American Community Survey, and available for certain defined areas of 100,000 or more of population, this data allows one to cross tabulate variables such as industry of employment and household income. The analysis here uses the most recent available data, from the 2010 through 2014 five-year period.

The PUMS data set was queried to identify the number of households by income category for the groups of industries assumed to be associated with the different non-residential building types (controlling for household size) to construct a household income distribution for each of these industry groupings. The distribution was constructed based on the income categories defined by the California Department of Housing and Community Development (HCD). These HCD income categories are defined by a formula based largely on the percentage of the Area Median Income (AMI), adjusted for household size and income levels relative to housing costs. Table 4 below presents the distribution of households by HCD income level for each of the eight commercial land uses.

[5] A worker household is defined as a household with one or more employed persons. They may be wage and salary workers, or self-employed/sole proprietors.

TABLE 4: DISTRIBUTION OF NEW WORKER HOUSEHOLDS BY INCOME

		Estimated Household Income as a Percent of AMI (a)					
NAICS Code	Land Use	Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% - 120% AMI	Above 120% AMI	Total
Private Sector Only							
51, 52, 53, 54, 55, 561	Office	10.7%	10.2%	15.0%	5.5%	58.6%	100.0%
44-45, except 454, 722	Retail	18.2%	18.5%	22.1%	6.4%	34.8%	100.0%
31-33, 562	Industrial	12.9%	16.2%	20.6%	6.3%	44.0%	100.0%
721	Hotel/Motel	15.2%	18.3%	22.1%	7.4%	37.0%	100.0%
23, 42, 48-49	Warehouse	16.6%	16.6%	21.3%	6.4%	39.1%	100.0%
62	Hospital	11.4%	11.6%	17.8%	6.2%	53.1%	100.0%
61, 71	Institutional	13.2%	11.1%	16.3%	6.0%	53.5%	100.0%

Notes:
(a) Based on a cross tabulation of Public Use Microdata Samples (PUMS) from the 2010-2014 American Community Survey. These incomes were compared to household income limits published by the California Department of Housing and Community Development, to determine the percentage of households falling into each income category. The analysis controlled for household size, to address the varying HCD income limits for each household size.
Sources: Census, American Community Survey Public-Use Microdata Sample (PUMS) 2010-2014; CA Dept. of Housing and Community Development, 2014; BAE, 2016.

Step 6: Estimate New Worker Households by Household Income

This analysis estimates the number of new worker households by income level by applying the worker household income distribution for each land use from Step 5 to the total number of worker households from Step 3. As shown in Table 5 below, the number of extremely low-, very low-, low-, and moderate-income households per 100,000 square feet of commercial space ranges from 31.4 households for construction, warehousing, and wholesale trade to 82.0 households for retail space.

The number of lower-income households that each land use type generates is a product of both the total number of worker households that 100,000 square feet of each use supports and the income distribution among those workers. As a result, hotel/motel and construction, warehousing, and wholesale trade land uses are among the uses that generate the smallest number of lower-income households, despite having relatively low worker household incomes, due to the low employment densities associated with these uses. Conversely, office uses generate a large number of lower-income households despite relatively high worker household incomes due to the high employment densities in office uses. Retail uses are associated with both relatively low worker household incomes and high employment densities, resulting in the highest number of lower-income worker households per 100,000 square feet out of all eight land uses.

TABLE 5: WORKER HOUSEHOLDS BY HOUSEHOLD INCOME GENERATED BY COMMERCIAL LAND USES

Employee Households by Income Level	Office	Retail	Industrial	Hotel/ Motel	Warehouse	Hospital	Institutional
Extremely Low Income (up to 30% AMI)	17.3	22.9	8.1	8.6	8.5	12.9	14.9
Very Low Income (31-50% AMI)	16.6	23.3	10.2	10.4	8.6	13.2	12.6
Low Income (51-80% AMI)	24.2	27.8	13.0	12.5	11.0	20.1	18.4
Moderate Income (81-120% AMI)	8.9	8.1	3.9	4.2	3.3	7.0	6.8
Subtotal - Affordable Housing Need (Units)	***67.0***	***82.0***	***35.3***	***35.7***	***31.4***	***53.2***	***52.7***
Above Moderate Income (over 120% AMI)	94.9	43.9	27.7	21.0	20.1	60.1	60.6
Total Housing Need	**161.9**	**125.9**	**62.9**	**56.6**	**51.5**	**113.3**	**113.3**

Assumptions	
Building Size	100,000

Sources: Census, American Community Survey Public-Use Microdata Sample (PUMS) 2010-2014; CA Dept. of Housing and Community Development, 2014; BAE, 2016.

Financing Gap

Step 7: Calculate the Financing Gap per Affordable Unit

The next step in the nexus analysis is to calculate the cost to house the extremely low-, very low-, low-, and moderate-income households calculated in Step 6 by determining the per unit "financing gap" that affordable housing developers encounter when securing a permanent loan for their projects. In other words, the cost to house a lower-income household is the difference between the cost to develop an affordable unit and the amount of the permanent loan that the developer can borrow to finance the unit.

According to cost data provided between 2013 and 2015 on applications for low-income housing tax credit projects in the City of Los Angeles, the average development cost for affordable housing in the City averages approximately $448,500 per unit, as shown in Table 6.[6] [7]

[6] This weighted average cost is based on data from 25 developments serving homeless, special needs, large-family, and senior households in the City of Los Angeles with a total of 1,503 units. All cost data inflated to 2016 dollars using the Turner Building Cost Index.

[7] This study uses the average development cost across all affordable housing types despite that most of the new workers living in affordable units will be housed in large family developments, which in practice accommodate a range of household sizes and mostly serve lower-income worker households. Among units in the large family developments analyzed in this study, three percent were studios, 35 percent were one-bedroom units, 28 percent were two-bedroom units, 32 percent were three-bedroom units, and on percent were units with four or more bedrooms. In contrast, homeless, special needs, and senior developments, typically have a large number of occupants living on social security. However, by using the average across all affordable unit types, the Nexus Study is conservative in estimating the financing gap associated with constructing new units because the average development costs for homeless, special needs and senior units tend to be lower than the development costs for large family units.

TABLE 6: DEVELOPMENT COSTS FOR AFFORDABLE HOUSING UNITS, CITY OF LOS ANGELES, 2013-2015

Housing Type	Avg. Development Cost (per unit) (a)	Number of Units
Homeless & Special Needs	$410,871	622
Large Family	$502,946	676
Senior	$382,977	205
Weighted Average - All Housing Types	$448,479	1,503

Note:
(a) Weighted average cost as reported on tax credit applications between 2013 and 2015. All costs adjusted to 2016 costs based on the Turner Building Cost Index.
Sources: City of Los Angeles, 2016; BAE, 2016.

Affordable housing developers are able to secure a permanent loan based on their net operating income (NOI) per unit. NOI is equal to rental income less operating expenses and vacancy. As shown in Table 7, households can afford monthly rents ranging from $544 for extremely low-income households to $1,708 for moderate-income households. These rents are based on household income limits for three-person households and assuming households spend 30 percent of their income on rent and utilities.[8] Standard deductions are taken for operating expenses and vacancies to determine NOI.

BAE used conventional financing assumptions to determine the supportable loan amount per unit for each income level. As shown in Table 7, the loan amount ranges from $0 per unit for extremely low-income units (i.e., operating expenses exceed NOI, leaving no NOI to support debt payments) to $152,301 for units serving moderate-income households.

The financing gap per affordable unit is equal to the total development cost less the supportable loan amount per unit. Based on the supportable loan amount calculated above, the financing gap per affordable unit ranges from $448,500 for extremely low-income units to $296,199 for moderate-income units, as shown in Table 7.

It should be noted that no other affordable housing subsidy was assumed in this analysis, because this calculation is intended to serve as the actual impact of the new employment-generating commercial land uses; it is not necessarily the way funds generated by a commercial fee would be spent on new affordable housing. Instead, in may affordable housing projects, multiple funding sources would be utilized in combination, enabling limited public resources from federal, state, and local sources to be combined most effectively. For some affordable housing projects serving low income households, non-cash subsidies such as Low Income Housing Tax Credits (LIHTCs) would also be used.

[8] The analysis assumes a three-person household for consistency with the 2016 Los Angeles County average household size of 2.88 persons per household, per California Department of Finance estimates.

TABLE 7: FINANCING GAP ANALYSIS, CITY OF LOS ANGELES, 2016

	Income Group			
	Extremely Low	**Very Low**	**Low**	**Moderate**
Household Income Limit (a)	$23,450	$39,100	$62,550	$70,000
Maximum Affordable Monthly Rent per Unit (b)	$544	$936	$1,522	$1,708
Monthly Operating Expenses (c)	$542	$542	$542	$542
Vacancy (d)	5%	5%	5%	5%
Net Operating Income per Unit (e)	-$25	$347	$904	$1,081
Operating Subsidy from Other Sources (f)	$25	$0	$0	$0
Monthly Supportable Debt Service per Unit (g)	$0	$278	$723	$865
Loan Amount (h)	$0	$48,900	$127,371	$152,301
Financing Gap per Affordable Unit (i)	**$448,500**	**$399,600**	**$321,129**	**$296,199**

Assumptions	
Total Affordable Unit Development Costs (j)	$448,500
Financing Terms	
Debt Coverage Ratio	1.25
Interest Rate	5.50%
Term of Loan (years)	30

Notes:
(a) Based on a 3-person household, CA Department of Housing & Community Development, 2016.
(b) 30% of income to rent and utilities.
(c) Data from funding applications for recent affordable housing projects in California.
(d) Standard required assumption for financing applications.
(e) Affordable Monthly Rent less Operating Expenses & Vacancy.
(f) Operating subsidy is necessary for units with negative NOI.
(g) Net Operating Income plus Operating Subsidy, divided by Debt Coverage Ratio.
(h) Based on financing terms assumptions.
(i) Total Development Costs less Loan Amount.
(j) Average development costs among units in tax credit projects developed in the City of Los Angeles between 2013 and 2015. All figures adjusted to 2016 values based on the Turner Construction Cost Index.
Sources: California HCD, 2016; City of Los Angeles, 2016; Turner Construction Cost Index, 2013-2016; BAE, 2016.

Maximum Legal Fee

Step 8: Calculate the Maximum Legal Fee

The final step in calculating the impact fee is to apply the financing gap per affordable unit for each income level (from Step 7) to the total housing need by income level (from Step 6) per commercial land use. This is expressed as the "maximum legal fee" because it is directly derived from the nexus analysis described above (i.e., new commercial development generating new jobs combined into new worker households distributed by income band, and the cost to provide new affordable rental housing units to these same households).

As shown in greater detail on the next page, the maximum legal fees are as follows:

- Office: $247.84 per square foot
- Retail: $308.82 per square foot
- Industrial: $130.60 per square foot
- Hotel/Motel: $132.68 per square foot
- Warehouse: $117.52 per square foot
- Med & Social Services: $195.78 per square foot
- Institutional: $196.56 per square foot

It is important to note that due to the high cost of providing affordable housing, these maximum fee levels are not feasible to charge to development projects. Thus, the lower "feasible" fee by land use tested under a range of current market conditions, is analyzed in the following chapter.

TABLE 8: MAXIMUM COMMERCIAL FEES, LOS ANGELES

Affordable Housing Need	Office	Retail	Industrial	Hotel/ Motel	Warehouse	Hospital	Institutional
Extremely Low Income (up to 30% AM	17.3	22.9	8.1	8.6	8.5	12.9	14.9
Very Low Income (31-50% AMI)	16.6	23.3	10.2	10.4	8.6	13.2	12.6
Low Income (51-80% AMI)	24.2	27.8	13.0	12.5	11.0	20.1	18.4
Moderate Income (81-120% AMI)	8.9	8.1	3.9	4.2	3.3	7.0	6.8
Total Affordable Housing Need	67.0	82.0	35.3	35.7	31.4	53.2	52.7
Financing Gap (a)							
Extremely Low Income Units	$7,747,508	$10,269,897	$3,646,292	$3,867,376	$3,824,996	$5,781,706	$6,699,669
Very Low Income Units	$6,613,935	$9,295,516	$4,079,489	$4,147,164	$3,418,720	$5,267,000	$5,024,260
Low Income Units	$7,785,398	$8,923,624	$4,166,664	$4,012,822	$3,524,464	$6,462,566	$5,914,130
Moderate Income Units	$2,637,145	$2,392,525	$1,167,458	$1,240,985	$983,651	$2,067,181	$2,017,919
Total Financing Gap	**$24,783,986**	**$30,881,562**	**$13,059,903**	**$13,268,346**	**$11,751,832**	**$19,578,452**	**$19,655,978**
Maximum Impact Fee per Sq. Ft.	**$247.84**	**$308.82**	**$130.60**	**$132.68**	**$117.52**	**$195.78**	**$196.56**
Assumptions							
Building Size	100,000						
Financing Gap							
Extremely Low Income Units	$448,500						
Very Low Income Units	$399,600						
Low Income Units	$321,129						
Moderate Income Units	$296,199						

Note:
(a) The financing gap is calculated by multiplying the number of employee housesholds at each income level by the financing gap per unit (from Step 7) at each affordability level.
Source: BAE, 2016.

As noted earlier, this set of findings will shift slightly with the implementation of the City's minimum wage regulations, to be completed in 2021. The Additional Considerations chapter at the end of this report discusses the effects of the minimum wage increases on the above findings.

Feasibility of Maximum Legal Fee

As shown in the preceding section, meeting the affordable housing costs generated by each land use category of commercial use per the nexus analysis results in expensive maximum legal fee levels.

In order to evaluate these maximum legal fees in the context of maintaining feasible market rate commercial projects, this report involved extensive analysis of the Los Angeles real estate marketplace by three levels of current market condition, and then financial feasibility testing of each of the eight land use categories by each of the market conditions' economic factors.

As an overview, the analytical process included the following steps (each step is explained more fully in the following pages):

- **Step A:** Identification of Los Angeles neighborhoods
- **Step B:** Analysis of market rents to categorize each neighborhood by market condition
- **Step C:** Formulation of basic static pro formas for each land use type to analyze the maximum feasible fee by land use and by the three market conditions
- **Step D:** Comparison of feasible fees to legal maximum fee

Step A: Identification of Los Angeles Neighborhoods

For this step, several geographic subarea classifications were considered, including Community Plan Areas (37 areas), City Council Districts (15 areas), and neighborhoods defined by the Los Angeles Times (114 neighborhoods). The Los Angeles Times neighborhoods were considered the most refined, enabling fine-grained differentiation by neighborhood, without being too small to obscure larger market trends. These neighborhoods along with their Step B market categorization are shown in Figure 3.

Step B: Classification of LA Neighborhoods by Market Condition

This step involved compiling data for commercial market rents based on 439 office projects' rents and 711 retail projects' rents reported by CoStar, a private data vendor (other commercial land uses showed fewer records in CoStar and were thus considered not reliable for purposes of this analysis). Both office and retail rents were analyzed based on the standard deviation from mean (average) rent, and combined into a composite index by neighborhood. The map on the next page displays the results of this analysis.

To illustrate how the development community has responded to market conditions, the maps on the next pages show permit activity of the past five years for office and retail projects throughout the city.

FIGURE 3: COMMERCIAL MARKET CONDITION BY NEIGHBORHOOD

Map Legend

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

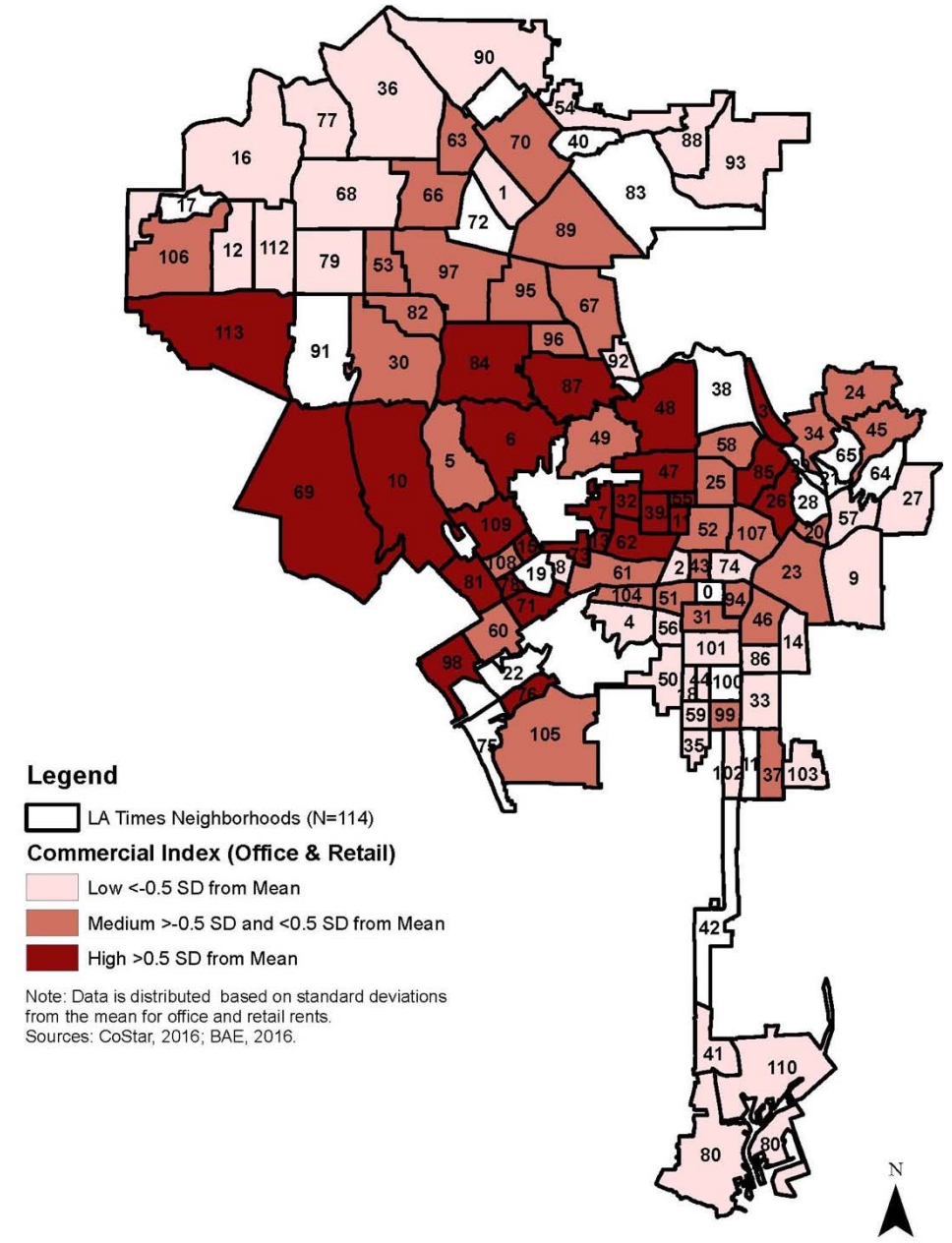
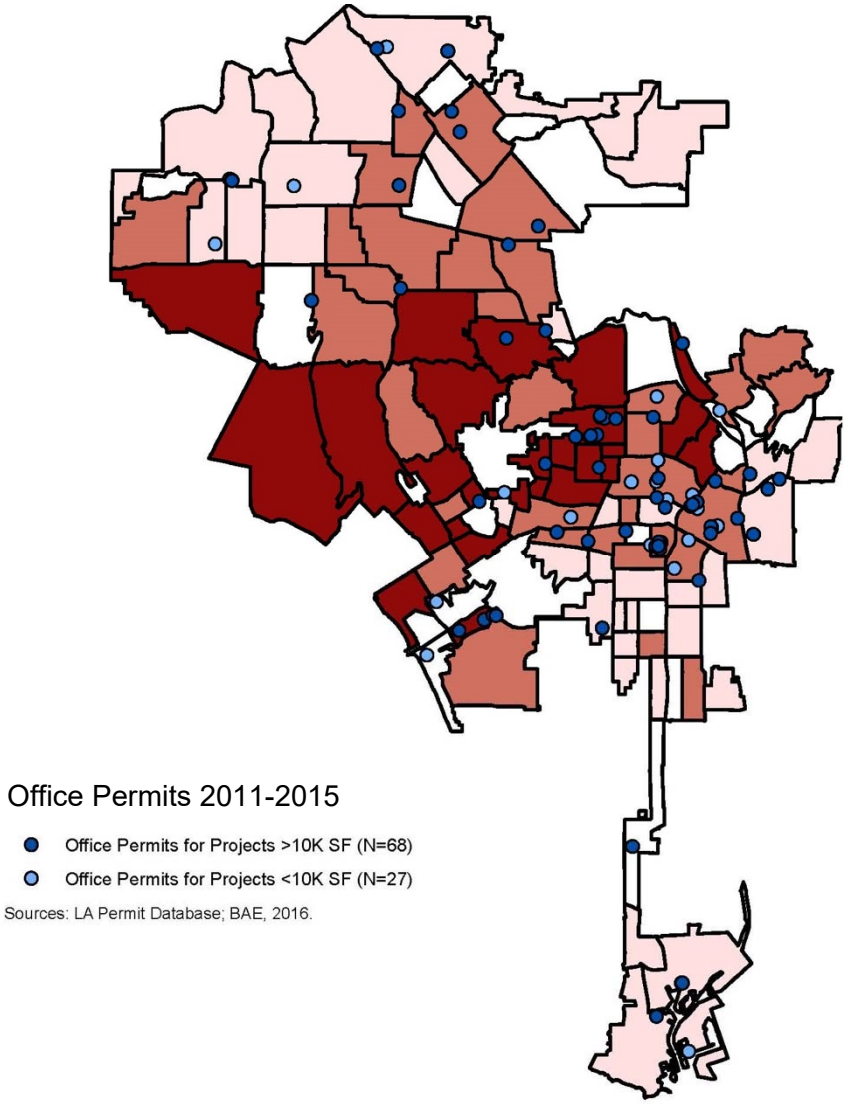
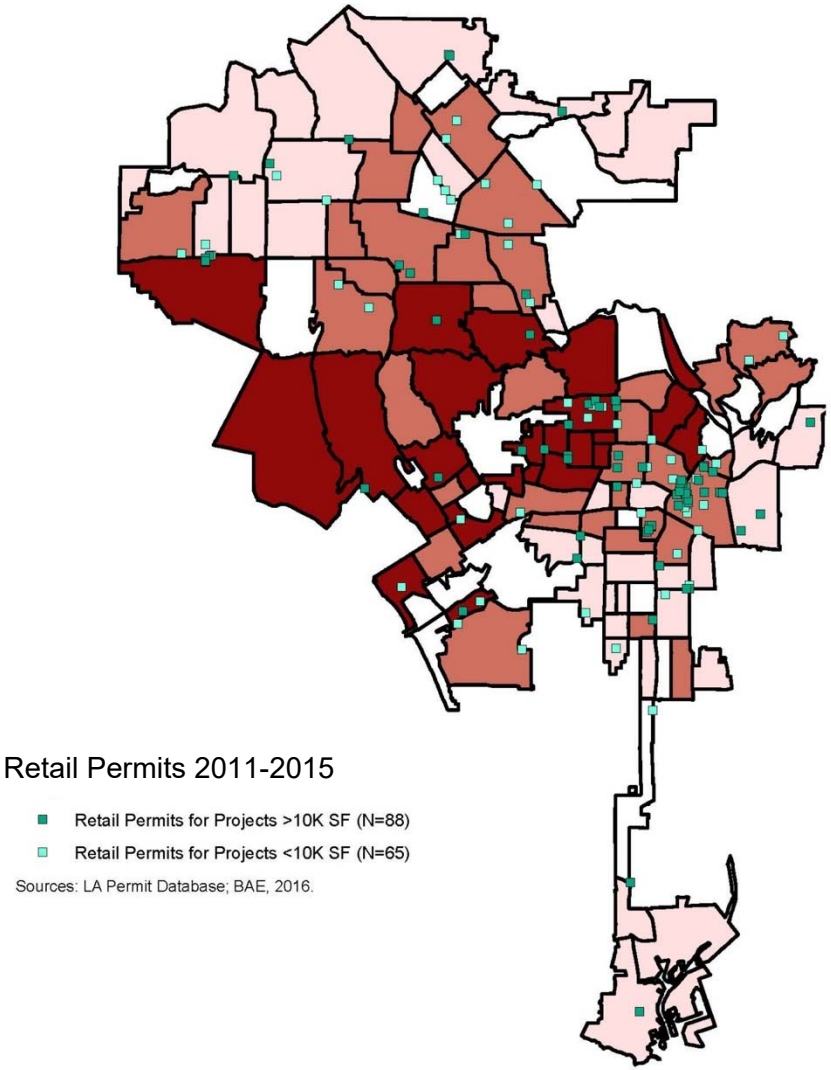


FIGURE 4: OFFICE AND RETAIL PERMIT ACTIVITY BY MARKET CONDITION, 2011-2015





Step C: Pro Forma Analysis to Determine Maximum Feasible Fee by Land Use for Each Market Condition

This step involved the formulation of basis static pro forma models for each land use, with rent assumptions varied by market condition. For all assumptions, a conservative approach was taken to ensure that feasible findings would be developed. A summary of the research informing each key assumption is described below.

- **Development Prototype** – For each land use, a median sized project was identified from actual projects permitted by the City of Los Angeles, as described previously in this report. The project's actual number of stories and parking method were researched, and the project's floor area ratio (FAR) and parking ratios were estimated based on review of applicable zoning codes, resulting in a development program for each prototype.
- **Land Costs** – For each land use and market condition, BAE reviewed available appraisals conducted for various city agencies (see Appendix C-8 for summary of land sales by market category), and also interviewed leading developers of commercial and residential projects currently active in Los Angeles.
- **Construction Costs (Hard, Soft, and Financing)** – For each prototype, per square foot hard costs was estimated based on review of R.S. Means, a cost manual. Soft costs and financing costs were estimated based on industry standards and current interest rates.
- **Rent** – Rent assumptions were developed based on an analysis of project rents from CoStar for just newer buildings (e.g., built in past 10 years or less), and further refined to estimated the 25th, 50th, and 75th percent quartile breakpoints in order to generate conservative rent assumptions. This approach means that, for example, the high market areas' rents do not represent very top end, but rather the 75th percent of top end rents.
- **Cap Rates** – For each prototype, both national and regional cap rates were compiled, with variations by market area based on developer interviews.

The following two metrics were utilized to judge feasibility:

- **Return on Total Development Cost (ROC)** – This metric divides total profit by total development cost, to judge overall project feasibility. It can be considered as a simple profit margin, irrespective of how a project is financed between debt and equity. In other words, ROC is useful because it allows comparison across all real estate project types (whether income-producing or for-sale units), irrespective of individual choices to leverage equity through use of debt. It is also useful because, as a simple project margin calculation, it can be easily compared to other non-leveraged non-real estate short-term investments such as one-year corporate bonds (which are generally paying 6 to 10 percent at present). Real estate development has higher risk inherent to the

investment activity, so the ROC on real estate projects should be higher than these other investment options.

To test feasibility for this study, this metric had to achieve at least a 15 percent return on cost, with cost including the new affordable housing fee and the applicable school fee.

- Yield on Cost (YOC) – This metric evaluates the annual stabilized Net Operating Income (NOI) compared to total development cost. It is useful to evaluate income-producing projects. For the feasibility testing, based on developer interviews, each land use was assigned a minimum YOC threshold. Both ROC and YOC thresholds had to be achieved to deem a project feasible with the total fees (e.g., new affordable fee + school fee).

A summary of the pro forma findings is shown on the following page. Detailed pro formas are shown in Appendix C.

It should be noted that new development projects in Low Market Areas, while occurring on the ground in selected locations, do not generally show feasible returns sufficient to support a fee when estimated very conservatively per the approach followed for this report (see Appendix C for these pro formas). Since many of these neighborhoods seek to encourage new development and investment, but additional fees may not "pencil" under today's market conditions, a market-based fee may not be workable in these areas. Some cities have called these kinds of areas Incentive Areas with lower or no fees charged, as a means to incentivize new development at slightly lower costs (assuming fees are charged in other Medium and High market areas).

TABLE 9: SUMMARY OF COMMERCIAL FEE PRO FORMAS

Low Market scenarios not shown here due to lack of general feasibility under conservative assumptions. Detailed pro formas including Low Market are shown in Appendix.

	Office		Retail		Hotel		Industrial		Warehouse	
	630 W Harry Bridges Blvd		5601 N Van Nuys		1133 N Vine St		3105 S La Cienega			
										
	Medium	**High**	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**
Assumptions for Baseline (a)										
Prototypical Building Size	23,000	23,000	14,000	14,000	45,000	45,000	12,000	12,000	16,000	16,000
Site Size (sf)	21,850	21,850	33,600	33,600	15,750	15,750	20,400	20,400	23,420	23,420
Total Number of Stories (Bldg)	4	4	1	1	5	5	1	1	1	1
Total Number of Stories (Parking)	Surface	Surface	Surface	Surface	1	1	Surface	Surface	Surface	Surface
FAR	1.05	1.05	0.42	0.42	2.86	2.86	0.59	0.59	0.68	0.68
Parking Type	Surface		Surface		Underground		Surface		Surface	
Total Dev Cost/SF (inc. land)	*$ 371*	*$ 517*	*$ 423*	*$ 577*	*$ 436*	*$ 486*	*$ 222*	*$ 257*	*$ 191*	*$ 252*
Rent (psf or per hotel REVPAR)	$ 35.00	$ 50.00	$ 35.00	$ 50.00	$ 205.00	$ 240.00	$ 18.00	$ 21.00	$ 14.00	$ 20.00
Return On Cost - Baseline	20.0%	23.1%	17.9%	34.6%	52.6%	60.3%	25.8%	27.2%	22.9%	32.8%
Yield on Cost - Baseline	6.6%	6.8%	7.1%	7.4%	9.2%	9.6%	6.9%	7.0%	6.8%	7.3%
Baseline Feasible? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Fee/Sq. Ft. (a)	**$ 14.50**	**$ 33.00**	**$ 7.00**	**$ 28.00**	**$ 5.00**	**$ 25.00**	**$ 14.00**	**$ 19.50**	**$ 5.00**	**$ 25.00**
New Fee for Prototype Project	$ 333,500	$ 759,000	$ 98,000	$ 392,000	$ 225,000	$ 1,125,000	$ 168,000	$ 234,000	$ 80,000	$ 400,000
Return On Cost with Fees	15.0%	15.0%	15.9%	27.9%	50.7%	51.6%	18.3%	18.2%	19.5%	20.1%
Yield on Cost with Fees	6.3%	6.3%	7.0%	7.0%	9.0%	9.1%	6.5%	6.5%	6.6%	6.6%
Feasible with Fee? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Res Fee, as % of Total Dev Cost	3.9%	6.1%	1.8%	4.7%	1.3%	5.0%	6.1%	7.3%	2.8%	9.2%

Notes:

a) See Appendix for detailed assumptions and proformas for each land use type.

b) Financial feasibility evaluated on 2 metrics

ROC = 15.0%

YOC :	Retail:	Office:	Hotel:	Industrial	Warehouse:
	7.0%	6.0%	9.0%	6.5%	6.5%

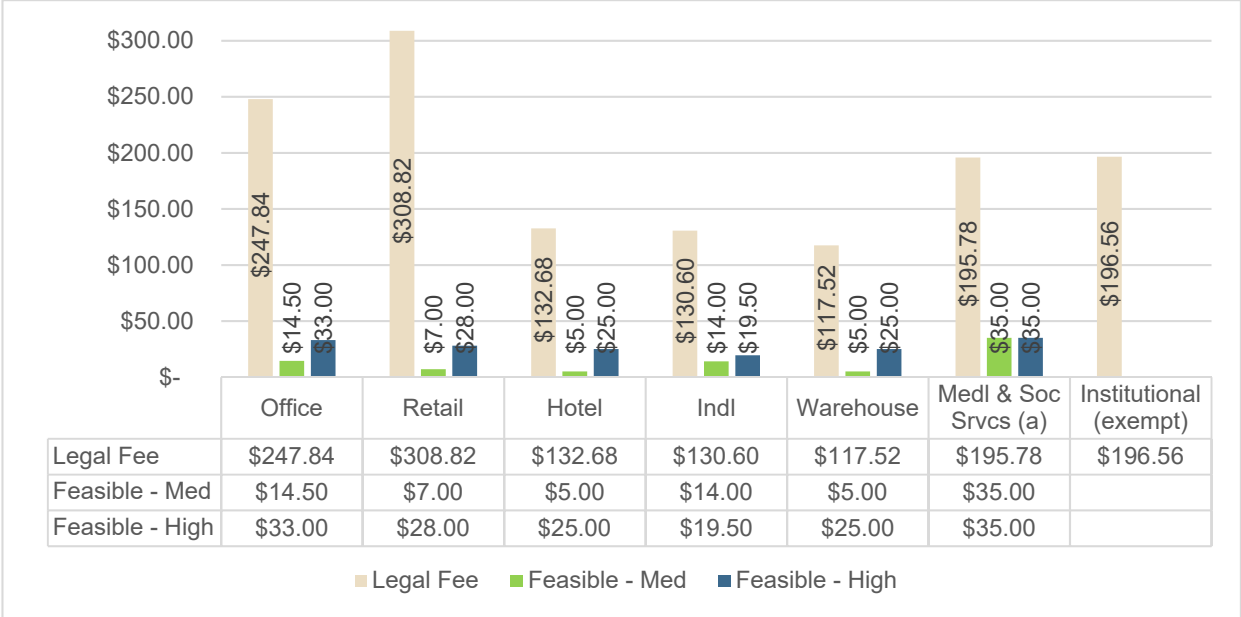
Two land use categories were treated differently than the above methodology. For the Medical & Social Services category (including hospitals), land uses will include both for-profit developments intended to generate financial returns such as medical office buildings, and non-profit developments intended to house social services, health clinics, of hospitals. For each of these sub-categories, the real estate economics situation often deviates varies from the standard income-generating investment property financial returns: non-profit facilities such as hospitals are often built by and for the occupant's use. Medical office buildings, while they may be developed as income-generating property, are also often built as part of hospital campuses or health clinics, and may have high construction costs. At the other end of the spectrum. social service agencies are often owned by a governmental entity (and would be exempt). For these reasons, this category was analyzed on a Percent of Cost basis to develop the fee, as detailed in Appendix C.

Institutional land uses, defined here as primarily schools and churches, are also often exempt from affordable housing fees. Thus, this category is not assigned a feasible fee rate, and would likely not generate any fee revenue, despite the housing market impacts identified through the legal fee (nexus) analysis.

Step D: Comparison of Feasible Fee to Maximum Legal Fee

The table below compares the feasible fees estimated above, to the maximum legal fees described in the previous chapter (based on nexus analysis of new worker households). As in most other cities in California, the gap between the dollars needed to fund affordable housing for new workers (e.g., maximum legal fee) and the feasible level of fee that can be absorbed by real estate market conditions, is substantial. In other words, charging a fee that would not constrain private sector development does not usually meet all subsidy needed to mitigate the costs of the affordable housing impacts generated by the new development.

FIGURE 5: COMPARISON OF MAXIMUM LEGAL COMMERCIAL FEES TO FEASIBLE FEES



	Office	Retail	Hotel	Indl	Warehouse	Medl & Soc Srvcs (a)	Institutional (exempt)
Legal Fee	$247.84	$308.82	$132.68	$130.60	$117.52	$195.78	$196.56
Feasible - Med	$14.50	$7.00	$5.00	$14.00	$5.00	$35.00	
Feasible - High	$33.00	$28.00	$25.00	$19.50	$25.00	$35.00	

a) Medical & Social Services includes hospitals. Fee formulated based on % of total cost, rather than on for-profit financial returns, due to this category representing primarily non-income properties. See Appendix C for % of Cost detail to formulate the example shown for hospitals.

Commercial Fee Program Options & Estimated Revenues

The preceding analysis underscores the complexity of formulating a fee schedule for commercial projects that balances the need for affordable housing funds with market conditions. The City could choose to structure this type of fee in several different ways to accommodate other policy options and limit effects on overall commercial development. The following presents four fee program options as examples. These options are then analyzed in order to estimate total annual fee revenues, along with two kinds of potential further adjustments to exempt certain projects.

Option A: Match Fee to Market Conditions

This option would create a fee schedule which charges feasible fees based on conservatively-estimated Medium Market Area conditions to new and rehabilitated projects in those areas, and feasible fees estimated for High Market Area conditions to those areas. Project fees in Low Market Areas would likely be waived since these fees would generally not be feasible.

This option would create the most finely-tuned fee structure, but may create challenges to administer and would necessitate periodic updating to identify changing neighborhood market conditions and feasible fee levels.

Option B: Charge Medium Market Fees to Both Medium and High Market Areas

This would be a conservative option, charging the level of feasible fee derived from a Medium market area feasibility test, to all projects located in both Medium and High Market Areas. This approach would limit debate about whether an individual project is in a medium or high market area, charging the same fee per land use to all projects regardless of location. Again, due to the economics of Low Market areas, fees would likely not be charged in these exempt zones.

This option would simplify fee administration, but may create an uneven burden on projects due to their location and subsequent economics.

Option C: Charge Only High Market Areas

This option would limit fees to only those projects located in premium, High Market Areas, where feasibility is most assured and development is least likely to be affected. Fees charged would be at the corresponding High Market levels. Projects in Medium and Low Market Areas would be waived based on their location. As market conditions change and are re-evaluated, neighborhoods may change from medium to high market conditions and become eligible for the fee schedule.

This option would further simplify fee program administration, but may create debate over specific projects which have High Market characteristics and economics but be technically located in a Medium Market neighborhood (or vice-versa).

Option D: Charge Lowest Feasible Commercial Fee Citywide (Flat Fee)

In this option, the lowest feasible fee for the lowest commercial land use in a Medium Market Area would be charged across all commercial uses in all markets. This is a more straightforward approach than any of the options cited above. For example, the feasibility testing for commercial land uses found that Warehouse projects in Medium Market Areas can only support an approximately $5.00 fee; this would become the flat fee charged to all land use categories for commercial projects anywhere in the city (including in Low Market Areas).

The benefits of this option are that it establishes clarity, minimizes confusion and minimizes administrative functions. While this option would apply the fee to all projects, including those located in market conditions that the pro formas concluded may be infeasible, most new development projects occurring in the Low market conditions likely reflect improving submarket conditions not reflected in the broader three market segments used for the analysis in this report.

The estimated annual revenues that could potentially be generated by the application of these fee program options are shown on the next page.

Adjustment for Project Size

Many cities exempt fees for smaller projects in order to encourage infill and accommodate small businesses. For this study, the distribution of new commercial projects by square foot size was analyzed (see data in Appendix B-3). This distribution suggests that projects less than 10,000 square feet in gross size is a logical threshold to waive the fee; approximately 40 percent of retail projects and 29 percent of office projects fall below this size, but on a square foot basis, most square footage built for office and retail occur in projects above this threshold.

TABLE 10: FEE SCHEDULE OPTIONS & ESTIMATED ANNUAL REVENUE

Estimates do not include possible exemptions and waivers under consideration other than minimum project size.

Option A - Match Fee to Market Conditions

	Low Market		Medium Market		High Market		Total		Total
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Potential Max Annual Rev Adjusted for Minimum Project Size (c)
Office	$ -	121,143	$ 14.50	274,169	$ 33.00	481,141	876,453	$ 19,853,099	$ 18,955,132
Retail	$ -	114,363	$ 7.00	308,224	$ 28.00	183,745	606,331	$ 7,302,417	$ 6,306,653
Industrial	$ -	2,911	$ 14.00	32,049	$ 19.50	0	34,960	$ 448,683	$ 371,205
Hotel	$ -	0	$ 5.00	294,953	$ 25.00	53,221	348,174	$ 2,805,294	$ 2,790,928
Warehouse	$ -	80,002	$ 5.00	334,961	$ 25.00	15,619	430,582	$ 2,065,290	$ 1,938,052
Medical (Hospital)	$ 35.00	18,644	$ 35.00	18,644	$ 35.00	18,644	55,932	$ 1,957,620	$ 1,957,620
Total		337,063		1,263,000		752,370	2,352,432	**$ 34,432,403**	**$ 32,319,591**

Option B - Medium Market Fees Applied to Both Med & High Zones

	Low Market		Medium Market		High Market		Total		Total
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Potential Max Annual Rev Adjusted for Minimum Project Size (c)
Office	$ -	121,143	$ 14.50	274,169	$ 14.50	481,141	876,453	$ 10,951,995	$ 10,456,630
Retail	$ -	114,363	$ 7.00	308,224	$ 7.00	183,745	606,331	$ 3,443,781	$ 2,974,184
Industrial	$ -	2,911	$ 14.00	32,049	$ 14.00	0	34,960	$ 448,683	$ 371,205
Hotel	$ -	0	$ 5.00	294,953	$ 5.00	53,221	348,174	$ 1,740,870	$ 1,731,955
Warehouse	$ -	80,002	$ 5.00	334,961	$ 5.00	15,619	430,582	$ 1,752,901	$ 1,644,909
Medical (Hospital)	$ -	18,644	$ 35.00	18,644	$ 35.00	18,644	55,932	$ 1,305,080	$ 1,305,080
Total		337,063		1,263,000		752,370	2,352,432	**$ 19,643,310**	**$ 18,483,963**

Option C - Fee in High Market Zones Only

	Low Market		Medium Market		High Market		Total		Total
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Potential Max Annual Rev Adjusted for Minimum Project Size (c)
Office	$ -	121,143	$ -	274,169	$ 33.00	481,141	876,453	$ 15,877,646	$ 15,159,491
Retail	$ -	114,363	$ -	308,224	$ 28.00	183,745	606,331	$ 5,144,849	$ 4,443,293
Industrial	$ -	2,911	$ -	32,049	$ 19.50	0	34,960	$ -	$ -
Hotel	$ -	0	$ -	294,953	$ 25.00	53,221	348,174	$ 1,330,530	$ 1,323,716
Warehouse	$ -	80,002	$ -	334,961	$ 25.00	15,619	430,582	$ 390,485	$ 366,428
Medical (Hospital)	$ -	18,644	$ -	18,644	$ 35.00	18,644	55,932	$ 652,540	$ 652,540
Total		337,063		1,263,000		752,370	2,352,432	**$ 23,396,050**	**$ 21,945,468**

Option D - Lowest Commercial Feasible Fee Charged Citywide

	Low Market		Medium Market		High Market		Total		Total
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Potential Max Annual Rev Adjusted for Minimum Project Size (c)
Office	$ 5.00	121,143	$ 5.00	274,169	$ 5.00	481,141	876,453	$ 4,382,264	$ 4,184,052
Retail	$ 5.00	114,363	$ 5.00	308,224	$ 5.00	183,745	606,331	$ 3,031,657	$ 2,618,258
Industrial	$ 5.00	2,911	$ 5.00	32,049	$ 5.00	0	34,960	$ 174,799	$ 144,615
Hotel	$ 5.00	0	$ 5.00	294,953	$ 5.00	53,221	348,174	$ 1,740,870	$ 1,731,955
Warehouse	$ 5.00	80,002	$ 5.00	334,961	$ 5.00	15,619	430,582	$ 2,152,912	$ 2,020,276
Medical (Hospital)	$ 5.00	18,644	$ 5.00	18,644	$ 5.00	18,644	55,932	$ 279,660	$ 279,660
Total		337,063		1,263,000		752,370	2,352,432	**$ 11,762,162**	**$ 10,978,815**

Notes on next page

Notes:

a) Sq. Ft. of each land use based on avg. annual permit data, as follows:

Office	876,453
Retail	606,331
Industrial	34,960
Hotel/Motel	348,174
Warehouse	430,582
Hospital	55,932
Total	2,352,432

b) Allocation of Sq. Ft. per Market Area category- based on geocoding of all permits:

	% Sq.Ft. in Low Markets	% Sq.Ft. in Med Markets	% Sq.Ft. in High Markets
Office	13.8%	31.3%	54.9%
Retail	18.9%	50.8%	30.3%
Industrial	8.3%	91.7%	0.0%
Hotel/Motel	0.0%	84.7%	15.3%
Warehouse	18.6%	77.8%	3.6%
Hospital*	33.3%	33.3%	33.3%

*The hospital square footage was allocated equally among low, medium, and high markets because only one new hospital was built between 2011 and 2015.

c) Adjusted for proposed minimum project size (10,000+ Sq. Ft.)

	Below Min Project Size	Above Min Project Size
Office	4.5%	95.5%
Retail	13.6%	86.4%
Industrial	17.3%	82.7%
Hotel/Motel	0.5%	99.5%
Warehouse	6.2%	93.8%
Hospital	0.0%	100.0%

In addition to adjustments for potential exempted small projects, the City of Los Angeles could also create a partial fee waiver in its new fee program for those projects located in the two Specific Plan areas which currently charge Transportation Impact Assessment (TIA) fees. These two areas – West Los Angeles Specific Plan and the Coastal Transportation Corridor Specific Plan (CTCSP) – currently each have similar fee schedules to fund local transportation improvements, varied by land use and in some cases, size of project.

As of August 2016, both of these fee programs have also been proposed for fee increases and refined schedules (changing some land use definitions and size thresholds). The fact that these two fee schedules are different from each other, and are undergoing a simultaneous simplification process, means that if the City were to adopt a commercial affordable housing fee and sought to still balance feasibility with needed fee revenue, these two areas could be partially waived and subject to a lower fee schedule for affordable housing plus the TIA fee, to end up at the same total fee level. A map of the TIA overlay on commercial market areas is shown below, and the adjustment to the potential fee revenue estimate for each option net of the proposed applicable TIA fee is shown on the next page. It should be noted that a fee revenue estimate for each option which combines waivers for both small projects and partial TIA waivers has not been conducted for this study.

FIGURE 6: COMMERCIAL MARKET AREAS & TIAS

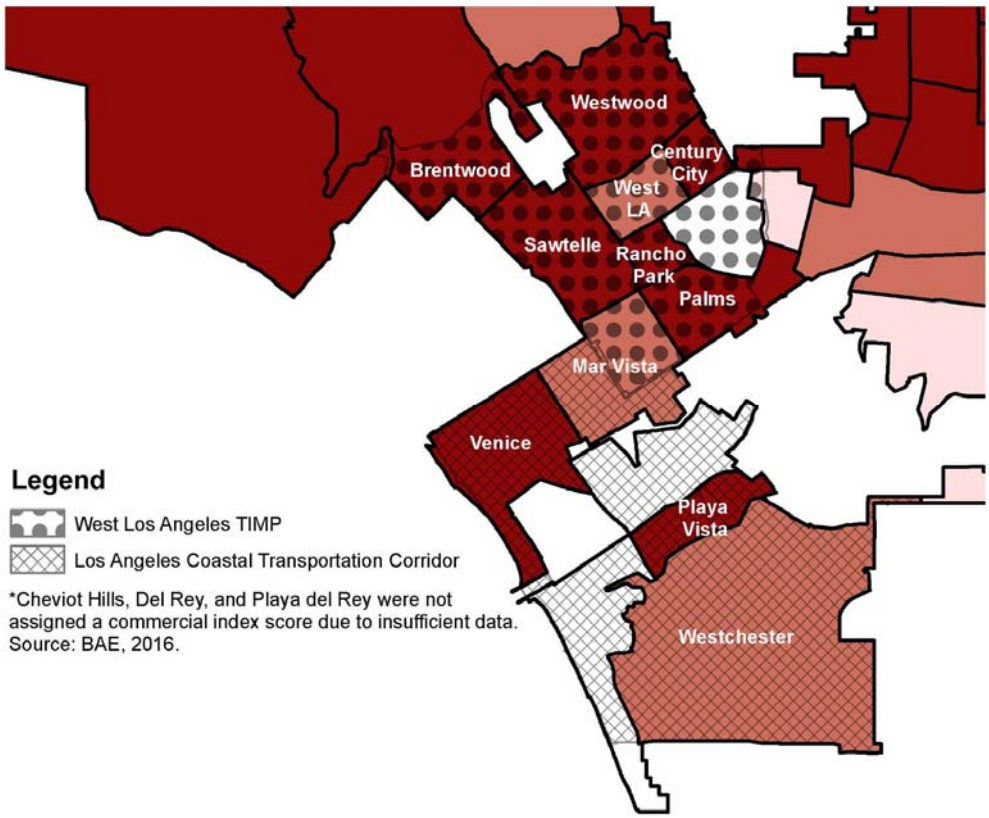


TABLE 11: ESTIMATED ANNUAL COMMERCIAL FEE REVENUE WITH TIA ADJUSTMENTS

Estimates do not include possible exemptions and waivers under consideration.

Option A - Citywide Fee with Market Area Zones

	Low Market		Medium Market		High Market		Total	
Use	**Low Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Med Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**High Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Annual Avg. Sq. Ft.**	**Potential Max Annual Revenue**
Office outside TIAs	$ -	121,143	$ 14.50	274,169	$ 33.00	420,894	816,206	$ 17,864,950
Office in TIAs	*$ -*	*0*	*$ -*	*0*	*$ -*	*60,247*	*60,247*	*$ -*
Retail outside TIAs	$ -	114,363	$ 7.00	307,523	$ 28.00	176,313	598,198	$ 7,089,421
Retail in TIAs	*$ -*	*0*	*$ -*	*701*	*$ 9.01*	*7,432*	*8,133*	*$ 66,937*
Industrial outside TIAs	$ -	2,911	$ 14.00	32,049	$ 19.50	0	34,960	$ 448,683
Industrial in TIAs	*$ -*	*0*	*$ 1.66*	*0*	*$ 7.16*	*0*	*0*	*$ -*
Hotel outside TIAs	$ -	0	$ 5.00	294,953	$ 25.00	53,221	348,174	$ 2,805,294
Hotel in TIAs	*$ -*	*0*	*$ -*	*0*	*$ 16.83*	*0*	*0*	*$ -*
Warehouse outside TIAs	$ -	80,002	$ 5.00	292,076	$ 25.00	15,247	387,325	$ 1,841,560
Warehouse in TIAs	*$ -*	*0*	*$ 0.36*	*42,885*	*$ 20.36*	*372*	*43,257*	*$ 22,844*
Hospital outside TIAs	$ 35.00	18,644	$ 35.00	18,644	$ 35.00	18,644	55,932	$ 1,957,620
Hospital in TIAs		*0*	*$ 20.50*	*0*	*$ 20.50*	*0*	*0*	*$ -*
Total		337,063		1,263,000		752,370	2,352,432	**$ 32,097,310**

Option B - Low Market Incentive Zone + Med Fee Applied to Both Med & High Zones

	Low Market		Medium Market		High Market		Total	
Use	**Low Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Med Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Med Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Annual Avg. Sq. Ft.**	**Potential Max Annual Revenue**
Office outside TIAs	$ -	121,143	$ 14.50	274,169	$ 14.50	420,894	816,206	$ 10,078,414
Office in TIAs	*$ -*	*0*	*$ -*	*0*	*$ -*	*60,247*	*60,247*	*$ -*
Retail outside TIAs	$ -	114,363	$ 7.00	307,523	$ 7.00	176,313	598,198	$ 3,386,849
Retail in TIAs	*$ -*	*0*	*$ -*	*701*	*$ -*	*7,432*	*8,133*	*$ -*
Industrial outside TIAs	$ -	2,911	$ 14.00	32,049	$ 14.00	0	34,960	$ 448,683
Industrial in TIAs	*$ -*	*0*	*$ 1.66*	*0*	*$ 1.66*	*0*	*0*	*$ -*
Hotel outside TIAs	$ -	0	$ 5.00	294,953	$ 5.00	53,221	348,174	$ 1,740,870
Hotel in TIAs	*$ -*	*0*	*$ -*	*0*	*$ -*	*0*	*0*	*$ -*
Warehouse outside TIAs	$ -	80,002	$ 5.00	292,076	$ 5.00	15,247	387,325	$ 1,536,617
Warehouse in TIAs	*$ -*	*0*	*$ 0.36*	*42,885*	*$ 0.36*	*372*	*43,257*	*$ 15,399*
Hospital outside TIAs	$ -	18,644	$ 35.00	18,644	$ 35.00	18,644	55,932	$ 1,305,080
Hospital in TIAs	*$ -*	*0*	*$ 20.50*	*0*	*$ 20.50*	*0*	*0*	*$ -*
Total		337,063		1,263,000		752,370	2,352,432	**$ 18,511,913**

Option C - High Market Zone Only

	Low Market		Medium Market		High Market		Total	
Use	**Low Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Med Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**High Feasible Fee per Sq. Ft.**	**Annual Avg. Sq. Ft. (a)(b)**	**Annual Avg. Sq. Ft.**	**Potential Max Annual Revenue**
Office outside TIAs	$ -	121,143	$ -	274,169	$ 33.00	420,894	816,206	$ 13,889,497
Office in TIAs	*$ -*	*0*	*$ -*	*0*	*$ -*	*60,247*	*60,247*	*$ -*
Retail outside TIAs	$ -	114,363	$ -	307,523	$ 28.00	176,313	598,198	$ 4,936,762
Retail in TIAs	*$ -*	*0*	*$ -*	*701*	*$ 9.01*	*7,432*	*8,133*	*$ 66,937*
Industrial outside TIAs	$ -	2,911	$ -	32,049	$ 19.50	0	34,960	$ -
Industrial in TIAs	*$ -*	*0*	*$ -*	*0*	*$ 7.16*	*0*	*0*	*$ -*
Hotel outside TIAs	$ -	0	$ -	294,953	$ 25.00	53,221	348,174	$ 1,330,530
Hotel in TIAs	*$ -*	*0*	*$ -*	*0*	*$ 16.83*	*0*	*0*	*$ -*
Warehouse outside TIAs	$ -	80,002	$ -	292,076	$ 25.00	15,247	387,325	$ 381,179
Warehouse in TIAs	*$ -*	*0*	*$ -*	*42,885*	*$ 20.36*	*372*	*43,257*	*$ 7,577*
Hospital outside TIAs	$ -	18,644	$ -	18,644	$ 35.00	18,644	55,932	$ 652,540
Hospital in TIAs	*$ -*	*0*	*$ -*	*0*	*$ 20.50*	*0*	*0*	*$ -*
Total		337,063		1,263,000		752,370	2,352,432	**$ 21,265,023**

Option D would be same as without TIA adjustment due to low flat fee structure

These estimates are not adjusted for project size threshold. Footnotes on following page.

Notes:

a) Sq. Ft. of each land use based on avg. annual permit data, as follows:

Office	876,453
Retail	606,331
Industrial	34,960
Hotel/Motel	348,174
Warehouse	430,582
Hospital	55,932
Total	2,352,432

b) Allocation of Sq. Ft. per Market Area category- based on geocoding of all permits:

	% Sq.Ft. in Low Markets	**% Sq.Ft. in Med Markets**	**% Sq.Ft. in High Markets**
Office	13.8%	31.3%	54.9%
Retail	18.9%	50.8%	30.3%
Industrial	8.3%	91.7%	0.0%
Hotel/Motel	0.0%	84.7%	15.3%
Warehouse	18.6%	77.8%	3.6%
Hospital*	33.3%	33.3%	33.3%

*The hospital square footage was allocated equally among low, medium, and high markets because only one new hospital was built between 2011 and 2015.

c) Adjusted for proposed minimum project size (10,000+ Sq. Ft.)

	Below Min Project Size	**Above Min Project Size**
Office	4.5%	95.5%
Retail	13.6%	86.4%
Industrial	17.3%	82.7%
Hotel/Motel	0.5%	99.5%
Warehouse	6.2%	93.8%
Hospital	0.0%	100.0%

d) Figures overestimate revenue if TIA fees are accounted for in two specific plan aras where TIA fees are charged. The highlighted figures represent the maximum fee for each prototype, which are used in the above calculation. The proposed TIA fees are:

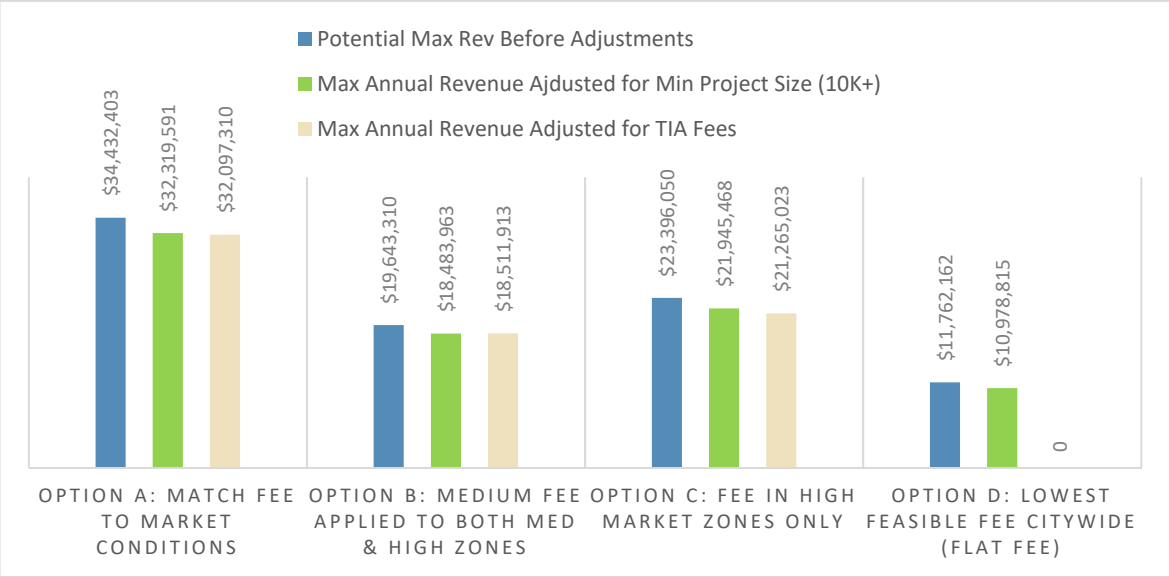
	Proposed TIA Fees		Max Supportabe Fee - Medium		Max Supportabe Fee - High	
	West LA	CTCSP	West LA	CTCSP	West LA	CTCSP
Office	$ 35.43	$ 31.52	$ -	$ -	$ -	$ 1.48
Retail	$ 18.99	$ 16.90	$ -	$ -	$ 9.01	$ 11.10
Industrial	$ 12.34	$ 10.98	$ 1.66	$ 3.03	$ 7.16	$ 8.53
Hotel	$ 8.17	$ 7.27	$ -	$ -	$ 16.83	$ 17.73
Warehouse	$ 4.64	$ 4.13	$ 0.36	$ 0.87	$ 20.36	$ 20.87
Medical (Hospital)	$ 14.50	$ 12.90	$ 20.50	$ 22.10	$ 20.50	$ 22.10

Allocation of Sq. Ft. per Market Area category within TIAs

	% Units in Low	**% of Units in Med**	**% of Units in High**	**Total Activity in TIAs**
Office	0.0%	0.0%	12.5%	12.5%
Retail	0.0%	0.2%	4.0%	4.3%
Industrial	0.0%	0.0%	0.0%	0.0%
Hotel	0.0%	0.0%	0.0%	0.0%
Warehouse	0.0%	12.8%	2.4%	15.2%
Medical (Hospital)	0.0%	0.0%	0.0%	0.0%

In summary, the estimated range of potential fee revenue for an average development year (based on the past five years of permit data), would be as follows.

FIGURE 7: ESTIMATE OF POTENTIAL ANNUAL COMMERCIAL FEE REVENUE



It should be noted that these are estimates, and actual fee collections will vary depending on the specific regulations in the to-be-determined adopted ordinance. Furthermore, these estimates rely on data for the past five years of permitted development activity (2011 – 2015), which reflects a time period at the end of the Great Recession plus the surge after economic recovery. Actual economic cycles in any given year may strongly influence the revenue stream.

Considerations for Implementation

Fees by Geographic Area

As described above, the City of Los Angeles could adopt a commercial fee schedule which varies the required fee by geographic area, as related to market condition. Further variations of this approach, which would match the feasible fee to the geographic area, are then possible to structure.

The advantage of this framework is that fees can be calibrated to achieve meaningful revenues to produce affordable housing, while still balancing the diversity of Los Angeles development conditions to achieve ongoing feasibility. However, this framework, whether accomplished through Option A, B, or C, would require ongoing or periodic analysis to re-calibrate market areas. Furthermore, the 114 LA Times neighborhoods used for this study, while representing a good way to determine subareas, could be further improved in terms of both the accuracy of the geo-spatial files, and possibly the actual division of geographies. For

example, a more fine-grained approach than taken in this study, could utilize Census Tracts to determine market condition by location.

Phase-In of Fee Schedule

A key component of adopting a commercial fee in Los Angeles will be the phase-in schedule. Most notably, most cities when first adopting a fee like this, set a future date for its implementation, and also define and waive current "pipeline" projects which would have been started without knowledge of this fee. Moreover, because Los Angeles has relatively few other impact fees for most areas, with the exception of the TIAs in 2 specific plan areas, and the proposed park fees, adoption of a new commercial fee may have the undesirable short-term perceived effect of a "shock" to the economic system for some projects with smaller profit margins.

For these reasons, it is recommended that if Los Angeles adopts a commercial fee program, it should consider a phased-in schedule when initially implemented. Some cities have phased fees like this in over a two-year period; for Los Angels, it is recommended that this two-year period be considered. The fee schedule, for example, could be set at half of the full fee for the first year of applicability, rising to the full 100 percent of the fee on projects seeking building permits 12 months later and beyond.

Fee Exemptions and Waivers

As profiled in the case studies of commercial fees, other cities in California have variable approaches to making categories of land use either exempt from commercial fees, or waiving fees under certain conditions.

Fee Exemptions

This study was conducted assuming that certain categories of land use would be exempted from commercial fees, due to the nature of these land uses (e.g., built and owned primarily by non-profit or public-purpose organizations). These include all institutional uses (churches, public schools, private schools, and public and private higher educational institutions), as well as child care facilities, and public agency owned buildings (including city, state and federal as required by the California Constitution).

Most cities also exempt 100 percent affordable housing projects. Some cities also exempt buildings smaller than a certain size threshold as discussed earlier in this study, and a few cities earmark other exemptions to achieve policy goals such as the example of San Francisco exempting neighborhood grocery stores and pharmacies.

Fee Waivers

Some cities profiled in the case studies also waive commercial fees in exchange for other mechanisms to provide for affordable housing impacts, including building the affordable housing (although few cities report that this option is used), and/or allow land donation at an equivalent value. Because most of Los Angeles is relatively built-out and land constrained,

especially in the stronger market areas, the option to dedicate land instead of pay a fee, should be further explored.

The revenue estimates for the commercial fee included an example adjustment that can also be built into the regulations for Transportation Impact Assessment (TIA) areas, which are currently applicable only to the Specific Plans for West Los Angeles and the Coastal Transportation Corridor. In the event other areas of Los Angeles were to adopt area transportation impact fees, the commercial linkage fee could be partially waived (reduced) to accommodate those other fees.

Finally, most cities allow for a waiver request if a) economic hardship can be demonstrated or b) if lesser affordable housing job impacts can be demonstrated. Excluding the issue of the planned increase in minimum wage (explored later in this report), it is recommended that these two options be narrowly allowed per legal requirements, but not more broadly offered, to minimize administrative burden on staff.

Timing of Fee Calculation and Payment

As profiled in the case studies, most cities charge the commercial fee prior to or at the time of building permit issuance. Several cities split up the payments, allowing for partial payment later (at Certificate of Occupancy), while a few cities spread payments even farther apart over time, allowing for essentially a payment plan or the choice of an upfront net present value payment of the entire amount.

For several reasons, it is recommended that for the City of Los Angeles, the fee payment be split only into at most, two equal installments – at the time of building permit issuance and at the time of Certificate of Occupancy. This recommendation is made due to the overarching immediate need to create a permanent source of funding for affordable housing, as well as potential collection challenges if payments were spread beyond the point of issuing a Certificate of Occupancy.

About Residential Fees

Overview of Residential Fees

Residential fees for affordable housing apply to market rate units, and are based on the "nexus" or relationship between the occupants of a market-rate unit's spending in the economy, and the portion of this spending that generates workers' low income households needing affordable units.

One of the complexities around this kind of fee is that for most cities in California with a residential fee, the fee is rooted in an existing inclusionary housing program, which requires generally 10 to 15 percent of units in market rate projects be affordable to low and sometimes moderate income households. There are more than 170 inclusionary programs in cities and counties throughout California, many of which have been operating for decades.[9] Although these programs were structured to achieve production of affordable units within a market-rate development, creating a mixed-income project, most of these programs also offer an in-lieu fee option instead of providing on-site affordable units. With the *Palmer/Sixth Street Properties L.P. v. City of Los Angeles* court decision in 2009, these inclusionary programs were found to violate California's Costa Hawkins Act regarding rent control, and thus prohibited from requiring on-site mandatory unit requirements. The in-lieu fee for market rate rental projects, however, remained legal. Many cities and counties then determined that the fee should be based on a nexus study (which many in-lieu fees had previously not been based on), and many jurisdictions proceeded to update and/or amend their inclusionary ordinances, supporting in-lieu fee requirements with nexus studies. Some legal questions remain, such as whether the in-lieu fee is subject to the California Mitigation Fee Act, but the nexus studies have nonetheless become common practice.

Because the City of Los Angeles does not have an operative inclusionary housing program, a pre-existing in-lieu fee is not a factor. Instead, and similar to a few cities which have never adopted an inclusionary program, the City of Los Angeles is considering a new residential fee for affordable housing. Some other cities term this fee as an "impact" fee or "development" fee; for simplicity's sake, this report calls the fee under consideration a residential fee for affordable housing ("residential fee").

It should be noted that the process of establishing a nexus for the City of Los Angeles's residential fee is virtually the same as the nexus studies undertaken to support inclusionary housing in-lieu fees after *Palmer*. This analytical process is described in the following chapter.

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[9] *Affordable by Choice: Trends in California Inclusionary Housing Programs* (Non-Profit Housing Association of Northern California, 2006).

Summary of Case Studies

This report profiles 11 cities with market-rate housing fees to produce affordable housing. The profiles include all large California cities with fee programs (e.g., San Francisco, Oakland, San Jose, and Sacramento), selected smaller southern California cities with economies similar to portions of Los Angeles (e.g., Santa Monica, West Hollywood, Pasadena, Santa Ana), along with a high-fee case in Palo Alto and two large cities elsewhere in the U.S. (e.g., Boston and Chicago). Appendix D provides a detailed discussion).

The California cities selected for case studies in this report are not exhaustive; over 170 jurisdictions in California have mandatory inclusionary housing programs, and all require a fee payment for market rate rental projects (after the *Palmer* decision, fees are the only requirement legally available related to impose on market-rate rental projects).[10]. Among the California cities profiled here, all except Oakland and San Jose had pre-existing mandatory inclusionary programs established prior to the Palmer decision, and as such, already had ongoing in-lieu fee program options. Therefore, the City of Los Angeles falls somewhere in the middle of this spectrum between long-established mandatory inclusionary programs with procedures and real estate markets that have adjusted to the concept, and new programs post-Palmer that do not relate directly to this practice.

The following table summarizes the case study cities, with key findings on the next page.

[10] It should be noted that the state legislature has twice passed legislative "fixes" to Palmer for rental projects, both of which were vetoed by the Governor. However, the Governor has recently proposed a legislative "fix" as part of proposed legislation to waive CEQA review for certain "by right" housing projects with at least 5 percent affordable housing included within the project. As of July 2016, this most recent legislative proposal has again been dropped and is considered "dead." These events are cited here to illustrate that the Palmer decision is reversible, and may be reversed by future California legislative action.

TABLE 12: SUMMARY OF RESIDENTIAL FEE CASE STUDIES

	Popoulation (a)	Fee per Unit/Square Foot (b)				Threshold	Fees Collected	Annual Rev. Per Capita (c)	Aff. Units Produced	Notes
Large Cities in CA with Fee										
San Francisco (2002/2016)	829,072	10-24 Units (d)	25+ Units (e)			10 units	$10.1 M/year	$12.14	2,157 between	Fees shown became effective June 1, 2016
SRO/Group Housing Unit (per		$29,701	$49,007				(avg since		1992 & Q2 2016	June 2016 ballot mesaure increased
Studio (per unit)		$39,602	$65,343				FY 2011/12)		(program	inclusionary % above level yielding the
1 Bedroom (per unit)		$53,792	$88,757						structured to	fees shown
2 Bedroom (per unit)		$73,274	$120,902						generate units)	
3 Bedroom (per unit)		$83,560	$137,874							
4 Bedroom (per unit)		$104,286	$172,072							
San Jose (2014)	986,320	Citywide Rental	Downtown Core High Rise Rental			3 units	NA (new)			Fees effective July 2016. Downtown highrises
(per sq. ft.)		$17.00	$17.00							w/ CoO on or before 6/30/2021 are exempt.
Oakland (2016)	402,339	Zone 1	Zone 2	Zone 3			N/A (new)			Some zones phased in, all apply as of
Multi-family (per unit)		$22,000	$17,750	$12,000						7/1/2018
Townhome (per unit)		$20,000	$14,250	$8,000						
Single-Family (per unit)		$23,000	$16,500	$8,000						
Sacramento (2015)	476,075	2-20 Units	21+ Units				$30,000 in	$0.06		
Single Units and Duplexes (per sq. ft.)		$2.58	$0.00				first year			
Multi-Unit Dwellings (per sq. ft.)		$2.58	$0.00							
Non-Resl to Res Conversion (per sq. ft.)		$0.00	$0.00							
Units in a Housing Incentive Zone (per sq. ft.)		$1.11	$1.11							
Smaller Cities with Fee										
Santa Monica (2006/2015)	91,619	Rental	Condominium			2 units	$992,000/year	$10.83		
(per sq. ft.)		$31.25	$36.51				(avg 1998-2015)			
West Hollywood (2001/2007)	35,053	All Residential				2 units	$1.3 M in	$37.09		Updated nexus study in 2014
2 to 10 units (per sq. ft.)		$12.65 - $27.13					FY 2014-15			
10+ Units (per sq. ft.)		$27.13								
Pasadena (2001)	139,065	Zone A	Zone B	Zone C	Zone D	10 units	$1.3 M/year	$9.40		Update pending 2016 nexus study
10-49 Rental Units (per sq. ft.)		$35.37	$19.97	$32.89	$35.37		(avg)			
50+ Rental Units (per sq. ft.)		$49.12	$27.74	$45.68	$49.12					
10-49 Ownership Units (per sq. ft.)		$47.01	$19.01	$29.66	$47.01					
50+ Ownership Units (per sq. ft.)		$65.30	$26.40	$41.20	$65.30					
Santa Ana (2011)	331,266	5-20 Units	20+ Units			5 units	$860,000/year	$2.60	64	Fees only apply to excess density above
(per sq. ft.)		$5.00	$15.00				(avg)			zoning
Palo Alto (2008/2016)	65,998					5 units				
Single Family Detached (per sq. ft.)		$95.00								
Single Family Attached (per sq. ft.)		$50.00								
Condominium (per sq. ft.)		$50.00								
Rental Housing		$50.00								
Major Cities Outside of CA with Fee										
Boston (2000/2015)	639,594	Zone A	Zone B	Zone C		10 units	$8 M/year (avg)	$12.48	1,597 units	
Rental (per unit)		$68,400	$54,000	$30,000					between	
Ownership		(f)	(f)	(f)					2000-2015	
Chicago (2003/2015)	2,712,608	Citywide Low-Mod Inc	Citywide Higher Inc	Downtown Rental	Downtown Ownership	10 units	$5.6 M/year	$2.05		
(per unit)		$12,500	$31,250	$28,750 to $43,750	$28,750 to $56,250		(avg.)			

Notes:
(a) All population figures from 2010-2014 American Community Survey.
(b) Each jurisdiction charges fees either on a per square foot or per unit basis.
(c) Per capita annual average revenue based on 2010-2014 ACS population estimates. Revenues are not adjusted for inflation, changes in fee rates, or other factors.
(d) Reflects an off-site inclusionary requirement of 20 percent of units n the principal project.
(e) Reflets an off-site inclusionary requirement of 33 percent of units in the principal project.
(f) For ownership projects, fee is greater of rental fee, or 50% of price difference between market rate and affordable unit.
Sources: ACS, 2010-2014; BAE, 2016.

Review of the case studies indicates the following key points:

Fee Charges and Structure

- Direct comparisons among cities is difficult due to the variation of fee structures; some cities charge per square foot, while others charge per unit by density variations or size of project.
- Residential fees for affordable housing charged by larger cities with a diverse real estate market range from a low of $1.11 per square foot in Sacramento (e.g., $1,100 per unit for 1,000 square feet), to over $172,000 per unit in San Francisco (for a 4-bedroom unit).
- Some cities, notably Santa Ana, Boston, and Chicago, only charge this kind of fee (and only apply their inclusionary ordinances) to projects with public financial assistance or those seeking a zoning change.
- Sacramento, Pasadena, Oakland, Boston, and Chicago take a zone approach to their fee schedules, seeking to incentivize housing production through lower fees in areas with more modest market conditions or for other policy reasons.
- San Jose also takes a zone/product type approach, exempting downtown high rise housing projects from the fee until 2021. This is an interesting product type/time frame targeting approach to foster the city's goal of increased production of dense downtown market-rate housing.
- Several cities (e.g., San Francisco, West Hollywood, and Pasadena) have developed fee schedules based on project size (e.g., number of units), with lower fees for smaller projects.
- San Francisco is the only city profiled which has a differentiated on- and off-site policy, originally designed to foster on-site unit production, although it should be noted that other California cities not profiled in this report have taken a similar approach.

Waivers, Exemptions, and Refunds

- All cities waive the fee for 100 percent affordable housing projects.
- All cities exempt publicly-owned projects.
- Some cities waive non-profit buildings, and/or churches, schools (public and private), universities and colleges, and other similar categories of land use.
- Most cities offer a "units in lieu of fee" and/or land donation in lieu of fee option.
- For individual newly-constructed single family units, some cities charge a fee, while others do not.
- Some cities have established clear refund processes if projects are subsequently not constructed, while others allow for refund requests decided on a case-by-case basis.
- During economic downturns, cities have either created special deferral programs or lowered fees across the board. These approaches demonstrate that these kinds of fees can be customized to adapt to downturns in the economic cycle.

- All cities in California have a "hardship" exemption available per legal requirements. Some cities render a hardship decision administratively; others have a more formal process.

Revenues and Reporting

- Estimates of revenues collected from residential fees range from less than $1 million to over $10 million per year, depending on the city's fee structure, size, and amount of residential development activity. It is import to note that with the exception of Oakland and San Jose, these fees have long been part of inclusionary programs which were structured to produce units within new projects, so instead of fees, cities obtained affordable units (not tracked in this report). If Los Angeles were to adopt a residential fee, it would be more akin to Oakland and San Jose, both of which are essentially starting from scratch, not able to require units in rental projects (just fees). Since both Oakland's and San Jose's fee programs are new, neither can be relied on to inform fee collection patterns at this time.
- Most cities do not specifically track the use of these fees to build affordable housing projects, because the funds go into a trust fund and are used in combination with other sources per project.
- San Francisco last reported its sources and uses of commercial linkage fees along with other revenue sources comprising its Affordable Housing Fund as part of a larger annual report for FY 2014-2015. Its reporting does clearly show both source and use of each funding stream within its Affordable Housing Fund, along with remaining balances at year end.
- Most cities have general guidelines for use of commercial fee funds such as maximum AMI levels that can be served in new affordable units, rather than targeting the funds specifically to serve households with the greatest need (e.g., at-risk of homelessness/extremely low income/very low income). The City of Los Angeles, with great need for new affordable units serving extremely low and very low income households, may wish to develop policies to target commercial fee funds.

Los Angeles Residential Fee Analysis

Overview of Methodology

The maximum residential fee calculation is based on the premise that new households in Los Angeles spend money within the local economy, thereby supporting employment for new workers, a portion of which will be in need of affordable housing. The intent of the market-rate residential fee is to generate revenue that will support the construction of affordable housing affordable to these new lower-income worker households.

This section provides an overview of the steps used to determine the maximum legal fee for market-rate residential units. Each step is discussed in more detail in the following sections.

Step 1: Define Housing Types

The Nexus Study identified four residential land uses to determine the maximum legal fee for each residential product type. The residential product types analyzed in this study consist of multifamily rental units, condominium units, single-family attached units, and single-family detached units.

Step 2: Identify Housing Prices for New Market-Rate Units

The Nexus Study estimated sale prices for new market rate units based on rent and sale price data for recently-constructed properties in Los Angeles. The analysis used rent and sale price data for units built in 2006 or later to approximate typical housing costs for the new units that would be subject to the impact fee.

Step 3: Estimate the Incomes of Households in New Market Rate Housing

Based on the rent and sale prices identified in Step 2, the Nexus Study estimated the household incomes of occupants in new residential units in Los Angeles, assuming that households spend 30 percent of gross household income on housing costs.

Step 4: Analyze Projected Spending Patterns for Households in New Market-Rate Units

Based on the household income figures from Step 3, the Nexus Study uses IMPLAN to estimate spending patterns among households that would occupy new units in the City and the number of new jobs that this spending would support. The IMPLAN output includes the number of new workers by industry from new household spending.

Step 5: Estimate New Worker Households by Household Income

The analysis uses a data set published by the U.S. Census (the Public Use Microdata Sample or PUMS) to estimate the household income distribution among the worker households derived from Step 4.

Step 6: Calculate Financing Gap per Affordable Unit

The next step in the nexus analysis is to determine the per unit "financing gap" that affordable housing developers encounter when securing a permanent loan for their projects. Step 6 of the Nexus Study calculates the net operating income (NOI) generated by units affordable to extremely low-, very low-, low-, and moderate-income households. Using conventional financing assumptions, the analysis determines the supportable loan amount based on the NOI from units at each income level.

The cost to house a lower-income household is the difference between the cost to develop an affordable unit and the amount the developer can borrow to build the unit. Using data on recent affordable housing developments in the City of Los Angeles, the Nexus Study determined the average cost to build an affordable rental unit in the City. The supportable permanent loan amounts identified in Step 6 were deducted from the average per-unit development cost to determine the financing gap for units serving households at each income level up to 120 percent of AMI.

Step 7: Calculate the Maximum Legal Fee

The final step in calculating the impact fee is to apply the financing gap per unit for each income level (from Step 6) to the total housing need by income level from new market-rate units (from Step 5).

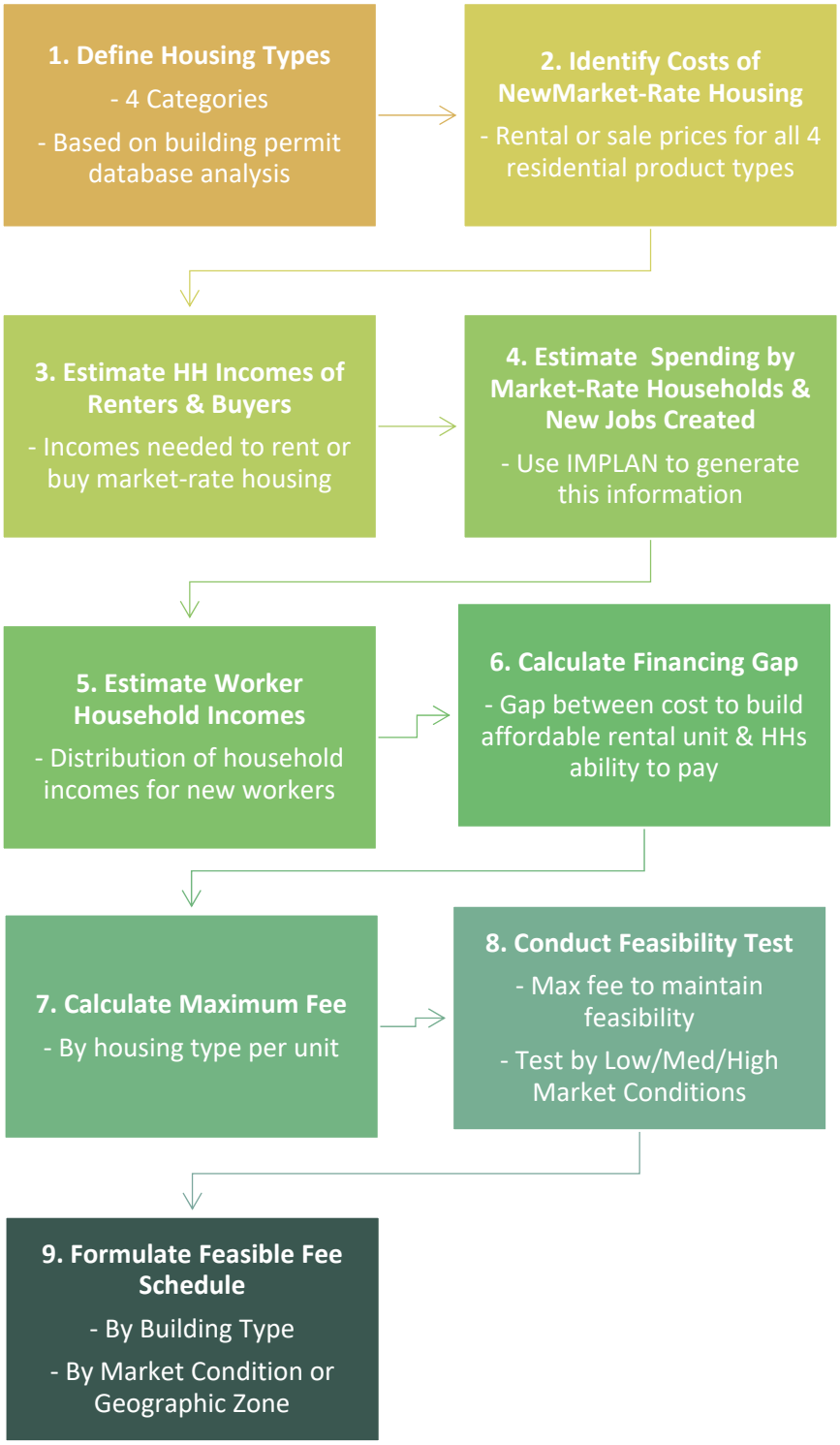
Step 8 Test Feasibility of Maximum Legal Fee Under Different Market Conditions

The City of Los Angeles has a wide range of neighborhoods and corresponding market conditions. In order to ensure that market-rate commercial development is not effected by any fee that may be adopted, this step identifies three general levels of market condition throughout the City, and analyzes the financial return from a development project, in order to identify "feasible" levels of fee by land use.

Step 9: Formulate Feasible Fee Schedule

This step involves a summary fee schedule tested for feasibility, along with policy recommendations for phasing it in, administration, and other options for consideration.

FIGURE 8: SUMMARY OF MARKET-RATE HOUSING FEE METHODOLOGY

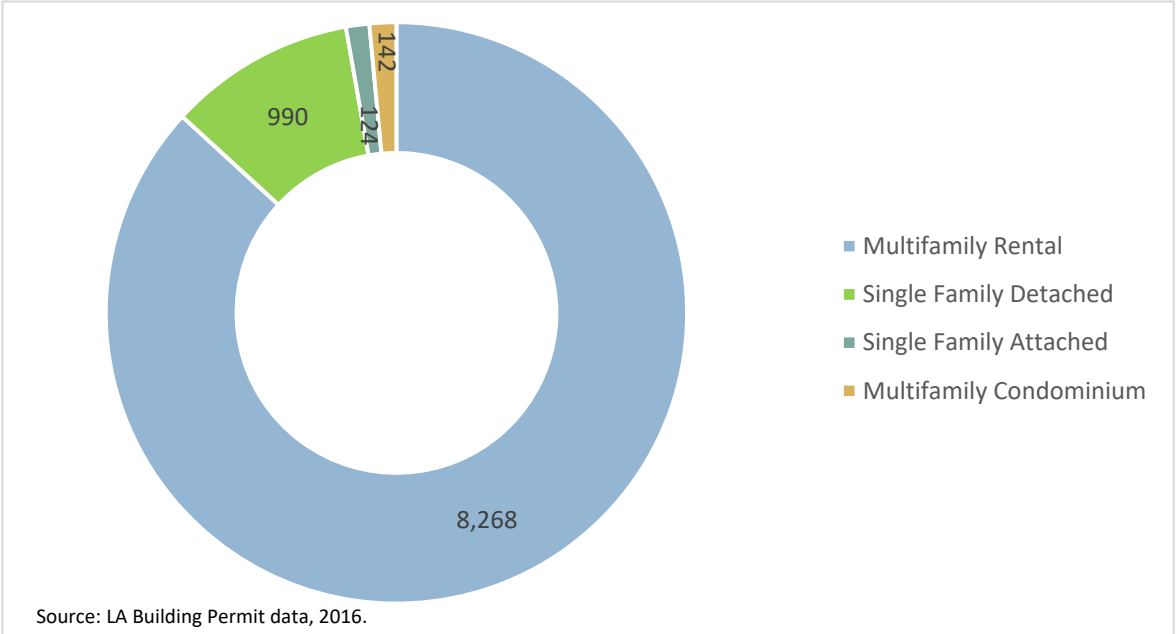


Residential Land Uses

Step 1: Define Housing Types

In order to formulate commercial land use categories that reflect actual development in Los Angeles, the City's building permit data was analyzed for the 2011 to 2015 period (see Appendix E for summary data). The City issued building permits for an average of approximately 14.0 million square feet of new residential space per year for the period, including an average of 990 single family detached units with 3.7 million square feet[11]. Just under 70 percent of permitted square feet was in multifamily rental, averaging 8,268 units in 9.8 million square feet annually for the period. The graph below shows the annual average for residential units permitted for the time period analyzed. It is important to note that this average over the past five years may not be predictive; longer "look-back" time periods may yield a lower annual average number of permits, but would be based on changing circumstances and include cycles of growth and recession that may not be repeated in future decades.

FIGURE 9: AVERAGE ANNUAL NEW PERMITTED RESIDENTIAL UNITS, CITY OF LA, 2011 - 2015



Source: LA Building Permit data, 2016.

[11] Note that the building permit database codes projects by single family detached and single family attached. The City's zoning related to small lot subdivisions has resulted in several projects (both single family attached and detached products) on small lots (minimum lot size of 2,000 square feet). Thus, the permit data contains these small lot subdivisions in both single family permit categories.

The Nexus Study analyzed four residential land uses to determine the maximum legal fee for each residential product type. As shown in the following tables, the residential product types analyzed in this study consist of:

- Single Family Detached Units
- Single Family Attached Units
- Condominium Units
- Multifamily Rental Units

New Worker Households and Affordable Housing Need

The Nexus Study estimates the affordable housing need generated by new market-rate units based on the projected spending patterns among the households that would occupy new market-rate units, the jobs that these spending patterns would support, and the affordable housing need among the workers employed in these jobs. This section details the methodology and findings from each of these steps to estimate the need for affordable housing generated by new market-rate units.

Step 2: Identify Housing Prices for New Market-Rate Units

The first step in estimating the new worker affordable housing need that would be generated by new market-rate residential units is to determine the rental rates and home sale prices for new residential units.

Multifamily Rental Units: BAE obtained data from Reis, a private data vendor that provides property-level information on multifamily rental properties, in order to estimate rental rates for new multifamily rental properties in Los Angeles. This analysis used 2016 rental rate data for all 149 multifamily rental properties (24,495 total units) built in 2006 or later that Reis tracks in the City. Since the units included in this analysis are among the newer rental units in Los Angeles, the rental rates for these properties are likely to be similar to rental rates for new multifamily rental properties in the City. As of the second quarter of 2016, the average rental rate among multifamily rental units in Los Angeles was $2,923 per month, as shown in Table 13.

TABLE 13: NEW MULTIFAMILY RENTAL HOUSING MARKET OVERVIEW, LOS ANGELES, 2016

Average Rent	**$2,923**
Studio	$2,087
1-Bedroom	$2,536
2-Bedroom	$3,435
3-Bedroom	$4,014
Vacancy Rate (a)	4.6%

Notes:
(a) Vacancy rate for developments completed between 2006 and 2014 in order to capture new properties that have passed the initial lease-up period.
Sources: Reis, 2016; BAE, 2016.

For Sale Units: BAE obtained data from CoreLogic, a private data vendor that provides data on home sales from county assessors, in order to estimate sale prices for new for-sale units in Los Angeles. This analysis used data on sales of recently-constructed (i.e., built in 2006 or later) for sale units that occurred between July 2015 and July 2016.

BAE conducted a detailed analysis of the data from CoreLogic in order to code each sale record as one of the three for-sale product types (i.e., condominium, single-family attached, or single-family detached). The data from CoreLogic include a code for each home sale record that identifies the unit as either a "condominium" or "single-family residential" unit, but does not code single-family attached units in a way that differentiates these units from either condominiums or single-family detached units. BAE cross-checked the data from CoreLogic with data from Redfin.com, which identifies residential units as either "condominiums", "townhomes", or "single-family" units, in order to re-categorize the unit types from the CoreLogic sale records as appropriate. In addition, BAE performed a thorough review of hundreds of the CoreLogic sale records to ensure that each was property categorized into one of the three for-sale residential product types, and re-coded records as necessary.

The analysis of recent home sales in Los Angeles indicates that the median sale price for recently-constructed for-sale properties sold between July 2015 and July 2016 was $659,000 for condominiums, $540,000 for single-family attached units, and $1.17 million for single-family detached units, as shown in Table 14.

TABLE 14: NEW FOR-SALE HOUSING MARKET OVERVIEW, LOS ANGELES, 2016

Income Level	Income Limit (a)	Max. Affordable Sale Price (b)	Percent of Recent Sales of New Units in Price Range (c)
Single-Family Detached			
Extremely Low-Income (Up to 30% AMI)	$23,450	$118,144	0.0%
Very Low-Income (Up to 50% AMI)	$39,100	$196,991	0.0%
Low-Income (Up to 80% AMI)	$62,550	$315,135	3.4%
Moderate-Income (Up to 120% AMI)	$70,000	$352,669	5.0%
Median Sale Price			$1,170,000
Number of Units Sold			322
Single-Family Attached/Townhomes			
Extremely Low-Income (Up to 30% AMI)	$23,450	$39,549	0.0%
Very Low-Income (Up to 50% AMI)	$39,100	$118,396	0.8%
Low-Income (Up to 80% AMI)	$62,550	$236,540	0.8%
Moderate-Income (Up to 120% AMI)	$70,000	$274,074	1.6%
Median Sale Price			$540,000
Number of Units Sold			123
Condominiums			
Extremely Low-Income (Up to 30% AMI)	$23,450	$39,549	0.0%
Very Low-Income (Up to 50% AMI)	$39,100	$118,396	0.0%
Low-Income (Up to 80% AMI)	$62,550	$236,540	0.2%
Moderate-Income (Up to 120% AMI)	$70,000	$274,074	1.0%
Median Sale Price			$659,000
Number of Units Sold			923

Notes:

Annual Interest Rate (fixed)	3.60%
Term of mortgage (years)	30
Percent of sale price as down payment	20%
Initial property tax (annual)	1.19%
Mortgage Insurance as percent of loan amount	0.0%
Annual homeowner's insurance rate as percent of sale price	0.40%
Monthly homeowners' association fee (condos & townhomes only)	$390
Percent of household income available for housing costs	30%

(a) Income limits published by the CA Department of Housing and Community Development for a three-person household in Los Angeles County, 2106.
(b) See Appendix A for affordability calculations.
(c) Includes of all sales of homes built in 2006 or later and sold between 03/15/2016 and 06/15/2016 in the City of Los Angeles.
Sources: California Department of Housing and Community Development, 2016; Freddie Mac, 2016; Los Angeles County Auditor-Controller's Office, 2016; CA Dept. of Insurance, 2016; BAE, 2016.

Step 3: Estimate the Incomes of Households in New Market Rate Housing

The Nexus Study uses the rent and sale prices for new units in Los Angeles, as identified in Step 2, to estimate the household incomes of households that occupy new rental and for sale units in Los Angeles.

Multifamily Rental Units: Table 15 presents the annual household income required to rent new multifamily rental units in Los Angeles, assuming households spend 30 percent of their gross income on rent and utilities. Based on the weighted average monthly rent of $2,923 for new multifamily rental units (as shown in Step 2) the annual household income required to afford these market rents is $118,400.

Table 15 also presents the estimated aggregate income for all households in new multifamily rental developments, calculated by multiplying the estimated household income by the 100 units in the development. This results in an aggregate income in the development of $11.8 million. The IMPLAN analysis discussed in the following section uses this aggregate income from the development to project spending patterns among new residents in multifamily rental units.

TABLE 15: HOUSEHOLD INCOME REQUIRED TO RENT NEW MULTIFAMILY UNITS, LOS ANGELES, 2016

Average Monthly Rent (a)	$2,923
Plus Utilities (b)	$38
Total Monthly Housing Costs	$2,961
Annual Housing Costs	$35,528
Household Income Required (c)	**$118,400**
Number of Households in Development	100
Aggregate Income in Development	**$11,840,000**

Notes:
(a) Data are for multifamily properties constructed in the City of Los Angeles that were constructed in 2006 or later and consist of more than 20 units.
(b) Utility costs based on utility allowance for multifamily dwellings established by the Los Angeles Housing Authority in 2015. Utility cost estimates assume that water, sewer, and trash collection costs are included in monthly rental amount.
(c) 30 percent of gross income spent on housing costs.
Sources: Reis, 2016; Los Angeles Housing Authority, 2016; BAE, 2016.

For-Sale Units: Table 16 shows the annual household income required to afford a new for-sale home in Low Angeles. Based on the sale prices for new for sale units (as shown in Step 2), the annual household income needed to afford new for-sale units in Los Angeles is $146,300 for condominiums, $107,100 for single-family attached units, and $232,100 for single-family detached units. The resulting estimated aggregate income is approximately $14.6 million for a 100-unit condominium development, $10.7 million for a 100-unit single-family attached

development, and $23.2 million for a 100-unit single-family detached development. The IMPLAN analysis discussed in the following section uses these aggregate incomes to project spending patterns among new residents in for-sale units, which in turn determines the estimated new worker households that may need affordable housing.

TABLE 16: HOUSEHOLD INCOME REQUIRED TO PURCHASE NEW UNITS, LA, 2016

	Single-Family Detached	Single-Family Attached	Condominium
Estimated Sale Price for New Residential Unit (a)	$1,170,000	$540,000	$659,000
Monthly Housing Costs for a New Residential Unit (b)	$5,803	$2,678	$3,659
Annual Housing Costs	$69,640	$32,141	$43,904
Household Income Required (c)	**$232,100**	**$107,100**	**$146,300**
Number of Households in Development	100	100	100
Aggregate Income in Development	**$23,210,000**	**$10,710,000**	**$14,630,000**

Notes:
(a) Median sale price among homes built in 2006 or later and sold between 03/15/2016 and 06/15/2016 in the City of Los Angeles.
(b) Monthly homeownership costs are based on the following assumptions:

Annual Interest Rate	3.60%
Term of Mortgage (years)	30
Percent of sales price as down payment	20%
Initial property tax (annual)	1.19%
Mortgage Insurance as a percent of sale price	0.0%
Annual homeowner's insurance rate as a percent of sale price	0.40%
Monthly homeowners' association fee (condominiums only)	$390

(c) Percent of household income available for housing costs: 30%
Sources: CoreLogic, 2016; Freddie Mac, 2016; California Department of Insurance, 2016; Los Angeles County Auditor-Controller, 2016; Condos.com, 2016; BAE, 2016.

Step 4: Analyze Projected Spending Patterns for Households in New Market-Rate Units

New household spending within an economy supports jobs. As households spend money on retail goods, food, and health, personal, professional, and educational services, they support job growth in these and other sectors.

To estimate the effect of new household spending on employment generation, this nexus study uses IMPLAN ("Impact analysis for Planning"), a widely-accepted and utilized software model. At the heart of the model is an input-output dollar flow table. For a specified region, the input-output table accounts for all dollar flows between different sectors of the economy. Using this information, IMPLAN models the way income injected into one sector is spent and re-spent in other sectors of the economy, generating waves of economic activity, or so-called "economic multiplier" effects. Appendix G contains a more detailed overview of IMPLAN.

The IMPLAN model is also able to estimate the number of *direct*, *indirect*, and *induced* jobs generated by a given economic "event." Once the economic events have been entered into the model, IMPLAN reports the following types of impacts:

- Direct Impacts. Direct impacts refer to the set of producer or consumer expenditures applied to the predictive model for impact analysis. It is the amount of spending available to flow through the local economy. IMPLAN then displays how the local economy will then respond to these initial changes. The direct impacts may equal the amount of spending input into the model, depending on a variety of factors.
- Indirect Impacts. The indirect impacts refer to the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money leaks from the local economy, either through imports or by payments to income and taxes. For capital projects this would include payments for construction inputs such as wood, steel, office supplies, and any other non-labor payments that a construction firm would purchase in the building process. Since IMPLAN is only used for the housing analysis for this report to assess the impacts of new resident household expenditures, there are no indirect impacts to assess as there are no industry expenditures as inputs to the model.
- Induced Impacts. The induced impacts refer to an economy's response to an initial change (direct impact) that occurs through re-spending of income according to household spending patterns. When households earn income, they spend part of that income on goods and services, such as food and healthcare. IMPLAN models households' disposable income spending patterns and distributes them through the local economy.

For the purpose of this analysis, the economic "event" is the household spending by occupants of new residential units in Los Angeles. By IMPLAN definition these expenditures are *direct* impacts, and the resulting spending results in *induced* impacts. For instance, the household expenditures generate jobs for cashiers and baggers at grocery stores patronized by the households. The process initiated by household expenditures continues as these workers and the businesses they work for spend money in subsequent transactions, supporting employment at places other than the initial point of sale, such as wholesalers supplying retail stores, or truck drivers delivering goods to those stores. In turn, these businesses and workers spend money to generate additional activity in the local economy. These are all part of the *induced* impacts linked to the household expenditures.

The IMPLAN model is customized to reflect the economic characteristics of the specified region – in this case Los Angeles County. The nexus analysis considers regional employment generation, rather than jobs generated in the City of Los Angeles exclusively, because household spending in the City creates jobs throughout the region. Some of these workers cannot afford to live in Los Angeles precisely because of the City's high housing costs. If the

analysis solely considered workers living in Los Angeles, it would in effect discount the needs of households who currently cannot afford to live in Los Angeles, and propagate the need for affordable housing in the City. In essence, this analysis considers employment effects beyond the City's borders in order to address the City's "fair share" of regional housing need.

Step 5: Estimate New Worker Households by Household Income

Worker households[12] in Los Angeles often have more than one employed person. In some instances, economists estimate household income for workers by simply multiplying worker earnings by industry by the average number of workers per worker household. This methodology relies on the unsatisfactory assumption that on average workers make the same amount of money as other workers in their household. Given the diversity of household composition, this assumption is not appropriate. For example, a household may have a teacher and a doctor, with significantly different individual earnings.

To address this issue, this analysis makes use of a detailed and rich data set published by the U.S. Census known as the Public Use Microdata Sample (PUMS). Derived from a five percent sample of all households per the American Community Survey, and available for certain defined areas with 100,000 population or more called PUMAs, this data allows one to cross tabulate variables such as industry of employment and household income. The analysis here uses the most recent available data, from the 2010 through 2014 five-year period. A map of the PUMAs comprising Los Angeles County is provided in Appendix F.

The PUMS data set was queried to identify the number of households by income category by industry (controlling for household size) to construct a household income distribution by industry. The distribution was constructed based on the income categories defined by the California Department of Housing and Community Development (HCD). These HCD income categories are defined as a percentage of the Area Median Income (AMI), adjusted for household size. The household income distribution by industry is shown in Table 17.

[12] A worker household is defined as a household with one or more employed persons. They may be wage and salary workers, or self-employed/sole proprietors.

TABLE 17: INCOME LEVEL BY INDUSTRY, PERSONS BY 2014 INCOME LIMITS

		Estimated Household Income as a Percent of AMI (a)					
NAICS Code	Industry	Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% - 120% AMI	Above 120% AMI	Total
Private Sector							
11, 21	Agriculture & Natural Resources	20.1%	21.6%	21.7%	6.6%	30.0%	100.0%
23	Construction	21.3%	18.2%	21.2%	6.0%	33.2%	100.0%
31-33	Manufacturing	12.9%	16.1%	20.6%	6.2%	44.2%	100.0%
42	Wholesale Trade	12.4%	14.2%	21.1%	6.8%	45.6%	100.0%
44-45	Retail Trade	16.8%	16.6%	20.7%	6.7%	39.1%	100.0%
48-49, 22	Transportation, Warehousing, & Utilities	12.5%	15.4%	20.6%	6.6%	44.9%	100.0%
51	Information	7.4%	6.7%	13.3%	5.0%	67.5%	100.0%
52-53	Finance, Insurance, & Real Estate	7.8%	8.9%	15.3%	6.3%	61.8%	100.0%
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	7.1%	6.7%	11.7%	4.6%	69.9%	100.0%
56	Admin, Support, & Waste Mgmt Srvcs	21.5%	19.8%	20.7%	6.4%	31.6%	100.0%
61	Educational Services	12.8%	10.6%	15.6%	5.9%	55.1%	100.0%
62	Health Care & Social Assistance	11.4%	11.6%	17.8%	6.2%	53.1%	100.0%
71-72	Leisure & Hospitality	18.2%	18.3%	21.7%	6.1%	35.6%	100.0%
81	Other Services Except Public Admin	21.8%	18.9%	21.2%	5.9%	32.2%	100.0%
All Government Employment		9.2%	9.3%	14.4%	5.9%	61.2%	100.0%

Notes:
(a) Based on a cross tabulation of Public Use Microdata Samples (PUMS) from the 2010-2014 American Community Survey. These incomes were compared to household income limits published by the California Department of Housing and Community Development, to determine the percentage of households falling into each income category. The analysis controlled for household size, to address the varying HCD income limits for each household size.
Sources: Census, American Community Survey Public-Use Microdata Sample (PUMS) 2010-2014; CA Dept. of Housing and Community Development, 2014; BAE, 2016.

Housing need is based on the number of households rather than the number of jobs. As such, jobs are translated into households by dividing the number of jobs by the average number of workers per worker household in the City of Los Angeles.[13]

Multifamily Rental Housing: Table 18 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in new rental units. As shown, a 100-unit apartment complex generates a total of 42 households across various income groups and 23 households earning up to 120 percent of AMI.

Condominiums: Table 19 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in new condominiums. As shown, a 100-unit condominium development generates a total of 48 households across various income groups and 26 households earning up to 120 percent of AMI.

Single-Family Attached: Table 20 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in new single-family

[13] Average workers per worker household from American Community Survey, 2010-2014.

attached units. As shown, 100 single-family attached units generate a total of 35 households across various income groups and 19 households earning up to 120 percent of AMI.

Single-Family Detached: Table 21 applies the income distribution by industry to the number of jobs generated in each industry as a result of spending by households in new single-family detached units. As shown, 100 single-family detached units generate a total of 73 households across the various income groups and 39 households earning up to 120 percent of AMI.

TABLE 18: EMPLOYMENT BY INCOME LEVEL FROM NEW 100-UNIT MARKET-RATE RENTAL PROJECT

NAICS Code	Industry	Total Jobs (a)	Estimated Jobs by Percent of AMI (b) Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 120% AMI	Above 120% AMI
Private Sector							
11, 21	Agriculture and Natural Resources	0.07	0.01	0.02	0.02	0.00	0.02
23	Construction	0.66	0.14	0.12	0.14	0.04	0.22
31-33	Manufacturing	0.62	0.08	0.10	0.13	0.04	0.27
42	Wholesale Trade	1.81	0.22	0.26	0.38	0.12	0.83
44-45	Retail Trade	9.86	1.66	1.64	2.04	0.66	3.86
48-49, 22	Transportation, Warehousing, and Utilities	2.20	0.28	0.34	0.45	0.15	0.99
51	Information	1.37	0.10	0.09	0.18	0.07	0.93
52-53	Finance, Insurance, and Real Estate	9.28	0.72	0.82	1.42	0.59	5.73
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	3.55	0.25	0.24	0.41	0.16	2.48
56	Administrative and Support and Waste Management Services	4.67	1.00	0.92	0.97	0.30	1.48
61	Educational Services	2.22	0.28	0.23	0.35	0.13	1.22
62	Health Care and Social Assistance	18.21	2.07	2.12	3.23	1.12	9.66
71-72	Leisure and Hospitality	12.05	2.19	2.20	2.62	0.74	4.30
81	Other Services Except Public Administration	7.98	1.74	1.51	1.69	0.47	2.57
All Government Employment		0.46	0.04	0.04	0.07	0.03	0.28
	Total Jobs	**75.01**	**10.80**	**10.65**	**14.11**	**4.62**	**34.83**
	Number of Households (c)	**42.49**	**6.12**	**6.03**	**7.99**	**2.62**	**19.73**

Notes:

(a) Total Jobs is output of IMPLAN model, and shows employment generated by household spending. Columns to right may not sum to Total Jobs due to independent rounding.

(b) Based on 2014 HCD Income Limits.

(c) Average number of workers per worker household calculated for Los Angeles County based on American Community Community Survey data, 2010-2014.

Total Workers	1,849,845
Total Households with Workers	1,047,928
Avg. Workers per Household	*1.765*

Sources: American Community Survey, 2010-2014, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2014; BAE, 2016.

TABLE 19: EMPLOYMENT BY INCOME LEVEL FROM NEW 100-UNIT CONDOMINIUM PROJECT

NAICS Code	Industry	Total Jobs (a)	Estimated Jobs by Percent of AMI (b) Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 120% AMI	Above 120% AMI
Private Sector							
11, 21	Agriculture and Natural Resources	0.08	0.02	0.02	0.02	0.01	0.02
23	Construction	0.73	0.16	0.13	0.16	0.04	0.24
31-33	Manufacturing	0.70	0.09	0.11	0.14	0.04	0.31
42	Wholesale Trade	2.02	0.25	0.29	0.43	0.14	0.92
44-45	Retail Trade	11.02	1.85	1.83	2.29	0.74	4.31
48-49, 22	Transportation, Warehousing, and Utilities	2.51	0.31	0.39	0.52	0.17	1.13
51	Information	1.47	0.11	0.10	0.20	0.07	0.99
52-53	Finance, Insurance, and Real Estate	9.78	0.76	0.87	1.49	0.62	6.04
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	3.96	0.28	0.26	0.46	0.18	2.77
56	Administrative and Support and Waste Management Services	5.16	1.11	1.02	1.07	0.33	1.63
61	Educational Services	2.88	0.37	0.30	0.45	0.17	1.59
62	Health Care and Social Assistance	20.06	2.28	2.33	3.56	1.24	10.65
71-72	Leisure and Hospitality	14.14	2.57	2.58	3.07	0.86	5.04
81	Other Services Except Public Administration	8.95	1.95	1.69	1.90	0.53	2.88
All Government Employment		0.50	0.05	0.05	0.07	0.03	0.30
	Total Jobs	**83.97**	**12.16**	**11.98**	**15.83**	**5.17**	**38.83**
	Number of Households (a)	**47.57**	**6.89**	**6.79**	**8.97**	**2.93**	**22.00**

Notes:

(a) Total Jobs is output of IMPLAN model, and shows employment generated by household spending. Columns to right may not sum to Total Jobs due to independent rounding.

(b) Based on 2014 HCD Income Limits.

(c) Average number of workers per worker household calculated for Los Angeles County based on American Community Community Survey data, 2010-2014.

Total Workers	1,849,845
Total Households with Workers	1,047,928
Avg. Workers per Household	*1.765*

Sources: American Community Survey, 2010-2014, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2014; BAE, 2016.

TABLE 20: EMPLOYMENT FROM NEW 100-UNIT SINGLE-FAMILY ATTACHED RESIDENTIAL PROJECT

NAICS Code	Industry	Total Jobs (a)	Estimated Jobs by Percent of AMI (b) Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 120% AMI	Above 120% AMI
Private Sector							
11, 21	Agriculture and Natural Resources	0.06	0.01	0.01	0.01	0.00	0.02
23	Construction	0.54	0.11	0.10	0.11	0.03	0.18
31-33	Manufacturing	0.51	0.07	0.08	0.11	0.03	0.23
42	Wholesale Trade	1.48	0.18	0.21	0.31	0.10	0.67
44-45	Retail Trade	8.07	1.35	1.34	1.67	0.54	3.16
48-49, 22	Transportation, Warehousing, and Utilities	1.84	0.23	0.28	0.38	0.12	0.83
51	Information	1.08	0.08	0.07	0.14	0.05	0.73
52-53	Finance, Insurance, and Real Estate	7.16	0.56	0.64	1.09	0.45	4.42
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	2.90	0.21	0.19	0.34	0.13	2.02
56	Administrative and Support and Waste Management Services	3.78	0.81	0.75	0.78	0.24	1.20
61	Educational Services	2.11	0.27	0.22	0.33	0.13	1.16
62	Health Care and Social Assistance	14.68	1.67	1.71	2.61	0.90	7.79
71-72	Leisure and Hospitality	10.35	1.88	1.89	2.25	0.63	3.69
81	Other Services Except Public Administration	6.55	1.43	1.24	1.39	0.39	2.11
All Government Employment		0.36	0.03	0.03	0.05	0.02	0.22
	Total Jobs	**61.47**	**8.90**	**8.77**	**11.59**	**3.78**	**28.43**
	Number of Households (a)	**34.82**	**5.04**	**4.97**	**6.56**	**2.14**	**16.10**

Notes:

(a) Total Jobs is output of IMPLAN model, and shows employment generated by household spending. Columns to right may not sum to Total Jobs due to independent rounding.

(b) Based on 2014 HCD Income Limits.

(c) Average number of workers per worker household calculated for Los Angeles County based on American Community Community Survey data, 2010-2014.

Total Workers	1,849,845
Total Households with Workers	1,047,928
Avg. Workers per Household	*1.765*

Sources: American Community Survey, 2010-2014, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2014; BAE, 2016.

TABLE 21: EMPLOYMENT FROM NEW 100-UNIT SINGLE-FAMILY DETACHED RESIDENTIAL PROJECT

NAICS Code	Industry	Total Jobs (a)	Estimated Jobs by Percent of AMI (b) Up to 30% AMI	30% to 50% AMI	50% to 80% AMI	80% to 120% AMI	Above 120% AMI
Private Sector							
11, 21	Agriculture and Natural Resources	0.11	0.02	0.02	0.02	0.01	0.03
23	Construction	1.07	0.23	0.19	0.23	0.06	0.36
31-33	Manufacturing	1.02	0.13	0.16	0.21	0.06	0.45
42	Wholesale Trade	3.25	0.40	0.46	0.69	0.22	1.48
44-45	Retail Trade	17.99	3.02	2.99	3.73	1.21	7.04
48-49, 22	Transportation, Warehousing, and Utilities	4.01	0.50	0.62	0.82	0.27	1.80
51	Information	2.11	0.16	0.14	0.28	0.11	1.43
52-53	Finance, Insurance, and Real Estate	14.22	1.10	1.26	2.17	0.90	8.78
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	6.06	0.43	0.41	0.71	0.28	4.24
56	Administrative and Support and Waste Management Services	7.64	1.64	1.51	1.58	0.49	2.42
61	Educational Services	5.27	0.67	0.56	0.82	0.31	2.90
62	Health Care and Social Assistance	29.57	3.36	3.44	5.25	1.82	15.69
71-72	Leisure and Hospitality	21.26	3.87	3.89	4.62	1.30	7.58
81	Other Services Except Public Administration	13.70	2.98	2.58	2.91	0.81	4.41
All Government Employment		0.74	0.07	0.07	0.11	0.04	0.45
	Total Jobs	**128.03**	**18.60**	**18.31**	**24.16**	**7.89**	**59.06**
	Number of Households (a)	**72.53**	**10.54**	**10.37**	**13.69**	**4.47**	**33.46**

Notes:

(a) Total Jobs is output of IMPLAN model, and shows employment generated by household spending. Columns to right may not sum to Total Jobs due to independent rounding.

(b) Based on 2014 HCD Income Limits.

(c) Average number of workers per worker household calculated for Los Angeles County based on American Community Community Survey data, 2010-2014.

Total Workers	1,849,845
Total Households with Workers	1,047,928
Avg. Workers per Household	*1.765*

Sources: American Community Survey, 2010-2014, including the Public User Microdata Sample; CA Department of Housing and Community Development, 2014; BAE, 2016.

Subsidy Gap

Step 6: Determine the Financing Gap for Affordable Units

The next step in the nexus analysis is to calculate the cost to house the extremely low-, very low-, low-, and moderate-income households calculated in Step 6 by determining the per unit "financing gap" that affordable housing developers encounter when securing a permanent loan for their projects. In other words, the cost to house a lower-income household is the difference between the cost to develop an affordable unit and the amount the developer can borrow to build the unit.

Affordable housing developers are able to secure a permanent loan based on their net operating income (NOI) per unit. NOI is equal to rental income less operating expenses and vacancy. As shown in Table 7 in Chapter 2, households can afford monthly rents ranging from $544 for extremely low-income households to $1,708 for moderate-income households. These rents are based on household income limits for three-person households and assuming households spend 30 percent of their income on rent and utilities.[14] Standard deductions are taken for operating expenses and vacancies to determine NOI.

BAE used conventional financing assumptions to determine the supportable loan amount per unit for each income level. As shown in Table 7 in Chapter 2, the loan amount ranges from $0 per unit for extremely low-income units (i.e., operating expenses exceed NOI, leaving no NOI to support debt payments) to $152,301 for units serving moderate-income households.

The financing gap per affordable unit is equal to the total development cost less the supportable loan amount per unit. According to cost data provided between 2013 and 2015 on applications for low-income housing tax credit projects in the City of Los Angeles, the average development cost for affordable housing in the City averages approximately $448,500 per unit, as shown in Table 22.

[14] The analysis assumes a three-person household for consistency with the 2016 Los Angeles County average household size of 2.88 persons per household, per California Department of Finance estimates.

TABLE 22: DEVELOPMENT COSTS FOR AFFORDABLE HOUSING, CITY OF LOS ANGELES, 2013-2015

Housing Type	Avg. Development Cost (per unit) (a)	Number of Units
Homeless & Special Needs	$410,871	622
Large Family	$502,946	676
Senior	$382,977	205
Weighted Average - All Housing Types	$448,479	1,503

Note:
(a) Weighted average cost as reported on tax credit applications between 2013 and 2015. All costs adjusted to 2016 costs based on the Turner Building Cost Index.
Sources: City of Los Angeles, 2016; BAE, 2016.

This study uses the average development cost across all affordable housing types despite the likelihood that most of the new worker households needing affordable units will be housed in large family developments, which in practice accommodate a range of household sizes and mostly serve lower-income worker households. Among units in the large family developments analyzed in this study, three percent were studios, 35 percent were one-bedroom units, 28 percent were two-bedroom units, 32 percent were three-bedroom units, and on percent were units with four or more bedrooms. In contrast, homeless, special needs, and senior developments, typically have a large number of occupants living on social security. However, by using the average across all affordable unit types, the Nexus Study is conservative in estimating the financing gap associated with constructing new units because the average development costs for homeless, special needs and senior units tend to be lower than the development costs for large family units.

Based on the supportable loan amount calculated in Step 6, the financing gap per affordable unit ranges from $448,500 for extremely low-income units to $296,199 for moderate-income units, as shown in Table 23.

TABLE 23: FINANCING GAP ANALYSIS, CITY OF LOS ANGELES, 2016

	Income Group			
	Extremely Low	**Very Low**	**Low**	**Moderate**
Household Income Limit (a)	$23,450	$39,100	$62,550	$70,000
Maximum Affordable Monthly Rent per Unit (b)	$544	$936	$1,522	$1,708
Monthly Operating Expenses (c)	$542	$542	$542	$542
Vacancy (d)	5%	5%	5%	5%
Net Operating Income per Unit (e)	-$25	$347	$904	$1,081
Operating Subsidy from Other Sources (f)	$25	$0	$0	$0
Monthly Supportable Debt Service per Unit (g)	$0	$278	$723	$865
Loan Amount (h)	$0	$48,900	$127,371	$152,301
Financing Gap per Affordable Unit (i)	**$448,500**	**$399,600**	**$321,129**	**$296,199**
Assumptions				
Total Affordable Unit Development Costs (j)	$448,500			
Financing Terms				
Debt Coverage Ratio	1.25			
Interest Rate	5.50%			
Term of Loan (years)	30			

Notes:
(a) Based on a 3-person household, CA Department of Housing & Community Development, 2016.
(b) 30% of income to rent and utilities.
(c) Data from funding applications for recent affordable housing projects in California.
(d) Standard required assumption for financing applications.
(e) Affordable Monthly Rent less Operating Expenses & Vacancy.
(f) Operating subsidy is necessary for units with negative NOI.
(g) Net Operating Income plus Operating Subsidy, divided by Debt Coverage Ratio.
(h) Based on financing terms assumptions.
(i) Total Development Costs less Loan Amount.
(j) Average development costs among units in tax credit projects developed in the City of Los Angeles between 2013 and 2015. All figures adjusted to 2016 values based on the Turner Construction Cost Index.
Sources: California HCD, 2016; City of Los Angeles, 2016; Turner Construction Cost Index, 2013-2016; BAE, 2016.

Maximum Legal Fee

Step 7: Calculate the Maximum Legal Fee

The final step in calculating the impact fee is to apply the financing gap per unit for each income level (from Step 7) to the total housing need by income level from new market-rate units (from Step 5). As shown in Table 24, the maximum impact fees for each of the four residential product types are as follows:

- Multifamily Rental: $84,964 per unit
- Condominium: $95,484 per unit
- Single-Family Attached: $69,900 per unit
- Single-Family Detached: $145,901 per unit

TABLE 24: MAXIMUM AFFORDABLE HOUSING IMPACT FEE CALCULATIONS

Employee Households in City by Income Level	Multifamily Rental	Condominium	Single-Family Attached	Single-Family Detached
Extremely Low Income (up to 30% AMI)	6.1	6.9	5.0	10.5
Very Low Income (31-50% AMI)	6.0	6.8	5.0	10.4
Low Income (51-80% AMI)	8.0	9.0	6.6	13.7
Moderate Income (81-120% AMI)	2.6	2.9	2.1	4.5
Subtotal - Affordable Housing Need (Units)	***22.8***	***25.6***	***18.7***	***39.1***
Above Moderate Income (over 120% AMI)	19.7	22.0	16.1	33.5
Total Housing Need	**42.5**	**47.6**	**34.8**	**72.5**
Financing Gap (a)				
Extremely Low Income Units	$2,743,807	$3,089,354	$2,261,584	$4,726,450
Very Low Income Units	$2,411,132	$2,711,989	$1,985,332	$4,144,578
Low Income Units	$2,566,479	$2,879,691	$2,108,099	$4,395,613
Moderate Income Units	$774,962	$867,372	$634,966	$1,323,442
Total Financing Gap per 100 Units	**$8,496,380**	**$9,548,406**	**$6,989,981**	**$14,590,083**
Maximum Impact Fee per Unit	**$84,964**	**$95,484**	**$69,900**	**$145,901**
Assumptions				
Building Size (# of units)	100			

Note:
(a) The financing gap is calculated by multiplying the number of employee housesholds at each income level by the financing gap per unit (from Step 7) at each affordability level.
Source: BAE, 2016.

Feasibility of Maximum Legal Fee

As shown in the preceding section, meeting the affordable housing costs generated by each residential land use per the nexus analysis results in expensive maximum legal fee levels.

In order to evaluate these maximum legal fees in the context of maintaining feasible market rate residential projects, this report involved extensive analysis of the Los Angeles real estate marketplace by three levels of current market condition, and then financial feasibility testing of each of the eight land use categories by each of the market conditions' economic factors.

As an overview, the analytical process included the following steps (each step is explained more fully in the following pages):

- **Step A:** Identification of Los Angeles neighborhoods
- **Step B:** Analysis of market rents/sale prices to categorize each neighborhood by market condition
- **Step C:** Formulation of basic static pro formas for each land use type to analyze the maximum feasible fee by land use and by the three market conditions
- **Step D:** Comparison of feasible fees to legal maximum fee

Step A: Identification of Los Angeles Neighborhoods

As detailed in the commercial fee chapter, this study used the Los Angeles Times neighborhoods to segment Los Angeles into three levels of market condition, as shown on the following map for residential markets.

Step B: Analysis of Market Rents/Sales Prices

Residential markets signal their market condition by price, and this economic principle was applied to classify neighborhoods into distinct market categories. Data were analyzed for three price signals: market rents, single family home sales, and condominium sale prices. For the rental variable, data was provided by Reis, a private data vendor, for 33,000 rentals in over 150 buildings. This information was geocoded, aggregated into an average rent for each neighborhood, and grouped using standard deviations. CoreLogic provided data on recently constructed single family homes and condominiums sold between June 2015 and June 2016. This data set captured sales for approximately 4,000 single family homes and 500 condos. Like the rental data, this information was geocoded and aggregated into an average price per square foot for each neighborhood, with the results grouped using standard deviations.

Using these three price signals, average rents, and average price per square foot for single family homes and condominiums, an index was developed to describe the market condition for each neighborhood. Each price signal was assigned a score from one to three, reflecting the

variable's placement within the standard deviation intervals.[15] A score of one indicated a relatively weaker housing market, while a score of three reflected a strong market. The scores were combined into a composite index. The following pages provide maps of the three variables used in the analysis, and the resulting composite Residential Index scores. Housing units that were permitted between 2011 and 2015 were overlaid on the maps to illustrate how permit activity corresponded to areas of varying market strength.

[15] Each of the three price signal variables was analyzed by using a statistical measure called standard deviation, which measures the dispersion of data relative to the mean (or average) for all data points. This measure best reflected the clustering across the three variables, with prices clustered at the high end, others around the average for all of Los Angeles, and some at the low end of the range. The intervals used to score each variable are noted in the maps in the following pages.

FIGURE 10: RESIDENTIAL NEIGHBORHOOD MARKET CONDITIONS

Map Legend

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

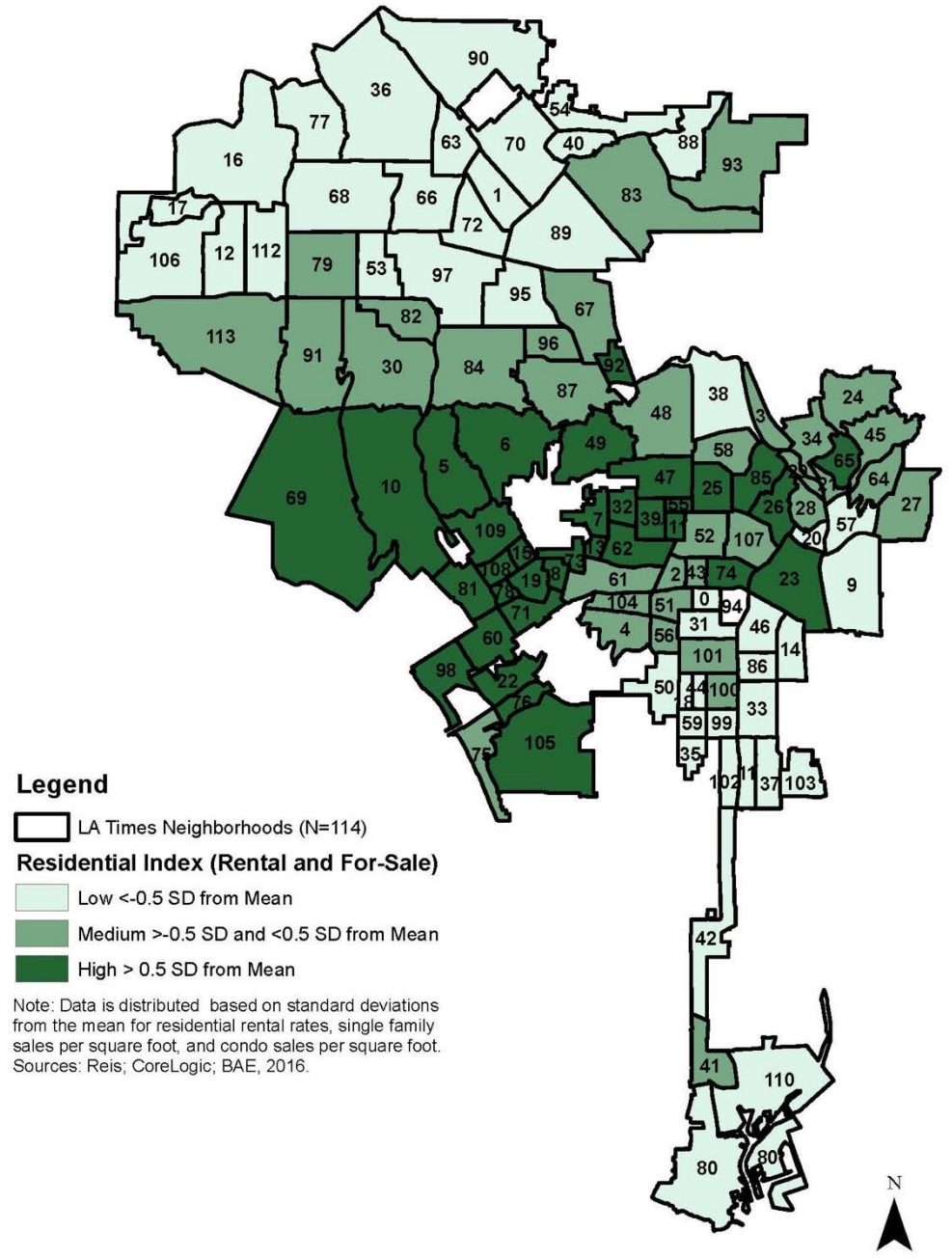
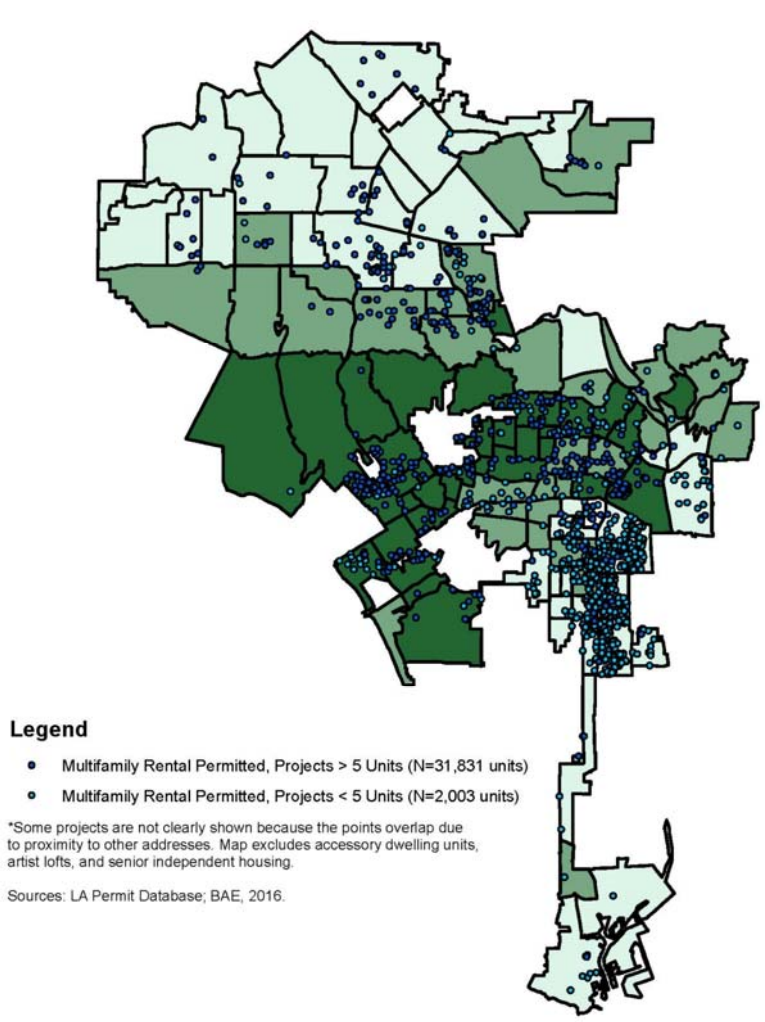
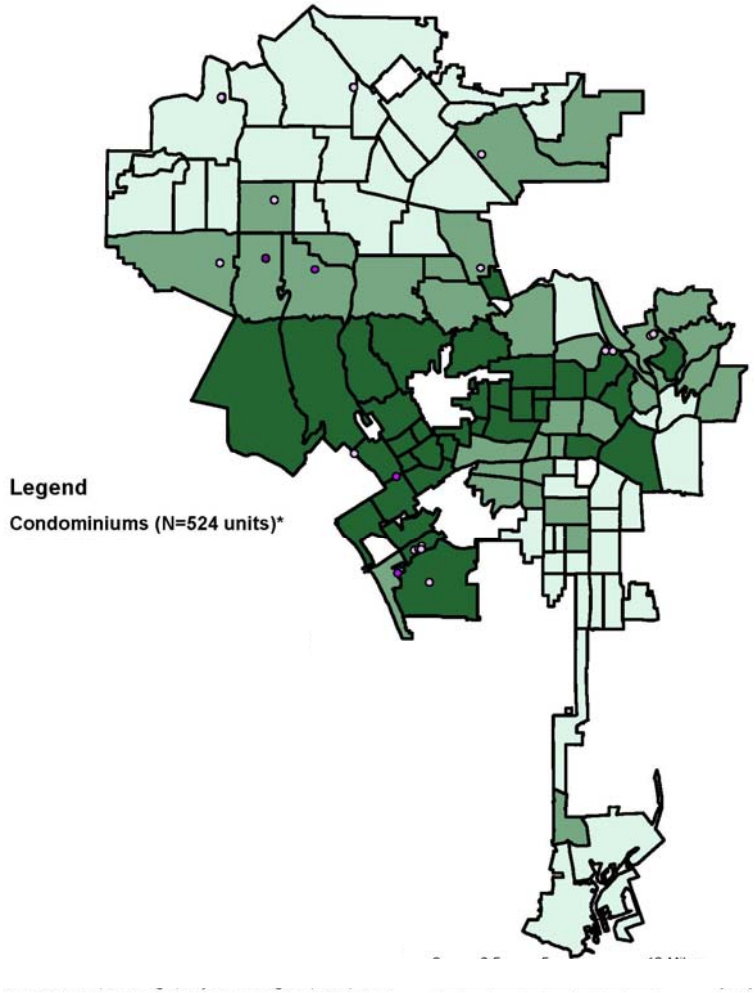
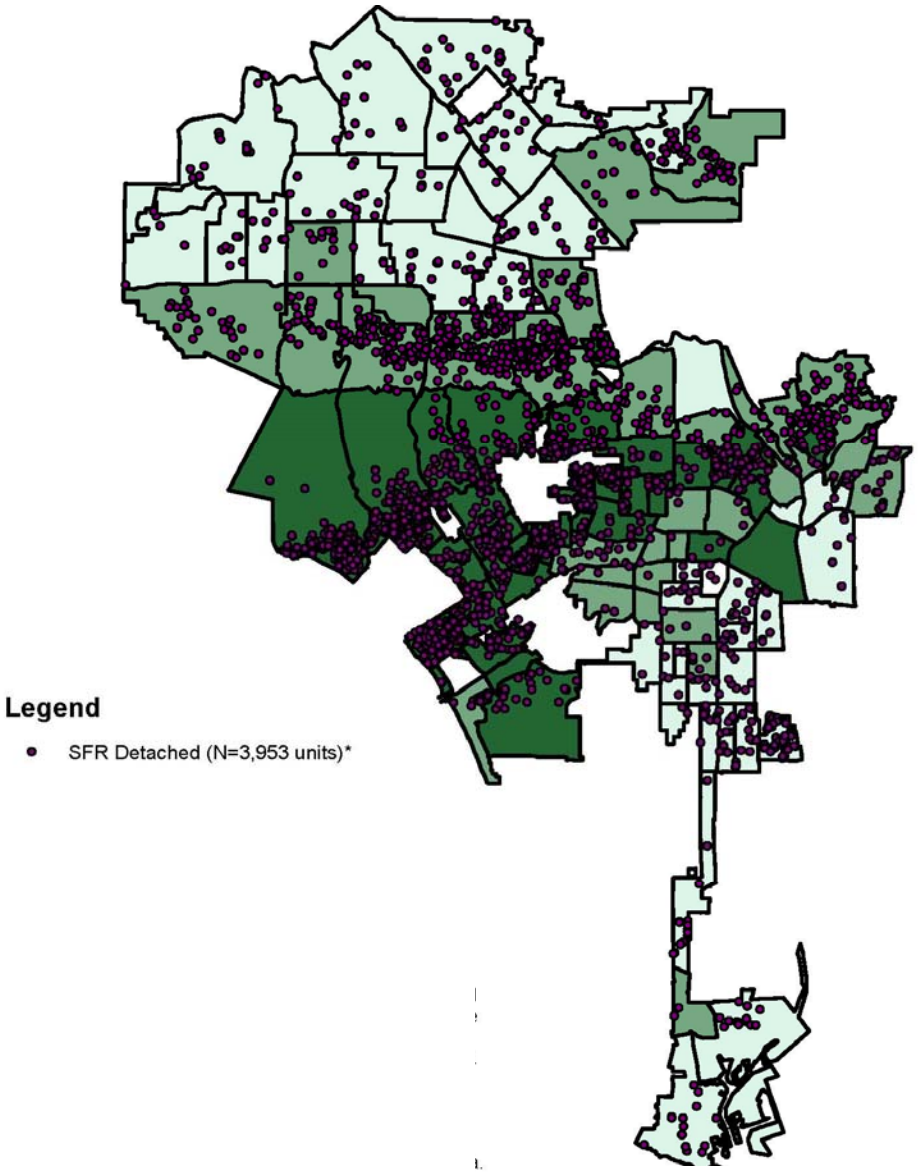
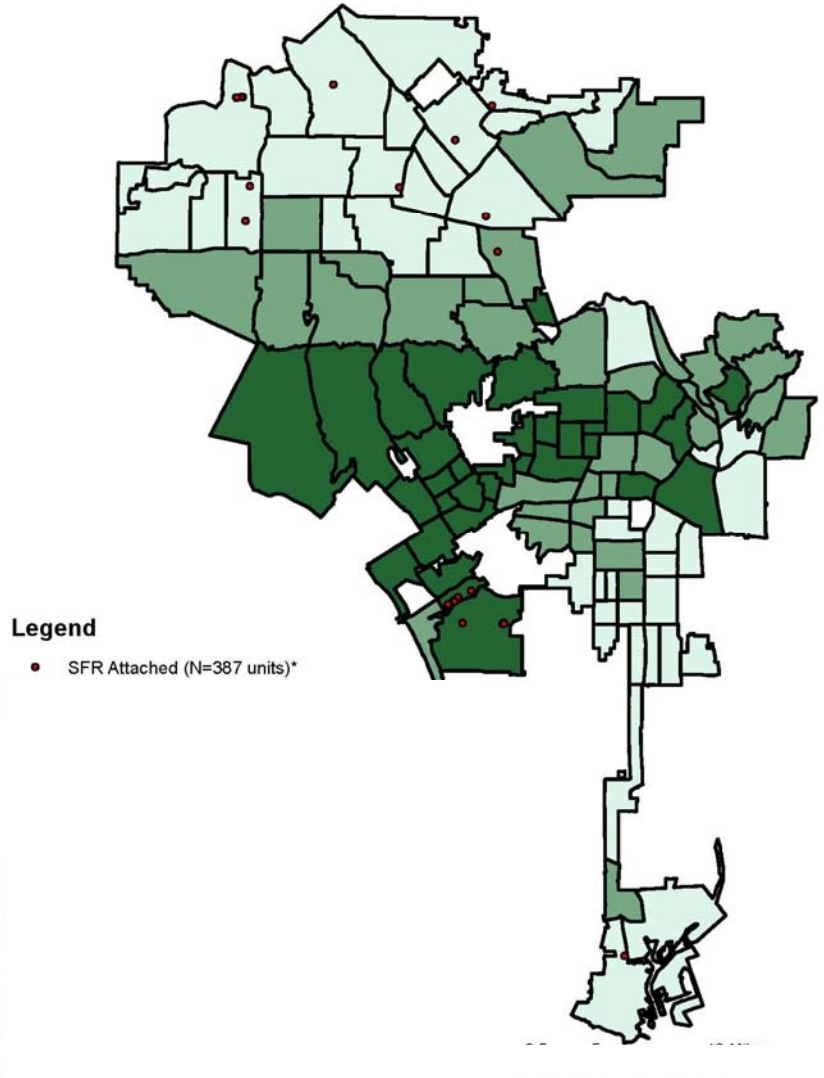


FIGURE 11: RESIDENTIAL PERMIT ACTIVITY BY MARKET CONDITION, 2011-2015






Legend
SFR Detached (N=3,953 units)*


Legend
SFR Attached (N=387 units)*

Step C: Pro Forma Analysis to Determine Maximum Feasible Fee by Land Use for Each Market Condition

This step involved the formulation of basis static pro forma models for each land use, with rent/sale revenue assumptions varied by market condition. A conservative approach was taken to ensure that feasible findings would be developed. A summary of the research informing each key assumption is described below:

- **Development Prototype** – For each land use, a median sized project was identified from actual projects permitted, as tracked by the Los Angeles Building Permit database described previously in this report. The project's actual number of stories and parking method were researched, and the project's floor area ratio (FAR) and parking ratios were estimated based on review of applicable zoning codes, resulting in a building description of each prototype[16].
- **Land Costs** – For each land use and market condition, BAE reviewed available public appraisals (see Appendix C-8), and also interviewed numerous leading developers of commercial and residential projects currently active in Los Angeles.
- **Construction Costs (Hard, Soft, and Financing)** – for each prototype, per square foot hard costs was estimated based on review of R.S. Means, a cost manual. Soft costs and financing costs were estimated based on industry standards and current interest rates.
- **Rents** – For multifamily rental, all rents for that land use in buildings built in 2006 or later were analyzed to develop a 25, 50, and 75th percent quartile rent assumption.
- **Cap Rates** – For multifamily rental, both national and regional cap rates were compiled and variations by market area were researched based on developer interviews.

The following two metrics were utilized to judge feasibility:

- **Return on Total Development Cost (ROC)** – This metric divides profit by total development cost, to judge overall project feasibility. As described in the Commercial Feasibility analysis, this metric is similar to overall return on investment in short-term investment mechanisms such as corporate bonds. To test feasibility, this metric had to achieve at least a 15 percent return on cost including for the new affordable housing fee and the applicable school fee. This metric does not account for leverage, but a separate analysis of several of the pro formas prepared for this study indicated that in the event of a typical equity/debt configuration, this metric and the 15% ROC threshold should still enable sufficient return in equity to investors.

[16] It should be noted that during the course of this analysis, discussions with builders specializing in inexpensive market rate residential units on small lots (e.g., minimum of 2,000 square feet and may be either attached or detached units) were concerned that their profit margins may not be reflected in the land uses shown herein, due to their particular business model. See further discussion in feasibility analysis summary.

- **Yield on Cost (YOC)** – This metric evaluates the annual stabilized Net Operating Income (NOI) compared to total development costs for multifamily rental housing projects only (not relevant in for-sale unit projects because these do not generate ongoing operating investment income). For the feasibility testing, based on developer interviews, multifamily rental housing was also assigned a minimum YOC threshold. Both ROC and YOC thresholds had to be achieved to deem a project feasible with the total fees (e.g., new affordable fee + school fee).

A summary of the pro forma findings is shown on the following page. Detailed pro formas are shown in the Appendix H.

Again, it should be noted that these four land use categories, based on building permit data, do not reflect several small lot subdivisions which may provide inexpensive market-rate units. For several reasons, the metrics of feasibility on these small lot inexpensive subdivisions (which may be either attached but lower than median sale prices, or detached and also lower than median sale prices), are difficult to reflect in this analytical framework due to the combination of several sources of builder profit along with the sometimes inexpensive sale prices.

Most other cities in California do not differentiate between small lot and conventional lot subdivisions, only between density and/or project size (number of units). This unique small lot detached or attached product, falling below the median in sale price by offering an inexpensive ownership unit, and reflecting the City's policy objective to encourage inexpensive small lot unit production, may be a good candidate for a partial waiver or refund of a fee, in the event that middle income ownership (e.g., inexpensive sale prices) can be demonstrated by the builder.

TABLE 25: SUMMARY OF RESIDENTIAL PRO FORMAS

Low Market scenarios not shown here, due to limited feasibility when analyzed conservatively. Low scenario pro formas shown in Appendix H.

	Apartment		Condominium		Single Family Attached		Single Family Detached	
	17825 W Devonshire St		12871 W Runway Rd		3801 Eagle Rock Blvd		Sterling (West Hills, Pulte)	
								
Assumptions for Baseline (a)	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**	**Medium**	**High**
Site Size (sf)	43,560	43,560	43,560	43,560	43,560	43,560	43,560	43,560
Total Number of Units	80	80	80	80	14	14	8	8
Average Unit Size	1,150	1,150	1,485	1,485	1,650	1,650	3,000	3,000
Number of Residential Floors	3	3	4	4	2	2	2	2
Number of Parking Stories	1	1	1	1	1	1	1	1
FAR	2.4	2.4	3.1	3.1	0.5	0.5	0.6	0.6
Parking Type	Podium		Podium		In Unit		In Unit	
Land Costs per door	$ 75,000	$ 100,000	$ 75,000	$ 100,000	$ 100,000	$ 150,000	$ 200,000	$ 400,000
Total Dev Cost/Unit (inc. land) bf new fe	$ 446,111	$ 533,526	$ 596,895	$ 869,349	$ 565,475	$ 834,972	$ 998,198	$ 1,468,383
Total Dev Cost/SF (inc. land) bf new fee	$ 337	$ 403	$ 350	$ 509	$ 343	$ 506	$ 333	$ 489
Sale Price/Sq. Ft.			$ 521	$ 785	$ 450	$ 656	$ 444	$ 953
Sale Price or Rent Per Unit	$ 3,200	$ 3,800	$ 773,685	$ 1,165,725	$ 742,500	$ 1,082,400	$ 1,332,000	$ 2,859,000
Return On Cost - Baseline	27.7%	26.8%	23.1%	27.4%	24.7%	23.2%	26.8%	85.0%
Yield on Cost - Baseline	6.4%	6.3%	NA	NA	NA	NA	NA	NA
Baseline Feasible? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Fee/Sq. Ft. (a)	**$ 18.00**	**$ 24.00**	**$ 22.00**	**$ 45.00**	**$ 26.00**	**$ 32.00**	**$ 31.00**	**$ 48.63**
New Fee per Unit	$ 23,805	$ 31,740	$ 37,571	$ 76,849	$ 42,900	$ 52,800	$ 93,000	$ 145,890
Return On Cost with Fees	20.7%	19.1%	15.2%	16.2%	15.2%	15.2%	15.1%	66.9%
Yield on Cost with Fees	6.0%	6.0%	N/A	N/A	N/A	N/A	N/A	N/A
Feasible with Fee? (b)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
New Res Fee, as % of Total Dev Costs	*5.0%*	*5.6%*	*5.9%*	*8.1%*	*7.0%*	*5.9%*	*8.5%*	*9.0%*

a) Assumes payment of proposed Qumiby fee (($10,000 per unit for subdivisions) or new Park fee ($5,000 per unit for multifamily)
Single family detached feasible fee is capped at max legal fee.

b) Feasibility measured 2 ways.

Project must achieve at least: 15.0% Return on Cost

Project must achieve at least: 6.0% Yield on Cost (if applicable)

Step D: Comparison of Feasible Fee to Maximum Legal Fee

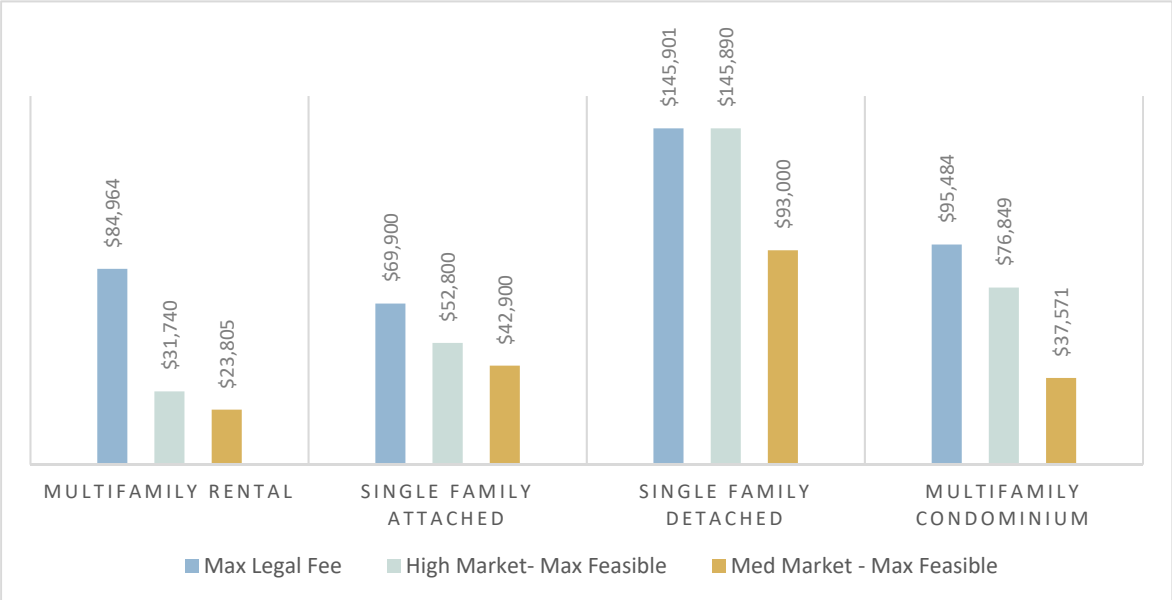
The table below compares the feasible fees estimated above, to the maximum legal fees described in the previous chapter (based on nexus analysis of new worker households). As in most other cities in California, the gap between the dollars needed to fund affordable housing for new workers (e.g., maximum legal fee) and the feasible level of fee that can be absorbed by real estate market conditions, is substantial. In other words, charging a fee that would not constrain private sector development does not usually meet all subsidy needed to mitigate the costs of the affordable housing impacts generated by the new development.

TABLE 26: COMPARISON OF RESIDENTIAL MAX LEGAL FEES TO FEASIBLE FEES

	Multifamily Rental		Multifamily Condo		Single Family Attached		Single Family Detached	
	Med	High	Med	High	Med	High	Med	High
Legal Fee (Max per Unit)	**$ 84,964**	**$ 84,964**	**$ 95,484**	**$ 95,484**	**$ 69,900**	**$ 69,900**	**$ 145,901**	**$ 145,901**
Legal Fee (Max per Sq. Ft.) (a)	**$ 73.88**	**$ 73.88**	**$ 64.30**	**$ 64.30**	**$ 42.36**	**$ 42.36**	**$ 48.63**	**$ 48.63**
								Capped at Legal Max
Feasible Fee Per Unit (b) (c)	**$ 23,805**	**$ 31,740**	**$ 37,571**	**$ 76,849**	**$ 42,900**	**$ 52,800**	**$ 93,000**	**$ 145,890**
Feasible Fee Per Sq. Ft. (b)	**$ 18.00**	**$ 24.00**	**$ 22.00**	**$ 45.00**	**$ 26.00**	**$ 32.00**	**$ 31.00**	**$ 48.63**
Feasible Fee as % of Legal Max	24.4%	32.5%	34.2%	70.0%	61.4%	75.5%	63.7%	100.0%

a) Legal Max calculated per unit in nexus analysis. Converted here to per sq.ft. based on pro forma assumptions based on sales analysis of sq. ft. of homes sold.
b) Current school fee and proposed Park fee is applied to project. Feasible Res Fee is after accounting for those costs.
c) The feasible fee per unit was derived by taking the feasible fee per square foot multiplied by the gross residential square footage divided by the number of units. As a result, while the fee is presented on a per unit basis, it accounts for area within units and common area space.

FIGURE 12: COMPARISON OF MAX RESIDENTIAL LEGAL FEES TO FEASIBLE FEES



Residential Fee Program Options & Estimated Revenues

Similar to the commercial fees, there are several options the City could select to structure a market-rate residential fee program. The following presents four program options as examples. These options are then analyzed in order to estimate total annual fee revenues, along with two kinds of potential further adjustments to exempt certain projects.

Option A: Match Fee to Market Conditions

This option would create a fee schedule which charges feasible fees based on conservatively-estimated Medium Market Area conditions to new and rehabilitated projects in those areas, and feasible fees estimated for High Market Area conditions to those areas. Project fees in Low Market Areas would likely be waived.

This option would create the most finely-tuned fee structure, but may create challenges to administer and would necessitate periodic updating to identify changing neighborhood market conditions and feasible fee levels.

Option B: Charge Medium Market Fees to Both Medium and High Market Areas

This would be a conservative option, charging the level of feasible fee derived from a Medium market area feasibility test, to all projects located in both Medium and High Market Areas. This approach would limit debate about whether an individual project is in a medium or high market area, charging the same fee per land use to all projects regardless of location. Due to the economics of Low Market areas, fees would likely not be charged in these exempt zones.

This option would simplify fee administration, but may create an uneven burden on projects due to their location and subsequent economics.

Option C: Charge Only High Market Areas

This option would limit fees to only those projects located in premium, High Market Areas, where feasibility is most assured and development is least likely to be affected. Fees charged would be at the corresponding High Market levels. Projects in Medium and Low Market Areas would be waived based on their location. As market conditions change and are re-evaluated, neighborhoods may change from medium to high market conditions and become eligible for the fee schedule.

This option would further simplify fee program administration, but may create debate over specific projects which have High Market characteristics and economics but be technically located in a Medium Market neighborhood (or vice-versa).

Option D: Charge Lowest Feasible Residential Fee Citywide (Flat Fee)

In this option, the lowest feasible fee for the lowest residential land use in a Medium Market Area (e.g., multi-family rental) would be charged across all residential uses in all markets.

The benefits of this option are that it establishes clarity, minimizes confusion and minimizes administrative functions. While this option would apply the fee to all projects, including those located in market conditions that the pro formas concluded may be infeasible, most new development projects occurring in the Low market conditions likely reflect improving submarket conditions not reflected in the broader three market segments analyzed in this report.

The estimated annual revenues that could potentially be generated by the application of these fee program options are shown on the next page.

Adjustment for Density Bonus Programs and 100 Percent Affordable Projects

Due to the anticipated different treatment for both density bonus programs and 100 percent affordable projects (e.g., "credit" for affordable units provided directly in these cases; see next chapter), the revenue estimates exclude the square feet for these projects.

Adjustment for Minimum Project Size

Many cities exempt fees for smaller projects in order to encourage infill and accommodate small businesses. For this study, multifamily rental, multifamily condo, and single family attached projects with less than five units are analyzed as a potential exempt minimum project size (see footnote c on following table for historic distribution of residential projects by number of units in project). Single family detached units were assumed to not be subject to this exemption for revenue-estimating purposes.

TABLE 27: REVENUE ESTIMATES OF FEE PROGRAM OPTIONS, ANNUAL AVERAGE

Estimates do not include possible exemptions and waivers under consideration, other than for project size, density bonus projects, & 100% affordable projects

Option A - Match Fee to Market Conditions

	Low Market		Medium Market		High Market		Total		
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Max Annual Rev Adjusted for Minimum Project Size (c)
Multifamily Rental*	$ -	1,216,635	$ 18.00	1,838,784	$ 24.00	4,618,450	7,673,869	$ 143,940,909	$ 135,304,454
Single Family Detached	$ -	459,831	$ 31.00	1,035,134	$ 48.63	2,182,417	3,677,381	$ 138,220,057	$ 138,220,057
Single Family Attatched	$ -	167,954	$ 26.00	4,783	$ 32.00	117,219	289,956	$ 3,875,358	$ 3,875,358
Multifamily Condominium	$ -	31,942	$ 22.00	100,758	$ 45.00	152,785	285,485	$ 9,092,010	$ 6,000,726
Total		1,876,362		2,979,458		7,070,871	11,926,691	**$ 295,128,333**	**$ 283,400,595**

** Multifamily Rental sq.ft. is net of density bonus & 100% aff projects.*

Option B - Medium Market Fees Applied to Both Med & High Zones

	Low Market		Medium Market		High Market		Total		
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Max Annual Rev Adjusted for Minimum Project Size (c)
Multifamily Rental*	$ -	1,216,635	$ 18.00	1,838,784	$ 18.00	4,618,450	7,673,869	$ 116,230,209	$ 109,256,396
Single Family Detached	$ -	459,831	$ 31.00	1,035,134	$ 31.00	2,182,417	3,677,381	$ 99,744,053	$ 99,744,053
Single Family Attatched	$ -	167,954	$ 26.00	4,783	$ 26.00	117,219	289,956	$ 3,172,045	$ 3,172,045
Multifamily Condominium	$ -	31,942	$ 22.00	100,758	$ 22.00	152,785	285,485	$ 5,577,951	$ 3,681,448
Total		1,876,362		2,979,458		7,070,871	11,926,691	**$ 224,724,258**	**$ 215,853,942**

** Multifamily Rental sq.ft. is net of density bonus & 100% aff projects.*

Option C - Fee in High Market Zones Only

	Low Market		Medium Market		High Market		Total		
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Max Annual Rev Adjusted for Minimum Project Size (c)
Multifamily Rental*	$ -	1,216,635	$ -	1,838,784	$ 24.00	4,618,450	7,673,869	$ 110,842,800	$ 104,192,232
Single Family Detached	$ -	459,831	$ -	1,035,134	$ 48.63	2,182,417	3,677,381	$ 106,130,917	$ 106,130,917
Single Family Attatched	$ -	167,954	$ -	4,783	$ 32.00	117,219	289,956	$ 3,751,005	$ 3,751,005
Multifamily Condominium	$ -	31,942	$ -	100,758	$ 45.00	152,785	285,485	$ 6,875,331	$ 4,537,719
Total		1,876,362		2,979,458		7,070,871	11,926,691	**$ 227,600,053**	**$ 218,611,873**

** Multifamily Rental sq.ft. is net of density bonus & 100% aff projects.*

Option D - Lowest Residential Feasible Fee Charged Citywide

	Low Market		Medium Market		High Market		Total		
Use	Lowest Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Lowest Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Lowest Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue	Max Annual Rev Adjusted for Minimum Project Size (c)
Multifamily Rental*	$ 18.00	1,216,635	$ 18.00	1,838,784	$ 18.00	4,618,450	7,673,869	$ 138,129,638	$ 129,841,860
Single Family Detached	$ 18.00	459,831	$ 18.00	1,035,134	$ 18.00	2,182,417	3,677,381	$ 66,192,865	$ 66,192,865
Single Family Attatched	$ 18.00	167,954	$ 18.00	4,783	$ 18.00	117,219	289,956	$ 5,219,208	$ 5,219,208
Multifamily Condominium	$ 18.00	31,942	$ 18.00	100,758	$ 18.00	152,785	285,485	5,138,730	$ 3,391,562
Total		1,876,362		2,979,458		7,070,871	11,926,691	**$ 214,680,442**	**$ 204,645,495**

** Multifamily Rental sq.ft. is net of density bonus & 100% aff projects.*

Notes:

a) Sq.Ft. for each land use based on avg. annual permit data adjusted to waive density bonus & 100% aff projects, as follows:

Annual Average 2011-2015

	All Units Built	Total Sq. Ft. Built	Units in Density Bonus Projects	100% Affordable Projects	Units Built Net of Density Bonus & Affordable	Net Sq. Ft. Built
Multifamily Rental	8,268	9,791,525	1,344	444	6,480	7,673,869
Single Family Detached	990	3,677,381	0	0	990	3,677,381
Single Family Attached	124	289,956	0	0	124	289,956
Multifamily Condominium	142	285,485	0	0	142	285,485
Total	9,524	14,044,347	1,344	444	7,736	11,926,691

b) Allocation of Sq. Ft. per Market Area category- based on geocoding of all permits excluding density bonus and 100% affordable projects:

	% Sq.Ft. in Low Markets	% Sq.Ft. in Med Markets	% Sq.Ft. in High
Multifamily Rental	15.9%	24.0%	60.2%
Single Family Detached	12.5%	28.1%	59.3%
Single Family Attached	57.9%	1.6%	40.4%
Multifamily Condominium	11.2%	35.3%	53.5%

c) Adjusted for minimum project size (5+ units)

	Below Min Project Size	Above Min Project Size
Multifamily Rental	6%	94%
Single Family Detached	NA	NA
Single Family Attached	0%	100%
Multifamily Condominium	34%	66%

Also similar to the commercial fee revenue estimates, two Specific Plans (West Los Angeles and the Coastal Transportation Corridor) currently charge a range of TIA fees and both have been proposed for increases in these fees. The map below shows the location of the TIAs and following pages show the effect of incorporating these proposed fees and charging a net feasible fee for affordable housing in those two Specific Plan areas.

FIGURE 13: RESIDENTIAL MARKET AREAS AND TIAS

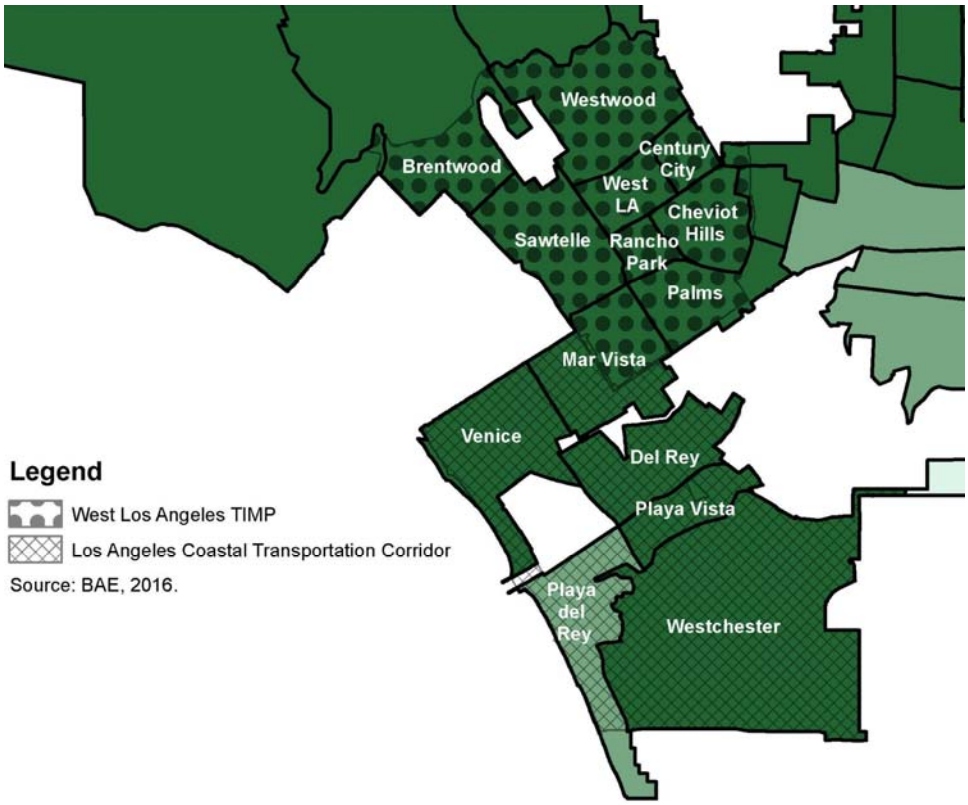


TABLE 28: RESIDENTIAL ESTIMATE FEE REVENUES WITH TIA ADJUSTMENTS

Estimates do not incorporate exemptions and waivers under consideration other than density bonus projects & 100% affordable projects.

	Option A - Citywide Fee Per Market Area Zones							
	Low Market		Medium Market		High Market		Total	
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue
Multifamily Rental* outside TIAs	$ -	1,216,635	$ 18.00	1,838,784	$ 24.00	3,851,063	6,906,482	$ 125,523,623
Multifamily Rental in TIAs*	*$ -*	*0*	*$ 13.46*	*0*	*$ 19.46*	*767,387*	*767,387*	*$ 14,932,681*
Single Family Detached outside TIAs	$ -	459,831	$ 31.00	1,020,424	$ 48.63	1,719,066	3,199,322	$ 115,231,348
Single Family Detached in TIAs	*$ -*	*0*	*$ 25.64*	*14,710*	*$ 43.27*	*463,350*	*478,060*	*$ 20,425,440*
Single Family Attatched outside TIAs	$ -	167,954	$ 26.00	4,783	$ 32.00	60,967	233,705	$ 2,075,311
Single Family Attatched in TIAs	*$ -*	*0*	*$ 21.74*	*0*	*$ 27.74*	*56,251*	*56,251*	*$ 1,560,620*
Multifamily Condominium outside TIAs	$ -	31,942	$ 22.00	87,911	$ 45.00	90,835	210,688	$ 6,021,618
Multifamily Condominium in TIAs	*$ -*	*0*	*$ 17.27*	*12,847*	*$ 40.27*	*61,950*	*74,797*	*$ 2,716,654*
Total		1,876,362		2,979,458		7,070,871	11,926,691	**288,487,297**

	Option B - Citywide Fee with Med Fee Applied to Both Med & High Zones							
	Low Market		Medium Market		High Market		Total	
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue
Multifamily Rental* outside TIAs	$ -	1,216,635	$ 18.00	1,838,784	$ 18.00	3,851,063	6,906,482	$ 102,417,245
Multifamily Rental in TIAs*	*$ -*	*0*	*$ 13.46*	*0*	*$ 13.46*	*767,387*	*767,387*	*$ 10,328,360*
Single Family Detached outside TIAs	$ -	459,831	$ 31.00	1,020,424	$ 31.00	1,719,066	3,199,322	$ 84,924,206
Single Family Detached in TIAs	*$ -*	*0*	*$ 25.64*	*14,710*	*$ 25.64*	*463,350*	*478,060*	*$ 12,256,578*
Single Family Attatched outside TIAs	$ -	167,954	$ 26.00	4,783	$ 26.00	60,967	233,705	$ 1,709,507
Single Family Attatched in TIAs	*$ -*	*0*	*$ 21.74*	*0*	*$ 21.74*	*56,251*	*56,251*	*$ 1,223,111*
Multifamily Condominium outside TIAs	$ -	31,942	$ 22.00	87,911	$ 22.00	90,835	210,688	$ 3,932,416
Multifamily Condominium in TIAs	*$ -*	*0*	*$ 17.27*	*12,847*	*$ 17.27*	*61,950*	*74,797*	*$ 1,291,798*
Total		1,876,362		2,979,458		7,070,871	11,926,691	**218,083,221**

	Option C - Fee in High Market Zones Only							
	Low Market		Medium Market		High Market		Total	
Use	Low Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Med Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	High Feasible Fee per Sq. Ft.	Annual Avg. Sq. Ft. (a)(b)	Annual Avg. Sq. Ft.	Potential Max Annual Revenue
Multifamily Rental* outside TIAs	$ -	1,216,635	$ -	1,838,784	$ 24.00	3,851,063	6,906,482	$ 92,425,515
Multifamily Rental in TIAs*	*$ -*	*0*	*$ -*	*0*	*$ 19.46*	*767,387*	*767,387*	*$ 14,932,681*
Single Family Detached outside TIAs	$ -	459,831	$ -	1,020,424	$ 48.63	1,719,066	3,199,322	$ 83,598,204
Single Family Detached in TIAs	*$ -*	*0*	*$ -*	*14,710*	*$ 43.27*	*463,350*	*478,060*	*$ 20,048,314*
Single Family Attatched outside TIAs	$ -	167,954	$ -	4,783	$ 32.00	60,967	233,705	$ 1,950,959
Single Family Attatched in TIAs	*$ -*	*0*	*$ -*	*0*	*$ 27.74*	*56,251*	*56,251*	*$ 1,560,620*
Multifamily Condominium outside TIAs	$ -	31,942	$ -	87,911	$ 45.00	90,835	210,688	$ 4,087,570
Multifamily Condominium in TIAs	*$ -*	*0*	*$ -*	*12,847*	*$ 40.27*	*61,950*	*74,797*	*$ 2,494,780*
Total		1,876,362		2,979,458		7,070,871	11,926,691	**221,098,643**

** Multifamily Rental sq.ft. is net of density bonus & 100% aff projects.*

Option D would not be affected by the presence of TIAs.

Footnotes shown on next page

Notes:

a) Sq.Ft. for each land use based on avg. annual permit data adjusted to waive density bonus & 100% aff projects, as follows:

	Annual Average 2011-2015					
	All Units Built	Total Sq. Ft. Built	Units in Density Bonus Projects	100% Affordable Projects	Units Built Net of Density Bonus & Affordable	Net Sq. Ft. Built
Multifamily Rental	8,268	9,791,525	1,344	444	6,480	7,673,869
Single Family Detached	990	3,677,381	0	0	990	3,677,381
Single Family Attached	124	289,956	0	0	124	289,956
Multifamily Condominium	142	285,485	0	0	142	285,485
Total	9,524	14,044,347	1,344	444	7,736	11,926,691

b) Allocation of Sq. Ft. per Market Area category- based on geocoding of all permits excluding density bonus and 100% affordable projects:

	% Sq.Ft. in Low Markets	% Sq.Ft. in Med Markets	% Sq.Ft. in High Markets
Multifamily Rental	15.9%	24.0%	60.2%
Single Family Detached	12.5%	28.1%	59.3%
Single Family Attached	57.9%	1.6%	40.4%
Multifamily Condominium	11.2%	35.3%	53.5%

c) Adjusted for minimum project size (5+ units)

	Below Min Project Size	Above Min Project Size
Multifamily Rental	6%	94%
Single Family Detached	68%	32%
Single Family Attached	0%	100%
Multifamily Condominium	34%	66%

d) Figures overestimate revenue if TIA fees are accounted for in two specific plan aras where TIA fees are charged. The highlighted figures represent the maximum fee for each prototype, which are used in the above calculation. The proposed TIA fees are (fees per unit converted to square foot fees based on unit sizes used for the pro forma analysis):

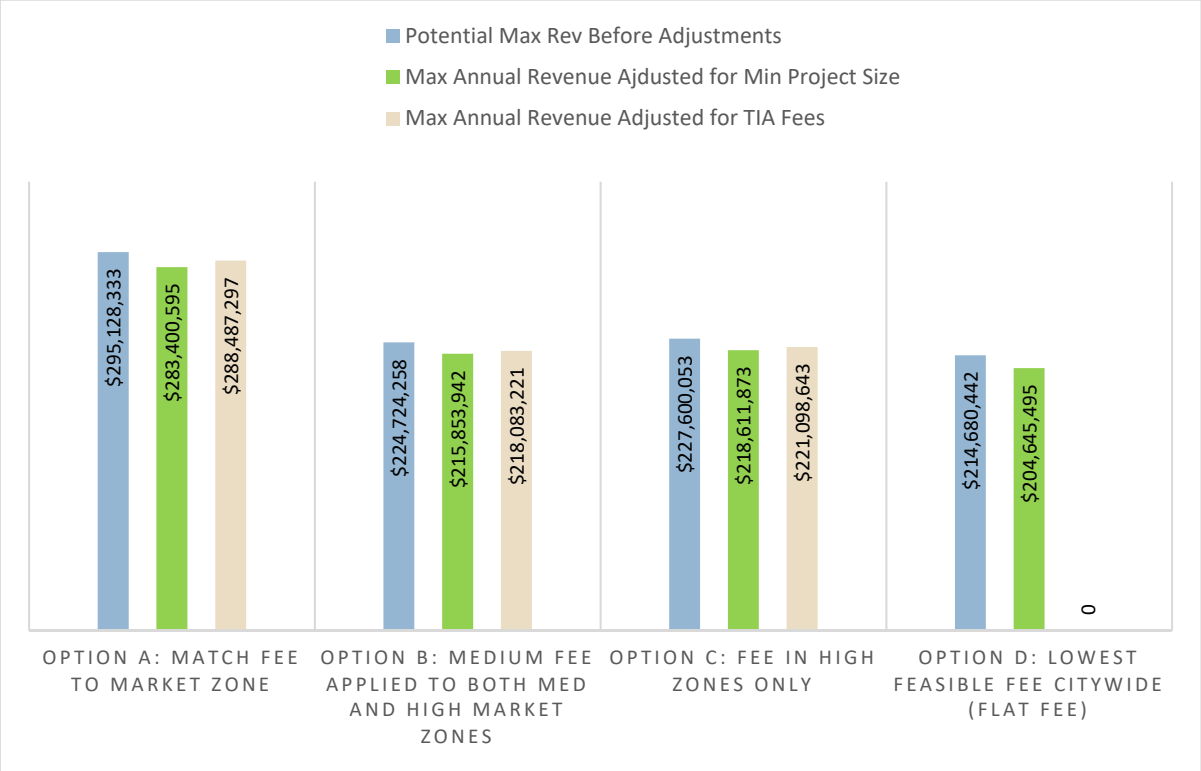
	Proposed TIA Fees		Max Supportabe Fee - Medium		Max Supportabe Fee - High	
	West LA	CTCSP	West LA	CTCSP	West LA	CTCSP
Multifamily Rental	$ 4.54	$ 4.04	$ 13.46	$ 13.96	$ 19.46	$ 19.96
Single Family Detached	$ 3.31	$ 5.36	$ 27.69	$ 25.64	$ 45.32	$ 43.27
Single Family Attached	$ 4.26	$ 3.79	$ 21.74	$ 22.21	$ 27.74	$ 28.21
Multifamily Condominium	$ 4.73	$ 4.21	$ 17.27	$ 17.79	$ 40.27	$ 40.79

Allocation of Sq. Ft. per Market Area category within TIAs

	% Units in Low	% of Units in Med	% of Units in High	Total Activity in TIAs
Multifamily Rental	0.0%	0.0%	10.0%	10.0%
Single Family Detached	0.0%	0.4%	12.6%	13.0%
Single Family Attached	0.0%	0.0%	19.4%	19.4%
Multifamily Condominium	0.0%	4.5%	21.7%	26.2%

In summary, the range of fee program options and their associated revenues for an average year are as follows:

FIGURE 14: ESTIMATE OF POTENTIAL ANNUAL RESIDENTIAL FEE REVENUE



Considerations for Implementation

Fees by Geographic Area

Similar to the commercial fee discussion of implementation earlier in this report, the City of Los Angeles could adopt a market-rate residential fee schedule which varies the required fee by geographic area, as related to market condition. Further variations of this approach, which would match the feasible fee to the geographic area, are then possible to structure.

Phase-In of Fee Schedule

A key component of adopting a commercial fee in Los Angeles will be the phase-in schedule. Most notably, most cities when first adopting a fee like this, set a future date for its implementation, and also define and waive current "pipeline" projects which would have been started without knowledge of this fee. Moreover, to mitigate the initial perceived "shock to the system" of a new residential fee, a phase-in schedule would help to mitigate this risk.

For these reasons, it is recommended that if Los Angeles adopts a residential fee program, it should consider a two-year phased-in schedule when initially implemented. The fee schedule, for example, could be set at half of the full fee for the first year of applicability, rising to the full 100 percent of the fee on projects seeking building permits 12 months later and beyond.

Fee Exemptions and Waivers

As profiled in the case studies of commercial fees, other cities in California have variable approaches to making categories of land use either exempt from residential fees or waiving fees under certain conditions.

Fee Exemptions

This study was conducted assuming that 100 percent affordable housing projects residential projects would be exempt from residential fees since affordable housing is being provided. Los Angeles could also exempt projects smaller than a certain size threshold, as discussed earlier in this study.

Fee Waivers

The next chapter explores the Los Angeles Density Bonus Program, which involves market-rate residential projects incorporating affordable units in exchange for additional allowable floor area ratio (FAR) in conformance with state law. This program means that these projects are already providing affordable units within the same project, although the levels of required affordable units to achieve FAR increases are lower than the nexus study levels of affordable housing need identified as generated from current market rate projects.

The revenue estimates for the residential fee included an example adjustment that can also be built into the regulations for Transportation Investment Areas (TIAs), which are currently applicable only to the Specific Plans for West Los Angeles and the Coastal Transportation

Corridor. In the even other areas of Los Angeles have the eventual need to adopt area transportation impact fees, the residential fee could be partially waived (reduced) to accommodate those other fees.

Another kind of waiver could be considered in cases where developers are applying to build inexpensive market rate homes in Low or Medium market areas on small lots (can be attached or detached units); these units are typically built with inexpensive finishes and sold at relatively inexpensive sale prices. Analysis for this report, and discussions with builders of these products, indicated concern for the ability to absorb a linkage fee and still provide this type of unit. If such units were sold at prices that served a policy objective (such as ownership housing serving 110 percent AMI households), a reduction or waiver in the fee may help limit this type of potential overlap between policy objectives.

Finally, most cities allow for a waiver request if a) economic hardship can be demonstrated or b) if lesser affordable housing job impacts can be demonstrated. Excluding the issue of the planned increase in minimum wage, it is recommended that these two options be narrowly allowed per legal requirements, but not more broadly offered, to minimize administrative burden on staff.

Timing of Fee Calculation and Payment

As profiled in the case studies, most cities charge the residential fee prior to or at the time of building permit issuance. Several cities split up the payments, allowing for partial payment later (at Certificate of Occupancy), while a few cities spread payments even farther apart over time, allowing for essentially a payment plan or the choice of an upfront net present value payment of the entire amount.

For several reasons, it is recommended that for the City of Los Angeles, the fee payment be split only into at most, two equal installments – at the time of building permit issuance and at the time of Certificate of Occupancy. This recommendation is made at this limited level, due to the overarching immediate need to create a permanent source of funding for affordable housing.

Additional Considerations

Effect of Los Angeles Minimum Wage Phase-In Schedule

In 2015, the Los Angeles City Council passed a City Minimum Wage Ordinance that will increase the minimum wage to $15 per hour for all employers in the City, with increases in the minimum wage phased in between 2016 and 2021. Employers with more than 25 employees will be required to reach the $15 minimum wage by 2020, while some nonprofit organizations and employers with 25 or fewer employees are eligible to receive an additional year to reach the $15 minimum wage. This section provides an analysis of the potential impact of the City's minimum wage ordinance on the legal maximum commercial linkage and affordable housing impact fee calculations presented in the preceding sections of this report.

Methodology

BAE analyzed the potential impacts of the increase in the minimum wage by determining the household AMI levels for workers that will earn the new minimum wage and adjusting the household income distribution among the workers generated by each residential or commercial land use type accordingly. BAE then re-calculated the maximum fee based on the adjusted household income distribution. This section provides an overview of the methodology used to analyze the potential impacts of the minimum wage ordinance on the maximum legal fee calculations. Calculation tables and additional detail about the methodology used in this analysis are shown in Appendix E.

Step 1: Determine the AMI band for households at the new minimum wage. The $15 per hour minimum wage that will apply to most employers in 2020 is equivalent to an estimated wage of $13.33 per hour in 2016 dollars, translating to an annual income equal to approximately $27,700 for a full-time employee. Assuming 1.77 workers per worker household, the estimated annual household income for an employee working full time at minimum wage would be approximately $48,900. According to 2016 HCD income limits for a household in Los Angeles County, a household earning an income of $48,900 falls within the low-income AMI band for two- to five-person households.

Step 2: Adjust the household income distribution for workers generated by new development. Based on the findings from Step 1, all worker households that fall into the extremely low- or very low-income AMI bands under current minimum wage requirements would fall into the low-income AMI band following an increase in the minimum wage to $15 in 2020. For each residential product type and commercial land use analyzed in the preceding maximum fee calculations, the household income distribution among worker households was adjusted by moving all extremely low- and very low-income households into the low-income AMI band.

Step 3: Re-calculate the maximum legal fees using the adjusted AMI distributions. Step 2 results in an income distribution that shows a reduction in extremely low- and very low-income households (to zero) and a commensurate increase in low-income households. Since the subsidy gap for low-income units is smaller than the subsidy gap for extremely low- or very low-income units, the cost associated with providing housing for households below the moderate income level decreases somewhat as extremely low- and very low-income households shift to become low-income households. The reduced cost of providing affordable housing translates directly to a lower maximum legal fee due to the increase in the minimum wage.

Findings

The increase in the City of Los Angeles minimum wage is not expected to impact the recommended fee rates, despite anticipated reductions in the maximum legal fees.

Although the increase in the minimum wage will decrease the maximum legal commercial linkage fee, the maximum legal fee will still be higher than the anticipated fee rate. As shown in Table 29, the planned increase in the minimum wage will decrease the maximum legal fee for each of the eight commercial land uses, resulting in maximum legal fees that range from approximately $100 per square foot to $261 per square foot, depending on the specific use. These lower maximum legal fees are nonetheless significantly higher than the feasible fee rates and the fees likely to be adopted by the City. In the event that the City adopts fee rates that are higher than those shown in the table below, it may necessary for the City to revisit the fee rates following implementation of the minimum wage increase.

TABLE 29: MAXIMUM LEGAL COMMERCIAL FEE, FUTURE MINIMUM WAGE

	Office	Retail	Industrial	Hotel/ Motel	Warehouse	Hospital	Institutional
Maximum Legal Fee (per sq. ft.)							
With Current (2016) Minimum Wage	$248	$309	$131	$133	$118	$196	$197
With Increased Minimum Wage in 2020	$213	$261	$112	$114	$100	$169	$168

Note:
See detailed calculations in Appendix I.
Source: BAE, 2016.

Similarly, the increase in the minimum wage will decrease the maximum legal affordable housing impact fee, though not below the anticipated fee rates. As shown in Table 30, the planned increase in the minimum wage will decrease the maximum legal fee for each of the four residential product types, resulting in maximum legal fees that range from approximately $59,600 per unit to $124,300 per unit. However, the maximum legal fees will remain higher than the fee rates likely to be adopted by the City. In the event that the City adopts fee rates that are higher than those shown in the table below, it may necessary for the City to revisit the fee rates following implementation of the minimum wage increase.

TABLE 30: MAXIMUM LEGAL HOUSING FEE UNDER FUTURE MINIMUM WAGE REQUIREMENTS

	Multifamily Rental	Condominium	Single-Family Attached	Single-Family Detached
Maximum Legal Fee (per unit)				
With Current (2016) Minimum Wage	$84,964	$95,484	$69,900	$145,901
With Increased Minimum Wage in 2020	$72,437	$81,385	$59,578	$124,339

Note:
See detailed calculations in Appendix I.
Source: BAE, 2016.

Option to Provide On-Site Units

Many cities with market-rate housing fees provide the option to developers to waive these fees if on-site affordable units are provided instead. This section calculates the proportion of affordable units that would need to be provided on-site for this option, and is based on the analysis of affordable housing need generated by new market-rate units in Los Angeles, as previously presented in shown in Table 24.

Table 31 shows the proportion of units that would be required to fully address the need for affordable units generated by market-rate units on site in mixed-income developments. This analysis uses the base 100 market-rate units in each of the development prototypes that were identified in the maximum fee calculations shown in this report, and adds the affordable unit need generated by these market-rate units to the project in order to demonstrate the number of units and income mix needed to address this need on site. For example, the figures in Table 24 show that 100 units of market-rate multifamily rental housing generate a need for 22.8 affordable units. The figures in Table 31 therefore assume a hypothetical 122.8-unit project comprised of 100 market-rate units and the 22.8 affordable units that are needed to address the affordable housing impacts of the market-rate units on site. The figures in Table 31 then calculate the numerical proportion of the total 122.8-unit project that would be comprised of units at each affordability level.

Table 31 also provides a weighting of the proportion of units at each affordability level to convert the entire need into units that serve each affordability level in order to estimate the number of units that would need to be provided on site at a single affordability level. As shown, the estimated proportions at single affordability levels are as follows:

- Multifamily Rental: 12 percent at extremely-low income, 16 percent at very-low income, 22 percent at low-income, or 29 percent at moderate income.
- Condominiums: 14 percent at extremely-low income, 18 percent at very-low income, 24 percent at low-income, or 32 percent at moderate income.
- Single-Family Attached: 11 percent at extremely-low income, 14 percent at very-low income, 18 percent at low-income, or 25 percent at moderate income.

- Single-Family Detached: 19 percent at extremely-low income, 24 percent at very-low income, 33 percent at low-income, or 44 percent at moderate income.

TABLE 31: ON-SITE UNITS NEEDED TO MITIGATE MARKET-RATE UNIT'S IMPACT

	Affordable Units					Market-	Total
Multifamily Rental	**ELI**	**VLI**	**LI**	**Mod**	**Total**	**Rate**	**Project (a)**
Number of Units (b)	6.1	6.0	8.0	2.6	22.8	100	122.8
Percent of Total Project	5.0%	4.9%	6.5%	2.1%	18.5%	81.5%	100.0%
Percent of Total - Weighted to ELI (c)	12.4%	0.0%	0.0%	0.0%	12.4%	87.6%	100.0%
Percent of Total - Weighted to VLI (c)	0.0%	16.1%	0.0%	0.0%	16.1%	83.9%	100.0%
Percent of Total - Weighted to LI (c)	0.0%	0.0%	21.7%	0.0%	21.7%	78.3%	100.0%
Percent of Total - Weighted to Mod (c)	0.0%	0.0%	0.0%	29.1%	29.1%	70.9%	100.0%
Condominiums							
Number of Units (b)	6.9	6.8	9.0	2.9	25.6	100	125.6
Percent of Total Project	5.5%	5.4%	7.1%	2.3%	20.4%	79.6%	100.0%
Percent of Total - Weighted to ELI (c)	13.6%	0.0%	0.0%	0.0%	13.6%	86.4%	100.0%
Percent of Total - Weighted to VLI (c)	0.0%	17.7%	0.0%	0.0%	17.7%	82.3%	100.0%
Percent of Total - Weighted to LI (c)	0.0%	0.0%	23.8%	0.0%	23.8%	76.2%	100.0%
Percent of Total - Weighted to Mod (c)	0.0%	0.0%	0.0%	31.9%	31.9%	68.1%	100.0%
Single-Family Attached							
Number of Units (b)	5.0	5.0	6.6	2.1	18.7	100	118.7
Percent of Total Project	4.2%	4.2%	5.5%	1.8%	15.8%	84.2%	100.0%
Percent of Total - Weighted to ELI (c)	10.5%	0.0%	0.0%	0.0%	10.5%	89.5%	100.0%
Percent of Total - Weighted to VLI (c)	0.0%	13.7%	0.0%	0.0%	13.7%	86.3%	100.0%
Percent of Total - Weighted to LI (c)	0.0%	0.0%	18.4%	0.0%	18.4%	81.6%	100.0%
Percent of Total - Weighted to Mod (c)	0.0%	0.0%	0.0%	24.7%	24.7%	75.3%	100.0%
Single-Family Detached							
Number of Units (b)	10.5	10.4	13.7	4.5	39.1	100	139.1
Percent of Total Project	7.6%	7.5%	9.8%	3.2%	28.1%	71.9%	100.0%
Percent of Total - Weighted to ELI (c)	18.8%	0.0%	0.0%	0.0%	18.8%	81.2%	100.0%
Percent of Total - Weighted to VLI (c)	0.0%	24.4%	0.0%	0.0%	24.4%	75.6%	100.0%
Percent of Total - Weighted to LI (c)	0.0%	0.0%	32.8%	0.0%	32.8%	67.2%	100.0%
Percent of Total - Weighted to Mod (c)	0.0%	0.0%	0.0%	44.1%	44.1%	55.9%	100.0%
Weighting Factors							
AMI Levels	30%	50%	80%	120%			
Weighting Factors - to ELI Units (d)	1.0	0.8	0.5	0.1			
Weighting Factors - to VLI Units (d)	1.2	1.0	0.7	0.3			
Weighting Factors - to LI Units (d)	1.5	1.3	1.0	0.6			
Weighting Factors - to Mod Units (d)	1.9	1.7	1.4	1.0			

Notes:
(a) "Total Project" includes all 100 market-rate units in the sample project plus the affordable housing need generated by these 100 units.
(b) From Table 24.
(c) Weighting to income levels represents a conversion of the percent of affordable units by AMI level into a single AMI band, based on the weighting factors shown in the table and described in footnote (d).
(d) Weighting factor = 1 + (%AMI threshold units are weighted to - % AMI threshold of weighted unit type). For example, the weighting factor to convert VLI units into LI units is: 1 + (80% - 50%), since 80% is the AMI level for LI units and 50% is the AMI level for VLI units.
Source: BAE, 2016.

Voluntary Density Bonus vs. Market-Rate Housing Fee

This section provides an overview of the use of the California State Bonus Law in the City of Los Angeles, compares the outcomes from the Density Bonus to the potential outcomes of the market-rate housing fee analyzed in this study, and provides a policy options for the implementation of the market-rate housing fee in combination with the State Density Bonus.

California Density Bonus Overview

The California State Density Bonus Law (California Government Code Sections 65915 through 65918) entitles developers to certain development incentives for projects that include a prescribed amount of affordable housing. For developers, the State Density Bonus Law is a voluntary, incentive-based program, which allows developers to opt in on a project-by-project basis in exchange for incentives. All cities in California are mandated by State Law to adopt the State Density Bonus.

Depending on the share of affordable units provided, development incentives under the State Density Bonus Law include up to a 35 percent increase in density over the density otherwise allowed on the project site. Projects in which at least 10 percent of units are affordable to low-income households or five percent of units are affordable to very low income households are eligible for a 20 percent density bonus, while projects with higher proportions of affordable units are eligible for larger density bonuses. In addition, condominium developments, planned developments, and stock cooperatives are eligible for a five percent density bonus if at least ten percent of units are moderate-income units, with density bonuses up to 35 percent for larger proportions of moderate-income units.

TABLE 32: CALIFORNIA STATE DENSITY BONUS PROVISIONS

	Density Bonus by Affordability Level		
Affordable Unit Percentage (a)	Very Low Income Units	Low Income Units	Moderate Income Units
5%	20.0%	N/A	N/A
6%	22.5%	N/A	N/A
7%	25.0%	N/A	N/A
8%	27.5%	N/A	N/A
9%	30.0%	N/A	N/A
10%	32.5%	20.0%	5.0%
11%	35.0%	21.5%	6.0%
12%	35.0%	23.0%	7.0%
13%	35.0%	24.5%	8.0%
14%	35.0%	26.0%	9.0%
15%	35.0%	27.5%	10.0%
16%	35.0%	29.0%	11.0%
17%	35.0%	30.5%	12.0%
18%	35.0%	32.0%	13.0%
19%	35.0%	33.5%	14.0%
20%	35.0%	35.0%	15.0%
21%	35.0%	35.0%	16.0%
22%	35.0%	35.0%	17.0%
23%	35.0%	35.0%	18.0%
24%	35.0%	35.0%	19.0%
25%	35.0%	35.0%	20.0%
26%	35.0%	35.0%	21.0%
27%	35.0%	35.0%	22.0%
28%	35.0%	35.0%	23.0%
29%	35.0%	35.0%	24.0%
30%	35.0%	35.0%	25.0%
31%	35.0%	35.0%	26.0%
32%	35.0%	35.0%	27.0%
33%	35.0%	35.0%	28.0%
34%	35.0%	35.0%	29.0%
35%	35.0%	35.0%	30.0%
36%	35.0%	35.0%	31.0%
37%	35.0%	35.0%	32.0%
38%	35.0%	35.0%	33.0%
39%	35.0%	35.0%	34.0%
40%	35.0%	35.0%	35.0%

Note:
(a) Affordable unit percentage applies the base (i.e., without density bonus) density. Calculation of the share of affordable units is conducted before adding market-rate units added by the density bonus.
Sources: CA Government Code Sections 65915-65918; BAE, 2016.

Use of State Density Bonus in Los Angeles

Use of the density bonus is fairly common among recent residential developments in Los Angeles. Between 2011 and 2015, 7,915 market-rate and affordable units were developed in density bonus projects in Los Angeles, accounting for 17 percent of all units built in the City, as shown in Table 33, not including 100 percent affordable developments that received a density bonus. Of this total, 683 units in density bonus projects were very low-, low-, or moderate-income units, a number equal to nine percent of the total number of market-rate units in density bonus projects.

Among multifamily rental developments, 6,722 market-rate and affordable units were in projects that received a density bonus between 2011 and 2015, amounting to 16 percent of multifamily rental units permitted in Los Angeles during this period. Multifamily rental developments that received a density bonus generated 585 affordable units, a number equivalent to 10 percent of the number of market-rate units in density bonus projects. Condominium developments that received a density bonus between 2011 and 2015 included 1,193 market-rate and affordable units, comprising 19 percent of all units in the City during the same period.

Density bonus projects produced 98 affordable for-sale units, a number equal to nine percent of all units in density bonus projects.

TABLE 33: UNITS IN DENSITY BONUS PROJECTS, CITY OF LOS ANGELES, 2011-2015

	Multifamily Rental	Condominium	Total
Very Low (AMI up to 50%)	497	95	592
Low (AMI 50%-80%)	73	2	75
Moderate (AMI 80%-120%)	15	1	16
Affordable Unit Total	**585**	**98**	**683**
Market-Rate Units in Density Bonus Projects	6,137	1,095	7,232
Total Units in Density Bonus Projects	**6,722**	**1,193**	**7,915**
Affordable Units as a % of Market-Rate Units in Density Bonus Projects	**9.5%**	**8.9%**	**9.4%**
Total Units Permitted in City (Density Bonus Projects + Other Projects)	41,341	6,280	47,621
Units in Density Bonus Projects as a Share of All Units Permitted	**16.3%**	**19.0%**	**16.6%**

Note:
Figures exclude projects that are comprised only of affordable units.
Sources: City of Los Angeles, 2011-2015; BAE, 2016.

Comparison of Density Bonus to Market-Rate Housing Fee

On a project-by-project basis, the density bonus does not generate enough units to meet the affordable housing need generated by the market-rate units in density bonus projects. As detailed in the section of this report that shows the maximum market-rate housing fee calculations and shown in Table 34 below, 100 units of market-rate multifamily housing generates a need for 22.8 affordable units. Mixed-income (i.e., not 100 percent affordable) density bonus projects built in Los Angeles between 2011 and 2015 produced 9.5 affordable multifamily rental units for each 100 units of market-rate multifamily rental housing, falling 13.2 units short of the need. Similarly, 100 market-rate condominium units generate a need

for 25.6 affordable units, while condominium projects that receive a density bonus generated 8.9 affordable units per 100 market-rate units between 2011 and 2015.[17]

TABLE 34: COMPARISON OF DENSITY BONUS OUTCOMES TO HOUSING FEE OUTCOMES

Shortfall of Density Bonus Program in Mitigating Affordable Housing Impacts	Multifamily Rental	Condominium
Affordable Housing Need Generated by 100 Market-Rate Units (a)	22.8	25.6
Affordable Units per 100 Market-Rate Units in Density Bonus Projects (b)	9.5	8.9
Shortfall using Density Bonus Program	**13.2**	**16.6**
Shortfall of Fee Program in Mitigating Affordable Housing Impacts		
Affordable Housing Need Generated by 100 Market-Rate Units (a)	22.8	25.6
Maximum Legal Market-Rate Housing Fee (per unit) (c)	$84,964	$95,484
Recommended Market-Rate Housing Fee (per unit) (d)		
Medium Market	$23,805	$37,571
High Market	$31,740	$76,849
Recommended Fee as a % of Maximum Legal Fee		
Medium Market	28.0%	39.3%
High Market	37.4%	80.5%
Affordable Units from Fees from 100 Market-Rate Units (e)		
Medium Market	6.4	10.1
High Market	8.5	20.6
Shortfall using Fee Program		
Medium Market	**16.4**	**15.5**
High Market	**14.3**	**5.0**

Notes:
(a) Affordable housing need from maximum fee calculations presented in a preceding section of this report.
(b) Based on the data in Table 29 above.
(c) Maximum legal fee from the maximum fee calculations presented in a preceding section of this report.
(d) Recommended fee from the analysis presented in a preceding section of this report.
(e) Affordable Housing Need Generated by 100 Market-Rate Units x Recommended Fee as a % of Maximum Legal Fee. This represents the amount of affordable housing need that could be addressed by fees from 100 market-rate units.
Source: BAE, 2016.

Application of Fee Program to Density Bonus Projects

The City of Los Angeles can elect to charge market-rate housing fees on the market-rate units in density bonus projects. As discussed above, the City may choose to waive market-rate housing fees on projects in which a defined proportion of units are affordable to lower-income households, which could include density bonus projects that meet the designated affordability threshold.

Table 35 below compares the proportion of affordable units in density bonus projects to the proportions needed to fully address the need generated by market-rate units on site, as shown in Table 31 above. The figures in Table 35 demonstrate that, with the exception of single-family attached projects, density bonus projects providing the minimum number of units necessary to receive the maximum density bonus under State Law result in fewer affordable units than needed to fully address the need for affordable units within the development.

[17] The historic yield of affordable units in density bonus projects is used here, because the state density bonus program allows a range of affordable units, starting at 5 percent. Thus, actual choices made and units produced, is the best indicator of expected future production of affordable housing using the bonus program.

These figures indicate that the City could provide market-rate housing fee waivers for multifamily rental, condominium, and single-family detached density bonus projects that provide a larger share of affordable units than the State Density Bonus Law addresses. This could incentivize the provision of a larger number of affordable units on site and provide flexibility for developers that may elect to provide additional affordable units in exchange for a fee waiver. For single-family attached developments, fee waivers could be provided for developments with slightly fewer affordable units than would be provided by meeting the minimum affordability requirement needed to achieve the maximum density bonus under the State Density Bonus Law.

TABLE 35: AFFORDABLE HOUSING YIELD FROM UNITS ON SITE

	Affordable Units				Market-Rate			Total
Very Low Income	**VLI**	**LI**	**Mod**	**Total**	**Base**	**Bonus**	**Total**	**Project**
Number of Units in Density Bonus Project (a)	11	0	0	11	89	35	124	135
Percent of Total in Density Bonus Project	8.1%	0.0%	0.0%	8.1%	65.9%	25.9%	91.9%	100.0%
Percent of Total to Address Need (b)	16.1%	0.0%	0.0%	16.1%	83.9%	0.0%	83.9%	100.0%
Low Income								
Number of Units in Density Bonus Project (a)	0	20	0	20	80	35	115	135
Percent of Total in Density Bonus Project	0.0%	14.8%	0.0%	14.8%	59.3%	25.9%	85.2%	100.0%
Percent of Total to Address Need (b)	0.0%	21.7%	0.0%	21.7%	78.3%	0.0%	78.3%	100.0%
Moderate Income								
Number of Units in Density Bonus Project (a)	0	0	40	40	60	35	95	135
Percent of Total in Density Bonus Project	0.0%	0.0%	29.6%	29.6%	44.4%	25.9%	70.4%	100.0%
Percent of Total to Address Need - Condo (b)	0.0%	0.0%	31.9%	31.9%	68.1%	0.0%	68.1%	100.0%
Percent of Total to Address Need - SFA (b)	0.0%	0.0%	24.7%	24.7%	75.3%	0.0%	75.3%	100.0%
Percent of Total to Address Need - SFD (b)	0.0%	0.0%	44.1%	44.1%	55.9%	0.0%	55.9%	100.0%

Notes:
(a) Assumes the minimum proportion of affordable units necessary to receive the maximum density bonus under State law.
(b) See previous table and accompanying text. Percentages for multifamily rental units used for projects with very low income or low income units. Percentages for for-sale unit types used for projects with moderate income units.
Source: BAE, 2016.

Appendix A: Commercial Fee Case Studies

The following profiles commercial linkage fee programs established in cities throughout California. First, larger cities' programs are summarized, including San Francisco, Sacramento, Oakland, and San Diego. Next, several smaller cities located near Los Angeles are profiled to provide context for more localized real estate economics and policy considerations.

It should be noted that these profiles are not exhaustive; numerous other smaller cities in California have adopted or are currently considering adopting commercial impact fees for affordable housing. However, given the large size of the City of Los Angeles, but with real estate markets specific to its economic base, this chapter seeks to profile both large city experiences along with smaller cities nearby facing similar affordable housing challenges.

It should also be noted that the names of some of the commercial fee programs can be confusing' some cities name these fee programs in terms of their objective (to create affordable housing), while others link program names to earlier nomenclature regarding jobs-housing balance goals, and still others carry names associated with their purpose (e.g., to mitigate commercial development impacts).

San Francisco Jobs-Housing Linkage Fee Program

Background

One of the earliest cities to adopt a commercial impact fee, San Francisco established a jobs-housing linkage fee program to support affordable housing production in 1981. Early versions of the policy focused specifically on office development, but the law was expanded in 1996 to encompass retail and hotel uses.[18]

In 2010, the Jobs-Housing Linkage Program (Program) was established in Section 413 of the San Francisco Municipal Code. The Program was founded on the acknowledgement that the supply of housing in the City had not kept pace with the demand created by workers employed in large-scale commercial developments, and that the lack of supply requires many employees to live elsewhere in the Bay Area, resulting in long commutes as well as negative impacts on quality of life, environmental resources, and social equity.

The Program applies to development projects of at least 25,000 gross square feet of entertainment, hotel, production/distribution/repair (PDR), office, research and development, retail, and/or small enterprise workspace. Exemptions include grocery and pharmacy spaces

[18] Keyser Marston Associates, Inc., "Residential Nexus Analysis – City and County of San Francisco." 2007. PDF. Accessed 6/23/16. http://sf-planning.org/sites/default/files/FileCenter/Documents/8380-FINAL%20Resid%20Nexus_04-4-07.pdf.

of a certain size, as well as other standard exemptions such as developments on property owned or leased by the federal government, State of California used exclusively for governmental or educational purposes, and developments on property owned by the San Francisco Redevelopment Agency or Port of San Francisco where application is prohibited by State or local law.[19] Major phases and development projects that are part of the Mission Bay North and Mission Bay South Redevelopment Plans and Interagency Cooperation Agreements are also exempt.

To fulfill the requirements of the Program, developers of commercial space have three options:

1. Payment of the impact fee, calculated based on use type and size.
2. Payment to a housing developer to construct a specified number of units based on use type (either monetary or by contributing land of equivalent value to the impact fee.)
3. A combination of the above options.

Payments are imposed as conditions of project approval. If the project sponsor elects to provide a payment to housing developers instead of paying the impact fee, they must obtain written approval from the Director of the Mayor's Office of Housing and Community Development (MOHCD).

Fee Structure

Fees are charged on a per gross square foot basis, excluding accessory parking, and vary by commercial use type. The current fee schedule is shown below.

SAN FRANCISCO FEES PER SQUARE FOOT OF COMMERCIAL DEVELOPMENT

Use	Fee per sq. ft.
Entertainment	$22.42
Hotel	$17.99
Integrated PDR	$18.89
Institutional	$0.00
Office	$24.03
PDR	$0.00
Research & Development	$16.01
Retail	$22.42
Small Enterprise Workspace	$18.89

Note:
(a) Fees reflect those effective January 1, 2015.

Sources: SF Planning Code, Sec. 413, 2016;
BAE, 2016.

[19] Free standing pharmacies not exceeding 50,000 square feet, general grocery retail not exceeding more than 75,000 square feet, and mixed-use space consisting of residential space and pharmacy retail space not exceeding 50,000 square feet, or general grocery retail space not exceeding 75,000 square feet are exempt from the requirements of the Jobs-Housing Linkage Program (Section 413.3(8)(A-C)).

Fees also apply to the replacement or change of use from PDR space occupied prior to April, 2010 to another commercial use; however, the fee is significantly lower than that imposed for new construction.[20]

In general, fees, payments, and/or transfer of land title(s) must be completed in full before issuance of the first construction document; however, the Board of Supervisors has adopted deferral mechanisms in the past. For example, during the Great Recession, development projects in the pipeline were permitted to defer payment of the jobs-housing linkage fee, in addition to all other impact fees, to the point in time just prior to issuance of the first certificate of occupancy. These deferrals were subject to a surcharge deposited into the Affordable Housing Fund. This option expired in July 2013, though the language still exists in the Planning Code, in the event that the Board of Supervisors decides to reactivate such provisions.

In the event that a project does not ever receive its first building permit, the fee may be refunded by contacting the Planning and Building Inspection Departments and submitting a request. If a building permit has been issued and a developer has authorization to build but chooses not to proceed, the fee is nonrefundable.

All monies generated by the impact fee and any lien proceedings are deposited into the Citywide Affordable Housing Fund, which is managed by the Mayor's Office of Housing and Community Development (MOHCD) and used exclusively to increase the supply of housing affordable to qualifying households. Unlike many other cities profiled in this report, funds may not be used for administrative or general overhead expenses.

The Jobs-Housing Linkage Fee is updated periodically according to the annual percent change in the Construction Cost Index (CCI) for San Francisco.

Payment to Housing Developer

Should a commercial developer elect to fulfill Program requirements through payment or contribution of land to one or more housing developer(s), the housing developer(s) are required to construct a minimum of the number of housing units determined by the formula in the table below. All housing units constructed pursuant to this option must be affordable to qualifying households continuously for 50 years.[21] Similar to the fee, the magnitude of the payment to the housing developer depends on the use type. Regardless of use type, the payment or value of land contributed must be at least equivalent to the amount of the impact fee. Staff noted that this option is seldom, if ever, pursued.

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[20] To derive the fee for replacement or change of use from PDR occupied prior to April 2010 to another commercial use, $14.09 is subtracted from the applicable fee listed in Table 1 (depending on the new use). See Table 413.6B of Section 413.6 of the Municipal Code.

[21] San Francisco Municipal Code, Section 413.5 (Compliance by Payment to Housing Developer.)

SAN FRANCISCO AFFORDABLE HOUSING REQUIREMENT, JOBS-HOUSING LINKAGE FEE

Use	Housing Unit Multiplier
Entertainment	Gross sq. ft. x 0.00014
Hotel	Gross sq. ft. x 0.00011
Office	Gross sq. ft. x 0.00027
R&D	Gross sq. ft. x 0.0002
Retail	Gross sq. ft. x 0.00014

Sources: SF Planning Code, Sec. 413, 2016; BAE, 2016.

Outcomes

A 2012 report published by the San Francisco Controller's Office notes, "Since fiscal year 1988-89, $56,791,248 in Jobs-Housing Linkage fees has been deposited into the Citywide Affordable Housing Fund, and $12,735,030 in interest has been earned on the Citywide Affordable Housing Fund, which also includes Inclusionary Housing Fees."[22] At the time of the report's publication, no commercial developers had opted to construct on- or off-site below market-rate units instead of paying the fee.

In fiscal year 2014-2015, the Jobs-Housing Linkage Program contributed over $27 million to the Affordable Housing Fund's ending balance of approximately $103 million as of June 30, 2015. In the same year, revenues in the Affordable Housing Fund assisted the development of 609 housing units for families, developmentally disabled persons, transition-age youth, low-income individuals, and seniors.[23]

Lessons Learned

Clearly defined use categories leads to easier administration. The specificity of San Francisco's commercial use categories and clarity of the definition of these uses in the City's land use classifications reduces the chance for misclassification of projects for which the jobs-housing linkage fee is assessed. City staff emphasized the importance of the clarity of these definitions in their ability to consistently and accurately apply the appropriate fee rate to new projects.

Consider impacts on essential neighborhood services. San Francisco's exemption of most pharmacies and grocery stores reduces the possible negative impact on the provision of essential goods and services.

[22] City and County of San Francisco Controllers Office, "FY 2011-12 Development Impact Fee Report." November 30, 2012. Accessed 7/19/16. http://sfcontroller.org/sites/default/files/FileCenter/Documents/3770-ImpactReport_2011-12.pdf.
[23] Mayor's Office of Housing and Community Development, "Annual Progress Report Fiscal Year 2014-2015." PDF. Accessed 7/15/16. http://sfmohcd.org/sites/default/files/Documents/MOHDC%20Annual%20Progress%20Report%20FY14-15.pdf.

Land contribution and/or direct payment to residential developer are rarely used. As is the case in Palo Alto, the option to provide a payment to a residential developer to construct affordable units rather than paying the fee is rarely, if ever, used.

It may be prudent to allow for a deferral mechanism in the future, even if not immediately effective. Deferral mechanisms were necessary and were well-utilized during the Great Recession when there was uncertainty about project completion. It is important, however, to include the provision of temporary policies carefully. San Francisco's description of a deferral mechanism in the Planning Code is somewhat misleading; the Planning Code references a section of the Building Code, which includes the expired sunset clause for this provision (planning staff noted that this is a constant source of confusion).

SACRAMENTO HOUSING TRUST FUND COMMERCIAL FEE

Background

The City of Sacramento enacted the Housing Trust Fund (HTF) Ordinance (Chapter 17.188 of the City of Sacramento Zoning Code) to fund construction of affordable housing near new employment centers. .[24] The original impetus seems to have been rapid development in North Natomas, where expected new commercial projects caused concern about creating an imbalance between new jobs and new housing.

The Citywide and North Natomas fees currently in effect are shown below. Land uses vary for North Natomas due to different land use designations for that area's Specific Plan.

SACRAMENTO CITYWIDE AND NORTH NATOMAS FEES, 2016

Citywide			N. Natomas		
Office	$	2.50	**Office/Business**	$	2.74
Hotel	$	2.38	**Community/Neighborhood Com**	$	2.06
Commercial	$	2.00	**Hwy Commercial**	$	2.74
R & D	$	2.12	**M-50**	$	1.74
Manufacturing	$	1.57	**M-20**	$	1.44
Warehouse/Office	$	0.91	**Light Industrial**	$	1.12
Warehouse	$	0.68			

Source: City of Sacramento; BAE, 2016.
Effective 7/1/2016

The City also enacted a separate series of commercial fees for projects where the developer elects to build affordable housing instead of pay the full fee (fees drop to 20 percent of above if specific amounts of housing are built). Also not shown above, are other specific land uses, including major medical facilities, which have a fee of $3.90 per square foot.

In the commercial fee program, the Planning Director determines the fee amount when the project does not fall in an existing category or when it is a use not shown here. Projects subject to this discretionary determination include sports complexes, marinas, golf courses, drive-in theaters, nonresidential care facilities, bus terminals, pest control companies, slaughter houses and flea markets. Other uses are exempt from the commercial fee, including properties owned by the state or US (as a state capital, Sacramento has substantial state-owned property), non-profit homeless facilities, low income services facilities, churches, child care facilities, utilities, and a number of other special purpose structures.

[24] City of Sacramento, https://www.cityofsacramento.org/Community-Development/Planning/Long-Range/Housing-Programs/Housing%20Trust%20Fund, last accessed May 30, 2016.

The Sacramento commercial fee at present, is increased each year by the San Francisco Construction Cost Index. In earlier years, fees were left the same for long periods, then increased, and when economic conditions warranted, rolled back.

Fees are collected prior to (and as condition for) the issuance of the building permit. No provisions exist for the deferral of fees or refunds. However, as long as the monies have not been transferred into the Housing Trust Fund itself, it is possible for a developer who decides not to build to negotiate a refund.

Fees flow to the Housing Trust Fund, created in 1989 specifically to administer monies collected under the commercial linkage fee program. The objective of the Fund is "*to increase and improve the supply of housing affordable to households of low income, with priority given to very low income households.*"[25] The Trust Fund does not finance housing for the homeless or low income senior housing.

Outcomes

Since inception in 1989 through 2013, approximately $25 million of commercial fees have been collected, an average of roughly $1 million per year. Staff estimates that these fees have been used to leverage gap financing to build 3,095 affordable housing units in 44 development projects. Projects receiving funds from the fees are tracked and identified on a map published by the Planning Division.

Lessons Learned

The staff interviewed for this report indicated that since the North Natomas area has now been largely built out, the separate fee structure may need to be collapsed into a single citywide schedule. Staff also mentioned complexities determining how to apply the fee to mixed-use projects (e.g., hotel with convention center and residential units) or or projects that start one way and end up another way (e.g., a warehouse to which office space is added over time).

[25] Sacramento City Code, section 17.708.020 Low income housing fund.

OAKLAND JOBS/HOUSING IMPACT FEE

Background

In 1999, the City of Oakland commissioned a Housing Development Task Force, which recommended in 2000 that the City conduct a Nexus Study for a Jobs/Housing Impact Fee. The City adopted the Jobs/Housing Impact fee in 2002 following completion of the Nexus Study in 2001. However, the City delayed implementation of the fee until 2005 in an effort to clear the development pipeline of projects that had been proposed before the fee was adopted.

Fee Structure

The City of Oakland adopted the jobs/housing impact fee to apply only to office and warehouse/distribution uses, despite that nexus study analyzed office, warehouse/distribution, hotel, and retail uses. The City's ordinance applies citywide but exempts the first 25,000 square feet of all projects and all space devoted to parking. In addition to new construction, the fee applies to substantial rehabilitation projects, defined as projects in which the cost of repairs or rehabilitation exceed 25 percent of the value of the building after the rehabilitation or repair.

The fee is updated on an annual basis based on the Marshall & Swift building cost index. As of 2016, the fee rate was $5.44 per square foot (up from $4 per square foot in 2005) of gross floor area in excess of 25,000 square feet.

Oakland assesses the fee rate at building permit issuance, but the fee is paid in three installments. The first 25 percent of the fee is paid prior to issuance of a building permit for all or any portion of the project. Developers are required to pay another 50 percent prior to issuance of a temporary certificate of occupancy for all or any portion of the project. The final 25 percent is due 18 months after the date of issuance of a temporary certificate of occupancy for all or a portion of the project. If necessary, the City may enforce payment by recording a lien against the property, revoking or suspending the certificate of occupancy, or other action.

Project applicants can request a fee exemption from the City Manager only under special circumstances. In addition, applicants can elect to provide affordable units on site at a rate of 0.00004 units per square foot of office or warehouse/distribution uses (with the first 25,000 square feet of commercial uses exempted). However, applicants for eligible projects are generally expected to pay the fee rather than seek exemptions.

The Jobs/Housing Linkage fee revenue accrues to the City's Housing Trust Fund, which is used to increase, improve, and preserve the supply of affordable housing in the City, with priority given to housing for very low income households. Eligible uses include, but are not limited to, assistance with staff costs or other administrative costs attributable to a specific affordable

housing project, equity participation in affordable housing projects, loans and grants to affordable housing projects, or other public/private partnership arrangements. Monies from the Affordable Housing Trust Fund may be extended for the benefit of rental housing, owner occupied housing, limited equity cooperatives, mutual housing developments, or other types of affordable housing projects.

Outcomes

As of April 2016, the City of Oakland had collected approximately $1,878,000 from the jobs/housing impact fee, with $2,483,000 expected from planned projects by the end of 2017. The City estimates that the fee revenue collected to date has supported the construction or substantial rehabilitation of 15 to 19 units, with a typical City contribution of approximately $100,000 to $125,000 per unit.

Lessons Learned

Adaptive reuse projects can generate commercial linkage fee revenue. The City of Oakland assesses its jobs/housing impact fee on substantial rehabilitation projects resulting in office or warehouse/distribution uses, provided that the project site has been vacant. A planned conversion of a former Sears building in the City to offices for Uber Technologies Inc. is expected to generate approximately $1 million in jobs/housing impact fees to the City, more than half of the total revenue that the fee has generated to date.

Commercial linkage fee revenue collection varies substantially over time due to real estate market cycles. Since implementation in 2005, Oakland's Jobs/Housing Impact Fee has generated a relatively modest amount of revenue, totaling just under $1.9 million, approximately $170,000 per year on average. The moderate pace of revenue collection is attributable in large part to the minimal amount of developer interest in office or warehouse/distribution projects in the City since 2005. However, due to strong regional job growth in key office-based industries, leading to strong office real estate markets in Oakland and other regional employment centers, the City now anticipates receipt of approximately $2.5 million in jobs/housing impact fee revenue over the next 12 to 18 months, exceeding the total revenue collected since the fee was implemented.

SAN DIEGO HOUSING IMPACT FEE

Background

In 1989, the San Diego Housing Commission created a task force to address the city's growing shortage of affordable housing, leading to adoption of the Housing Trust Fund Ordinance in April 1990, which established a Housing Impact Fee for commercial development.[26] Since 1990, the Ordnance has been revised many times, most recently in April, 2016. Fees were reduced by 50 percent in 1996, and only recently restored to their 1990 levels.

Fee Structure

Fees apply to the gross square feet of office, hotel, and retail projects, along with a discounted fee for R & D projects (to encourage economic development). Exempt uses include manufacturing and warehousing, as well as non-profit hospitals, SRO housing units, projects located on state or federally-owned lands, and general government buildings. The most recent Ordinance update also removed the prior requirement that staff recommend an annual fee increase to City Council.[27] Current fees per April 2016 are:

SAN DIEGO HOUSING IMPACT FEES

	Per Gross Building Sqare Foot	
	2016	2017 and After
Office	$ 1.76	$ 2.12
Hotel	$ 1.06	$ 1.28
Retail	$ 1.06	$ 1.28
R & D	$ 0.80	$ 0.80

Source: San Diego Municipal Code
Chapter 9: Building, Housing and Sign Regulations
Article 8: Housing, Division 6: Housing Impact Fees On Commercial Development

For rehab projects, the fee to be paid "shall be the fees for the new use, less any fees that either were paid or would have been paid based on the existing use of the building."[28] In lieu of fees, developers can donate land or air rights, provided the dedicated property is suitable for housing construction[29]. Developers may also ask for a fee variance prior to obtaining the building permit, for reasons such as financial hardship or if special circumstances apply. To date, 54 requests for fee variances have been submitted, mostly by religious and educational institutions, including 49 stating they would create few jobs, one for financial hardship, and four on both grounds. The five claims of financial hardship were denied, but many of the low job-creation reasons were approved. These variances have resulted in a mix of reduced and

[26] San Diego Municipal Code, Chapter 9: Building, Housing and Sign Regulations, Article 8: Housing, Division 6: Housing Impact Fees On Commercial Development, Section 98.0601: Purpose.
[27] Adapted, with modifications, from a person communication from staff, June 29, 2016.
[28] San Diego Municipal Code, Section 98.0610: Payment of Housing Impact Fee.
[29] This provision was granted once, in 2003, when the San Diego Revitalization Corporation had over $83,000 in impact fees waived because it included shared parking in a commercial project for use by people in an adjacent affordable housing project.

waived fees, reducing total collections for the 54 requests by over $600,000. The Mayor makes the ultimate determination of fee waiver amounts.[30]

As of May 2016, developers may ask for fee deferral for up to two years, but certificates of occupancy are not issued without payment. The deferral program is administered by the City of San Diego Facilities Financing Department and is run on a cost-recovery basis (an application for deferral costs $500). Since the program is new, no information is available about uptake.

Outcomes

San Diego's commercial fees are deposited in a Housing Impact Fee subaccount of the San Diego Housing Trust Fund. Recent data collected for the 2006 – 2014 period indicates that total revenues from the fee were approximately $14 million, averaging $1.55 million annually. No data is collected to track housing financed by the fee.

Lessons Learned

Staff indicated that the commercial fee, with just four categories, which may be too few for contemporary development product types. Also, each category is not clearly defined. The recent removal of an automatic indexed increase to the fee also is problematic, particularly because other local fees are indexed and this fee used to be indexed.

[30] San Diego Municipal Code, Section 98.0611: Determination of Fee.

West Hollywood Non-Residential Affordable Housing Fee

Background

West Hollywood's Non-Residential Affordable Housing Impact Fee was established in 1989. Since its inception, the fee has applied to developments of at least 10,000 net new square feet of commercial space. In 2014, the City increased the fee from $2.85 to $8.00 per square foot based on an updated nexus study. To minimize impacts of this increase, the City Council phased it in over two years; the fee rose to $4.00 per square foot in FY 15-16, and rose again to $8.00 per square foot in FY 16-17 [31] The flat fee is based on the average of the fees supported by various nonresidential uses per the most recent nexus study.[32]

Fee Structure

The City currently levies its commercial fee on office, retail, and hotel development. Fees must be paid prior to building permit issuance. If a project consists of multiple phases, fees for the whole project must be paid before building permit issuance. The Non-Residential Affordable Housing Impact Fee is annually adjusted based on the Building Cost Index (BCI).[33] Currently, fees cannot be deferred, and are generally nonrefundable; however, fee payments may be returned if the building permit expires and is not extended, or if the fees were collected illegally or erroneously. To request a refund, applicants must file a written request with the City no later than 90 days after the initial payment date to be considered.[34]

Outcomes

Commercial fees are deposited into the City's Affordable Housing Trust Fund (along with West Hollywood's residential fee). The Trust's funds subsidize housing projects with at least 20 percent of units affordable to very low income households, and at least 60 percent affordable to low- and moderate-income households. Non-profit housing developers in West Hollywood receive these funds for development costs including predevelopment, land acquisition, administration, and gap financing. From 2002 through 2013, the Trust Fund generated $2.57 million in revenue, and been used to subsidize 17 housing projects[35]. Future Trust Fund revenues are projected to grow rapidly due to the recent commercial fee increase [36]

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[31] http://www.weho.org/home/showdocument?id=26821.
[32] West Hollywood Department of Human Services and Rent Stabilization, "Non-Residential Jobs-Housing Nexus Study and Residential Nexus Study." December 15, 2014 City Council Agenda Report.
[33] Keyser Marston Associates, "Non-Residential Jobs-Housing Nexus Study." August 2014.
[34] West Hollywood Municipal Code, Chapter 19.64 (Development Fees).
[35] Keyser Marston Associates, "Non-Residential Jobs-Housing Nexus Study." August 2014.
[36] IBID

PALO ALTO COMMERCIAL IMPACT FEE

Background

In 1977, three years after the City adopted its inclusionary housing policy, Palo Alto began requiring affordable housing mitigation fees for large commercial and industrial developments, using its environmental review authority provided by the California Environmental Quality Act (CEQA). Funds were deposited into what was then known as the Industrial-Commercial Account, which has since evolved into the current Commercial Housing Fund.[37,38]

Historically, the City has charged one impact fee per square foot for all commercial uses (most recently at $19.85). In 2014, the City completed commercial and residential nexus studies to update its commercial and market-rate residential affordable housing fees.

Fee Structure

Palo Alto's commercial fees are shown below. Effective August 15, 2016, the new fee structure varies by commercial use type. The fee applies to all gross building area, excluding parking.

PALO ALTO COMMERCIAL FEE

Use	Existing Fee	Adopted Fee (a)
Office/R&D	$19.85/sf	$35/sf
Hotel	$19.85/sf	$30/sf
Retail/Restaurant/Other	$19.85/sf	$19.85/sf

Note:
(a) Adopted fee schedule is effective August 15, 2016.

Sources: Palo Alto Planning and Community Environment Department, 2016; BAE, 2016.

Exemptions include on-site child care or recreational facilities, residential uses, churches, colleges and universities, commercial recreation, hospitals and convalescent facilities, private clubs, private educational facilities, public facilities, and small retail/restaurant/auto spaces of 1,500 square feet or less.[39]

[37] City of Palo Alto Finance Committee, "Residential/Commercial Impact Fee Studies Staff Report." February 16, 2016. Accessed 7/19/16. http://www.cityofpaloalto.org/civicax/filebank/documents/50935.
[38] City of Palo Alto, "Affordable Housing Fund Guidelines." August 17, 2015. PDF. Accessed 7/21/16. http://www.cityofpaloalto.org/civicax/filebank/documents/53195.
[39] See Palo Alto Municipal Code, Chapter 16.47.030.

While determined to be reasonable by the 2014 Residential Nexus Study, Palo Alto's recently adopted fees are among the highest in the Bay Area due to the City's strong housing market conditions, making housing in Palo Alto unaffordable for many new workers. [40]

The commercial fee must be paid before issuance of the first grading or building permit. If a project consists of multiple phases, payments may be submitted proportional to each phase prior to issuance of the grading and building permits for that phase. Fees are adjusted annually based on in the Consumer Price Index (all urban consumers) for the San Francisco-Oakland area.

Revenues generated by the affordable housing impact fee are collected in the Commercial Housing Fund, a "sub-fund" of the City's Affordable Housing Fund, a trust fund to preserve and expand affordable housing for very low-, low-, and moderate-income households. Other "sub-funds" of the Affordable Housing Fund include the Residential In-Lieu Fund, Home Investment Partnership Fund, Community Development Block Grant (CDBG), and Below Market Rate Emergency Fund.

Detailed guidelines for use of Affordable Housing Fund are posted on the City's website. According to these guidelines, specific restrictions apply to the use of funds in each sub-category. Fees generated by the Commercial Housing Fund may be used for the following:

- Construction of new housing units;
- Addition of new units to existing buildings;
- Conversion of non-residential space to housing units;
- Acquisition, rehabilitation, and preservation of existing affordable housing, where rents are controlled by deed restriction or another similar mechanism;
- Administrative costs for the collection of fees and administration of the fund;
- The cost of consultant studies required to update the fees;
- Direct costs for the City to implement an affordable housing construction program.[41]

Alternatives to Fee Payment

As is the case in San Francisco, Palo Alto's commercial affordable housing fee program also permits developers to construct affordable units rather than paying the fee. City staff remarked that while this alternative is available, it is rarely, if ever, pursued by commercial developers in Palo Alto. The formula used to determine the required number of below market-rate units is as follows:

Gross square feet/350 x 0.017 = Number of units required

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[40] City of Palo Alto Finance Committee, "Staff Report Attachment A: Draft Commercial Linkage Fee Nexus Study." November 2015. Accessed 7/19/16. http://www.cityofpaloalto.org/civicax/filebank/documents/50935.

[41] City of Palo Alto, "Affordable Housing Fund Guidelines." August 17, 2015. PDF. Accessed 7/21/16. http://www.cityofpaloalto.org/civicax/filebank/documents/53195.

Put simply, under this alternative, developers are required to construct 1.7 percent of the gross square feet of the nonresidential development divided by 350. If the calculation results in a fraction of a unit, the developer must either provide a whole unit or pay an in-lieu fee based on the square footage of the applicable project.

Outcomes

In fiscal year 2014-15, revenues generated by the commercial affordable housing impact fee contributed approximately $2.3 million to the Commercial Housing In-Lieu Fund, independent of interest earnings. As of June 30, 2015, the Fund contained approximately $14.6 million.[42]

[42] City of Palo Alto, "Annual Status Report Development Impact Fees FY15." January 25, 2016. PDF. Accessed 7/19/16. http://www.cityofpaloalto.org/civicax/filebank/documents/50632.

BOSTON COMMERCIAL IMPACT FEE

Background

In 1983, a non-binding ballot measure to promote development in the neighborhoods (vs. downtown) and institute a commercial linkage fee received strong voter approval. Council then adopted the fee, set at $5.00 per square foot payable in 12 years, on new commercial projects that had over 100.000 square feet. of floor area and received a zoning change. After a change in administration, Boston created the Neighborhood Housing Trust to manage and allocate the fees. Council added a $1.00 square foot fee for job training and shortened the payment period from 12 to 7 years for downtown projects. A Neighborhood Jobs Trust was set up for the new job-training fees in 1987.

Fee Structure

Contrary to most other cities, there is a flat fee for all projects, irrespective of kind or location. It is currently set at $8.34 per square foot. Instead of paying the fee, developers may also build or help build housing that is affordable to low- and moderate-income residents (with an investment at least equal to the amount that would have been paid in fees) or do a combination of fee payment and housing development. The development project in which the developer invests must be approved by the Boston Redevelopment Authority. This provision is the mirror image, so to speak, of the City's Inclusionary Development Policy, under which a developer may pay cash in lieu of building affordable units.

The fee is imposed on "all new large-scale commercial real estate developments exceeding 100,000 square feet and requiring zoning relief, including expansion and rehabilitation projects."[43] The fee applies only to the floor area in excess of 100,000 square feet. This provision applies to phased development and to the Master Plans that health and educational institutions and the City of Boston adopt together to regulate the institution's growth: one cannot development in a number of small phases (< 100,000 square feet) in order to avoid fee payments.

The initial fee of $5.00 per square foot was raised to $7.18 per square foot in 2001. At the same time, the payment period was set at 7 years for both downtown and neighborhood development. In 2006, the fee was raised to $7.87 per square foot was raised again in 2013, to $8.34 per square foot.

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43 City of Boston, Neighborhood Housing Trust Annual Report 2014, n. p.; available at http://dnd.cityofboston.gov/portal/v1/contentRepository/Public/dnd%20pdfs/HousingDevelopment/NHT_Report_2014_150406_1230.pdf (last consulted on May 31, 2016).

The timing of fee payments can be spread over seven years, or paid up front (present value). For neighborhood projects, the fee must be paid either at issuance of certificate of occupancy or 24 months after issuance of building permit, whichever is sooner. Downtown projects, in contrast, must pay at building permit issuance.

Fees go to the Neighborhood Housing Trust, which then allocates funds raised from fees to affordable housing projects based on criteria including meeting a "but for" test (fee is needed), serving households at 80 percent or below, and with affordability set for 50 years for for-sale units, and in perpetuity for rental units. [44]

Outcomes

Between 1986 and 2012, commercial fees generated over $133.,8 million.[45] In the same time period (1986 – 2012), fees contributed to the development or preservation of 10,176 units in 193 projects.[46]

Lessons Learned

Boston's regulations are fairly simple compared to those of other cities (e.g., flat fee for all kinds of projects, everywhere in the city). This has limited political debates and the creation of favorable rates for some rather than others. At the same time, flexibility is important, too. For example, Boston allows developers of commercial projects to partner with a community group to build affordable units rather than pay fees, creating partnerships best-equipped to address the underlying goal of affordable housing unit production.

Staff interviews indicated that Boston's lack of a built-in annual fee increase is being reconsidered at present (rather than have to rely on Council to raise fees periodically). Another possible change under consideration is whether the size threshold of 100,000 square feet should be reduced to 50,000 square feet, to provide a more targeted incentive to non-fee paying small projects.

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44 *Ibid*.
45 *Ibid*.
46 *Ibid*.

SEATTLE AFFORDABLE HOUSING IMPACT MITIGATION PROGRAM FOR COMMERCIAL DEVELOPMENT

Background

Seattle has had an incentive zoning program for downtown commercial development since 2001, and for residential development since 2006.

In 2013, during the rezoning of the South Lake Union area near downtown, it became clear that these programs were insufficient to meet the need for affordable housing created by new market-rate commercial and residential development. It should also be noted that general interpretations of Washington State laws have meant that fees or inclusionary zoning is considered not possible unless these are paired with upzoning regulations given at the same time.

The initiative to update the city's affordable housing programs started in May 2013. It included best practices studies, the creation of the Housing Affordability and Livability Agenda (HALA), and the institution of the HALA Advisory Committee. This committee submitted its report in July 2015. Its main recommendation was "that the City boost market capacity by extensive citywide upzoning of residential and commercial zones and, in connection with such upzones, implement a mandatory inclusionary housing program for new construction residential development and a commercial linkage fee program for new construction commercial development."[47]

The policy goal is to help produce 6,000 housing units that are affordable to households with incomes below 60 percent of median income over ten years. A nexus study set possible fee levels; the City chose to stay well below those levels in its July 2015 Statement of Intent for Basic Framework for Mandatory Inclusionary Housing and Commercial Linkage Fee, and to monitor their effects. Council passed an ordinance in November 2015 to establish the framework for an Affordable Housing Impact Mitigation Program for commercial development."[48] Upzoning in commercial, industrial and mixed-use districts should take place in 2016 – 2017.

Seattle has had strong grassroots activists and political leaders over the years who have pushed the affordable-housing agenda forward. There is a community of sophisticated affordable-housing developers and experienced city staff in incentive zoning and such measures. Debates between the City and the development community were intense, with

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[47] City of Seattle, Ordinance 124895, p. 2.

48 City of Seattle, Ordinance 124895, "An ordinance relating to land use and zoning; adding a new Chapter 23.58B of the Seattle Municipal Code (SMC) to establish the framework for an Affordable Housing Impact Mitigation Program for commercial development; and amending subsection 23.40.020.A, subsection 23.76.006.B, subsection 23.76.006.C, and subsection 25.05.675.I of the SMC," available at https://seattle.legistar.com/LegislationDetail.aspx?ID=2451973&GUID= 5A771786-2728-4862-AF11-C20A4919A85B&Options=&Search=, last accessed on June 6, 2016.

consulting reports produced on both sides. In the end, the parties struck a "Grand Bargain" in which increased burdens on development to contribute to affordable housing were exchanged for increased development densities. The link between upzoning and the imposition of a commercial linkage fee also serves a legal function: because such a fee was still untested in Washington State, providing extra development density as compensation would make the policy less likely to be challenged in court.

Fee Structure

In all cases, developers may choose to meet the requirements of the ordinance by means of "payment" (fees) or by means of "performance," i.e., in the provision of affordable rental units, on-site or off. Fees are differentiated by location in the city, i.e., inside or outside Downtown and South Lake Union Urban Centers and then by location within these general areas.

Inside Downtown and South Lake Union Urban Centers, the fees are differentiated by land-use zone, and outside these two areas, they are differentiated by land-use zone and by intensity. Given the number of land-use zones in the downtown area and Urban Centers, this approach results in a lengthy fee schedule, but there is simplicity in the fact that there is not differentiation according to the type of development. Among the 43 land-use zones that are listed in the table of fees for Downtown and South Lake Union Urban Centers, four have no impact fee requirement; among the other 39 zones, cash requirements vary from $8.00 per square foot to $17.50 per square foot.

Exemptions are meant to avoid impacting desirable mixed-use development:

- In building in which at least 50 percent of above-ground floor area is devoted to housing, up to 4,000 square feet of street-level floor area used for arts facilities, cafés and restaurants, entertainment venues (except for adult entertainment) and general sales and services
- Along designated "pedestrian streets," all street-level floor area that is necessary to meet standards set by the City for such streets
- Commercial floor area in buildings containing affordable units (with at least 75 percent of units affordable to households with less than 60 percent of median income) and in buildings with rent-controlled or income-controlled units[49]

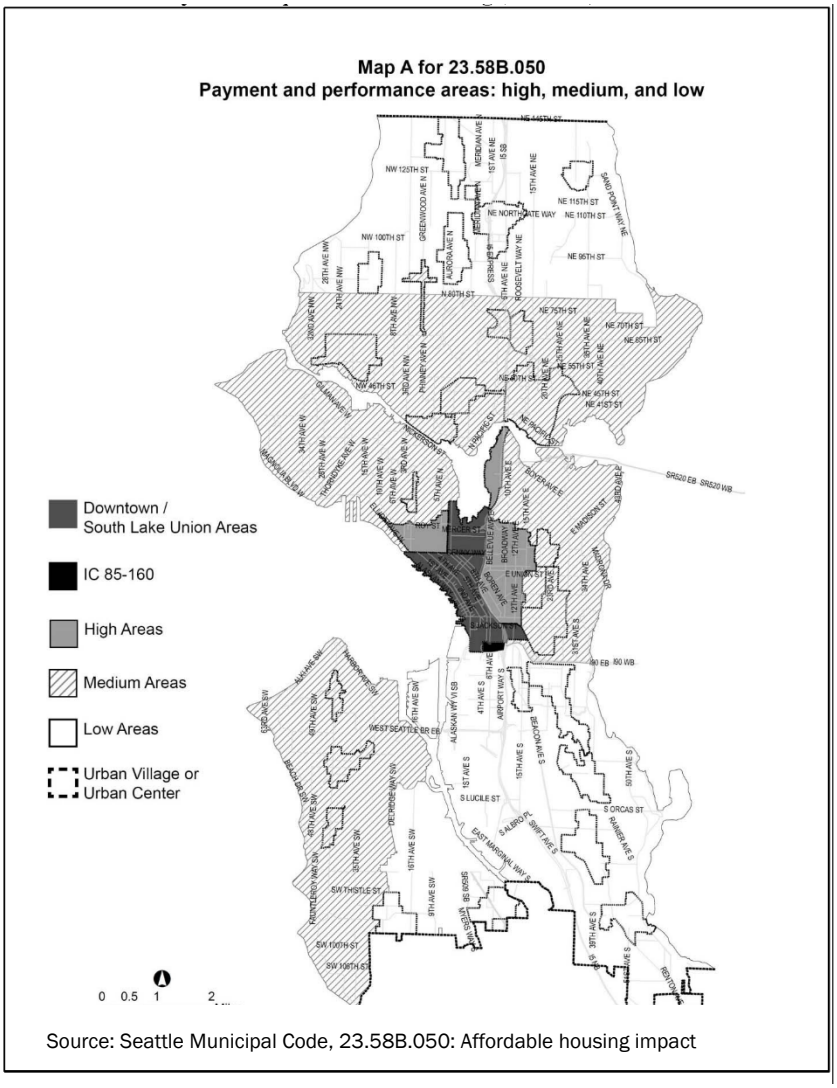
[49] Seattle Municipal Code, Section 23.58B.020: Voluntary agreements for affordable housing, Subsection C: Exemptions.

The Director of Construction and Inspections may, in consultation with the Director of Housing, modify the impact fee in cases where the developer can demonstrate that the housing impact of the project does not warrant the regular fee, or when the project is in a zone with building heights over 85 feet and development standards make it impossible for the project to exceed that height, or when the requirements would cause financial hardship that outweighs the affordable housing impacts"[50][51]

As mentioned above, the ordinance calls for possible fee adjustments during the implementation phase, and every five years thereafter. In addition, there is an automatic adjustment every year, starting March 1, 2016, according to the change in the Consumer Price Index for the preceding calendar year.

Fees must be paid before a construction permit is issued. However, "construction permit" does not include "a demolition, excavation, or shoring permit." If a phased permit application is being used, the fees must be paid "prior to issuance of the portion of the building permit that includes the structural frame for the entire building."[52]

SEATTLE ZONE MAP FOR COMMERCIAL FEES



Source: Seattle Municipal Code, 23.58B.050: Affordable housing impact

[50] Seattle Municipal Code, Section 23.58B.030: Modification of amount of payment or performance, Subsection D. Financial hardship.
51 Although the is given in the section pertaining to the "performance" option, it also applies to the payment option, i.e., to the fees to be paid.
52 Seattle Municipal Code, Section 23.58B.035: Documentation and timing.

All fees will go into a dedicated fund to subsidize affordable projects which preserve or produce rental units affordable to households with incomes up to 60 percent of Area Median Income, and to owner households with incomes up to 80 percent.[53] Allocation of these funds are guided by factors including contribution to fair housing choice, location in an urban center or in an urban village (place types which guide planning in Seattle), proximity to transit service, or contribution to furthering economic opportunity. t[54]

Lessons Learned

The "Grand Bargain" struck by all stakeholders enabled the City to adopt new programs to produce affordable housing and/or generate funding for it. Parties made compromises, resulting in a complex system which links upzoining with fee payments and/or affordable housing unit production.

The ordinance contains strong provisions for monitoring and possible adjustments, including planned upzonings, modifications to development standards, and starting in 2018, and every two years thereafter, staff analysis of the effectiveness of the policies and a report on unit production. The program's rules also required it to be reviewed and possibly amended within five years of its adoption if outcomes are below expectations or if significant changes occur in real-estate markets; otherwise, it has to be reviewed within ten years. To perform a review, the Mayor and Council will appoint and Technical Review Committee with proper representation of all public, private and community stakeholders.

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[53] Seattle Municipal Code, Section 23.58B.040: Affordable housing impact mitigation - payment option, Subsection B: Deposit and use of cash contributions.
[54] *Ibid*.

Appendix B: Commercial Building Permit Analysis

APPENDIX B-1: SUMMARY OF COMMERCIAL PERMITS, CITY OF LOS ANGELES, 2011-2015

Permitted Commercial Space by Use Allocation Code						
Building Type (a)	**Total Permitted (sf)**	**% of Total**	**# of Projects**	**Median Size (sf)**	**Minimum Size (sf)**	**Maximum Size (sf)**
Private Garage	9,976,975	34.7%	82	64,855	5,098	677,569
Public Garage	4,417,752	15.4%	24	122,605	5,180	1,374,661
Commercial Office	4,382,264	15.3%	98	19,145	5,031	439,380
Retail Store	1,988,039	6.9%	94	12,004	5,010	152,865
Hotel/Motel	1,740,870	6.1%	9	80,797	8,915	881,148
Warehouse	1,601,643	5.6%	31	16,212	5,010	271,130
School	1,379,845	4.8%	38	26,760	5,054	172,443
Airport Building	538,633	1.9%	16	17,003	5,000	128,367
Miscellaneous Structure	403,697	1.4%	9	11,085	6,165	284,548
Amusement Building	395,643	1.4%	20	25,510	5,669	112,269
Restaurant	387,297	1.3%	26	10,330	5,072	45,954
School Dormitory	285,050	1.0%	3	85,192	62,025	137,833
Hospital	279,659	1.0%	1	279,659	N/A	N/A
Medical/Dental Clinic	212,566	0.7%	7	16,408	6,135	73,320
Church	175,289	0.6%	5	29,541	6,725	71,817
Manufacturing	174,799	0.6%	10	11,673	5,558	46,398
Service Station/Repair	144,613	0.5%	6	7,045	5,220	110,777
Public Administration Building	103,078	0.4%	5	15,986	7,358	51,856
Cinema/Live Theater	60,590	0.2%	2	30,295	24,782	35,808
Senior Independent Housing (ground floor retail)	23,409	0.1%	1	23,409	N/A	N/A
Consumer Services	14,190	0.0%	1	14,190	N/A	N/A
Public Utility Facility	12,636	0.0%	2	6,318	5,425	7,211
Single - room Occupancy (ground floor retail)	12,506	0.0%	2	6,253	5,511	6,995
Artist-in-Residence/Loft (ground floor retail)	5,370	0.0%	1	5,370	N/A	N/A
Total	**28,716,413**	**100.0%**	**493**			

Notes:
(a) Includes permits for "New" buildings > 5,000 sf issued by City of LA from 1-1-2011 thru 12-31-15.
(b) Land use categories adapted from categories utilized in 2013 Santa Monica Commercial Nexus Study and Linkage Fee Analysis.
Sources: Los Angeles Department of Buildings; BAE, 2016.

APPENDIX B-2: BUILDING PERMIT DATA RE-CATEGORIZED BY PROPOSED COMMERCIAL FEE LAND USES

Permitted Commercial by Proposed Fee Category Fee Category (a)(b)	5-Year Total	% of	# of	Median	Minimum	Maximum Size	Annual Avg.
1. Office							
Commercial Office	4,382,264	15.3%	98	19,145	5,031	439,380	876,453
Subtotal	***4,382,264***	***15.3%***	***98***				**876,453**
2. Retail							
Retail Store	1,988,039	6.9%	94	12,004	5,010	152,865	397,608
Amusement Building	395,643	1.4%	20	25,510	5,669	112,269	79,129
Restaurant	387,297	1.3%	26	10,330	5,072	45,954	77,459
Service Station/Repair	144,613	0.5%	6	7,045	5,220	110,777	28,923
Cinema/Live Theater	60,590	0.2%	2	30,295	24,782	35,808	12,118
Senior Independent Housing (ground floor retail)	23,409	0.1%	1	23,409	N/A	N/A	4,682
Consumer Services	14,190	0.0%	1	14,190	N/A	N/A	2,838
Single - room Occupancy (ground floor retail)	12,506	0.0%	2	6,253	5,511	6,995	2,501
Artist-in-Residence/Loft (ground floor retail)	5,370	0.0%	1	5,370	N/A	N/A	1,074
Subtotal	***3,031,657***	***10.6%***	***153***				**606,331**
3. Industrial							
Manufacturing	174,799	0.6%	10	11,673	5,558	46,398	34,960
Subtotal	**174,799**	***0.6%***	***10***				**34,960**
4. Hotel							
Hotel/Motel	1,740,870	6.1%	9	80,797	8,915	881,148	348,174
Subtotal	***1,740,870***	***6.1%***	***9***				**348,174**
5. Institutional							
School	1,379,845	4.8%	38	26,760	5,054	172,443	275,969
School Dormitory	285,050	1.0%	3	85,192	62,025	137,833	57,010
Church	175,289	0.6%	5	29,541	6,725	71,817	35,058
Subtotal	***1,840,184***	***6.4%***	***46***				**368,037**
6. Medical & Social Services							
Medical/Dental Clinic	212,566	0.7%	7	16,408	6,135	73,320	42,513
Hospital	279,659	1.0%	1	279,659	N/A	N/A	55,932
Public Administration Building	103,078	0.4%	5	15,986	7,358	51,856	20,616
Subtotal	***595,303***	***2.1%***	***13***				**119,061**
7. Warehouse/Utility/Light Industrial							
Warehouse	1,601,643	5.6%	31	16,212	5,010	271,130	320,329
Public Utility Facility	12,636	0.0%	2	6,318	5,425	7,211	2,527
Airport Building	538,633	1.9%	16	17,003	5,000	128,367	107,727
Subtotal	***2,152,912***	***7.5%***	***49***				**430,582**
SUBTOTAL EMPLOYMENT-GENERATING USES	**13,917,989**	**48.5%**	**378**				**2,783,598**
Not Classifed for Fee Purposes							
Private Garage	9,976,975	34.7%	82	64,855	5,098	677,569	883,550
Public Garage	4,417,752	15.4%	24	122,605	5,180	1,374,661	883,550
Miscellaneous Structure	403,697	1.4%	9	11,085	6,165	284,548	57,010
Subtotal	***14,798,424***	***51.5%***	***115***				**2,959,685**
TOTAL ALL PERMITS	**28,716,413**	**100.0%**	**493**				**5,743,283**

Notes:
(a) Includes permits for "New" buildings > 5,000 sf issued by City of LA from 1-1-2011 thru 12-31-15.
(b) Fee categories adapted from 2013 Santa Monica Commercial Nexus Study and Linkage Fee Analysis.
(c) Includes Commercial Office square footage specifically noted as creative or production-oriented in LADBS database.
Sources: Los Angeles Department of Building and Safety; BAE, 2016.

APPENDIX B-3: DISTRIBUTION OF OFFICE AND RETAIL PROJECTS BY SIZE (SQ.FT.)

	Office		Retail	
By Square Feet	**Sq. Ft.**	**% of Total**	**Sq. Ft.**	**% of Total**
<10K Sq. Ft.	194,293	4.5%	449,170	13.6%
>10K Sq. Ft. and <20K Sq. Ft.	334,789	7.8%	530,094	16.1%
>20K Sq. Ft.	3,766,529	87.7%	2,314,717	70.3%
	4,295,611	**100.0%**	**3,293,981**	**100.0%**
By Number of Projects	**Projects**	**% of Total**	**Projects**	**% of Total**
<10K Sq. Ft.	27	28.4%	66	43.1%
>10K Sq. Ft. and <20K Sq. Ft.	22	23.2%	37	24.2%
>20K Sq. Ft.	46	48.4%	50	32.7%
	95	**100.0%**	**153**	**100.0%**

Note:
Data are for permits for "New" buildings > 5,000 sq. ft. issued by City of LA from 1-1-2011 thru 12-31-15.
Sources: Los Angeles Department of Building and Safety; BAE, 2016.

Appendix C: Pro Forma Analysis for Commercial Land Uses

APPENDIX C-1: RETAIL PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market - Baseline	Low Market with Linkage Fee	Moderate Market-Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Gross Building Area (sf)		14,000	14,000	14,000	14,000	14,000	14,000
Efficiency Ratio		95%	95%	95%	95%	95%	95%
Net Leaseable Area		13,300	13,300	13,300	13,300	13,300	13,300
Parking Ratio (spaces per square foot)		1 per 250	1 per 250	1 per 250	1 per 250	1 per 250	1 per 250
Number of Parking Spaces		56	56	56	56	56	56
Total Surface Spaces		56	56	56	56	56	56
Total Structured Parking Spaces		-	-	-	-	-	-
Total Underground Spaces		-	-	-	-	-	-
Total Parking Area (sf)	350	19,600	19,600	19,600	19,600	19,600	19,600
Total Number of Stories		1	1	1	1	1	1
Total Number of Stories (Parking)		1	1	1	1	1	1
Built FAR (ratio to 1.0)		0.42	0.42	0.42	0.42	0.42	0.42
Site Size (sf)		33,600	33,600	33,600	33,600	33,600	33,600
Site Size (acres)		0.77	0.77	0.77	0.77	0.77	0.77
Rents			0		0		0
Rent/SF/Year (a)		$ 25.00	$ 25.00	$ 35.00	$ 35.00	$ 50.00	$ 50.00
Development Costs			-		-		-
Site Work		$ 5	$ 5	$ 5	$ 5	$ 5	$ 5
Hard Costs (b)		$ 120	$ 120	$ 120	$ 120	$ 120	$ 120
Tenant Improvements (c)		$ 50	$ 50	$ 50	$ 50	$ 50	$ 50
Parking Costs (per space surface)		$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Parking Costs (per space structured)		$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Parking Costs (per space underground)		$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Soft Costs exc Fees (as % of hard)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees			0		0		0
School Fee per sq. ft. (d)		$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54
Commercial Linkage Fee		$ -	$ -	$ -	$ 7.00		$ 28.00
Financing Costs			-		-		23
Loan to Cost Ratio		80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		18	18	18	18	18	18
Average Outstanding Balance		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Operations			-		-		-
Vacancy		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Op Ex (% of Gross Rent) (a)		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Cap Rate (e)		7.0%	7.0%	6.0%	6.0%	5.5%	5.5%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market - Baseline	Low Market with Linkage Fee	Moderate Market-Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Land	$ 1,948,800	$ 1,948,800	$ 2,016,000	$ 2,016,000	$ 4,032,000	$ 4,032,000
Land per Site sf	$ 58.00	$ 58.00	$ 60.00	$ 60.00	$ 120.00	$ 120.00
Construction Costs						
Site Work	$ 168,000	$ 168,000	$ 168,000	$ 168,000	$ 168,000	$ 168,000
Hard Costs	$ 1,680,000	$ 1,680,000	$ 1,680,000	$ 1,680,000	$ 1,680,000	$ 1,680,000
Hard Costs - Parking	$ 336,000	$ 336,000	$ 336,000	$ 336,000	$ 336,000	$ 336,000
Tenant Improvements	$ 700,000	$ 700,000	$ 700,000	$ 700,000	$ 700,000	$ 700,000
Soft Costs	$ 576,800	$ 576,800	$ 576,800	$ 576,800	$ 576,800	$ 576,800
School Fee	$ 7,560	$ 7,560	$ 7,560	$ 7,560	$ 7,560	$ 7,560
Commercial Linkage Fee	$ -	$ -	$ -	$ 98,000	$ -	$ 392,000
Subtotal Costs Before Financing	$ 3,468,360	$ 3,468,360	$ 3,468,360	$ 3,566,360	$ 3,468,360	$ 3,860,360
Financing Costs						
Points	$ 41,620	$ 41,620	$ 41,620	$ 42,796	$ 41,620	$ 46,324
Construction Period Interest	$ 390,036	$ 390,036	$ 394,874	$ 401,930	$ 540,026	$ 568,250
Subtotal Financing Costs	$ 431,656	$ 431,656	$ 436,494	$ 444,726	$ 581,646	$ 614,574
Total Development Costs	**$ 5,848,816**	**$ 5,848,816**	**$ 5,920,854**	**$ 6,027,086**	**$ 8,082,006**	**$ 8,506,934**
Total Development Cost per SF	*$ 417.77*	*$ 417.77*	*$ 422.92*	*$ 430.51*	*$ 577.29*	*$ 607.64*
Commerical Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*1.6%*	*0.0%*	*4.6%*
Total Impact Fees as % of TDC	*0.1%*	*0.1%*	*0.1%*	*1.8%*	*0.1%*	*4.7%*
Valuation						
Operations						
Gross Income	$ 332,500	$ 332,500	$ 465,500	$ 465,500	$ 665,000	$ 665,000
Less: Vacancy	$ (16,625)	$ (16,625)	$ (23,275)	$ (23,275)	$ (33,250)	$ (33,250)
Less: Op Expenses	$ (16,625)	$ (16,625)	$ (23,275)	$ (23,275)	$ (33,250)	$ (33,250)
Net Operating Income (NOI)	$ 299,250	$ 299,250	$ 418,950	$ 418,950	$ 598,500	$ 598,500
Value at Stabilization	$ 4,275,000	$ 4,275,000	$ 6,982,500	$ 6,982,500	$ 10,881,818	$ 10,881,818
Yield on Cost						
Value at Stabilization	$ 4,275,000	$ 4,275,000	$ 6,982,500	$ 6,982,500	$ 10,881,818	$ 10,881,818
Less: Total Development Costs	$ 5,848,816	$ 5,848,816	$ 5,920,854	$ 6,027,086	$ 8,082,006	$ 8,506,934
Profit	$ (1,573,816)	$ (1,573,816)	$ 1,061,646	$ 955,414	$ 2,799,812	$ 2,374,884
Return on Cost	**-26.9%**	**-26.9%**	**17.9%**	**15.9%**	**34.6%**	**27.9%**
Yield on Cost (NOI/TDC)	**5.1%**	**5.1%**	**7.1%**	**7.0%**	**7.4%**	**7.0%**
Project Feasible? (f)	No	No	Yes	Yes	Yes	Yes

Notes:

a) Assumes triple net lease

b) Hard costs were based on data from RS Means with a location factor applied to reflect construction costs in Los Angeles.

c) Estimates for tenant improvements were provided by developers active in Los Angeles building this product type.

d) School Fees for Commercial

Current	$ 0.54	psf
Anticipated to Increase in Fall 2016	$ 0.57	psf

e) Cap rates were estimated based on investor reports, data provided by developers, and a review of Costar data for properties sold between August 2015 and July 2016.

f) Feasibility is based on a minimum Yield on C 7%
and a minimum Return on Cost of 15%
based on interviews with developers active in the Los Angeles.

Source: BAE, 2016.

APPENDIX C-2: OFFICE PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Gross Building Area (sf)		23,000	23,000	23,000	23,000	23,000	23,000
Efficiency Ratio		100%	100%	100%	100%	100%	100%
Net Leaseable Area		23,000	23,000	23,000	23,000	23,000	23,000
Parking Ratio (spaces per square foot)		1 per 500	1 per 500	1 per 500	1 per 500	1 per 500	1 per 500
Number of Parking Spaces		46	46	46	46	46	46
Total Surface Spaces		46	46	46	46	46	46
Total Structured Parking Spaces		-	-	-	-	-	-
Total Underground Spaces		-	-	-	-	-	-
Total Parking Area (sf)	350	16,100	16,100	16,100	16,100	16,100	16,100
Total Number of Stories (Bldg)		4	4	4	4	4	4
Total Number of Stories (Parking)		1	1	1	1	1	1
Built FAR (ratio to 1.0)		1.05	1.05	1.05	1.05	1.05	1.05
Site Size (sf)		21,850	21,850	21,850	21,850	21,850	21,850
Site Size (acres)		0.50	0.50	0.50	0.50	0.50	0.50
Rents							
Asking Rent/SF/Year (a)		$ 25.00	$ 25.00	$ 35.00	$ 35.00	$ 50.00	$ 50.00
Development Costs							
Site Work		$ 5	$ 5	$ 5	$ 5	$ 5	$ 5
Hard Costs (b)		$ 195	$ 195	$ 195	$ 195	$ 195	$ 195
Tenant Improvements (c)		$ 20	$ 20	$ 20	$ 20	$ 20	$ 20
Parking Costs (per space surface)		$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Parking Costs (per space structured)		$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Parking Costs (per space underground)		$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Soft Costs exc Fees (as % of hard)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
School Fee per sq. ft. (d)		$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54
Commercial Linkage Fee		$ -	$ -	$ -	$ 14.50	$ -	$ 33.00
Financing Costs							
Loan to Cost Ratio		80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		24	24	24	24	24	24
Average Outstanding Balance		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Operations							
Vacancy		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Op Ex (% of Gross Rent) (a)		25%	25%	25%	25%	25%	25%
Cap Rate (e)		6.5%	6.5%	5.5%	5.5%	5.5%	5.5%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market Baseline	Strong Market with Linkage Fee
Land	$ 983,250	$ 983,250	$ 1,311,000	$ 1,311,000	$ 4,370,000	$ 4,370,000
Land per Site sf	$ 45.00	$ 45.00	$ 60.00	$ 60.00	$ 200.00	$ 200.00
Construction Costs						
Site Work	$ 109,250	$ 109,250	$ 109,250	$ 109,250	$ 109,250	$ 109,250
Hard Costs	$ 4,485,000	$ 4,485,000	$ 4,485,000	$ 4,485,000	$ 4,485,000	$ 4,485,000
Hard Costs - Parking	$ 276,000	$ 276,000	$ 276,000	$ 276,000	$ 276,000	$ 276,000
Tenant Improvements	$ 460,000	$ 460,000	$ 460,000	$ 460,000	$ 460,000	$ 460,000
Soft Costs	$ 1,066,050	$ 1,066,050	$ 1,066,050	$ 1,066,050	$ 1,066,050	$ 1,066,050
School Fee	$ 12,420	$ 12,420	$ 12,420	$ 12,420	$ 12,420	$ 12,420
Commercial Linkage Fee	$ -	$ -	$ -	$ 333,500	$ -	$ 759,000
Subtotal Costs Before Financing	$ 6,408,720	$ 6,408,720	$ 6,408,720	$ 6,742,220	$ 6,408,720	$ 7,167,720
Financing Costs						
Points	$ 76,905	$ 76,905	$ 76,905	$ 80,907	$ 76,905	$ 86,013
Construction Period Interest	$ 709,629	$ 709,629	$ 741,093	$ 773,109	$ 1,034,757	$ 1,107,621
Subtotal Financing Costs	$ 786,534	$ 786,534	$ 817,998	$ 854,016	$ 1,111,662	$ 1,193,634
Total Development Costs	**$ 8,178,504**	**$ 8,178,504**	**$ 8,537,718**	**$ 8,907,236**	**$ 11,890,382**	**$ 12,731,354**
Total Development Costs/SF	*$ 355.59*	*$ 355.59*	*$ 371.21*	*$ 387.27*	*$ 516.97*	*$ 553.54*
Commerical Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*3.7%*	*0.0%*	*6.0%*
Total Impact Fees as % of TDC	*0.2%*	*0.2%*	*0.1%*	*3.9%*	*0.1%*	*6.1%*
Valuation						
Operations						
Gross Income	$ 575,000	$ 575,000	$ 805,000	$ 805,000	$ 1,150,000	$ 1,150,000
Less: Vacancy	$ (28,750)	$ (28,750)	$ (40,250)	$ (40,250)	$ (57,500)	$ (57,500)
Less: Op Expenses	$ (143,750)	$ (143,750)	$ (201,250)	$ (201,250)	$ (287,500)	$ (287,500)
Net Operating Income (NOI)	$ 402,500	$ 402,500	$ 563,500	$ 563,500	$ 805,000	$ 805,000
Value at Stabilization	$ 6,192,308	$ 6,192,308	$ 10,245,455	$ 10,245,455	$ 14,636,364	$ 14,636,364
Yield on Cost						
Value at Stabilization	$ 6,192,308	$ 6,192,308	$ 10,245,455	$ 10,245,455	$ 14,636,364	$ 14,636,364
Less: Total Development Costs	$ 8,178,504	$ 8,178,504	$ 8,537,718	$ 8,907,236	$ 11,890,382	$ 12,731,354
Profit	$ (1,986,196)	$ (1,986,196)	$ 1,707,737	$ 1,338,219	$ 2,745,982	$ 1,905,010
Return on Cost	**-24.3%**	**-24.3%**	**20.0%**	**15.0%**	**23.1%**	**15.0%**
Yield on Cost (NOI/TDC)	**4.9%**	**4.9%**	**6.6%**	**6.3%**	**6.8%**	**6.3%**
Project Feasible? (f)	No	No	Yes	Yes	Yes	Yes

Notes:

a) Assumes full-service lease

b) Hard costs were based on data from RS Means with a location factor applied to reflect construction costs in Los Angeles.

c) Estimates for tenant improvements were provided by developers active in Los Angeles building this product type.

d) School Fees for Commercial

Current	$ 0.54	psf
Anticipated to Increase in Fall 2016	$ 0.57	psf

e) Cap rates were estimated based on investor reports, data provided by developers, and a review of Costar data for properties sold between August 2015 and July 2016.

f) Feasibility is based on a minimum Yield on 6%
and a minimum Return on Cost of 15%
based on interviews with developers active in the Los Angeles.

Source: BAE, 2016.

APPENDIX C-4: HOTEL PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Gross Building Area (sf)		45,000	45,000	45,000	45,000	45,000	45,000
Number of Hotel Rooms	750	60	60	60	60	60	60
Parking Ratio (a)		See (a)	See (a)	See (a)	See (a)	See (a)	See (a)
Number of Parking Spaces		45	45	45	45	45	45
Total Surface Spaces		-	-	-	-	-	-
Total Structured Parking Spaces		-	-	-	-	-	-
Total Underground Spaces		45	45	45	45	45	45
Total Parking Area (sf)	350	15,750	15,750	15,750	15,750	15,750	15,750
Total Number of Stories (Bldg)		5	5	5	5	5	5
Total Number of Stories (Parking)		1	1	1	1	1	1
Built FAR (ratio to 1.0)		2.9	2.9	2.9	2.9	2.9	2.9
Site Size (sf)		15,750	15,750	15,750	15,750	15,750	15,750
Site Size (acres)		0.36	0.36	0.36	0.36	0.36	0.36
Rents							
Average Daily Rate (b)		$ 135	$ 135	$ 250	$ 250	$ 300	$ 300
Occupancy Rate		70%	70%	70%	70%	70%	70%
RevPAR		$ 95	$ 95	$ 175	$ 175	$ 210	$ 210
Other Revenue per Available Room Night		$ 15	$ 15	$ 30	$ 30	$ 30	$ 30
Development Costs							
Site Work		$ 5.0	$ 5.0	$ 5.0	$ 5.0	$ 5.0	$ 5.0
Hard Costs (c)		$ 225	$ 225	$ 225	$ 225	$ 225	$ 225
Tenant Improvements/FFEs (per room) (d)		$ 20,000	$ 20,000	$ 25,000	$ 25,000	$ 40,000	$ 40,000
Parking Costs (per space) (surface)		$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Parking Costs (per space) (structured)		$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Parking Costs (per space) (underground)		$ 45,000	$ 45,000	$ 45,000	$ 45,000	$ 45,000	$ 45,000
Soft Costs exc Fees (as % of hard)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
School Fee per sq. ft. (e)		$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54
Commercial Linkage Fee		$ -	$ -	$ -	$ 5.00	$ -	$ 25.00
Financing Costs							
Loan to Cost Ratio		85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		24	24	24	24	24	24
Avg. Outstanding Balance During Construction		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Operations							
Op Ex (% of revenue per available room)		60%	60%	60%	60%	60%	60%
Cap Rate (f)		7.0%	7.0%	6.0%	6.0%	6.0%	6.0%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Land	$ 787,500	$ 787,500	$ 1,102,500	$ 1,102,500	$ 2,047,500	$ 2,047,500
Land per Site sf	$ 50.00	$ 50.00	$ 70.00	$ 70.00	$ 130.00	$ 130.00
Construction Costs						
Site Work	$ 78,750	$ 78,750	$ 78,750	$ 78,750	$ 78,750	$ 78,750
Hard Costs	$ 10,125,000	$ 10,125,000	$ 10,125,000	$ 10,125,000	$ 10,125,000	$ 10,125,000
Hard Costs - Parking	$ 2,025,000	$ 2,025,000	$ 2,025,000	$ 2,025,000	$ 2,025,000	$ 2,025,000
Tenant Improvements/FFEs	$ 1,200,000	$ 1,200,000	$ 1,500,000	$ 1,500,000	$ 2,400,000	$ 2,400,000
Soft Costs	$ 2,685,750	$ 2,685,750	$ 2,745,750	$ 2,745,750	$ 2,925,750	$ 2,925,750
School Fee	$ 24,300	$ 24,300	$ 24,300	$ 24,300	$ 24,300	$ 24,300
Commercial Linkage Fee	$ -	$ -	$ -	$ 225,000	$ -	$ 1,125,000
Subtotal Costs Before Financing	$ 16,138,800	$ 16,138,800	$ 16,498,800	$ 16,723,800	$ 17,578,800	$ 18,703,800
Financing Costs						
Points	$ 205,770	$ 205,770	$ 210,360	$ 213,228	$ 224,130	$ 238,473
Construction Period Interest	$ 1,726,483	$ 1,726,483	$ 1,795,333	$ 1,818,283	$ 2,001,883	$ 2,116,633
Subtotal Financing Costs	$ 1,932,252	$ 1,932,252	$ 2,005,692	$ 2,031,511	$ 2,226,012	$ 2,355,106
Total Development Costs	**$ 18,858,552**	**$ 18,858,552**	**$ 19,606,992**	**$ 19,857,811**	**$ 21,852,312**	**$ 23,106,406**
Total Development Costs/SF	*419*	*419*	*436*	*441*	*486*	*513*
Commerical Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*1.1%*	*0.0%*	*4.9%*
Total Impact Fees as % of TDC	*0.1%*	*0.1%*	*0.1%*	*1.3%*	*0.1%*	*5.0%*
Valuation						
Operations						
Revenue - Hotel Rooms	$ 2,069,550	$ 2,069,550	$ 3,832,500	$ 3,832,500	$ 4,599,000	$ 4,599,000
Revenue - Other	$ 328,500	$ 328,500	$ 657,000	$ 657,000	$ 657,000	$ 657,000
Less: Op Expenses	$ (1,438,830)	$ (1,438,830)	$ (2,693,700)	$ (2,693,700)	$ (3,153,600)	$ (3,153,600)
Net Operating Income (NOI)	$ 959,220	$ 959,220	$ 1,795,800	$ 1,795,800	$ 2,102,400	$ 2,102,400
Value at Stabilization	$ 13,703,143	$ 13,703,143	$ 29,930,000	$ 29,930,000	$ 35,040,000	$ 35,040,000
Yield on Cost						
Value at Stabilization	$ 13,703,143	$ 13,703,143	$ 29,930,000	$ 29,930,000	$ 35,040,000	$ 35,040,000
Less: Total Development Costs	$ 18,858,552	$ 18,858,552	$ 19,606,992	$ 19,857,811	$ 21,852,312	$ 23,106,406
Profit	$ (5,155,409)	$ (5,155,409)	$ 10,323,008	$ 10,072,189	$ 13,187,688	$ 11,933,594
Return on Cost	**-27.3%**	**-27.3%**	**52.6%**	**50.7%**	**60.3%**	**51.6%**
Yield on Cost (NOI/TDC)	**5.1%**	**5.1%**	**9.2%**	**9.0%**	**9.6%**	**9.1%**
Project Feasible? (f)	No	No	Yes	Yes	Yes	Yes

Notes:

a) The parking requirements for a hotel/motel are as follows: one parking space for the first 30 guestrooms, 1/2 of a parking space for the next 30 guestrooms, and 1/3 of a parking space for the remaining rooms.

b) Average daily rates were derived from listesd average rooms rates for hotels across market conditions.

c) Hard costs were based on data from RS Means with a location factor applied to reflect construction costs in Los Angeles.

d) Furniture, fixtures, and equipment for hotels in strong markets were assumed to have a greater cost associated with higher grade finishes.

e) School Fees for Commercial

Current	$ 0.54	psf
Anticipated to Increase in Fall 2016	$ 0.57	psf

f) Cap rates were estimated based on investor reports, data provided by developers, and a review of Costar data for properties sold between August 2015 and July 2016.

g) Feasibility is based on a minimum YOC of 9%
and a minimum return on cost of 15%
based on interviews with developers active in the Los Angeles.

Source: BAE, 2016.

APPENDIX C-5: WAREHOUSE PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Gross Building Area (sf)		16,000	16,000	16,000	16,000	16,000	16,000
Efficiency Ratio		100%	100%	100%	100%	100%	100%
Net Leaseable Area		16,000	16,000	16,000	16,000	16,000	16,000
Parking Ratio (spaces per square foot) (a)		1 per 500	1 per 500	1 per 500	1 per 500	1 per 500	1 per 500
Number of Parking Spaces (a)		21	21	21	21	21	21
Total Surface Spaces		21	21	21	21	21	21
Total Structured Parking Spaces		-	-	-	-	-	-
Total Underground Spaces		-	-	-	-	-	-
Total Parking Area (sf)	350	7,420	7,420	7,420	7,420	7,420	7,420
Total Number of Stories (Bldg)		1	1	1	1	1	1
Total Number of Stories (Parking)		1	1	1	1	1	1
Built FAR (ratio to 1.0)		0.68	0.68	0.68	0.68	0.68	0.68
Site Size (sf)		23,420	23,420	23,420	23,420	23,420	23,420
Site Size (acres)		0.54	0.54	0.54	0.54	0.54	0.54
Rents							
Asking Rent/SF/Year (b)		$ 9.00	$ 9.00	$ 14.00	$ 14.00	$ 20.00	$ 20.00
Development Costs							
Site Work		$ 5	$ 5	$ 5	$ 5	$ 5	$ 5
Hard Costs (c)		$ 110	$ 110	$ 110	$ 110	$ 110	$ 110
Tenant Improvements		$ -	$ -	$ -	$ -	$ -	$ -
Parking Costs (per space surface)		$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Parking Costs (per space structured)		$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Parking Costs (per space underground)		$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Soft Costs exc Fees (as % of hard)		20%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
School Fee per sq. ft. (d)		$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54
Commercial Linkage Fee		$ -	$ -	$ -	$ 5.00	$ -	$ 25.00
Financing Costs							
Loan to Cost Ratio		80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		12	12	12	12	12	12
Average Outstanding Balance		60.0%	60.0%	60.0%	60.0%	60.0%	60%
Operations							
Vacancy		5%	5%	5%	5%	5%	5%
Op Ex (% of Gross Rent) (b)		3%	3%	3%	3%	3%	3%
Cap Rate (e)		6.0%	6.5%	5.5%	5.5%	5.5%	5.5%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market - Baseline	Low Market with Linkage Fee	Moderate Market- Baseline	Moderate Market with Linkage Fee	Strong Market - Baseline	Strong Market with Linkage Fee
Land	$ 351,300	$ 351,300	$ 468,400	$ 468,400	$ 1,405,200	$ 1,405,200
Land per Site sf	$ 15.00	$ 15.00	$ 20.00	$ 20.00	$ 60.00	$ 60.00
Construction Costs						
Site Work	$ 117,100	$ 117,100	$ 117,100	$ 117,100	$ 117,100	$ 117,100
Hard Costs	$ 1,760,000	$ 1,760,000	$ 1,760,000	$ 1,760,000	$ 1,760,000	$ 1,760,000
Hard Costs - Parking	$ 127,200	$ 127,200	$ 127,200	$ 127,200	$ 127,200	$ 127,200
Tenant Improvements	$ -	$ -	$ -	$ -	$ -	$ -
Soft Costs	$ 400,860	$ 400,860	$ 400,860	$ 400,860	$ 400,860	$ 400,860
School Fee	$ 8,640	$ 8,640	$ 8,640	$ 8,640	$ 8,640	$ 8,640
Commercial Linkage Fee	$ -	$ -	$ -	$ 80,000	$ -	$ 400,000
Subtotal Costs Before Financing	$ 2,413,800	$ 2,413,800	$ 2,413,800	$ 2,493,800	$ 2,413,800	$ 2,813,800
Financing Costs						
Points	$ 28,966	$ 28,966	$ 28,966	$ 29,926	$ 28,966	$ 33,766
Construction Period Interest	$ 132,725	$ 132,725	$ 138,346	$ 142,186	$ 183,312	$ 202,512
Subtotal Financing Costs	$ 161,690	$ 161,690	$ 167,311	$ 172,111	$ 212,278	$ 236,278
Total Development Costs	**$ 2,926,790**	**$ 2,926,790**	**$ 3,049,511**	**$ 3,134,311**	**$ 4,031,278**	**$ 4,455,278**
Total Development Costs/SF	*$ 183*	*$ 183*	*$ 191*	*$ 196*	*$ 252*	*$ 278*
Commerical Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*2.6%*	*0.0%*	*9.0%*
Total Impact Fees as % of TDC	*0.3%*	*0.3%*	*0.3%*	*2.8%*	*0.2%*	*9.2%*
Valuation						
Operations						
Gross Income	$ 144,000	$ 144,000	$ 224,000	$ 224,000	$ 320,000	$ 320,000
Less: Vacancy	$ (7,200)	$ (7,200)	$ (11,200)	$ (11,200)	$ (16,000)	$ (16,000)
Less: Op Expenses	$ (4,320)	$ (4,320)	$ (6,720)	$ (6,720)	$ (9,600)	$ (9,600)
Net Operating Income (NOI)	$ 132,480	$ 132,480	$ 206,080	$ 206,080	$ 294,400	$ 294,400
Value at Stabilization	$ 2,208,000	$ 2,038,154	$ 3,746,909	$ 3,746,909	$ 5,352,727	$ 5,352,727
Yield on Cost						
Value at Stabilization	$ 2,208,000	$ 2,038,154	$ 3,746,909	$ 3,746,909	$ 5,352,727	$ 5,352,727
Less: Total Development Costs	$ 2,926,790	$ 2,926,790	$ 3,049,511	$ 3,134,311	$ 4,031,278	$ 4,455,278
Profit	**$ (718,790)**	**$ (888,637)**	**$ 697,398**	**$ 612,598**	**$ 1,321,450**	**$ 897,450**
Return on Cost	**-24.6%**	**-30.4%**	**22.9%**	**19.5%**	**32.8%**	**20.1%**
Yield on Cost (NOI/TDC)	**4.5%**	**4.5%**	**6.8%**	**6.6%**	**7.3%**	**6.6%**
Project Feasible? (f)	No	No	Yes	Yes	Yes	Yes

Notes:

a) The parking ratio for warehouse or storage is 1 per 500 square feet for the first 10,000 square feet, and 1 per 5,000 thereafter.

b) Assumes triple-net lease

b) Hard costs were based on data from RS Means with a location factor applied to reflect construction costs in Los Angeles.

d) School Fees for Commercial

Current	$ 0.54	psf
Anticipated to Increase in Fall 2016	$ 0.57	psf

e) Cap rates were estimated based on investor reports, data provided by developers, and a review of Costar data for properties sold between August 2015 and July 2016.

f) Feasibility is based on a minimum YOC of 6.5%
and a minimum return on cost of 15%
based on interviews with developers active in the Los Angeles.

Source: BAE, 2016.

APPENDIX C-6: INDUSTRIAL PRO FORMAS

Key Development Assuptions		Alternative 1 Low Market - Baseline	Alternative 1 Low Market with Linkage Fee	Alternative 2 Moderate Market- Baseline	Alternative 2 Moderate Market with Linkage Fee	Alternative 3 Strong Market - Baseline	Alternative 3 Strong Market with Linkage Fee
Gross Building Area (sf)		12,000	12,000	12,000	12,000	12,000	12,000
Efficiency Ratio		95%	95%	95%	95%	95%	95%
Net Leaseable Area		11,400	11,400	11,400	11,400	11,400	11,400
Parking Ratio (spaces per square foot)		1 per 500	1 per 500	1 per 500	1 per 500	1 per 500	1 per 500
Number of Parking Spaces		24	24	24	24	24	24
Total Surface Spaces		24	24	24	24	24	24
Total Structured Parking Spaces		-	-	-	-	-	-
Total Underground Spaces		-	-	-	-	-	-
Total Parking Area (sf)	350	8,400	8,400	8,400	8,400	8,400	8,400
Total Number of Stories (Bldg)		1	1	1	1	1	1
Total Number of Stories (Parking)		1	1	1	1	1	1
Built FAR (ratio to 1.0)		0.59	0.59	0.59	0.59	0.59	0.59
Site Size (sf)		20,400	20,400	20,400	20,400	20,400	20,400
Site Size (acres)		0.47	0.47	0.47	0.47	0.47	0.47
Rents							
Asking Rent/SF/Year (a)		$ 10.00	$ 10.00	$ 18.00	$ 18.00	$ 21.00	$ 21.00
Development Costs							
Site Work		$ 5	$ 5	$ 5	$ 5	$ 5	$ 5
Hard Costs		$ 135	$ 135	$ 135	$ 135	$ 135	$ 135
Tenant Improvements		$ -	$ -	$ -	$ -	$ -	$ -
Parking Costs (per space surface)		$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Parking Costs (per space structured)		$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000	$ 30,000
Parking Costs (per space underground)		$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
Soft Costs exc Fees (as % of hard)		20%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
School Fee per sq. ft. (c)		$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54	$ 0.54
Commercial Linkage Fee		$ -	$ -	$ -	$ 14.00	$ -	$ 19.50
Financing Costs							
Loan to Cost Ratio		8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		12	12	12	12	12	12
Average Outstanding Balance		60.0%	60.0%	60.0%	60.0%	60.0%	60%
Operations							
Vacancy		5%	5%	5%	5%	5%	5%
Op Ex (% of Gross Rent) (b)		5%	5%	5%	5%	5%	5%
Cap Rate (d)		6.0%	6.5%	5.5%	5.5%	5.5%	5.5%

Development Costs	Alternative 1 Low Market - Baseline	Alternative 1 Low Market with Linkage Fee	Alternative 2 Moderate Market- Baseline	Alternative 2 Moderate Market with Linkage Fee	Alternative 3 Strong Market - Baseline	Alternative 3 Strong Market with Linkage Fee
Land	$ 306,000	$ 306,000	$ 408,000	$ 408,000	$ 816,000	$ 816,000
Land per Site sf	$ 15.00	$ 15.00	$ 20.00	$ 20.00	$ 40.00	$ 40.00
Construction Costs						
Site Work	$ 102,000	$ 102,000	$ 102,000	$ 102,000	$ 102,000	$ 102,000
Hard Costs	$ 1,620,000	$ 1,620,000	$ 1,620,000	$ 1,620,000	$ 1,620,000	$ 1,620,000
Hard Costs - Parking	$ 144,000	$ 144,000	$ 144,000	$ 144,000	$ 144,000	$ 144,000
Tenant Improvements	$ -	$ -	$ -	$ -	$ -	$ -
Soft Costs	$ 373,200	$ 373,200	$ 373,200	$ 373,200	$ 373,200	$ 373,200
School Fee	$ 6,480	$ 6,480	$ 6,480	$ 6,480	$ 6,480	$ 6,480
Commercial Linkage Fee	$ -	$ -	$ -	$ 168,000	$ -	$ 234,000
Subtotal Costs Before Financing	$ 2,245,680	$ 2,245,680	$ 2,245,680	$ 2,413,680	$ 2,245,680	$ 2,479,680
Financing Costs						
Points	$ 2,695	$ 2,695	$ 2,695	$ 2,896	$ 2,695	$ 2,976
Construction Period Interest	$ 12,248	$ 12,248	$ 12,738	$ 13,544	$ 14,696	$ 15,819
Subtotal Financing Costs	$ 14,943	$ 14,943	$ 15,432	$ 16,440	$ 17,391	$ 18,795
Total Development Costs	**$ 2,566,623**	**$ 2,566,623**	**$ 2,669,112**	**$ 2,838,120**	**$ 3,079,071**	**$ 3,314,475**
Total Development Costs/SF	*$ 214*	*$ 214*	*$ 222*	*$ 237*	*$ 257*	*$ 276*
Commerical Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*5.9%*	*0.0%*	*7.1%*
Total Impact Fees as % of TDC	*0.3%*	*0.3%*	*0.2%*	*6.1%*	*0.2%*	*7.3%*
Valuation						
Operations						
Gross Income	$ 114,000	$ 114,000	$ 205,200	$ 205,200	$ 239,400	$ 239,400
Less: Vacancy	$ (5,700)	$ (5,700)	$ (10,260)	$ (10,260)	$ (11,970)	$ (11,970)
Less: Op Expenses	$ (5,700)	$ (5,700)	$ (10,260)	$ (10,260)	$ (11,970)	$ (11,970)
Net Operating Income (NOI)	$ 102,600	$ 102,600	$ 184,680	$ 184,680	$ 215,460	$ 215,460
Value at Stabilization	$ 1,710,000	$ 1,578,462	$ 3,357,818	$ 3,357,818	$ 3,917,455	$ 3,917,455
Yield on Cost						
Value at Stabilization	$ 1,710,000	$ 1,578,462	$ 3,357,818	$ 3,357,818	$ 3,917,455	$ 3,917,455
Less: Total Development Costs	$ 2,566,623	$ 2,566,623	$ 2,669,112	$ 2,838,120	$ 3,079,071	$ 3,314,475
Profit	**$ (856,623)**	**$ (988,161)**	**$ 688,706**	**$ 519,698**	**$ 838,384**	**$ 602,980**
Return on Cost	**-33.4%**	**-38.5%**	**25.8%**	**18.3%**	**27.2%**	**18.2%**
Yield on Cost (NOI/TDC)	**4.0%**	**4.0%**	**6.9%**	**6.5%**	**7.0%**	**6.5%**
Project Feasible? (f)	No	No	Yes	Yes	Yes	Yes

Notes:

a) Assumes triple-net lease

b) Hard costs were based on data from RS Means with a location factor applied to reflect construction costs in Los Angeles.

c) School Fees for Commercial

Current	$ 0.54	psf
Anticipated to Increase in Fall 2016	$ 0.57	psf

d) Cap rates were estimated based on investor reports, data provided by developers, and a review of Costar data for properties sold between August 2015 and July 2016.

e) Feasibility is based on a minimum YOC of 6.5%
and a minimum return on cost of 15%
based on interviews with developers active in the Los Angeles.

Source: BAE, 2016.

APPENDIX C-7: MEDICAL (HOSPITAL) PROTOTYPE (COST-BASIS)

Key Development Assuptions (a)		Cost Basis
Gross Building Area (sf)		75,000
Efficiency Ratio		100%
Net Leaseable Area		75,000
Parking Ratio (spaces per square foot)		1 per 200
Number of Parking Spaces		375
Total Surface Spaces		-
Total Structured Parking Spaces		375
Total Underground Spaces		-
Total Parking Area (sf)	350	131,250
Total Number of Stories (Bldg)		6
Total Number of Stories (Parking)		2
Built FAR (ratio to 1.0)		1.0
Site Size (sf)		78,125
Site Size (acres)		1.79
Rents		
Asking Rent/SF/Year		N/A
Development Costs		
Site Work		$ 5
Hard Costs		$ 800
Tenant Improvements		$ -
Parking Costs (per space surface)		$ 6,000
Parking Costs (per space structured)		$ 25,000
Parking Costs (per space underground)		$ 40,000
Soft Costs exc Fees (as % of hard)		20.0%
Impact Fees		
School Fee per sq. ft. (b)		$ 0.54
Commercial Linkage Fee		$ 35.00

Development Costs	Cost Basis
Land	$ 3,906,250
Land per Site sf	$ 50.00
Construction Costs	
Site Work	$ 390,625
Hard Costs	$ 60,000,000
Hard Costs - Parking	$ 9,375,000
Tenant Improvements	$ -
Soft Costs	$ 13,953,125
Subotoal Before Fees	**$ 83,718,750**
School Fee	$ 40,500
Commercial Linkage Fee	$ 2,625,000
Subtotal Fees	**$ 2,665,500**
Total Development Costs	**$ 90,290,500**
Total Development Costs/SF	*$ 1,204*
Commerical Linkage Fee as % of TDC	*2.9%*
Total Impact Fees as % of TDC	*3.0%*

Notes:

a) The hospital/medical office prototype was evaluated using a total development cost metric because it is difficult to obtain data on revenue, which varies depending on the type of medical services offered. Data from the Office of Statewide Health Planning and Development was evaluated for new hospital expansion projects between 2010 and 2016, with construction costs averaging $600-$1,200 per square foot. For each cost threshold, the fee was set at 1% of total development cost.

b) School Fees for Commercial

Current	$	0.54
Anticipated to Increase in Fall 2016	$	0.57

Source: BAE, 2016.

APPENDIX C-8: LAND SALES FOR COMMERCIAL AND RESIDENTIAL PROJECTS

Commercial Land Comps	City	Neighborhood	APN	Zoning	Sale Date	Land SF	Sales Price	Price/SF	Market
7221 Canby Avenue	Reseda	Reseda	2119-020-901	C2	4/3/2015	10,994	$ 439,760	$ 40.00	Low
18854 Sherman Way	Reseda	Reseda	2126-001-001	C2	4/17/2014	36,690	$ 1,600,000	$ 43.61	Low
18854-18860 Sherman Way	Reseda	Reseda	2126-001-001	C2	4/17/2014	36,220	$ 1,600,000	$ 44.17	Low
18447 Sherman Way	Reseda	Reseda	2119-020-900	C2	4/3/2015	8,400	$ 420,000	$ 50.00	Low
7324-7332 Reseda Blvd	Reseda	Reseda	2119-019-032	C2/P	3/3/2015	29,142	$ 1,550,000	$ 53.19	Low
7332 Reseda Blvd	Reseda	Reseda	2119-019-032	C2	9/19/2013	29,140	$ 1,555,000	$ 53.36	Low
22112 Sherman Way	Canoga Park	Canoga Park	2024-012-007	R2	5/4/2015	15,719	$ 880,000	$ 55.98	Low
7304 Canby Avenue	Reseda	Reseda	2119-021-039	C2	4/18/2014	8,003	$ 540,000	$ 67.47	Low
18438 Bryant Street	Northridge	Northridge	2786-005-011	CM	3/2/2016	14,192	$ 1,040,000	$ 73.28	Low
20460 Sherman Way	Winnetka	Winnetka	2136-002-024	C4-5/P	6/6/2014	16,533	$ 1,500,000	$ 90.73	Low
Average								***$ 57.18***	
16623 Sherman Way	Van Nuys	Lake Balboa	2226-006-016	C2	2/28/2011	16,552	$ 840,000	$ 50.75	Moderate
16836 Sherman Way	Van Nuys	Lake Balboa	2225-018-012	LAR3	3/14/2014	14,462	$ 967,000	$ 66.86	Moderate
Average								***$ 58.81***	
Industrial Land Comps									
930 East 111th Place	Los Angeles	Green Meadows	Multiple	M-1	-	395,555	$ 7,900,000	$ 19.97	Moderate
338 East Beach Avenue	Inglewood	N/A	4015-017-017	Industrial	11/1/2014	61,468	$ 1,100,000	$ 17.90	Outside of City
9415 Burtis Street	South Gate	N/A	622-001-015	Industrial	11/1/2014	187,508	$ 5,250,000	$ 28.00	Outside of City
21038 South Wilmington Avenue	Carson	N/A	7316-028-014	Industrial	12/1/2013	435,164	$ 14,200,000	$ 32.63	Outside of City
Average								***$ 24.62***	
Residential Land Comps						**# of Units**		**Price/Unit**	
1030-48 N. Soto Street	Los Angeles	Boyle Heights	N/A	N/A	Escrow	49	$ 2,000,000	$ 40,816	Low
2423-31 East 1st Street	Los Angeles	Boyle Heights	N/A	N/A	8/1/2014	31	$ 1,483,100	$ 47,842	Low
1836-42 Sichel Street	Los Angeles	Lincoln Heights	N/A	N/A	2/1/2015	20	$ 1,195,000	$ 59,750	Low
516 Echandia Street	Los Angeles	Boyle Heights	N/A	N/A	4/1/2015	3	$ 230,000	$ 76,667	Low
Average								***$ 56,269***	
G12	Los Angeles	Downtown	N/A	N/A	Oct-13	640	$ 45,000,000	$ 70,313	High
Hanover	Los Angeles	Downtown	N/A	N/A	Jan-13	231	$ 18,000,000	$ 77,922	High
1027 Olive	Los Angeles	Downtown	N/A	N/A	Jan-14	201	$ 20,000,000	$ 99,502	High
Average								***$ 82,579***	

Source: Data based on multiple appraisals provided by the City of Los Angeles in 2016

Appendix D: Residential Fee Case Studies

The following profiles several residential fee programs established in cities throughout California. First, larger cities' programs are summarized, including San Francisco, Sacramento, Oakland, and San Diego. Next, several smaller cities located near Los Angeles are profiled to provide context for more localized real estate economics and policy considerations.

It should be noted that these profiles are not exhaustive; numerous other cities in California have pre-existing inclusionary housing programs, and almost all of these jurisdictions have an in-lieu fee option (especially post-Palmer for rental housing projects).

The only city profiled in this chapter that did not have an existing inclusionary housing ordinance at the time of the Palmer decision is Oakland, which just recently adopted it's housing impact fee, as described below.

San Francisco Inclusionary Program and In-Lieu Fees

Background

San Francisco's Inclusionary Housing Program dates back to 1992, though substantial amendments in 2002 extended applicability to as-of-right projects with ten units or more, and established the option to pay an in-lieu fee that in large part remains in place today.

Since its inception, the inclusionary requirements and scope have been modified numerous times to account for changing economic conditions, growing affordable housing needs. and legal challenges to inclusionary housing policies across the State.[55] At the time of the policy's adoption in 1992, the program established a 10 percent on-site affordable housing (60% AMI) requirement that applied only to projects seeking conditional uses. Changes to the policy in 2002 cited declining vacancy rates and dramatic increases in average housing prices as the impetus for the imposition of stricter requirements, including expanding its applicability to as-of-right projects.[56]

Rather than constructing inclusionary units, market-rate residential developers have had an option to pay an in-lieu fee, based on the number of off-site inclusionary units (typically a higher percentage than those required on-site), the affordability gap identified by way of a nexus study, and annual adjustments.

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[55] A summary of the evolution of San Francisco's Inclusionary Housing Program has been compiled by the Mayor's Office of Housing and Community Development and may be accessed at the following URL as of 7/21/16: http://sfmohcd.org/sites/default/files/FileCenter/Documents/7252-Evolution%20of%20Inclusionary%20Housing%20Program%20110513.pdf.

[56] San Francisco Ordinance No. 37-02, "Inclusionary Affordable Housing Program." Amended 3/18/02. Accessed 7/18/16. http://sfmohcd.org/sites/default/files/FileCenter/Documents/3780-Inclusionary%20Housing%20LawOrdinance37-02.pdf.

In 2010, the Program's in-lieu fee evolved into the Affordable Housing Fee following the 2009 California Court of Appeal's decision in *Palmer/Sixth Street Properties L.P. v. City of Los Angeles*, which effectively prohibited the enforcement of inclusionary housing programs and associated in-lieu fees on rental developments. The current ordinance imposes the Affordable Housing Fee on residential projects of ten or more units and provides developers with an option to construct units rather than paying the Fee, provided they meet certain requirements. This setup is opposite the original policy, which required the construction of units but offered the option to pay an in-lieu fee, subject to conditions.

Most recently, in June 2016, San Francisco voters passed Proposition C, which removed the existing inclusionary rates from the City Charter to allow for easier routine adjustment and increased the affordable housing obligations applicable for larger market-rate residential developments. The requirements set forth in Proposition C will be enforced on an interim basis until the City enacts an ordinance to amend the Planning Code and adopt inclusionary and/or affordable housing obligations.[57] As such, the inclusionary standards described in this section reflect those in Proposition C.

Today, San Francisco's program applies broadly to any residential development project that consists of at least ten units (even if units are located on separate adjacent lots), with standard exemptions such as developments located on property owned or leased continuously by the United States or State of California used exclusively for governmental or educational purposes, and those located on property owned by the San Francisco Redevelopment Agency or Port of San Francisco where application is prohibited by State or local law. Projects in which 100 percent of units will be affordable and regulated by a government unit, agency, or authority and qualified student housing projects are also exempt from the inclusionary requirement, subject to specific requirements and conditions.[58]

As part of the program, all project sponsors or developers are required to submit a Declaration of Intent specifying how the inclusionary requirements will be fulfilled to the Planning Department before payment of any fees. The Planning Department is then responsible for notifying the Development Fee Collection Unit at the Department of Building Inspection of their choice. Should a developer opt to proceed with an alternative option rather than paying the

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[57] The full text of Proposition C may be accessed at the following URL as of 7/21/16: http://sfgov.org/elections/sites/default/files/Documents/candidates/IHR%20Legal%20Text.pdf.

[58] Section 415.3 of the Municipal Code states, "If a project qualifies as exempt because it consists of 100 percent affordable units, the project sponsor must record an NSR against the property that provides that, in the event of foreclosure or for any other reason, the project no longer qualifies as a project meeting the requirements of [the exemption], the project will either pay the Affordable Housing Fee plus interest from the date the project received its first construction document for the project if no affordable units were ever provided, or if affordable units were provided and occupied, then the Affordable Housing Fee with no interest is due on the dates the units were no longer occupied by qualifying households; or provide the required number of on-site affordable units required at time of original project approval and that those units shall be subject to all of the requirements of [the inclusionary program]." In order to qualify as exempt, a Student Housing project must be part of a larger institutional master plan, which is to be filed with the Planning Department prior to the issuance of any building permit or alteration permit.

fee, they must submit an Affidavit of Eligibility for an Alternative to the Affordable Housing Fee in addition to the Declaration of Intent.

Fee Structure

The amount of the Affordable Housing Fee (formerly the in lieu fee) is charged on a per-unit basis for either 20 percent of the total number of units in the principal project for projects with 10 to 24 units or 33 percent for projects with 25 units or more, without rounding up to the nearest whole number. The current fee schedule is shown in the table below. Fees charged per unit reflect the unit mix of the principal project.

The inclusion of a fee specific to single room occupancy (SRO) and Group Housing Units in 2016 is unique among the case study areas analyzed for this report and accounts for the finding that these units are typically smaller than studios.

MARKET-RATE RESIDENTIAL AFFORDABLE HOUSING FEES

	Project Size	
Unit Type (a)	**10-24 Units** (b)	**25+ Units** (c)
SRO/Group Housing Unit	$29,701	$49,007
Studio	$39,602	$65,343
1 Bedroom	$53,792	$88,757
2 Bedroom	$73,274	$120,902
3 Bedroom	$83,560	$137,874
4 Bedroom	$104,286	$172,072

Note:
(a) Fees shown are those effective June 1, 2016.
(b) Reflects an off-site inclusionary requirement of 20% of units in the principal project.
(c) Reflects an off-site inclusionary requirement of 33% of units in the principal project.

Sources: SF Mayor's Office of Housing and Community Development, 2016; BAE, 2016.

The Affordable Housing Fee must be paid in full before issuance of the first construction document, though in the past, the Board of Supervisors has adopted deferral mechanisms. For example, during the Great Recession, development projects in the pipeline were permitted to defer payment of the in-lieu fee, in addition to all other impact fees, to prior to issuance of the first certificate of occupancy, subject to a deferral surcharge deposited into the Downtown Park Fund. This option expired in July 2013, though the language still exists in the Planning Code, in the event that the Board of Supervisors is motivated to reactivate such provisions.

All monies collected by the Affordable Housing Fee and any lien proceedings are deposited into the Citywide Affordable Housing Fund, which is managed by the Mayor's Office of Housing. Funds generated by the Inclusionary Housing Program are used as a source of gap financing to

support affordable housing developments,[59] assist low and moderate income homebuyers, and pay the expenses of the Mayor's Office of Housing and Community Development (MOHCD) as necessary to administer and monitor compliance with the Program, but not exceeding $200,000 every five years.

The Mayor's Office of Housing and Community Development updates and publishes annual adjustments to the Affordable Housing Fee, based on the annual percent change in the Construction Cost Index (CCI) for San Francisco as published by Engineering News Record.

Alternatives

As noted previously, developers may choose to construct inclusionary units, either on- or off-site (or provide a combination of units and paying the fee) rather than paying the Affordable Housing Fee in full.[60] If a developer chooses to construct units rather than paying the fee, they must either (a) construct, market and sell all units as ownership units that will remain ownership units for the life of the project, or (b) submit a contract to the City demonstrating that construction of the inclusionary units is not in violation of the Costa-Hawkins Rental Housing Act because they have entered into an agreement with a public entity to receive a direct financial contribution or other form of assistance, thereby exempting the development from the requirements of Costa-Hawkins.[61] Typically, off-site units must be located within one mile of the principal project, to support an even distribution of market-rate and subsidized housing across the City. Special requirements may apply to individual projects subject to standards established in a developer agreement.

Pursuant to recent changes adopted in Proposition C, the number of inclusionary units required is dependent on project size as follows:

Projects with 10-24 Units

For projects with fewer than 25 units, developers may choose to construct inclusionary units on- or off-site, equivalent to either 12 percent of the number of units in the principal project for on-site units or 20 percent for off-site units, and affordable to low-income households.[62]

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[59] Based on an interview with a Development Project Manager in the Mayor's Office of Housing and Community Development, the amount of gap financing contributed by the Affordable Housing Fund typically does not exceed $200,000 per unit. The City has established supportive service requirements for affordable projects, and these standards which may be increased especially when the City has invested funds into the project; however, funds are generally not used directly for supportive services, which are typically shown as an operating expense (rather than construction cost), and paid by the developer over the life of the project.

[60] In certain geographic areas such as the UMU and Mission Transit Districts, developers also have an additional option to contribute land to the City whose value is at least equivalent to payment of the Affordable Housing Fee.

[61] Refer to California Civil Code Section 1954.53(a)(2).

[62] The percentage requirement of off-site affordable units is slightly different for tall projects. Section 415.7 of the Municipal Code provides that any project that is over 120 feet in height and does not require a Zoning Map amendment or Planning Code text amendment related to its project approvals that results in a net increase in the number of permissible residential units or in a material increase in the net permissible residential square footage is required to construct 17 percent times the number of units in the principal project, rounded up from fractions of 0.5 or more.

Projects with 25+ Units

For projects with twenty-five dwelling units or more, the minimum required number of on-site affordable units be must be equal to at least 25 percent of the units in the principal project, rounded up from fractions of 0.5 or more, with 15 percent of units affordable to low- and very low-income households and 10 percent affordable to middle-income households. If inclusionary units are constructed off-site, the developer must construct at least the number of units equivalent to 33 percent of all units constructed in the principal project, rounded up from fractions of 0.5 or more, with 20 percent of units affordable to low- and very low-income households and 13 percent of units affordable to middle-income households.

These alternative scenarios are summarized in the table below.

INCLUSIONARY HOUSING REQUIREMENTS FOR ON- AND OFF-SITE UNITS

Project Size	On-Site Requirement (a)	On-Site Minimum Affordability Requirement	Off-Site Requirement (b)	Off-Site Minimum Affordability Requirement
< 10 units	0	N/A	0	N/A
10 - 24 units	12% of units on project site	Affordable to LI households	20% of units in principal project	Affordable to LI households
> 24 units	25% of units on project site	15% affordable to LI households; 10% affordable to LI/MI households	33% of units in principal project	20% affordable to LI households; 13% affordable to LI/MI households

Notes:
(a) The requirements shown are general, city-wide requirements. Specific requirements may apply to the UMU District and Eastern Neighborhood.
(b) Subject to a pending feasibility study.

Sources: SF Planning Code, Sec. 415, 2016; SF Planning, 2016; BAE, 2016.

Outcomes

Since its inception in 1992, the inclusionary housing program has resulted in the production of 2,157 total below market-rate (BMR) units with an average of 86 units completed per year[63] Due to the nature of the program, the magnitude of BMR inclusionary housing units completed in a particular year is dependent on market-rate construction trends and consequently broader economic conditions. In 2008, for example, 311 BMR units were completed, the peak year since the program's establishment in 1992. Following the Great Recession, the program saw its lowest production of BMR inclusionary units, with just four completed in 2011. Since 2012, production of BMR units has grown annually, but has not yet exceeded the 2008 pre-recession peak. In addition to the units produced on-site, as of FY 2011-12, $50,321,468 in Inclusionary Housing Fees had been deposited into the Affordable Housing Fund.[64]

Lessons Learned

[63] Based on an inventory of projects completed between Q1 1992 and Q2 2016. Source data provided by the SF MOHCD and may be downloaded at https://data.sfgov.org/Housing-and-Buildings/Residential-Projects-With-Inclusionary-Requirement/nj3x-rw36n. Accessed 7/19/16.

[64] City and County of San Francisco Controllers Office, "FY 2011-12 Development Impact Fee Report." November 30, 2012. Accessed 7/19/16. http://sfcontroller.org/sites/default/files/FileCenter/Documents/3770-ImpactReport_2011-12.pdf.

City staff interviewed for this study remarked that while the City is not legally able to require developers to select one particular option to comply with the ordinance, construction of on-site units is the City's preferred option in most cases.[65] This is partially due to the challenge of using of Affordable Housing Fee funds in housing boom cycles, when land prices and construction costs are high, making affordable projects difficult to build.

By imposing a smaller proportion of affordable units when constructed on-site, San Francisco's program incentivizes on-site construction of affordable units.

Since the transition of the in-lieu fee to the Affordable Housing Fee in 2010 and realignment of the policy towards a fee-based program, 60 percent of projects approved by the Planning Department have elected to construct on-site units. Of those projects electing to provide on-site affordable units, a slightly greater proportion have built ownership units (54 percent ownership compared to 46 percent rental units.)[66] Approximately 34 percent of projects approved since 2011 have chosen to pay the Affordable Housing Fee and approximately three percent have sought a combination of units and fees.

These program outcomes are summarized below.

INCLUSIONARY PROGRAM OUTCOMES, Q1 2011 - Q2 2016

Option	Projects (a)	Percent
On-Site BMR Project	82	60.3%
Fee Payment	46	33.8%
Combination Project	4	2.9%
Land Dedication	2	1.5%
Units for Off-Site Project with Onsite Obligation	1	0.7%
Units for Off-Site Project	1	0.7%
Total	**136**	**100.0%**

Note:
(a) Based on the date of planning approval.

Sources: San Francisco MOHCD, 2016; BAE, 2016.

[65] One case in which on-site units are not a preference are those in which luxury units have particularly high homeowners' association fees that may ultimately make a technically "affordable" unit exceed allowable housing payments.
[66] Based on a total of 83 projects that chose to provide on-site BMR units and received planning approval between 1/1/11 and 6/9/2016.

OAKLAND AFFORDABLE HOUSING IMPACT FEE

Background

The City of Oakland had undertaken various efforts to study inclusionary housing ordinances prior to the City's recent adoption of an affordable housing impact fee in May 2016. For example, in 2000, a City Housing Task Force recommended that the City consider adopting an inclusionary housing policy, though the City did not act on the recommendation at that time. In 2006, the City Council established a Blue Ribbon Commission to study a proposed inclusionary ordinance, condominium conversions, and a comprehensive housing strategy, and formulate a set of recommendations. The Commission's final report was presented to Council in September 2007. Among other recommendations, the Commission recommended that the City adopt an inclusionary housing ordinance for new residential ownership developments. An economic feasibility report that was completed to inform the Commission's work found that development of rental housing was economically infeasible at the time even without an additional affordable housing impact fee, leading the Commission to elect not to recommend inclusionary requirements for rental projects.

In late 2007, shortly after the release Blue Ribbon Commission's recommendations, the Oakland housing market began to experience the impacts of the recent recession, stalling the City's consideration of an inclusionary housing ordinance. However, in the past few years, Oakland's housing market, including the market for rental housing, has experienced a dramatic boom. Significant increases in housing costs and concerns about displacement have led housing advocates to call for affordable housing impact fees, particularly within the context of the City's recent adoption of four major Specific Plans.

At roughly the same time, the City began to consider adoption of a transportation impact fee, causing City staff and Council members to call attention to the need for an affordable housing impact fee, along with fees for other capital improvements.

In 2013 the City Council authorized funding for the affordable housing impact fee nexus study, which was completed in 2016. The Nexus Study analyzed seven types of residential development and found the maximum legal fees per unit of each type of housing to be as follows:

- Single-Family Homes – Urban $34,833
- Single-Family Homes – Hills $81,729
- Townhomes – Urban $44,693
- Townhomes – Hills $53,258
- Multifamily – Lower/Mid-Rise $35,172
- Multifamily – Mid-Rise $39,887
- Multifamily – High-Rise $50,804

Alongside the nexus study, the City commissioned an Economic Feasibility Study to evaluate the impacts of all three new impact fees (affordable housing, transportation, and capital facilities) on development feasibility. The study found that single-family homes and townhouses were feasible in most parts of Oakland, multifamily rental housing was marginally feasible without the new impact fees, and condominium development was not feasible even without the new fees.

The Oakland City Council adopted substantially lower-than-maximum housing fees (see next section) on May 2016. The adopted fee schedule is effective on September 1, 2016.

Fee Structure

Oakland's affordable housing impact fee applies to all new residential units constructed in the City, regardless of the number of units in the project. The fee structure has different rates for each of three product types - multifamily, townhome, and single-family units - as well as different fees and phase-in schedules for each of three geographic zones. In the two geographic zones with stronger current residential market conditions, the fee will be phased in starting on September 1, 2016 and increasing on July 1, 2017 and July 1, 2018. The third zone, with a more moderate residential market, has a slower phase-in period. Starting on July 1, 2021, the fee will increase on an annual basis based on the Marshall & Swift building cost index. The adopted fee rates and phasing through July 1, 2020 are as shown in the table below. Affordable units and accessory dwelling units are exempt from the fee.

OAKLAND AFFORDABLE HOUSING IMPACT FEE (PER UNIT)

	Sept. 1, 2016	July 1, 2017	July 1, 2018	July 1, 2019	July 1, 2020
Zone 1					
Multifamily	$5,500	$11,500	$22,000	$22,000	$22,000
Townhome	$6,500	$12,000	$20,000	$20,000	$20,000
Single-Family	$6,000	$12,500	$23,000	$23,000	$23,000
Zone 2					
Multifamily	$4,550	$9,250	$17,750	$17,750	$17,750
Townhome	$2,600	$7,200	$14,250	$14,250	$14,250
Single-Family	$3,750	$9,000	$16,500	$16,500	$16,500
Zone 3					
Multifamily	$0	$0	$3,000	$6,000	$12,000
Townhome	$0	$0	$1,000	$4,000	$8,000
Single-Family	$0	$0	$1,000	$4,000	$8,000

Sources: City of Oakland, 2016; BAE, 2016.

Oakland's affordable housing impact fee is collected in two installments: half prior to issuance of a building permit for all or any part of the project, and half prior to issuance of a certificate of occupancy or temporary certificate of occupancy. The City has the ability to enforce payment of the fee by withholding building permits, recording a special assessment or other

lien against the property, revoking or suspending the certificate of occupancy or temporary certificate of occupancy, assessing civil penalties, or taking any other action necessary and appropriate to secure payment.

Project applicants have the option to provide affordable units on- or off-site rather than pay the fee. Affordable units provided off site must be completed within 18 months of the issuance of a certificate of occupancy for the market-rate units, and in most cases must be located within one half mile of the market-rate project site. In order to qualify for a fee exemption, the project must provide ten percent of units to low- or moderate-income households or five percent of units to very low-income households. In effect, these provisions exempt projects that are developed pursuant to the State Density Bonus Ordinance from the fee.[67] The City enacted these provisions in part to encourage developers to apply for density bonuses to address a lack of developer interest in pursuing density bonus projects in Oakland. In addition, City staff and leadership are hoping that use of the density bonus will make it feasible for a larger number of developers to provide units on-site within market-rate developments.

Applicants can also petition the City Manager for fee waivers or reductions on the basis that the fee would make a project infeasible and there are no feasible means of compliance, that the specific project will not generate a need for affordable housing (or only a limited need for affordable housing), or that the project has been subjected to atypical delays beyond the applicant's control due to litigation or similar circumstances.

Once the fee is implemented, revenues will be deposited into Oakland's Housing Trust Fund and can be used to support primarily the development of units for very low- or low-income households; up to 15 percent of revenues can be used to support the development of moderate-income households.

Outcomes

Because the fee has not yet gone into effect, the program has not generated any revenue or units to date.

Lessons Learned

Stakeholder working groups are often essential to creating a feasible fee, but can be controversial. Oakland engaged a stakeholder working group comprised of housing advocates and developers in order to gain technical insight and ensure that the adopted fee rate would be feasible. City staff report that this process was essential to determine feasible fee rates.

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[67] Oakland's affordability requirements for fee exemptions differ slightly from the affordability requirements under the State Density Bonus Ordinance in that the State Density Bonus does not include provisions that allow for additional density for rental projects that provide units for moderate-income households, while Oakland's ordinance does allow fee exemptions for projects that provide moderate-income units.

However, the working group process did receive some negative media attention because meetings were not open to the public in order to ensure candid stakeholder input.

Adopting different fees in different geographic areas can be politically controversial. The City of Oakland adopted different fee rates for each residential unit type based on three geographic zones. In general, the adopted fee rates and are lower and phased in more slowly in areas of the City that have experienced minimal recent developer interest in order to avoid the potential negative impacts of fees in areas with weaker real estate market conditions and encourage additional development in those areas. As the City began discussing the proposed fee rates with the public, some residents expressed dissatisfaction with the difference in rates on the basis that the differing rates send a message that the area with lower fee rates are not as desirable as other areas.

Stakeholders have differing views on fee collection vs. units on site. Affordable housing advocates in Oakland generally supported policies that would encourage most developers to provide fee revenue rather than construct units on site. Because Housing Trust Fund revenue can be used to leverage other sources of affordable housing financing, many affordable housing developers and advocates prefer fee revenue on the basis that it can generate a larger total number of affordable units. However, City staff and elected officials developed fee exemptions for on-site units with the goal of encouraging a greater mix of incomes at both the project and neighborhood level, and therefore adopted less stringent requirements for onsite units than many housing advocates requested. The City expects some developers to elect to pay the fees regardless of exemptions for on or offsite units due to the relative simplicity of providing the fee or economic feasibility considerations specific to each project. Notably, some areas of Oakland have no height or density limits, thereby negating any potential benefit of a density bonus that would be provided in exchange for affordable units.

Eligible activities for fee expenditures should be related to nexus study methodology. Affordable housing advocates lobbied to have all affordable housing fee revenues dedicated to support units serving lower-income households. In contrast, due to high market-rate housing costs, Oakland City staff and elected officials identified a need to also serve moderate-income households. Consequently, the City adopted policies that would allow up to 15 percent of housing impact fee revenue to support moderate-income units.

Adopting a charge based on square footage can lead to different outcomes than per-unit charges. The City of Oakland's adopted fees are charged on a per-unit basis, despite prior consideration of a fee that would be based on square footage. In part, the City decided on a per unit fee because developers often make a larger profit on a per-square-foot basis for smaller units. A per-unit fee effectively results in a higher fee rate per square foot for smaller units than for larger units, thereby capturing a larger share of any excess profit from smaller units relative to larger units, which may have lower profit margins. Perhaps more importantly,

the City has identified a need for increased construction of larger multifamily units, and therefore sought to avoid charging higher fees for larger units.

SACRAMENTO HOUSING IMPACT FEE

Background

In 2005, housing advocates pushed for making inclusionary housing requirements citywide. (The 2000 regulations on inclusionary housing concerned only certain growth areas.) A new council member elected in District 1 (with one of the growth areas) also wanted a fairer distribution of affordable housing units. The Housing Element update of 2008 put the shift to city-wide affordable housing policy on paper. The Palmer and Patterson decision and the loss of the Redevelopment Agency both forced the city to look for new ways of producing affordable housing or revenue for affordable housing. A linkage fee was chosen. Keyser Marston did a nexus study in 2015, and a new ordinance was passed in the summer of that year. Fees go into the Housing Trust Fund that was created in 1989, for the commercial impact fee program.

The "Mixed Income Housing" ordinance was enacted on Sept. 1, 2015.

Fee Structure

The fee structure shown below aims to foster higher densities of development and to steer development into specific locations: the fee of $2.58 per square foot is waived for high-density housing and greatly reduced in a Housing Incentive Zone (see figure on next page).

SACRAMENTO HOUSING FEES

Type	Fee Per Square Foot
Single/Duplex	$ 2.58
High Density Single/Duplex (a)	$ -
Multi-Unit Dwelling	$ 2.58
High Density Multi-Unit Dwelling (b)	$ -
Nonresidential to Residential Conversion	$ -
DU in Housing Incentive Zone	$ 1.11

Notes:
(a) "High Density" single/duplex is defined as 20 dwelling units or more per acre.
(b) "High Density" multi-unit is defined as 40 dwelling units or more per acre.

Sources: City of Sacramento, 2016; BAE, 2016.
Effective 11/1/2015

The Housing Incentive Zone (HIZ) is made up of areas where the market supplies housing that is actually affordable. The reduction in the fee represents an incentive to build there and helps to keep prices affordable. The ratio of HIZ fee to citywide fee is the same as the ratio of the median home price in the HIZ to the median home price in the rest of the city.

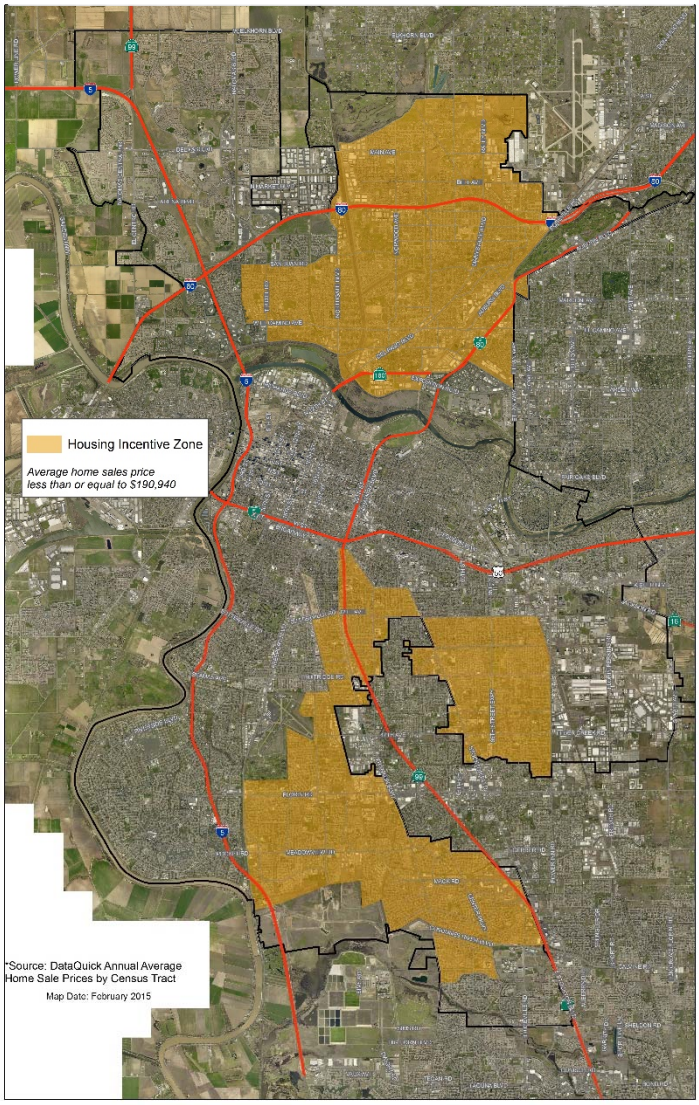
Note that for projects on parcels larger than 100 acres in area, the developer, in addition to paying impact fees, must gain approval of a "mixed income housing strategy" in the project.

Aside from grandfathered projects (with varying conditions according to the type of the project), several categories of project are exempt, including mobile home parks, development projects with at least 10 percent of affordable units, a new single-unit dwelling built by an owner-builder on his/her property (under certain conditions), a secondary dwelling unit, uninhabitable square footage without conditioned air, and community rooms for residential developments.[68]

Increases occur annually, on July 1, according to the San Francisco Construction Cost Index.

Fees are collected prior to (and as condition for) the issuance of the building permit. No provisions exist for the deferral of fees (but see below, planned revisions) and no provisions exist for refunds. However, as long as the monies have not been transferred into the Housing Trust Fund itself, it should be possible for a developer who decides not to build to negotiate a refund.

SACRAMENTO HOUSING INCENTIVE ZONES



According to staff interviewed for this report, there is little interplay between the fee program with the density bonus program, because the current zoning code is very permissive in terms of densities. Only two bonuses have been awarded in the last 20 years.

[68] Sacramento City Code, section 17.712.040 Exempted development projects.

Fees accrue to the Housing Trust Fund, founded in 1989 (when the commercial linkage fee program was initiated. The objective of the Housing Trust Fund is "to increase and improve the supply of housing affordable to households of low income, with priority given to very low income households."[69] "Low income" is defined as being below 80% of countywide median income; "very low income" is defined as below 50% of median income.

Housing that is financed by the Housing Trust Fund does not include housing for the homeless and housing dedicated to seniors.

Outcomes

Since Sept. 1, 2016, only about $30,000 has been collected. This small amount can be explained by three factors: the limited time since the adoption of the ordinance; the fact that many projects were already in the pipeline at the time of adoption; the fact that many projects are at densities or in locations that make them exempt from the fee.

No affordable housing units have been produced.

Lessons Learned

The requirement to pay the whole housing linkage fee upfront is a burden to developers. Council is currently studying a fee deferral ordinance, to enable developers to pay housing linkage fees over a certain amount of time.

The fees apply to all housing projects in which units are "market-rate," i.e., "not restricted to an affordable housing price or affordable rent."[70] This includes projects such as those built by Habitat for Humanity, in which owners invest sweat equity. The Planning Division would like to amend definitions so as to exempt such projects. Planners also would like to clarify the ways in which fees are assessed on multi-use projects or projects with different forms of tenure.

Finally, the price differential between market-rate housing in the Housing Incentive Zone and housing elsewhere in the city needs to be monitored, to know whether the ratio of HIZ fee to "regular" fee is still correct.

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[69] Sacramento City Code, section 17.708.020 Low income housing fund.
[70] Sacramento City Code, section 17.712.020 Definitions.

San Jose Affordable Housing Impact Fee

Background

The City of San Jose wanted to have additional tools to implement some of its housing policy goals (as spelled out in the Housing Element of its General Plan), in particular the objective to have 15 percent of new residential units be affordable units. Other goals served by the provision of affordable housing is a better jobs-housing balance and reduced pressure on traffic, and the attraction and retention of employees by the city's businesses.[71] A nexus analysis was prepared in 2014, and a new regulation was passed by City Council later that year. The Affordable Housing Impact Fee ordinance will take effect on July 1, 2016.

The Affordable Housing Impact Fee applies only to rental housing projects in large part because the *Palmer* decision limited the City's ability to generate revenue for affordable housing through in-lieu fees on rental development as part of its Inclusionary Housing Policy. San Jose's Inclusionary Housing Ordinance was adopted in 2010 (though it will take effect only this year, after a long legal battle). Legally distinct from the in-lieu fee, the Affordable Housing Impact Fee is an alternative mechanism to increase the City's supply of both affordable rental and ownership units.

Fee Structure

Fees apply to all market-rate rental developments (i.e., not to homeownership projects). Floor areas on which the fee is calculated are the residential areas of units (i.e., not including balconies, loggias, etc. or common areas in buildings).

Two categories of projects exist: Rental Development and Downtown High Rise Rental Development. The latter are projects in the Downtown Core Area in which the highest occupied floor is 150 feet or more above street level. The fees are $17.00 per square foot for both categories. (The two categories of projects reflect the categorization that exists in the Inclusionary Housing Ordinance, where downtown high-rise buildings had a lower in-lieu fee.) It is also noteworthy that the fee on rental units is the same as the in-lieu fee per the inclusionary program charged on for-sale units.[72]

Exemptions to the fee include pipeline projects, downtown high-rise projects which obtain a certificate of occupancy by July 1, 2021, and projects for which the developer is able to demonstrate no impact or standard violations of the US Constitution or California Constitution."[73]

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[71] City of San Jose, Resolution No. 77218, "A Resolution of the Council of the City of San Jose Adopting a Housing Impact Fee," available at http://www.sanjoseca.gov/DocumentCenter/View/37779, last accessed on June 1, 2016.
[72] This equality is due to the fact that the nexus study gave a range of possible levels for the impact fee and that $17.00 per square foot was within that range and seemed to all to be a good compromise.
[73] City of San Jose, Resolution No. 77218, Section 11, par. A.

Fees are adjusted annually at a fixed rate of 2.4 percent. In addition, the resolution allows the City to adjust the fee schedule from time to time if conditions change, such as an economic downturn.

Fees must be paid prior to issuance of the building permit. Developers may petition the Director of Housing of the City to delay payment of the fees to the time of delivery of the Certificate of Occupancy or the date of the final inspection if the City is not yet able to spend impact fees.

A Housing Impact Fee Fund was set up to manage the monies collected. It can be used to purchase affordable housing, finance the development of affordable housing, or to acquire affordability covenants. This fund is different from the Affordable Housing Fund set up with the adoption of the Inclusionary Housing Policy in 1988 (revised 2010).

The City has prepared an "Expenditure Plan for Housing Impact Fee Revenue" based on the nexus study of 2014 and demographic projections from ABAG.

Outcomes

The program has not yet generated fees. The City received 34 applications for exemptions as pipeline projects.

Lessons Learned

The ordinance was produced on the basis of a robust consultation process, in which developers and the public were heard. This produced a good compromise (e.g., 5-year exemption for downtown high-rise rental projects, but the same fee of $17.00 per square foot fee as on rental projects elsewhere), and provided solid support when City Council voted on the ordinance.

SANTA MONICA AFFORDABLE HOUSING PRODUCTION PROGRAM

Background

In 1990, Santa Monica voters approved Proposition R, which required that at least 30 percent of all housing units produced in any given year be affordable to low- and moderate-income households. Other ordinances were adopted over the years, including the Affordable Housing Production Program (AHPP) in 1998. The current ordinance took effect in May 2006 and was revised in June 2015.

Santa Monica's inclusionary housing policy mandates that 20 to 25 percent of market-rate units on-site, or 25 percent more than the on-site requirement for inclusionary units built off-site, be made affordable to low- and moderate-income households, depending on tenure and project size. The current residential Affordable Housing Fee originated from the option for residential developers to pay an in-lieu fee, rather than constructing affordable units, to satisfy the requirements of the AHPP.

Fee Structure

In-lieu fees are required for all rental projects, irrespective of the number of units[74] As an option for rental projects, a developer of a project with two or more units may dedicate land to the City or to a non-profit housing developer, sell either party land below market rate, or pay for an option on a piece of land. In all of these land options, the developer's loss or investment must equal the fee amount.

Fees can also be an option for or-sale projects that contain two or three units. For-sale projects with four or more units must provide affordable units either on- or off-site.

Currently, the Unit Base Fee is $31.25 per square foot for rental projects and $36.51 per square foot for condominium projects. [75]

Exemptions in addition to pipeline and other standard exemptions include single-unit projects, and designated landmark buildings or structures that are part of a historic district (fee only applies to new structures on site).

Fees are reviewed annually and are set by Council. Increases are based on changes in construction costs and on changes in land costs in the past year. The former are assessed by means of the relevant Construction Cost Index published by the Engineering New Record; the

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[74] City of Santa Monica, "Affordable Housing Production Program," at http://www.smgov.net/Departments/HED/Housing_and_Redevelopment/Housing/Production_Program_(Inclusionary)/AHPP.aspx, last accessed on June 5, 2016. In the Municipal Code that is available on the web at this time (June 5, 2016), there is no differentiation between condominium and apartment projects.

[75] City of Santa Monica, "Fee – Affordable Housing," available at https://smgov.net/Departments/HED/ Housing_and_ Redevelopment/Housing/Fee_-_Affordable_Housing/Fee_-_Affordable_Housing.aspx

latter are determined by data on the median condominium prices in the city. The precise methodology for revising the "Affordable housing unit base fee" is described in internal guidelines, the latest version of which was approved by Council in April 2016.[76]

Fees must be paid between issuance of the first building permit and issuance of the certificate of occupancy. No certificate will be issued without fees having been paid.

Fees are deposited a reserve account separate from the General Fund, and are to be used only for development of affordable housing, administrative costs related to the production of this housing, and monitoring and evaluation of this affordable housing production program."[77]. Fees must be used within five years of payment or approval of the project, whichever occurs later. An interesting enforcement mechanism has been adopted to manage the fee program: If fees are not used in the five-year time period, they will be returned to all developers who paid fees during the relevant five-year period, on a pro-rata basis.

The City of Santa Monica has also adopted an extensive Land Use and Circulation Element of the General Plan (LUCE), which provides for density bonuses in exchange for providing affordable housing along with an array of other incentives to direct denser development to certain locations. However, these provisions have been in flux in the past several years, with changes to implementing policies (not detailed herein).

Outcomes

Approximately $17 million has been received as in-lieu fees between 1998 and 2015.[78]

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[76] City of Santa Monica Housing Division, "Affordable Housing Production Program Administrative Guidelines (Pursuant to Chapter 9.64 of the Municipal Code)," April 12, 2016, available at http://www.smgov.net/uploadedFiles/Departments/HED/Housing_and_Redevelopment/Housing/Production_Program_(Inclusionary)/AHPP_Administrative_Guidelines_2016-04-12.pdf, last accessed on June 5, 2016.

[77] Santa Monica Municipal Code, Section 9.64.070: Affordable Housing Fee, paragraph F.

[78] This sum was obtained by adding in-lieu fees reported in the annual "Housing Reports" of the City of Santa Monica, available at https://www.smgov.net/Departments/HED/Housing_and_Redevelopment/Housing/Reports/Housing_ Reports.aspx, last consulted on June 7, 2016. The exact sum is $16,863,380. It was obtained by adding (1) fees collected in the first half of 1998 and in fiscal year 1998-1998 from all projects approved in that time period, (2) fees collected in fiscal years 1999-2000 to 2013-2014 for all projects completed in that time period, and (3) fees collected in fiscal year 2014-2015 from all projects completed, under construction or approved in that year.

West Hollywood Affordable Housing Impact Fee

Background

Established in 1986, West Hollywood's original Inclusionary Housing Program required developers to construct at least one unit affordable to low- or moderate-income households for projects with ten or fewer units and 20 percent affordable units in projects with over ten units.[79] Only projects of ten or fewer units have historically had the option to pay an Affordable Housing Fee in-lieu of providing units.

Subsequent to *Palmer/Sixth Street Properties, L.P v. City of Los Angeles* (2009), the City modified its inclusionary program by expanding the in-lieu fee option to rental projects of any size, provided the project does not utilize the State Density Bonus program or any other form of assistance described in Section 65915 of the California Civil Code. Condominiums, cooperatives, and apartments constructed using the Density Bonus program or other forms of assistance are still required to construct inclusionary units.[80]

In 2014 the City commissioned a residential nexus study to ensure that even if such requirements faced legal challenge, the requisite fees would survive the reasonable nexus test.[81] The Nexus Study prepared in 2014 confirmed that the in-lieu fee charged as part of the City's inclusionary program is supported by the analysis of all three residential prototypes studied. Nevertheless, the City is in the process of converting the Inclusionary Housing Ordinance into a Residential Affordable Housing Impact Fee program to establish consistent fee requirements for all residential development, regardless of tenure, and reduce the opportunity for legal challenge. While inclusionary units are still required of condominiums, cooperatives, and apartments constructed with a density bonus, this section describes the Residential Affordable Housing Fee as it applies to rental projects constructed without a density bonus or other form of financial assistance.

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[79] City of West Hollywood, "2013-2021 Housing Element." December 2013. PDF. Accessed 7/14/16. http://www.hcd.ca.gov/housing-policy-development/housing-resource-center/plan/he/housing-element-documents/west_hollywood_5th_adopted121313.pdf.

[80] City staff expressed that while their program has faced legal challenge, it has withstood such scrutiny due to the fact that the court's ruling in the *Palmer* case was that density bonuses and other types of incentives qualify as "direct financial contribution or any other [form] of assistance" specified in CA Civil Code Section 65915 (Density Bonus Program), therefore exempting development projects utilizing such incentives or assistance from the requirements of the Costa-Hawkins Rental Housing Act (CA Civil Code Section 1954.50).

[81] West Hollywood Department of Human Services and Rent Stabilization, "Non-Residential Jobs-Housing Nexus Study and Residential Nexus Study." December 15, 2014 City Council Agenda Report.

Fee Structure

In general, all residential development projects are required to either construct inclusionary units or pay the Affordable Housing Fee, with the exception of new single family dwelling units or the replacement of one single family dwelling with another single family dwelling, and projects developed, owned, or operated by a nonprofit housing provider (including residential care facilities), where all units are exclusively for low- or low- and moderate-income persons.[82]

The City provides density bonuses in excess of what is currently required per State law, allowing a maximum density increase of up to 100 percent the maximum density permitted by the underlying zone, subject to conditions of approval. In addition, the Inclusionary Housing Program offers concessions to developers including modified development standards such as height limits, setback, and open space requirements, in addition to reduced parking requirements. If a density bonus or other financial incentives are utilized, developers are required to construct inclusionary units (with an option to construct a greater proportion of inclusionary units off-site) and comply with the development standards as described in Chapter 19.22 of the West Hollywood Municipal Code.

The amount of the Affordable Housing Fee depends on project size (in terms of the number of units) and calculated based on the square feet of gross livable area (GLA) (including balconies and porches, but excluding parking.) Projects with 10 or fewer units pay a fee per square foot of GLA based on the sliding scale shown below. Projects with greater than ten units are required to pay a fee of $27.13 per square foot of GLA. Note that the figures in the table below reflect current amounts for the 2016-2017 fiscal year.

WEST HOLLYWOOD AFFORDABLE HOUSING IN-LIEU FEES

Project Size	Fee per Square Foot
2 Units	$12.65
3 Units	$14.47
4 Units	$16.28
5 Units	$18.09
6 Units	$19.90
7 Units	$21.71
8 Units	$23.53
9 Units	$25.33
10+ Units	$27.13

Sources: City of West Hollywood, 2016; BAE, 2016.

The adopted Affordable Housing Fee is a fraction of the maximum fees supported by the 2014 Residential Nexus Study. The Nexus Study arrived at a maximum supportable per square foot

[82]West Hollywood Municipal Code, Chapter 19.22 (Affordable Housing Requirements and Incentives).

fee of $33.00 for small condo projects, $40.30 for medium rental projects, and $47.20 for large rental projects.

The Affordable Housing Fee is adjusted based on changes in the Construction Cost Index (CCI) and adopted annually by the City Council. Fees must be paid in full upon issuance of a building permit for all units incurring the fees. If the project consists of multiple detached units, fees for the whole project must be paid before building permit issuance. Currently, there is no option for fee deferral. Impact fees are generally nonrefundable; however, funds may be issued if the building permit expires and is not extended or if the fees were collected illegally or erroneously. To request a refund, applicants must file a written request with the City no later than 90 days after the initial payment date to be considered.[83]

Outcomes

Revenue generated by the Affordable Housing Fee is deposited into the City's Affordable Housing Trust Fund. In fiscal year 2014-15, the Affordable Housing Fee generated approximately $1.3 million.[84]

Established in 1986, the Affordable Housing Trust Fund receives funds from residential and commercial development impact fees, as well as settlement funds. Funds are used exclusively for projects that include a minimum of 20 percent of the total units affordable to low income households and at least 60 percent affordable to low- and moderate-income households. Tax-exempt, non-profit corporations are eligible to apply to receive funds from the Affordable Housing Trust Fund which may be used for predevelopment costs, land or air rights acquisition, administrative costs, gap financing, or to lower the interest rate of construction loans or permanent financing. As of June 20, 2015, loans disbursed from the Affordable Housing Trust Fund and the Housing Asset Fund to qualified non-profit housing and community development corporations had an outstanding balance of $28,996,603.[85] The City does not have an updated estimate of the funds generated by the Residential Affordable Housing Fee or the number of units constructed by the program. City staff expressed a desire to maintain records of this progress in the future.

Lessons Learned

Of the case study areas analyzed, the City of West Hollywood's detailed sliding scale for smaller projects is unique; this approach lessens the burden of impact fees on small projects.

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[83] West Hollywood Municipal Code, Chapter 19.64 (Development Fees).
[84] City of West Hollywood, "Comprehensive Annual Financial Report." Fiscal Year Ending June 30, 2015. Accessed 7/14/16. http://www.weho.org/home/showdocument?id=25132. Page 14.
[85] City of West Hollywood, "Comprehensive Annual Financial Report." Fiscal Year Ending June 30, 2015. Accessed 7/14/16. http://www.weho.org/home/showdocument?id=25132. Page 66.

SANTA ANA INCLUSIONARY IN-LIEU FEE

Background

The Housing Opportunity Ordinance was adopted in 2011 to support implementation of the 2009 Housing Element Update. Other major land use changes underway in the City of Santa Ana at the time, including major rezoning of large industrial areas (Transit Zoning Code) and for the Harbor Boulevard Corridor, underscored the need to address affordable housing as well.

Santa Ana's inclusionary housing policy is contained in the Housing Opportunity Ordinance and requires that 15 percent of new, market rate residential projects consisting of five or more units be made affordable on-site to very low- or low-income households. Rather than constructing affordable units, developers may opt to pay an in-lieu fee, whose revenues are collected in an Inclusionary Housing Fund and used to produce affordable housing.

It is important to note that the Ordinance applies only to three types of projects: (1) housing developments that exceed the density otherwise available under applicable zoning and development standards, (2) projects that require a change in land use classification from a land use that does not permit residential uses to one that does, and (3) the conversion of rental units to condominiums.[86]

Fee Structure

The in-lieu fee varies by size of project, from $5.00 per square foot for projects with 5 to 20 units, to $15.00 per square foot for projects with over 20 units. This fee is applied only to the number of units that exceed land use density regulations allow at the time of the application. The fee is also used to deal with fractions of units that are normally required but are not included among those being built on-site or off-site.

The structure of the in-lieu fee has changed over time, with a recent shift to a higher fee per square foot on smaller projects because City Council realized that it is difficult for smaller projects (less than 20 units) to incorporate affordable units within them, so a fee payment is preferable.

Aside from pipeline projects and projects subject to California statues, projects with fewer than five units are exempt from the inclusionary requirement and thus the fee. In addition, the ordinance exempts conversion or adaptive reuse projects that change the use of the property from non-residential to residential; this exemption is provided in recognition of the fact that conversion and adaptive reuse projects are often made very expensive by code upgrades

[86] City of Santa Ana, "Affordable Rental Housing Administrative Procedures." January 2015. PDF. Accessed 8/9/16. http://www.santa-ana.org/pba/planning/documents/3AdminProcedures-RentALL.pdf.

The fee is due at issuance of the building permit. In the case of mixed-use projects, the rule applies even if the first building permit concerns only the non-residential portion of the project.

Outcomes

Fees are deposited in an Inclusionary Housing Fund, and combined with other affordable housing funding sources. Uses of in-lieu and other Trust funds can be used for rental or ownership projects. The ordinance contains a provision that invites developers paying the fees to provide input into their use, which according to staff interviewed for this study, is present to prevent political pressure from directing the affordable housing funds to a particular project or affordable housing developer.

As of June 2016, $4,302,000 has been received. So far, $1,875,000 has been committed to a project with 64 units.

Palo Alto Below Market Rate Housing Program

Background

Palo Alto's Below Market Rate (BMR) Housing Program was implemented in 1974, concurrent with the City's first receipt of Community Development Block Grant funding, to increase the City's supply of affordable housing.[87] Like other cities with inclusionary housing programs that predate the *Palmer* decision, Palo Alto is in the process of converting its residential inclusionary in-lieu fee to an impact fee supported by a reasonable nexus. In 2014, the City completed both residential and commercial nexus studies to determine the maximum legal fees justified by the impact of market-rate residential development in the City.

The City's existing BMR Housing program, adopted in 2008, is contained in Chapter 18.14 of the Municipal Code. The policy requires developers of projects with five or more units to construct 15 percent of units in the principal project as BMR units, or pay an in-lieu fee. Today this requirement applies only to ownership housing units, unless the developer agrees by contract to restrict rents in exchange for financial incentives such as a density bonus. Rental projects were once subject to this requirement before the 2009 California Court of Appeal ruled, in *Palmer/Sixth Street Properties L.P. v. City of Los Angeles,* that the application of inclusionary housing requirements and associated in-lieu fees on rental residential development was a violation of the Costa-Hawkins Rental Housing Act. In 2014, the City completed a residential nexus study to transform the in-lieu fee into a market-rate residential affordable housing impact fee.

Palo Alto's home prices and rental rates surged during its recovery from the Great Recession. A 2016 staff report explains that, "Since 2010 the purchase price of an average priced home in Palo Alto has increased 259% from $900,785 to $2,337,500. Rental costs have also skyrocketed from an average of $1,695 in 2010 to $3,105 in 2015."[88] Combined with the *Palmer* decision, these factors formed the impetus for the City to undertake commercial and residential nexus studies to establish impact fees and generate revenue for affordable housing.

Fee Structure

Historically, the City has imposed an inclusionary in-lieu fee equivalent to 7.5 to 10 percent of the sales price for market-rate single-family detached, single family attached, and condominiums. Following the results of recent nexus studies, the City has adopted flat fees per unit, rather than the existing percentage of sales price, that will take effect on August 15, 2016.

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[87] City of Palo Alto Finance Committee, "Residential/Commercial Impact Fee Studies Staff Report." February 16, 2016. Accessed 7/19/16. http://www.cityofpaloalto.org/civicax/filebank/documents/50935.

[88] City of Palo Alto Finance Committee, "Residential/Commercial Impact Fee Studies Staff Report." February 16, 2016. Accessed 7/19/16. http://www.cityofpaloalto.org/civicax/filebank/documents/50935. Page 3.

Both the existing and adopted fees are shown in the table below.

PALO ALTO RESIDENTIAL FEES

Unit Type	Existing Fee	Adopted Fee (a)
Single Family Detached	7.5 to 10% of sales price	$95/sf
Single Family Attached	7.5 to 10% of sales price	$50/sf
Condominium	7.5 to 10% of sales price	$50/sf
Rental Housing	None	$50/sf

Note:
(a) Adopted fee schedule is effective August 15, 2016.

Sources: Palo Alto Planning and Community Environment Department, 2016; BAE, 2016.

Revenues generated by the affordable housing impact fee are collected in the City's Residential Housing Fund, a "sub-fund" of the City's Affordable Housing Fund, a trust fund that exists to preserve and expand affordable housing for very low-, low-, and moderate-income households. Other sub-funds of the Affordable Housing Fund include the Commercial In-Lieu Fund, Home Investment Partnership Fund, Community Development Block Grant (CDBG), and Below Market Rate Emergency Fund. Detailed guidelines dictating the use of Affordable Housing Fund are posted on the City's website. According to these guidelines and the City's Notice of Funding Availability application, specific restrictions apply to the use of funds in each sub-category. Fees generated by the Residential Housing Fund may be used for the following:

- Construction of new housing units;
- Addition of new units to existing buildings;
- Conversion of non-residential space to housing units;
- Acquisition, rehabilitation, and preservation of existing affordable housing, where rents are controlled by deed restriction or another similar mechanism;
- Administrative costs of operating the BMR housing program.[89]

There is currently no limit on the amount of funding that can be allocated to a single development.[90]

Established in 2002 and distinct from the Residential Affordable Housing Fund, the Below-Market Rate Emergency Fund is used chiefly for activities necessary to preserve existing BMR housing by providing assistance such as deferred payment, low interest loans in the event that an owner of BMR housing faces "severe financial hardship" in paying major capital assessment on condominiums (not including monthly homeowners dues), acquiring units in

[89] City of Palo Alto, "Affordable Housing Fund Guidelines." August 17, 2015. PDF. Accessed 7/21/16. http://www.cityofpaloalto.org/civicax/filebank/documents/53195.
[90] City of Palo Alto, "Notice of Funding Availability." May 20, 2014. PDF. Accessed 7/21/16. http://www.cityofpaloalto.org/civicax/filebank/documents/42343.

foreclosure, repairing and reselling BMR units acquired by the City, or issuing short-term loans to rehabilitate older BMR housing stock.[91]

Outcomes

In Fiscal Year 2014-15, $19,800 in housing in-lieu fees was collected and deposited into the City's Residential Housing In-Lieu Fund, which as of June 30, 2015 had an ending balance of approximately $17.6 million.

[91] City of Palo Alto, "Affordable Housing Fund Guidelines." August 17, 2015. PDF. Accessed 7/21/16. http://www.cityofpaloalto.org/civicax/filebank/documents/53195. Page 5.

PASADENA INCLUSIONARY HOUSING ORDINANCE

Background

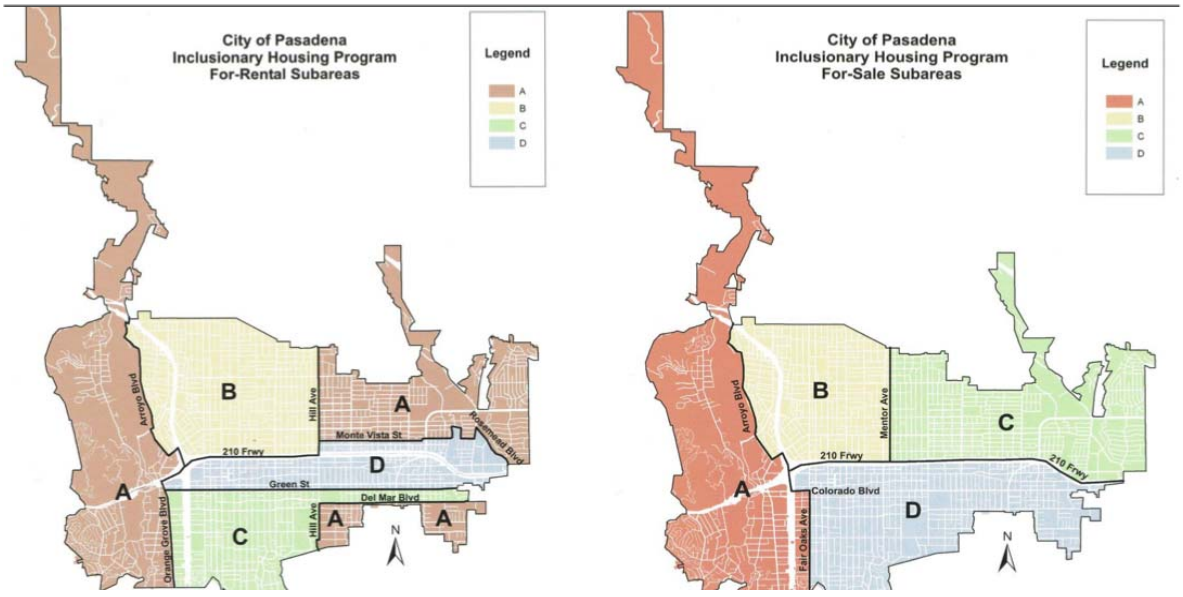
Pasadena's Inclusionary Housing Ordinance was adopted in 2001.[92] The policy requires either that 15 percent of all newly constructed, market-rate residential units be made affordable to low- and moderate- income households and constructed on-site, or payment of a fee based on project size and tenure, and assessed per square foot.

As with most inclusionary housing ordinances in California, the residential fee was originally established as an option "in-lieu" of producing the required number of affordable units. After the California courts limited mandatory unit production in the case of market-rate rental units, Pasadena revisited its rental housing in-lieu fee. In 2015 the City commissioned an Affordable Housing In-Lieu Analysis to recalculate the fee based on the affordability gap between the cost of market-rate housing units and the price that a low- or moderate-income household could afford to pay.[93] The City is currently considering raising its ordinance requirements based on a recent nexus study presented to City Council in April 2016.

Fee Structure

Inclusionary requirements and in-lieu fees vary by zone, with the four zones also varying slightly by tenure (rental vs. ownership projects) as shown below.

PASADENA INCLUSIONARY HOUSING ZONES



Source: City of Pasadena: http://ww5.cityofpasadena.net/housing/wp-content/uploads/ sites/3/2016/04/City-presentation-April-12-2016-.pdf

[92] City of Pasadena, Ordinance #6868, "An Ordinance of the City of Pasadena Amending Title 17"
[93] David Paul Rosen and Associates, "Pasadena Affordable Housing In Lieu Fee Analysis." March 10, 2016. PDF. Accessed 8/9/16. http://ww5.cityofpasadena.net/housing/wp-content/uploads/sites/3/2016/03/DRAFT-Inclusionary-In-Lieu-Fee-Analysis-.pdf.

Current and proposed fees as of April 2016 are shown below:

PASADENA CURRENT AND PROPOSED IN-LIEU FEES

	Fee Per Square Foot	
	FY 2016 Rate	Proposed Rate
10-49 Rental Units		
Sub-area A	$ -	$ 35.37
Sub-area B	$ 1.14	$ 19.97
Sub-area C	$ 25.21	$ 32.89
Sub-area D	$ 22.92	$ 35.37
50+ Rental Units		
Sub-area A	$ -	$ 49.12
Sub-area B	$ 1.14	$ 27.74
Sub-area C	$ 34.39	$ 45.68
Sub-area D	$ 32.10	$ 49.12
10-49 Ownership Units		
Sub-area A	$ 43.56	$ 47.01
Sub-area B	$ 16.04	$ 19.01
Sub-area C	$ 26.36	$ 29.66
Sub-area D	$ 20.63	$ 47.01
50+ Ownership Units		
Sub-area A	$ 60.75	$ 65.30
Sub-area B	$ 21.78	$ 26.40
Sub-area C	$ 36.68	$ 41.20
Sub-area D	$ 28.65	$ 65.30

Sources: David Paul Rosen and Associates; 2016, BAE, 2016.

Projects with fewer than 10 units are exempt from the Inclusionary Ordinance.

Half of the fee is due prior to obtaining the first building permit, with the balance due prior to obtaining a certificate of occupancy. Fees accrue to the Inclusionary Housing Trust Fund. There are no guidelines or limitations on the use of the fees collected.

Outcomes

The total amount collected between 2001 and April 2016 was $19.6 million.[94] Fee revenues have varied dramatically year by year: revenue dropped from about $5,000,000 in 2006 to about $100,000 six years later, during the Great Recession. These fluctuations have spurred the City to consider other options currently, including a commercial fee.[95]

As of 2016, Pasadena reports that there have been 1,507 "city-funded affordable units" produced.

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[94] City of Pasadena, "Affordable Housing Workshop: Pasadena Inclusionary Housing Ordinance" (presentation by Jim Wong, Senior Project Manager, April 12, 2016), p. 7, available at http://ww5.cityofpasadena.net/housing/wp-content/uploads/sites/3/2016/04/City-presentation-April-12-2016-.pdf, last accessed on June 6, 2016.

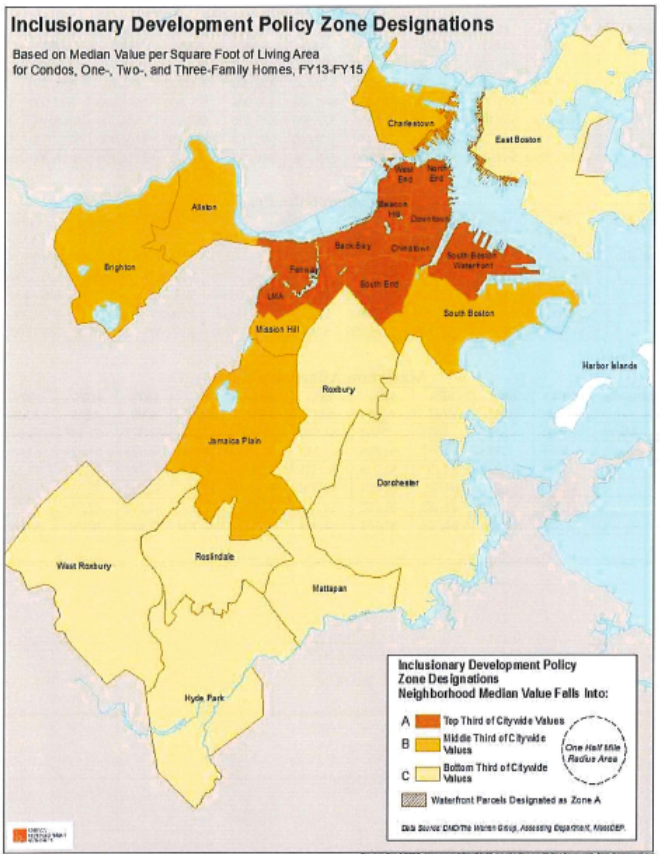
95 City of Pasadena, "City Council Affordable Housing Workshop" (PowerPoint presentation by William Huang, Director of the Housing Department, January 11, 2016),available at ww2.cityofpasadena.net/councilagendas/2016%20Agendas/ Jan_11.../AR%2014.ppt, last accessed on June 6, 2016.

BOSTON INCLUSIONARY DEVELOPMENT IN-LIEU FEE

Background

An executive order created the Boston inclusionary housing policy in 2000. The policy allowed for in-lieu fees: instead of including a number of affordable units equivalent to 10 percent of the total number of units in the project, the developer could pay a fee of $52,000 per unit on a number of units equivalent to 15 percent of the total number of units in the project. In 2003, a revision required that an in-lieu fee also be paid for the fraction of affordable unit that was not built when the number of affordable units was rounded off to the nearest lower number. The program has been revised several times to improve implementation since its inception.

BOSTON INCLUSIONARY DEVELOPMENT ZONES



Source: City of Boson. Inclusionary Development Policy. Exhibit B

The Inclusionary Development Program (IDP) applies to all residential projects that have ten units or more that are financed by the City, that are located on land that belongs to the City or to the Boston Redevelopment Authority, or for which zoning relief is sought.

Fee Structure

Fees vary by location and by tenure. The territory of the city was divided into three zones: Zone A comprise neighborhoods whose median value of a square foot of residential living area is in the top third of city valuations; Zone B has neighborhood medians close to the city average; and Zone C has neighborhood medians in the bottom third of city valuations. Different fees apply in each zone.

Contributions for rental projects are $380,000 per unit for projects in Zone A, $300,000 per unit for projects in Zone B, and $200,000 per unit for projects in Zone C. These unit costs are called “Zone Factors.” The number of units on which the IDP Contribution is calculated is 18 percent of the total number of units for projects in Zone A and in Zone B and 15 percent in Zone C. The total contribution is therefore Zone Factor X number of units.

Contributions per unit for homeownership projects are the highest of two figures: the Zone Factor or 50 percent of the difference between the market rate price and the affordable price for each unit type. The number of units is the same as for rental projects: 18 percent of total project units in Zones A and B, 15% in Zone C.

Note that an in-lieu contribution is also required in cases where affordable units are built on site to compensate for the loss of a fraction of an affordable unit in the project. For example, if the number of affordable units that is required is 7.35 and 7 units are built, the developer owes 35 percent of the in-lieu fee for a unit.

Exemptions include grandfathered projects, projects in which 40 percent or more of the units have income restrictions or are otherwise protected as affordable units, and dormitories.

There are no automatic fee increases; the unit factor was first set at $52,000, raised to $97,000 in 2005, and then to $200,000 in 2006. The 2006 revisions included a provision that contributions for rental projects could be paid in seven annual installments rather than all at once. The fee structure was amended again in 2015, to its current status.

Developers of rental housing may pay the IDP Contribution in 7 annual installments or all at once (using the current yield of a 10-year Treasury bond to calculate NPV). The first installment is due within 30 days of receipt of the "initial full building permit." Developers of ownership projects must pay 25 percent of the IDP Contribution based on Zone Factors within 30 days of receiving the building permit and the remaining 75 percent within 30 days of receiving the Certificate of Occupancy for their project.

Fees normally go into the IDP Fund. However, developers may ask that some or all of their IDP Contribution be used to finance an affordable housing project in the vicinity of their own development project.

Outcomes

Between 2000 and 2015, $119,700,542 was generated by in-lieu IDP Contributions. About $80,000,000 were already collected at that time, and the remainder was committed but not collected. An additional $22,176,190 was estimated to be in the pipeline, from projects that had been approved by the Boston Redevelopment Authority but had not yet been granted a development permit.[96]

In the same time period (2000 – 2015), contributions helped to build 1,597 new affordable housing units. Of these, 1,215 units were for low-income households (< 60% AMI) and 382 units were middle-income households (60% - 120% AMI).[97]

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[96] *Ibid*.
[97] *Ibid*.

Lessons Learned

The City would like a maximum number of projects to be built with affordable housing units on-site. Developers prefer either building off-site units or paying in-lieu fees. City staff reports that most projects chose a combination of units and fees.

Staff are currently considering revisions or clarifications on a number of elements of the ordinance including:

- The provision that allows developers to identify a specific project to target their in-lieu fees; because fee payments may be made in 7 years, this provision raises a serious problem for the financing of the affordable housing project. If the developer does not pay all fees upfront (with NPV calculation), the City must utilize the IDP fund to finance the affordable housing project and then use future fee payment to repay the IDP
- The distribution of monies to affordable housing projects; more emphasis on unit preservation vs. new construction may be needed. New units are generally in less attractive locations with fewer services, and preservation may also be cheaper in some cases.

CHICAGO AFFORDABLE REQUIREMENTS ORDINANCE

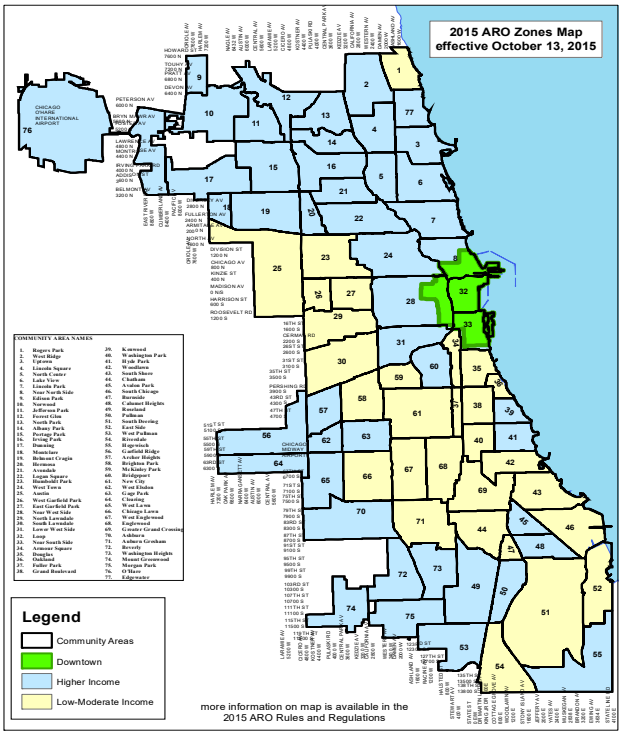
Background

Chicago adopted the first version of the Affordable Requirements Ordinance (ARO) in 2003. A few years later, as the market grew stronger and affordable units lost to new development increased, community groups pushed for stronger inclusionary requirements and Mayor Daley supported their goals. A much stronger ordinance was adopted in 2007, which started to generate more in-lieu fees (see Fees collected since inception, below). After the Great Recession, a new market upswing provoked a new push for generating affordable housing funding. Thus in 2015, requirements were strengthened again in order to generate more in-lieu fees.

Fee Structure

The fees are differentiated in several ways. First, they are differentiated geographically, according to local market conditions. Where the market is strongest ("Downtown"), the fees are highest. Lower fees are charged in medium strength markets (e.g., "Higher Income" areas, with low poverty rates), and still lower fees are charged in areas where markets are weakest (e.g., "Low-Moderate Income" areas, with high poverty rates). This scale is viewed as an incentive for developers to invest in Low-Moderate Income areas. A simplified map of the three zones will be updated every five years, based on new census data.

CHICAGO ZONE MAP



Source: City of Chicago, available at http://www.cityofchicago.org/content/dam/city/depts/dcd/general/housing/2015_ARO_ Zone_Map _JULY_28_2015.pdf

Second, the fees are differentiated according to tenure in the Downtown zone. Third, the fees are differentiated according to the developer's effort to contribute to the supply of affordable housing by means of construction (rather than in-lieu fees; see three green columns). Thus in the table on the next page, the "Final In-lieu Fee" applies today for regular projects; the "Final Authorized Agency In-lieu Fee" applies to projects in which the developer builds and sells or leases to an "authorized

agency" (for use as affordable housing, in the project at hand) a number of housing units at least equal to 25 percent of the total number of affordable units required under the ARO (i.e., the number of affordable units that should be built if no in-lieu fees were paid). The "Final In-lieu Premium" applies to downtown for-sale projects in which the developer fails to build, on-site or off-site, at least 25 percent of the number of required affordable units.[98]

Finally, fee increases were phased in over a year: "initial" levels are replaced by "final" levels after about 6 months.

CHICAGO IN-LIEU FEES

	In-Lieu Fee Per Unit					
Zone	Initial (a)	Final (b)	Initial Authorized Agency	Final Authorized Agency	Initial Premium	Final Premium
Low-Moderate Income	$ 50,000	$ 50,000	n/a	n/a	n/a	n/a
Higher Income	$ 125,000	$ 125,000	$ 100,000	$ 100,000	n/a	n/a
Downtown Rental	$ 140,000	$ 175,000	$ 115,000	$ 150,000	n/a	n/a
Downtown For Sale	$ 140,000	$ 175,000	$ 115,000	$ 150,000	$ 160,000	$ 225,000

Notes:
(a) "Initial" denotes an effective date of October 13, 2015.
(b) "Final" denotes an effective date of April 16, 2015.

Sources: City of Chicago, 2016; BAE, 2016.

Chicago, unlike other cities, does not require the payment of in-lieu fees for fractions of units that are required under the percentage-based formulas for on-site or off-site affordable housing construction. Results are rounded off to the nearest whole number.

A number of projects are exempt from affordable housing requirements under ARO including grandfathered projects, projects that do not call for a rezoning, do not benefit from the sale of City land and do not benefit from the City's financial assistance (i.e., require a rezoning, include the purchase of City land or benefit from City subsidies); and existing housing units, except in projects for which the developer received financial assistance from the City (i.e., for projects that involve existing buildings and are not subsidized, the requirements are calculated only on the new units added to the project)

Like other cities, Chicago also has a "waiver" option in its ordinance, which allows, the Commissioner of Planning and Development, "in certain limited circumstances as specified in the rules and regulations, to waive, adjust or reduce the requirements of this section [i.e., ARO]."[99] However, the rules were written is such a way as to limit the number of requests for

98 Chicago Municipal Code, Section 2-45-115 2015 Affordable Requirements, subsection F Methods of compliance. Note that the price of units sold to an authorized agency is not regulated; i.e., the sale can be done at market prices.
99 Chicago Municipal Code, 2-45-115 2015 Affordable Requirements, subsection P Hardship Waiver.

waivers to a minimum. In fact, no developer has yet attempted to obtain a waiver under this article of the ordinance.

Until 2015, fees were being updated periodically. The new ARO specifies that as of 2018, fees will be increased on January 1 of every year, at the rate given by the change in the Consumer Price Index for the metropolitan area of Chicago (using the annual change posted in September of the previous year).

Fees are due prior (and as a condition for) the issuance of the first building permit. The applicable fees are calculated by the Project Manager when the project is submitted for review and are valid for two years only; after that time period they must be calculated again, in light of any changes in the ARO.

In-lieu fees are deposited in the Affordable Housing Opportunity Fund ("unless required to be deposited into another fund pursuant to federal or state law"[100]). The funds will be divided two, one half being used for the production of affordable housing (new construction, rehabilitation or preservation), the other half is to be transferred to the Chicago Low-Income Housing Trust Fund, which provides rental subsidies.

To date, the fee program has raised approximately $50 million since 2007. Because of the economic downturn of 2008 and subsequent years, most fees have been collected since 2014. To date, in-lieu fees have been used to produce an estimated 310 affordable units, with an addition 242 units were built by developers as part of their projects.

Developers of projects who have received extra density under Chicago's Affordable Housing Zoning Bonus program (which give extra floor area in exchange for cash payments to the City) must first pay the fees owed under that program. Sums paid are then credited toward the in-lieu fees to be paid under the ARO.[101]

Lessons Learned

Sensitivity to context, i.e., to the socioeconomic geography of the city, is important. In Chicago, the very robust downtown market is key to the generation of fees for affordable housing and for other city priorities. (A new Neighborhood Opportunity Bonus was instituted in May 2016, whereby developers can earn a density bonus in exchange for a contribution to a newly established Neighborhood Opportunity Fund, which will be used to finance local economic development programs and projects.[102]) The distinction by zone, recognizing market

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[100] Chicago Municipal Code, 2-45-115 2015 Affordable Requirements, subsection G Affordable Housing Opportunity Fund.
101 Chicago Municipal Code, 2-45-115 2015 Affordable Requirements, subsection E Relationship between 2015 ARO and Affordable Housing Density Bonus. See also Section 17-4-1004-C Bonus Formula.
[102] City of Chicago, Neighborhoods Opportunity Fund Ordinance, available at http://chicagotonight.wttw.com/sites/default/files/article/file-attachments/Neighborhood%20Opportunity%20Fund%20Ordinance.pdf, last accessed on June 4, 2016.

conditions, is also important, so that modulated fees can help to generate more fee income in areas where development is robust and encourage developers to do projects in areas where economic development is needed.

One important issue noted during interviews for this case study is the balance between certainty and discretion in the use of funds generated by the in-lieu fee. On the one hand, the funds must be earmarked for specific purposes. However, planners feel that they must be able to allocated the funds without constraints on the location or type of project. In Chicago as in other cities, there was pressure from the community to earmark in-lieu fees from a project to affordable units in the same neighborhood. Planners resisted the pressure and maintained their right to allocate fees to projects throughout the city, on the basis of need.

A similar tension exists in the provision about waivers: use of this provision must be very tightly regulated, to prevent abuse, but it remains useful as an escape valve for truly exceptional cases.

Appendix E: Residential Building Permit Analysis

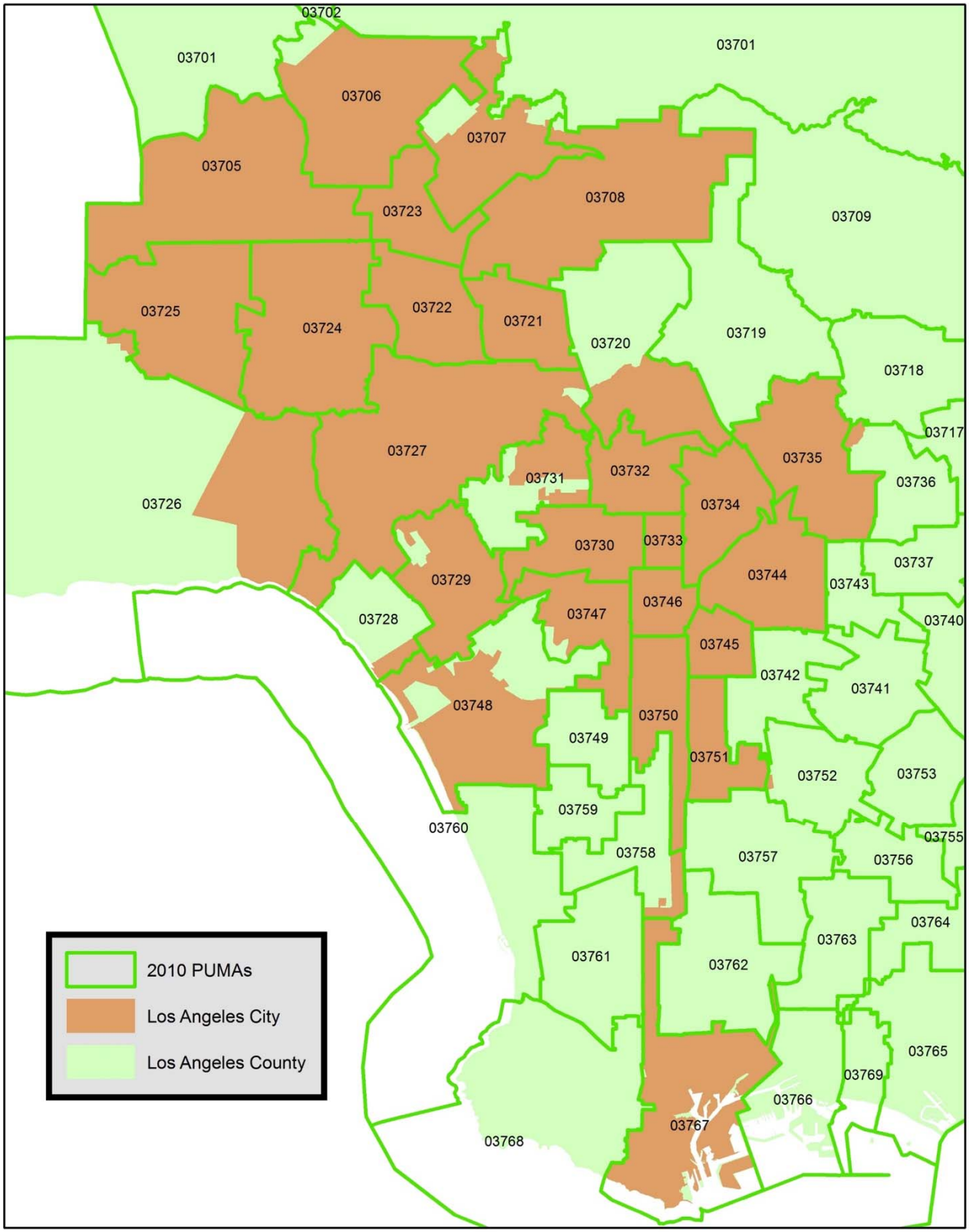
APPENDIX E-1: RESIDENTIAL UNITS PERMITTED, CITY OF LOS ANGELES, 2011-2015

Permit database does not differentiate between single family small lots and conventional lots. Thus, single family attached and single family detached categories include small lot projects.

Residential Units Permitted 2011-2015								
	Total for 2011-2015							
Building Type (a)(b)	Total Sq. Ft. Permitted	Percent of Total Sq.Ft.	Number of Permits	Total Units	Median Building Size (sf)	Avg. Units Per Permit	Avg, Sq,Ft, Per Year	Avg. Units Per Year
Single Family Detached (b)	**18,386,907**	**26.2%**	**4,973**	**4,952**	**3,088**		**3,677,381**	**990**
Single Family Attached/Townhouse								
Single Family Attached	1,266,345	1.8%	550	550	2,150		253,269	
Condominium	167,341	0.2%	56	61	2,632		33,468	
Duplex Condominium	16,093	0.0%	4	8	4,019		3,219	
Subtotal	**1,449,779**	**2.1%**	**610**	**619**			**289,956**	**124**
Multifamily Condominium								
Condominium 2-3 story	551,298	0.8%	48	313	9,511	7	110,260	
Condominium 4-5 story	876,126	1.2%	51	396	11,379	8	175,225	
Condominium > 6 story	0	0.0%	0	0	N/A	N/A	-	
Subtotal	**1,427,424**	**2.0%**	**99**	**709**			**285,485**	**142**
TOTAL OWNERSHIP UNITS	**21,264,110**	**30.3%**	**5,682**	**6,280**			**4,252,822**	**1,256**
Mutlifamily Rental								
Accessory Living Quarters	157,676	0.2%	74	67	1,477		31,535	
Duplex	3,105,698	4.4%	907	1,810	3,334		621,140	
Artist-in-Residence/Loft	7,049	0.0%	3	4	2,998		1,410	
Apartment 2-3 story	5,588,337	8.0%	321	4,272	10,248	13	1,117,667	
Apartment 4-5 story	17,333,097	24.7%	273	14,488	38,302	53	3,466,619	
Apartment 6-12 story	15,052,510	21.4%	70	14,343	161,060	205	3,010,502	
Apartment > 12 story	6,524,181	9.3%	15	5,225	358,796	348	1,304,836	
Senior Independent Housing	1,189,081	**1.7%**	15	1,132	68,404	75	237,816	
TOTAL RENTAL UNITS	**48,957,629**	**69.7%**	**1,678**	**41,341**			**9,791,526**	**8,268**
TOTAL ALL UNITS	**70,221,739**	**100.0%**	**7,360**	**47,621**			**14,044,348**	**9,524**

Notes:
(a) Includes permits for "New" buildings > 1,000 sf issued by City of LA from 1-1-2011 thru 12-13-15.
(b) Excludes Miscellaneous Structure Use Codes.
Sources: Los Angeles Department of Building and Safety; BAE, 2016.

Appendix F: Los Angeles PUMAs



Appendix G: Overview of IMPLAN

This appendix provides additional clarification of the workings of the IMPLAN input-output model. It provides a step-by-step account of how IMPLAN estimates economic impacts using new residential development as an illustrative example. Definitions of key *italicized* terms are provided in footnotes for the benefit of the reader. This section begins with an overview of the data that IMPLAN uses internally, and moves forward through the process of how the model estimates the impacts of the construction phase of the proposed casino.

What is IMPLAN?

As stated in the main body of the text, IMPLAN is an input-output model that estimates the total economic implications of new economic activity within a specified geography. The model uses national industry data and county-level economic data to generate a series of multipliers, which in turn estimate the total economic implications of economic activity.

At the heart of the model is a national input-output dollar flow table called the Social Accounting Matrix (SAM). Unlike other static input-output models, which just measure the purchasing relationships between industry and household sectors, SAM also measures the economic relationships between government, industry, and household sectors, allowing IMPLAN to model transfer payments such as unemployment insurance. Thus, for the specified region, the input-output table accounts for all the dollar flows between the different sectors within the economy.

National Industry Data. The model uses national production functions for 440 sectors to determine how an industry spends its operating receipts to produce its commodities. The model also uses a national matrix to determine the *byproducts*[103] that each industry generates. To analyze the impacts of household spending, the model treats households as an "industry" to determining their expenditure patterns. IMPLAN couples the national production functions with a variety of county-level economic data to determine the impacts for our example.

d

County-Level Economic Data. In order to estimate the county-level impacts, IMPLAN combines national industry production functions with county-level economic data. IMPLAN collects data from a variety of economic data sources to generate average output, employment, and productivity for each of the industries in a given county. It also collects data on average prices for all of the goods sold in the local economy. In the case of our example, IMPLAN uses economic data for Los Angeles County. IMPLAN gathers data on the types and amount of output that each industry generates within the region. In addition, the IMPLAN model uses county-level data on the prices of goods and household expenditures to determine the

[103] The byproducts refer to any secondary commodities that the industry creates.

consumption functions of regional households and local government, taking into account the availability of each commodity within the specified geography.

Multipliers. IMPLAN combines this data to generate a series of SAM-type multipliers for the local economy. The multiplier measures the amount of total economic activity that results from an industry (or household) spending an additional dollar in the local economy. Based on these multipliers, IMPLAN generates a series of tables to show the economic event's *direct*, *indirect*, and *induced* impacts to gross receipts, or output, within each of the model's 536 sectors. These outputs are described below:

- Direct Impacts. Direct impacts refer to the dollar value of economic activity available to circulate through the economy. In the case of new residential development, the direct impacts are equal to the new households' discretionary spending. The direct impacts do not include household savings and payments to federal, state, and local taxes, as these payments do not circulate through the economy.

  It should be noted that impacts from retail expenditures differ significantly between the total economic value of retail and the amount available to circulate through the local economy. The nature of retail expenditures accounts for this difference. The model assumes that only the retail markup impacts the local economy, particularly for industries heavily populated with national firms such as gas stations and grocery stores. Since local stores buy goods from wholesalers and manufacturers outside of the area, and corporate profits also leave the local economy, only the retail markup will be available for distribution within the local economy. To the extent that retailers' headquarters are located within the county or region, the model allocates their portions of the impacts to the local economy.

- Indirect Impacts. The indirect impacts refer to the inter-industry impacts of the input-output analysis. Since IMPLAN is only used for the housing analysis for this report to assess the impacts of new resident household expenditures, there are no indirect impacts to assess as there are no industry expenditures as inputs to the model.

- Induced Impacts. The induced impacts refer to the impacts of household spending by the employees generated by the direct and indirect impacts. In other words, induced impacts result from the household spending of employees of business establishments that the new households patronize (direct) and their suppliers (indirect). The model accounts for local commute patterns in the geography. For example, if 20 percent of construction workers who work in the region live outside of the region, the model will allocate 80 percent of labor's disposable income into the model to generate induced impacts. The model excludes payments to federal and state taxes and savings based on the geography's average local tax and savings rates. Thus, only the disposable incomes from local workers are included in the model.

Specifying the "Event" and Running the Model

Once the model is built for the specified geographies, it is time to specify the "event" that the model will analyze and run the model.

Specifying the "Event." The "event" refers to the total economic value of industry output that we are interested in analyzing. In the case of the ongoing economic impacts of a new residential development, the "event" would be the total household incomes of the households that buy or rent the homes.

Running the Model. Once the event is specified, IMPLAN runs the event through the model to generate the results. IMPLAN applies the local data on average output per worker and compensation per worker to determine the direct impacts. It then applies the value of the event to the national production functions and runs a number of iterations of this value through the production functions for the local economy to determine the indirect and induced impacts. For each iteration, the model removes expenditures to government, savings, and for goods bought outside of the local economy so that the results only include those dollars that impact the local economy.

Summarizing the Impacts

Once the model is run, IMPLAN generates a series of output tables to show the direct, indirect, and induced impacts within each of the model's 536 sectors. IMPLAN generates these tables for three types of impacts: output, employment, and value added. This nexus study is concerned with the employment impacts.

- *Output* refers to the total economic value of the project in the local economy.
- *Employment* shows the number of employees needed to support the economic activity in the local economy. It should be noted that for annual impacts of ongoing operations, the employment figure shown represents the amount of employment needed to support that activity for a year. Furthermore, IMPLAN reports the number of jobs based on average output per employee for a given industry within the geography. This is not the same as the number of full-time positions.
- *Value Added* shows the total income that the event generates in the local economy. This income includes:
    - *Employee Compensation* – total payroll costs, including benefits
    - *Proprietary Income* – payments received by self-employed individuals as income
    - *Other Property Type Income* – payments for rents, royalties, and dividends
    - *Indirect Business Taxes* – excise taxes, property taxes, fees, and sales taxes paid by businesses. These taxes occur during the normal operation of businesses, but do not include taxes on profits or income.

Appendix H: Detailed Pro Forma Analysis for Residential Land Uses

APPENDIX H-1: MULTIFAMILY RENTAL PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Site Size (sf)		43,560	43,560	43,560	43,560	43,560	43,560
Less: Open Space (sf of site per unit) (a)	125	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Developed Footprint (sf)		38,560	38,560	38,560	38,560	38,560	38,560
Number of Units		80	80	80	80	80	80
Average Unit Size (mix of studios, 1s, 2s)		1,150	1,150	1,150	1,150	1,150	1,150
Net Residential Space (sf)		92,000	92,000	92,000	92,000	92,000	92,000
Common Area	15.0%	13,800	13,800	13,800	13,800	13,800	13,800
Total Residential Space (sf)		105,800	105,800	105,800	105,800	105,800	105,800
FAR		2.4	2.4	2.4	2.4	2.4	2.4
Parking Ratio (spaces per unit)		1.5	1.5	1.5	1.5	1.5	1.5
Number of Parking Spaces		120	120	120	120.00	120	120
Total Parking Garage (sf)	350	42,000	42,000	42,000	42,000	42,000	42,000
Number of Residential Floors		3	3	3	3	3	3
Total Number of Stories		1	1	1	1	1	1
Rents							
Average Rent per Unit		$ 2,500	$ 2,500	$ 3,200	$ 3,200	$ 3,800	$ 3,800
Development Costs							
Site Work		$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Hard Costs - Res (wood frame)		$ 175	$ 175	$ 175	$ 175	$ 210	$ 210
Parking Costs (per space)		$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Soft Costs exc Fees (as % of hard)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
Quimby/Park Fee per Unit (b)		$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000
School Fee per sq. ft. (c)		$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36
Residential Fee per sq. ft.		$ -	$ -	$ -	$ 18.00	$ -	$ 24.00
Residential Fee per unit		$ -	$ -	$ -	$ 23,805	$ -	$ 31,740
Financing Costs							
Loan to Cost Ratio		85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		18	18	18	18	18	18
Avg. Outstanding Balance During Construction		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Operations							
Vacancy		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
OpEx per unit		$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 9,500	$ 9,500
Cap Rate		6.0%	6.0%	5.0%	5.0%	5.0%	5.0%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Land	$ 4,000,000	$ 4,000,000	$ 6,000,000	$ 6,000,000	$ 8,000,000	$ 8,000,000
Land per Residential Unit	$ 50,000	$ 50,000	$ 75,000	$ 75,000	$ 100,000	$ 100,000
Land per Site sf	$ 91.83	$ 91.83	$ 137.74	$ 137.74	$ 183.65	$ 183.65
Construction Costs						
Site Work	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800
Hard Costs - Residential	$ 18,515,000	$ 18,515,000	$ 18,515,000	$ 18,515,000	$ 22,218,000	$ 22,218,000
Hard Costs - Parking	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
Soft Costs	$ 4,346,560	$ 4,346,560	$ 4,346,560	$ 4,346,560	$ 5,087,160	$ 5,087,160
Quimby/Park Fee	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000
School Fee	$ 355,488	$ 355,488	$ 355,488	$ 355,488	$ 355,488	$ 355,488
Residential Linkage Fee	$ -	$ -	$ -	$ 1,904,400	$ -	$ 2,539,200
Subtotal Const Costs Before Financing	$ 26,834,848	$ 26,834,848	$ 26,834,848	$ 28,739,248	$ 31,278,448	$ 33,817,648
Financing Costs						
Points	$ 342,144	$ 342,144	$ 342,144	$ 366,425	$ 398,800	$ 431,175
Construction Period Interest	$ 2,358,866	$ 2,358,866	$ 2,511,866	$ 2,657,552	$ 3,004,801	$ 3,199,050
Subtotal Financing Costs	$ 2,701,010	$ 2,701,010	$ 2,854,010	$ 3,023,978	$ 3,403,601	$ 3,630,225
Total Development Costs	**$ 33,535,858**	**$ 33,535,858**	**$ 35,688,858**	**$ 37,763,226**	**$ 42,682,049**	**$ 45,447,873**
Total Development Cost per SF (excl land)	*$ 279*	*$ 279*	*$ 281*	*$ 300*	*$ 328*	*$ 354*
Total Development Cost per SF (inc. land)	*$ 317*	*$ 317*	*$ 337*	*$ 357*	*$ 403*	*$ 430*
Residential Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*5.0%*	*0.0%*	*5.6%*
Total Impact Fees as % of TDC	*2.3%*	*2.3%*	*2.1%*	*7.0%*	*1.8%*	*7.2%*
Valuation						
Operations						
Gross Income	$ 2,400,000	$ 2,400,000	$ 3,072,000	$ 3,072,000	$ 3,648,000	$ 3,648,000
Less: Vacancy	$ (120,000)	$ (120,000)	$ (153,600)	$ (153,600)	$ (182,400)	$ (182,400)
Less: Op Expenses	$ (640,000)	$ (640,000)	$ (640,000)	$ (640,000)	$ (760,000)	$ (760,000)
Net Operating Income (NOI)	$ 1,640,000	$ 1,640,000	$ 2,278,400	$ 2,278,400	$ 2,705,600	$ 2,705,600
Value at Stabilization	$ 27,333,333	$ 27,333,333	$ 45,568,000	$ 45,568,000	$ 54,112,000	$ 54,112,000
Return on Cost						
Value at Stabilization	$ 27,333,333	$ 27,333,333	$ 45,568,000	$ 45,568,000	$ 54,112,000	$ 54,112,000
Less: Total Development Costs	$ 33,535,858	$ 33,535,858	$ 35,688,858	$ 37,763,226	$ 42,682,049	$ 45,447,873
Profit	$ (6,202,525)	$ (6,202,525)	$ 9,879,142	$ 7,804,774	$ 11,429,951	$ 8,664,127
% Return on Cost	**-18.5%**	**-18.5%**	**27.7%**	**20.7%**	**26.8%**	**19.1%**
Yield on Cost (NOI/TDC)	**4.9%**	**4.9%**	**6.4%**	**6.0%**	**6.3%**	**6.0%**
Feasible? (d)	No	No	Yes	Yes	Yes	Yes

Notes:

a) Assumes 50% of open space requirement is satisfied on first floor as common open space, pursuant to LAMC Section 12.21G. The remaining open space requirement will be satisifed on private balconies and a roof top deck.

b) Proposed park fees under study by City Council are:

Quimby (for subdivisions)	$ 10,000	per dwelling unit
Park Facililties Fee (applicable to all rental units)	$ 5,000	per dwelling unit

c) School Fees for Residential

Current	$ 3.36	psf
Anticipated to Increase in Fall 2016	$ 3.54	psf

d) Project feasibility assumes a minimum return on cost of 15%
and a minimum yield on cost of 6%

APPENDIX H-2: CONDOMINIUM PRO FORMAS

Key Development Assuptions		Alternative 1		Alternative 2		Alternative 3	
		Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Site Size (sf)		43,560	43,560	43,560	43,560	43,560	43,560
Less: Open Space (sf of site per unit) (a)	125	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Developed Footprint (sf)		38,560	38,560	38,560	38,560	38,560	38,560
Number of Units		80	80	80	80	80	80
Average Unit Size (mix of studios, 1s, 2s)		1,485	1,485	1,485	1,485	1,485	1,485
Net Residential Space (sf)		118,800	118,800	118,800	118,800	118,800	118,800
Common Area	15.0%	17,820	17,820	17,820	17,820	17,820	17,820
Total Residential Space (sf)		136,620	136,620	136,620	136,620	136,620	136,620
FAR		3.1	3.1	3.1	3.1	3.1	3.1
Parking Ratio (spaces per unit)		1.5	1.5	1.5	1.5	1.5	1.5
Number of Parking Spaces		120	120	120	120.00	120	120
Total Parking Garage (sf)	350	42,000	42,000	42,000	42,000	42,000	42,000
Number of Residential Floors		4	4	4	4	4	4
Total Number of Stories (Parking)		1	1	1	1	1	1
Sales Price		3.54					
Average Sales Price PSF		$ 329	$ 329	$ 521	$ 521	$ 785	$ 785
Average Sales Price per Unit		488,565	488,565	773,685	773,685	1,165,725	1,165,725
Development Costs							
Site Work		$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Hard Costs		$ 185	$ 185	$ 200	$ 200	$ 310	$ 310
Parking Costs (per space)		$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000
Soft Costs exc Fees (as % of hard)		20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees							
Quimby/Park Fee per Unit (b)		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
School Fee per sq. ft. (c)		$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36
Residential Fee per sq. ft.		$ -	$ -	$ -	$ 22.00	$ -	$ 45.00
Residential Fee per unit		$ -	$ -	$ -	$ 37,571	$ -	$ 76,849
Financing Costs							
Loan to Cost Ratio		85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Interest Rate		6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees		1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)		18	18	18	18	18	18
Avg. Outstanding Balance During Construction		60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Sales Assumptions							
Marketing Costs		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Land	$ 4,800,000	$ 4,800,000	$ 6,000,000	$ 6,000,000	$ 8,000,000	$ 8,000,000
Land per Residential Unit	$ 60,000	$ 60,000	$ 75,000	$ 75,000	$ 100,000	$ 100,000
Land per Site sf	$ 110.19	$ 110.19	$ 137.74	$ 137.74	$ 183.65	$ 183.65
Construction Costs						
Site Work	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800
Hard Costs - Residential	$ 25,274,700	$ 25,274,700	$ 27,324,000	$ 27,324,000	$ 42,352,200	$ 42,352,200
Hard Costs - Parking Garage	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000	$ 3,000,000
Soft Costs	$ 5,698,500	$ 5,698,500	$ 6,108,360	$ 6,108,360	$ 9,114,000	$ 9,114,000
Quimby/Park Fee	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000	$ 800,000
School Fee	$ 459,043	$ 459,043	$ 459,043	$ 459,043	$ 459,043	$ 459,043
Residential Linkage Fee	$ -	$ -	$ -	$ 3,005,640	$ -	$ 6,147,900
Subtotal Const Costs Before Financing	$ 35,450,043	$ 35,450,043	$ 37,909,203	$ 40,914,843	$ 55,943,043	$ 62,090,943
Financing Costs						
Points	$ 451,988	$ 451,988	$ 483,342	$ 521,664	$ 713,274	$ 791,660
Construction Period Interest	$ 3,079,128	$ 3,079,128	$ 3,359,054	$ 3,588,986	$ 4,891,643	$ 5,361,957
Subtotal Financing Costs	$ 3,531,116	$ 3,531,116	$ 3,842,396	$ 4,110,650	$ 5,604,917	$ 6,153,617
Total Development Costs	**$ 43,781,160**	**$ 43,781,160**	**$ 47,751,600**	**$ 51,025,493**	**$ 69,547,960**	**$ 76,244,560**
Total Development Cost per SF (excl land)	*$ 285*	*$ 285*	*$ 306*	*$ 330*	*$ 451*	*$ 500*
Total Development Cost per SF (inc. land)	*$ 320*	*$ 320*	*$ 350*	*$ 373*	*$ 509*	*$ 558*
Residential Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*5.9%*	*0.0%*	*8.1%*
Total Impact Fees as % of TDC	*2.9%*	*2.9%*	*2.6%*	*8.4%*	*1.8%*	*9.7%*
Valuation						
Sales						
Condominium Sales	$ 39,085,200	$ 39,085,200	$ 61,894,800	$ 61,894,800	$ 93,258,000	$ 93,258,000
Less: Marketing Costs	$ (1,954,260)	$ (1,954,260)	$ (3,094,740)	$ (3,094,740)	$ (4,662,900)	$ (4,662,900)
Net Sales Revenue	$ 37,130,940	$ 37,130,940	$ 58,800,060	$ 58,800,060	$ 88,595,100	$ 88,595,100
Return on Cost						
Net Sales Revenue	$ 37,130,940	$ 37,130,940	$ 58,800,060	$ 58,800,060	$ 88,595,100	$ 88,595,100
Less: Total Development Costs	$ 43,781,160	$ 43,781,160	$ 47,751,600	$ 51,025,493	$ 69,547,960	$ 76,244,560
Profit	$ (6,650,220)	$ (6,650,220)	$ 11,048,460	$ 7,774,567	$ 19,047,140	$ 12,350,540
% Return on Cost	**-15.2%**	**-15.2%**	**23.1%**	**15.2%**	**27.4%**	**16.2%**
Feasible? (d)	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:

a) Assumes 50% of open space requirement is satisfied on first floor as common open space, pursuant to LAMC Section 12.21G.
The remaining open space requirement will be satisifed on private balconies and a roof top deck.

b) Proposed park fees under study by City Council are:

Quimby (for subdivisions)	$ 10,000	per dwelling unit
Park Facililties Fee (applicable to all rental units)	$ 5,000	per dwelling unit

c) School Fees for Residential

Current	$ 3.36	psf
Anticipated to Increase in Fall 2016	$ 3.54	psf

d) Project feasibility assumes a minimum return on cost of 15%

APPENDIX H-3: SINGLE-FAMILY ATTACHED PRO FORMAS

Key Development Assuptions	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Site Size (sf)	43,560	43,560	43,560	43,560	43,560	43,560
Minimum Lot Size (a)	3,000	3,000	3,000	3,000	3,000	3,000
Total Lots	14	14	14	14	14	14
Average SFR Size (sf)	1,650	1,650	1,650	1,650	1,650	1,650
Total Residential Space (sf)	23,100	23,100	23,100	23,100	23,100	23,100
Number of Residential Floors	2	2	2	2	2	2
FAR	0.5	0.5	0.5	0.5	0.5	0.5
Parking Ratio (spaces per unit) (parking in unit)	2.0	2.0	2.0	2.0	2.0	2.0
Number of Parking Spaces	28	28	28	28.00	28	28
Sales Price						
Average Sales Price PSF	$ 251	$ 251	$ 450	$ 450	$ 656	$ 656
Average Sales Price Per Unit	$ 414,150	$ 414,150	$ 742,500	$ 742,500	$ 1,082,400	$ 1,082,400
Development Costs						
Site Work	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Hard Costs - Res (wood frame)	$ 185	$ 185	$ 195	$ 195	$ 295	$ 295
Parking Costs (per space)	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Soft Costs exc Fees (as % of hard)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees						
Quimby/Park Fee per Unit (b)	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
School Fee per sq. ft. (c)	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36
Residential Fee per sq. ft.	$ -	$ -	$ -	$ 26.00	$ -	$ 32.00
Residential Fee per unit	$ -	$ -	$ -	$ 42,900	$ -	$ 52,800
Financing Costs						
Loan to Cost Ratio	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Interest Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)	18	18	18	18	18	18
Avg. Outstanding Balance During Construction	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Sales Assumptions						
Marketing Costs	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Land	$ 1,050,000	$ 1,050,000	$ 1,400,000	$ 1,400,000	$ 2,100,000	$ 2,100,000
Land per Residential Unit	$ 75,000	$ 75,000	$ 100,000	$ 100,000	$ 150,000	$ 150,000
Land per Site sf	$ 24.10	$ 24.10	$ 32.14	$ 32.14	$ 48.21	$ 48.21
Construction Costs						
Site Work	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800
Hard Costs - Residential	$ 4,273,500	$ 4,273,500	$ 4,504,500	$ 4,504,500	$ 6,814,500	$ 6,814,500
Hard Costs - Parking (in unit)	$ -	$ -	$ -	$ -	$ -	$ -
Soft Costs	$ 898,260	$ 898,260	$ 944,460	$ 944,460	$ 1,406,460	$ 1,406,460
Quimby/Park Fee	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000	$ 140,000
School Fee	$ 77,616	$ 77,616	$ 77,616	$ 77,616	$ 77,616	$ 77,616
Residential Linkage Fee	$ -	$ -	$ -	$ 600,600	$ -	$ 739,200
Subtotal Const Costs Before Financing	$ 5,607,176	$ 5,607,176	$ 5,884,376	$ 6,484,976	$ 8,656,376	$ 9,395,576
Financing Costs						
Points	$ 71,491	$ 71,491	$ 75,026	$ 82,683	$ 110,369	$ 119,794
Construction Period Interest	$ 509,274	$ 509,274	$ 557,255	$ 603,201	$ 822,863	$ 879,412
Subtotal Financing Costs	$ 580,765	$ 580,765	$ 632,281	$ 685,884	$ 933,232	$ 999,205
Total Development Costs	**$ 7,237,941**	**$ 7,237,941**	**$ 7,916,657**	**$ 8,570,860**	**$ 11,689,608**	**$ 12,494,781**
Total Development Cost per SF (excl land)	*$ 268*	*$ 268*	*$ 282*	*$ 310*	*$ 415*	*$ 450*
Total Development Cost per SF (inc. land)	*$ 313*	*$ 313*	*$ 343*	*$ 371*	*$ 506*	*$ 541*
Residential Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*7.0%*	*0.0%*	*5.9%*
Total Impact Fees as % of TDC	*3.0%*	*3.0%*	*2.7%*	*9.5%*	*1.9%*	*7.7%*
Valuation						
Sales						
Sales	$ 5,798,100	$ 5,798,100	$ 10,395,000	$ 10,395,000	$ 15,153,600	$ 15,153,600
Less: Marketing Costs	$ (289,905)	$ (289,905)	$ (519,750)	$ (519,750)	$ (757,680)	$ (757,680)
Net Sales Revenue	$ 5,508,195	$ 5,508,195	$ 9,875,250	$ 9,875,250	$ 14,395,920	$ 14,395,920
Return on Cost						
Net Sales Revenue	$ 5,508,195	$ 5,508,195	$ 9,875,250	$ 9,875,250	$ 14,395,920	$ 14,395,920
Less: Total Development Costs	$ 7,237,941	$ 7,237,941	$ 7,916,657	$ 8,570,860	$ 11,689,608	$ 12,494,781
Profit	$ (1,729,746)	$ (1,729,746)	$ 1,958,593	$ 1,304,390	$ 2,706,312	$ 1,901,139
% Return on Cost	**-23.9%**	**-23.9%**	**24.7%**	**15.2%**	**23.2%**	**15.2%**
Feasible? (d)	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

Notes:

a) Assumes minimum associated with RD-3-1 zoning

The remaining open space requirement will be satisifed on private balconies and a roof top deck.

b) Current Quimby/Finn fees for parks only apply to projects with a zone change. This pro forma assumes no zone change.

b) Proposed park fees under study by City Council are:

Quimby (for subdivisions)	$ 10,000	per dwelling unit
Park Facililties Fee (applicable to all rental units)	$ 5,000	per dwelling unit

c) School Fees for Residential

Current	$ 3.36	psf
Anticipated to Increase in Fall 2016	$ 3.54	psf

d) Project feasibility assumes a minimum return on cost of 15%

APPENDIX H-4: SINGLE-FAMILY DETACHED PRO FORMAS

Key Development Assuptions	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Site Size (sf)	43,560	43,560	43,560	43,560	43,560	43,560
Minimum Lot Size (a)	5,000	5,000	5,000	5,000	5,000	5,000
Total Lots	8	8	8	8	8	8
Average SFR Size (sf)	3,000	3,000	3,000	3,000	3,000	3,000
Total Residential Space (sf)	24,000	24,000	24,000	24,000	24,000	24,000
Number of Residential Floors	2	2	2	2	2	2
FAR	0.6	0.6	0.6	0.6	0.6	0.6
Parking Ratio (spaces per unit) (parking in unit)	-	-	-	-	-	-
Number of Parking Spaces	-	-	-	-	-	-
Sales Price						
Average Sales Price PSF	$ 263	$ 263	$ 444	$ 444	$ 953	$ 953
Average Sales Price Per Unit	$ 789,000	$ 789,000	$ 1,332,000	$ 1,332,000	$ 2,859,000	$ 2,859,000
Development Costs						
Site Work	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00	$ 5.00
Hard Costs	$ 165	$ 165	$ 185	$ 185	$ 250	$ 250
Parking Costs (per space)	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000
Soft Costs exc Fees (as % of hard)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Impact Fees						
Quimby/Park Fee per Unit (b)	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000
School Fee (c)	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36	$ 3.36
Residential Fee per sq. ft.	$ -	$ -	$ -	$ 31.00	$ -	$ 48.63
Residential Fee per unit	$ -	$ -	$ -	$ 93,000	$ -	$ 145,890
Financing Costs						
Loan to Cost Ratio	85.0%	85.0%	85.0%	85.0%	85.0%	85.0%
Interest Rate	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Loan Fees	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Construction Period (months)	18	18	18	18	18	18
Avg. Outstanding Balance During Construction	60.0%	60.0%	60.0%	60.0%	60.0%	60.0%
Sales Assumptions						
Marketing Costs	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%

Development Costs	Alternative 1		Alternative 2		Alternative 3	
	Low Market Baseline	Low Market with Res. Linkage Fee	Moderate Market Baseline	Moderate Market with Res. Linkage Fee	Strong Market Baseline	Strong Market with Res. Linkage Fee
Land	$ 800,000	$ 800,000	$ 1,600,000	$ 1,600,000	$ 3,200,000	$ 3,200,000
Land per Residential Unit	$ 100,000	$ 100,000	$ 200,000	$ 200,000	$ 400,000	$ 400,000
Land per Site sf	$ 18.37	$ 18.37	$ 36.73	$ 36.73	$ 73.46	$ 73.46
Construction Costs						
Site Work	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800	$ 217,800
Hard Costs - Residential	$ 3,960,000	$ 3,960,000	$ 4,440,000	$ 4,440,000	$ 6,000,000	$ 6,000,000
Hard Costs - Parking (in unit)	$ -	$ -	$ -	$ -	$ -	$ -
Soft Costs	$ 835,560	$ 835,560	$ 931,560	$ 931,560	$ 1,243,560	$ 1,243,560
Quimby/Park Fee	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000	$ 80,000
School Fee	$ 80,640	$ 80,640	$ 80,640	$ 80,640	$ 80,640	$ 80,640
Residential Linkage Fee	$ -	$ -	$ -	$ 744,000	$ -	$ 1,167,120
Subtotal Const Costs Before Financing	$ 5,174,000	$ 5,174,000	$ 5,750,000	$ 6,494,000	$ 7,622,000	$ 8,789,120
Financing Costs						
Points	$ 65,969	$ 65,969	$ 73,313	$ 82,799	$ 97,181	$ 112,061
Construction Period Interest	$ 457,011	$ 457,011	$ 562,275	$ 619,191	$ 827,883	$ 917,168
Subtotal Financing Costs	$ 522,980	$ 522,980	$ 635,588	$ 701,990	$ 925,064	$ 1,029,229
Total Development Costs	**$ 6,496,980**	**$ 6,496,980**	**$ 7,985,588**	**$ 8,795,990**	**$ 11,747,064**	**$ 13,018,349**
Total Development Cost per SF (excl land)	*$ 237*	*$ 237*	*$ 266*	*$ 300*	*$ 356*	*$ 409*
Total Development Cost per SF (inc. land)	*$ 271*	*$ 271*	*$ 333*	*$ 366*	*$ 489*	*$ 542*
Residential Linkage Fee as % of TDC	*0.0%*	*0.0%*	*0.0%*	*8.5%*	*0.0%*	*9.0%*
Total Impact Fees as % of TDC	*2.5%*	*2.5%*	*2.0%*	*10.3%*	*1.4%*	*10.2%*
Valuation						
Sales						
Sales	$ 6,312,000	$ 6,312,000	$ 10,656,000	$ 10,656,000	$ 22,872,000	$ 22,872,000
Less: Marketing Costs	$ (315,600)	$ (315,600)	$ (532,800)	$ (532,800)	$ (1,143,600)	$ (1,143,600)
Net Sales Revenue	$ 5,996,400	$ 5,996,400	$ 10,123,200	$ 10,123,200	$ 21,728,400	$ 21,728,400
Return on Cost						
Net Sales Revenue	$ 5,996,400	$ 5,996,400	$ 10,123,200	$ 10,123,200	$ 21,728,400	$ 21,728,400
Less: Total Development Costs	$ 6,496,980	$ 6,496,980	$ 7,985,588	$ 8,795,990	$ 11,747,064	$ 13,018,349
Profit	$ (500,580)	$ (500,580)	$ 2,137,613	$ 1,327,211	$ 9,981,337	$ 8,710,051
% Return on Cost	**-7.7%**	**-7.7%**	**26.8%**	**15.1%**	**85.0%**	**66.9%**
Feasible? (d)	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**
Cost per unit	$ 812,122	$ 812,122	$ 998,198	$ 1,099,499	$ 1,468,383	$ 1,627,294

Notes:

a) Assumes RD-1.5-1 zoning

The remaining open space requirement will be satisifed on private balconies and a roof top deck.

b) Proposed park fees under study by City Council are:

Quimby (for subdivisions)	$ 10,000	per dwelling unit
Park Facililties Fee (applicable to all rental units)	$ 5,000	per dwelling unit

c) School Fees for Residential

Current	$ 3.36	psf
Anticipated to Increase in Fall 2016	$ 3.54	psf

d) Project feasibility assumes a minimum return on cost of 15%

Appendix I: Minimum Wage Analysis

This appendix provides additional detail on the methodology and calculations that supported the analysis of the potential impacts of the future increase in the City of Los Angeles minimum wage, as summarized in the body of this report. In summary, BAE analyzed the potential impacts of the minimum wage increase by determining the household AMI levels for workers that will earn the new minimum wage and adjusting the household income distribution among the workers generated by each residential or commercial land use type accordingly. BAE then re-calculated the maximum fee based on the adjusted household income distribution. The detailed steps and calculation tables are discussed below.

Step 1: Determine AMI bands for households with workers earning the new minimum wage

Step 1A: Discount the minimum wage to 2016 dollars

Since the full $15 minimum wage will take effect beginning in 2020 (2021 for some employers), this analysis is based on an estimate of the $15 hourly wage in current (2016) dollars. Although the $15 minimum wage will take full effect with all employers in 2021, this analysis discounts the $15 wage assuming implementation in 2020, when it will apply to the majority of employers. Assuming three percent annual inflation, $15 in 2020 is equivalent to approximately $13.33 in 2016 dollars.

Step 1B: Calculate the annual household income for workers earning the new minimum wage

Assuming full-time employment, the discounted 2020 minimum wage would result in an annual income of approximately $27,700 ($13.33 per hour x 2,080 work hours per year) in 2016 dollars, as shown below. According to the US Census American Community Survey, as of 2014 the City of Los Angeles had 1,849,845 workers living in households and 1,047,928 households with at least one worker, averaging approximately 1.77 workers per household with workers. Therefore, this analysis uses an average of 1.77 workers per worker household to calculate household income among minimum wage workers, resulting in an annual worker household income equal to approximately $48,900.

Step 1C: Determine the AMI level for minimum wage worker households

According to 2016 HCD income limits for a household in Los Angeles County, a household earning the annual income derived in Step 1B ($48,900 per year) falls within the low-income AMI band for any household size from two to five people. Accordingly, this analysis places minimum wage worker households into the low-income AMI band.

TABLE I-1: HOUSEHOLD INCOME AT INCREASED MINIMUM WAGE, LOS ANGELES, 2020

2020 Minimum Hourly Wage (Nominal) (a)	$15
2020 Minimum Hourly Wage in 2016 $ (b)	$13
Annual Worker Income at Minimum Wage (2016 $) (c)	$27,721
Minimum Wage Worker Household Income (2016 $) (d)	$48,934
Minimum Wage Worker Household Income Level (e)	Low Income

Notes:
(a) 2020 Minimum Wage for businesses with 26 or more employees per City of Los Angeles Minimum Wage Ordinance. The mimimum wage for businesses with 25 or fewer employees will increase to $15 per hour in 2021.
(b) Assumes 3% annual inflation.
(c) Assumes 2080 work hours per year (40 hrs per week x 52 weeks per year).
(d) Average number of workers per worker household calculated for Los Angeles County based on American Community Community Survey data, 2010-2014.

Total Workers	1,849,845
Total Households with Workers	1,047,928
Avg. Workers per Household	*1.765*

(e) Based on 2016 HCD income limits for a 3-person household.
Sources: City of Los Angeles, 2016; ACS, 2010-2014; CA Dept. of Housing and Community Development, 2016; BAE, 2016.

Step 2: Adjust the household income distribution for workers generated by new development.

The findings from Step 1 indicate that all worker households that fall into the extremely low- or very low-income AMI bands under current minimum wage requirements would fall into the low-income AMI band following an increase in the minimum wage to $15 in 2020. As a result, all of the extremely low- and low-income housing need generated by the eight commercial land use types and the four residential product types analyzed in the Nexus Study would instead constitute low-income housing need.

Accordingly, in Step 2 of the minimum wage analysis, BAE adjusted the income distribution among the worker households generated by each commercial and residential land use type (from Step 6 in the commercial maximum fee calculations and Step 5 in the residential maximum fee calculations) by moving all extremely low- and very low-income households into the low-income AMI band. The resulting household income distributions are shown below.

Step 3: Re-calculate the maximum legal fees using the adjusted AMI distributions

Step 2 results in an income distribution that shows a reduction in extremely low- and very low-income households (to zero) and a commensurate increase in low-income households. As shown in Step 7 of the commercial and residential maximum fee calculations in the body of this report, the subsidy gap for low-income units is smaller than the subsidy gap for extremely low- or very low-income units. Consequently, the cost associated with providing housing for households below the moderate income level decreases as extremely low- and very low-income households shift to become low-income households as discussed in Step 2 above. The lower per-unit cost associated with housing low-income households as compared to

extremely low- and very low-income households results in a lower maximum legal fee under the new minimum wage requirements. The adjusted fee calculations are shown below.

APPENDIX I-2: MAXIMUM COMMERCIAL LINKAGE FEES PER NEW CITY MINIMUM WAGE, LA, 2016

Affordable Housing Need	Office	Creative Office	Retail	Hotel/ Motel	Industrial	Institutional	Medical & Social Assistance	Construction, Warehousing, & Wholesale Trade
Extremely Low Income (up to 30% AMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Very Low Income (31-50% AMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income (51-80% AMI)	61.4	44.5	73.9	31.5	31.3	45.9	46.2	28.1
Moderate Income (81-120% AMI)	9.1	8.1	8.1	4.2	3.9	6.8	7.0	3.3
Total Affordable Housing Need	70.5	52.6	82.0	35.7	35.3	52.7	53.2	31.4
Financing Gap (a)								
Extremely Low Income Units	$0	$0	$0	$0	$0	$0	$0	$0
Very Low Income Units	$0	$0	$0	$0	$0	$0	$0	$0
Low Income Units	$19,704,956	$14,300,108	$23,747,066	$10,114,661	$10,055,821	$14,748,770	$14,835,009	$9,010,563
Moderate Income Units	$2,695,275	$2,398,078	$2,392,525	$1,240,985	$1,167,458	$2,017,919	$2,067,181	$983,651
Total Financing Gap	**$22,400,231**	**$16,698,186**	**$26,139,592**	**$11,355,646**	**$11,223,278**	**$16,766,688**	**$16,902,190**	**$9,994,214**
Maximum Impact Fee per Sq. Ft.	**$224.00**	**$166.98**	**$261.40**	**$113.56**	**$112.23**	**$167.67**	**$169.02**	**$99.94**
Assumptions								
Building Size	100,000							
Financing Gap								
Extremely Low Income Units	$448,500							
Very Low Income Units	$399,600							
Low Income Units	$321,129							
Moderate Income Units	$296,199							

Note:
(a) The financing gap is calculated by multiplying the number of employee housesholds at each income level by the financing gap per unit (from Step 7 of the commercial maximum fee calculation) at each affordability level.
Source: BAE, 2016.

APPENDIX I-3: MAXIMUM RESIDENTIAL IMPACT FEES PER NEW CITY MINIMUM WAGE, LA 2016

Employee Households in City by Income Level	Multifamily Rental	Condominium	Single-Family Attached	Single-Family Detached
Extremely Low Income (up to 30% AMI)	0.0	0.0	0.0	0.0
Very Low Income (31-50% AMI)	0.0	0.0	0.0	0.0
Low Income (51-80% AMI)	20.1	22.6	16.6	34.6
Moderate Income (81-120% AMI)	2.6	2.9	2.1	4.5
Subtotal - Affordable Housing Need (Units)	***22.8***	***25.6***	***18.7***	***39.1***
Above Moderate Income (over 120% AMI)	19.7	22.0	16.1	33.5
Total Housing Need	**42.5**	**47.6**	**34.8**	**72.5**
Financing Gap (a)				
Extremely Low Income Units	$0	$0	$0	$0
Very Low Income Units	$0	$0	$0	$0
Low Income Units	$6,468,714	$7,271,117	$5,322,875	$11,110,478
Moderate Income Units	$774,962	$867,372	$634,966	$1,323,442
Total Financing Gap per 100 Units	**$7,243,676**	**$8,138,489**	**$5,957,841**	**$12,433,919**
Maximum Impact Fee per Unit	**$72,437**	**$81,385**	**$59,578**	**$124,339**
Assumptions				
Building Size (# of units)	100			

Note:
(a) The financing gap is calculated by multiplying the number of employee housesholds at each income level by the financing gap per unit (from Step 7 of the residential maximum fee calculation) at each affordability level.
Source: BAE, 2016.