CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

1390 Market Street, Suite 1150, San Francisco, CA 94102 (415) 552-9292 FAX (415) 252-0461

Policy Analysis Report

To: Supervisor Gordon Mar

From: Budget and Legislative Analyst's Office

Re: Jobs-Housing Fit

Date: October 16, 2019

Fred Broman

Summary of Requested Action

You requested that the Budget and Legislative Analyst evaluate the current and planned housing stock in San Francisco relative to projected future jobs and population in the City to determine if existing and planned housing is adequate for the projected population of the City in coming years. Specifically, you asked that the analysis compare projected jobs and their wages to determine if the City's housing stock will be sufficient in number and affordability for all income segments of the City's population. You suggested that this assessment include actual new housing built by private developers and through City programs.

You also requested that we provide information on the City's Jobs Housing Linkage program and fees and the processes by which the fees are used for affordable housing programs administered by the Mayor's Office of Housing and Community Development to address the City's jobs-housing fit.

For further information about this report, contact Fred Brousseau, Director of Policy Analysis, at the Budget and Legislative Office.

Project Staff: Michelle Lau, Jennifer Tell, Fred Brousseau

EXECUTIVE SUMMARY

- The population of San Francisco grew at higher rates than housing production between 2010 and 2018. The population increased by 84,070, or 10.4%, whereas housing units increased by 24,671, or 6.5%.
- The number of low- and moderate-income households decreased by 23% and 8%, respectively, between 2010 and 2018 but the number of high-income households increased by 44% between 2010 and 2017. Average household size by income level remained steady.

Household Income Level	2010	2017	Change	% Change
Low-income (< 80% AMI)	146,152	112,186	(33,966)	(23%)
Moderate-income (80-120% AMI)	52,117	48,128	(3,989)	(8%)
High-income (> 120% AMI)	137,687	198,458	60,771	44%
Total households	335,956	358,772	22,816	7%
Median income (\$)	\$71,304	\$96,265		35%

Exhibit A: Changes in Households by Income in San Francisco, 2010 and 2017

- Between just 2016 and 2018, the number of jobs in the San Francisco area¹ increased by 96,360, a 9% increase. Job growth was concentrated in high-wage and low-wage industries though housing production was concentrated on market rate, or high income, housing. Jobs in moderate-wage industries remained steady.
- Between 2010 and 2018, 6,224 affordable housing units were added to the San Francisco housing stock, representing 25% of the 24,671 new housing units added. During the same period, 210,000 jobs were added in San Francisco.
- Job growth far outpaced housing production between 2010 and 2018, with 8.5 new jobs for each new housing unit produced between 2010 and 2018.

Exhibit B: Reduction in Housing Production Relative to Job Growth in San Francisco, 2010-2018

	2010	2018	2010-2018
Jobs	550,300	760,300	210,000
Housing Units	376,942	401,613	24,671
Jobs/Housing Unit	1.5	1.9	8.5

 For just 2016 through 2018, we estimate that 27,546 new low- and moderate- wage jobs were added in San Francisco. During the same time, 2,913 affordable housing units were produced for a jobs to housing ratio of 9.5. Though job creation and housing production do

¹ San Francisco area refers to the City and County of San Francisco and San Mateo County, since the data reported by the State Employment Development Department (EDD), combines information from both counties. We estimate that the City and County of San Francisco accounts for approximately 64 percent of all jobs in the two jurisdictions and that the composition of those jobs does not vary significantly.

not necessarily occur in unison, to achieve the 2018 1.9 jobs to housing ratio presented in Exhibit B for that three year period would have required production of 14,498 units affordable for low- and moderate-income households, or 11,585 more than actually produced.

 Wage growth has not kept pace with the increases in housing costs in San Francisco. A fourperson household that could afford to purchase a median priced home had to have an income of at least 137% of the area median income (AMI) in 2010 and 197% of the AMI in 2019.

	2010	2019
Median Rent	\$3 <i>,</i> 300	\$4,500
Household Income Needed	\$132,000	\$180,000
% AMI for 4-Person Household	133%	146%
Median Sale	\$703,000	\$1,300,000
Household Income Needed	\$135,720	\$243,040
% AMI for 4-Person Household	137%	197%

Exhibit C: Household Income Needed to Rent or Buy at Median Prices, 2010 and 2019

- Although the increase in market rate housing prices has outpaced wage growth since 2010, the median percent of income that San Francisco households spend on rent has not changed substantially.
- The City applies a Jobs-Housing Linkage fee to non-residential development based on size and type of development. Between FY 2009-10 and FY 2018-19, the City collected \$89.2 million in Jobs-Housing Linkage fees for the Citywide Affordable Housing Fund administered by the Mayor's Office of Housing and Community Development (MOHCD). Over this period, MOHCD spent approximately one-third, or approximately \$30.2 million of the funds collected.
- As of the end of FY 2018-19, MOHCD also committed to spending an additional \$63.7 million in Jobs-Housing Linkage fee funds.
- Based on the State-defined Regional Housing Need Allocation goals set in 2015 for San Francisco for 2015-2022, as of 2018 San Francisco has produced 96% of the housing target goal for high-income households but only 39% of the target for low-income households and 15% of the target for moderate-income households.
- The number of jobs in the San Francisco area is projected to increase by 126,950, or 11%, between 2016 and 2026 according to the California Employment Development Department. High-wage jobs are projected to increase by 14%, the highest rate of all jobs categories, but low-wage jobs are projected to increase by 11%, nearly keeping pace with high wage jobs. Moderate-wage jobs are projected to increase by 5%.

- The top five fastest growing occupations projected by the State Employment Development Department for 2016-2026 account for 33,000 of the 126,950 projected new jobs. Only one of these occupations, software developer, with 12,410 new jobs projected, falls within the high-wage category. The 20,590 other fastest growing occupations are all low wage.
- The City and County of San Francisco needs to add 34,664 housing units between 2019 and 2026 to match projected employment growth with housing needs.

Wage Level	2016 Employment	2026 Employment	Change	Housing Needed	Housing Constructed 2016-2018	% Housing Needed	Housing Needed 2019- 2026
Low-wage	275,868	307,586	31,718	18,229	974	5.3%	17,255
Moderate- wage	190,750	200,018	9,267	5,326	1,939	36.4%	3,387
High-wage	291,089	331,466	40,377	23,205	9,183	40.0%	14,022
Total	757,707	839,069	81,362	46,760	12,096	25.9%	34,664

Exhibit D: Projected Jobs by Wage Level, Estimate for San Francisco County Only, 2016-2026

 Based on the number and types of housing in the development pipeline in San Francisco as of the second quarter of 2018, there will continue to be a shortage of housing units for low-income households while there will be enough housing constructed for the projected growth in high-income households.

Exhibit E: Difference between Housing Units in the Pipeline as of 2018 and Projected Housing Needed by Income Level through 2026, San Francisco

Income Level	Housing Needed	Total Entitled	Difference
Low income	17,255	1,626	15,629
Moderate income	3,387	577	2,810
High income	14,022	18,627	-4,605
Total	34,664	20,830	13,834

- More recent pipeline data from the Planning Department shows that some progress is being made in closing the housing gap identified above for low and moderate income housing, We estimate that the gap as the second quarter of 2019 to be approximately 9,327 units.
- The estimated housing deficiencies do not include deficits in affordable housing incurred through 2018, such as the estimated

Policy Options

The Board of Supervisors could:

- 1. Request the Planning Department to prepare annual projections of new jobs for San Francisco, by income segment, and new affordable housing completed and in the pipeline to identify any gap between employment projections and new housing.
- 2. Request that MOHCD track new housing to be funded by Jobs-Housing Linkage fee revenue by income segment and report to the Board of Supervisors annually on new affordable housing completed and in the pipeline by income segment.

Jobs-Housing Fit: Historical Data

Population Growth and Income

- The population of San Francisco grew approximately 10.4 percent between 2010 and 2018, from 805,235 to 889,305. During the same time, the number of housing units in San Francisco increased by only 24,671 adding 311.8 housing units for every 1,000 new residents. This was substantially less than the 468 housing units for every 1,000 residents in place in 2010, indicating a reduction in housing unit production relative to population.
- In addition to a reduction in new housing relative to population, the number of higher income households grew by 60,771 between 2010 and 2017 and then accounted for 55 percent of all households, as compared to 41 percent in 2010. During the same period,

the number of moderate- and low-income households declined by 37,955 and then made up 13 and 31 percent of all households, respectively, as compared to 16 and 44 percent in 2010. These factors combined have contributed to increased housing costs in San Francisco, particularly for low and moderate wage households.

A review of household incomes during the same years shows that this growth did not occur equally across income levels. Table 1 shows that the number of lowwage households, defined as those earning less than 80 percent of the area median income (AMI), and

Household Income Levels

This report uses the following definitions for household income levels, where AMI refers to area median income:

- Low income: Less than 80% AMI
- Moderate income: 80-120% AMI
- High income: More than 120% AMI

moderate-wage households, defined as those earning between 80-120 percent of AMI, both declined. At the same time, high-income households, defined as those earning more than 120 percent of AMI, increased by 44 percent.

Household Income Level	2010	2017	Change	% Change
Low-income (< 80% AMI)	146,152	112,186	(33,966)	(23%)
Moderate-income (80-120% AMI)	52,117	48,128	(3 <i>,</i> 989)	(8%)
High-income(> 120% AMI)	137,687	198,458	60,771	44%
Total households	335,956	358,772	22,816	7%
Median income (\$)	\$71,304	\$96,265		35%

Table 1: Changes in Households by Income in San Francisco, 2010 and 2017

Sources: IPUMS USA: Version 9.0 [dataset]. Minneapolis, MN: IPUMS, 2019. Mayor's Office of Housing and Community Development, Maximum Income by Household Size, 2010 and 2017.

As shown in Figure 1 below, low-income households made up approximately 44 percent of San Francisco households in 2010. In 2017, these households decreased to approximately 31 percent of all households. Moderate-income households also decreased from 16 percent to 13 percent of the total share of households. The largest increase occurred in high-income households: these households made up 55 percent of San Francisco households in 2017, up from 41 percent in 2010.



Figure 1: Households by Wage Level in San Francisco, 2010 and 2017

Sources: IPUMS USA: Version 9.0 [dataset]. Minneapolis, MN: IPUMS, 2019. Mayor's Office of Housing and Community Development, Maximum Income by Household Size, 2010 and 2017.

The average household size by wage level remained steady over this period, with an average of 2.0 persons in low-wage households, 2.4 persons in moderate-wage households, and 2.2 persons in high-wage households in both 2010 and 2017.

Changes in Jobs, Wages, and Occupations

Total jobs in San Francisco increased from 550,300 in 2010 to 760,300 in 2018, an

increase of 210,000, or 38.2 percent, according to the California Employment Development Department. As with the changes in household income presented above, job growth during those years was not evenly distributed across income groups. Jobs in high-wage industries grew the most between 2016 and 2018, with jobs in low-wage jobs close behind. Jobs in moderate-wage industries remained essentially the same.

Jobs Data

Between just 2016 and 2018, the metropolitan division of San Francisco, Redwood City, and South San Francisco (San Francisco and San Mateo counties) experienced a 9.5 percent increase in jobs, from 1,020,030 in 2016 to 1,116,390 in 2018, an increase of 96,360 jobs. Over the same period, the median annual salary increased by 5.1 percent, from \$55,765 to \$58,594, or from \$26.81 to \$28.17 hourly. Table 2 below summarizes employment and wages between 2016 and 2018.² As explained above, data before 2016 could

Jobs Data Used

The California Employment Development Department (EDD) reports job, wage, and occupation data for San Francisco and San Mateo counties combined. While the inclusion of San Mateo County data could potentially skew the statistics to some degree, we conclude that the general trends and changes in the two counties are similar overall and that because San Francisco has more than half the jobs in the two counties, its changes have more impact on the reported totals than San Mateo County.

Another limitation of the EDD data is that until 2016, San Francisco and San Mateo County data was aggregated with data from Marin County. Since then, Marin County data is no longer included but this change renders comparisons of years prior to 2016 not meaningful.

Even with these limitations, we believe the EDD data still presents a useful picture of changes in jobs, wages, and occupations in San Francisco for the years between 2016 and 2018. The Planning Department reports it has access to data from EDD that provides details on jobs in just San Francisco, but this data is not made publically available by EDD and is subject to certain restrictions in use.

not be used because it includes Marin County in addition to San Francisco and San Mateo counties. From 2016 and thereafter, EDD discontinued including Marin County data with San Francisco and San Mateo county data.

² We have presented data for the metropolitan division consisting of the City and County of San Francisco and San Mateo County as data for San Francisco County only with this level of wage detail is not publicly available.

	2016	2018	Change	% Change
Total Jobs	1,020,030	1,116,390	96,360	9.5%
Median Annual Salary	\$55,765	\$58,594	\$2,829	5.1%
Median Hourly Wage	\$26.81	\$28.17	\$1.36	5.1%

Table 2: Jobs and Median Wages for All Occupations, 2016-2018, San Francisco-Redwood City-South San Francisco Metropolitan Division

Source: CA Employment Development Department, Occupational Employment Statistics and Wages, 2016 and 2018.

Table 3 below shows the share of low, moderate, and high-wage jobs in the San Francisco-Redwood City-South San Francisco area. Consistent with the changes in household income distribution between 2010 and 2017 described above, Table 3 shows that high-wage jobs increased by 14 percent in San Francisco and San Mateo counties between 2016 and 2018. Higher income households also assumed a greater share of San Francisco's housing, as shown in Figure 1 above, between 2010 and 2017, increasing from 41 to 55 percent of all households.

While low-wage jobs increased by 11 percent between 2016 and 2018, low-income households decreased as a share of total households in San Francisco between 2010 and 2017, also shown in Figure 1 above.

Moderate-wage jobs decreased only slightly, by 0.1 percent, between 2016 and 2018, though moderate-income households decreased from 16 to 13 percent of all households between 2010 and 2017. In short, while there were increases or no appreciable changes in low- and moderate-wage jobs between 2016 and 2018, more jobholders in those income classes appear to have left the City, replaced by high-wage workers.

		%		%		0/
		Total		Total		%
Wage Level	2016	Jobs	2018	Jobs	Change	Change
Low-wage (< 80% of AMI)	379,940	37.2%	423,330	37.9%	43,390	11%
Moderate-wage (80- 120% of AMI)	268,100	26.3%	267,750	24.0%	-350	-0.1%
High-wage (> 120% of AMI)	371,990	36.5%	425,310	38.1%	53,320	14%
Total Jobs	1,020,300	100.0%	1,116,390	100.0%	96,360	9%

Table 3: Jobs by Wage Level, 2016-2018, San Francisco-Redwood City-South San FranciscoMetropolitan Division

Source: CA Employment Development Department, Occupational Employment Statistics and Wages, 2016 and 2018. Note: The median hourly wage in 2010 was \$26.81 and \$28.17 in 2018.

The share of low-wage jobs increased slightly from 37.2 to 37.9 percent while the share of high-wage jobs increased from 36.5 to 38.1 percent of all jobs. The share of moderate-wage jobs declined to 24.0 percent from 26.3 percent of all jobs in 2016.

Table 4 shows employment figures and hourly wages for each industry category in the San Francisco-Redwood City-South San Francisco Metropolitan Division by earnings in 2016 and 2018. As shown, all groups experienced increases in wages between 2016 and 2018.

The occupation categories that experienced the largest increase in number of jobs include: from the low-wage sector, Personal Care and Service occupations, with 26,060 new jobs, an increase of 91 percent, and, from the high-wage sector, Business and Financial Operations occupations with 16,810 new jobs, an 18 percent increase, and Computer and Mathematical occupations with 13,190 new jobs, an increase of 16 percent. While wages for the high-wage Business and Financial Operations occupations and Computer and Mathematical occupations increased by one percent and nine percent, respectively, between 2016 and 2018, wages for low-wage Personal Care and Service occupations decreased by six percent during that period. All other low-wage industries experienced increases in wages expect protective services.

Table 4: Employment Changes and Median Hourly Wages, 2016-2018, San Francisco-Redwood City-South San Francisco Metropolitan Division

Industry Category	2016 Employment	2018 Employment	Change	% Change	2016 Median Hourly Wage	2018 Median Hourly Wage	% Change
All industries	1,020,030	1,116,390	96,360	9%	\$26.81	\$28.17	5%
High-wage industries	371,990	425,310	53,320	14%	\$52.61	\$54.90	4%
Management	79,830	90,630	10,800	14%	\$69.46	\$72.66	5%
Legal	14,480	15,750	1,270	9%	\$62.73	\$68.68	9%
Computer and Mathematical	80,480	93,670	13,190	16%	\$53.56	\$58.61	9%
Healthcare Practitioners and Technical	36,590	43,870	7,280	20%	\$53.98	\$54.93	2%
Architecture, Engineering	22,040	23,940	1,900	9%	\$48.41	\$49.95	3%
Business, Financial Operations	91,930	108,740	16,810	18%	\$43.13	\$43.60	1%
Life, Physical, Social Science	21,430	19,210	-2,220	-10%	\$45.95	\$43.25	-6%
Arts, Design, Entertainment, Sports, Media	25,210	29,500	4,290	17%	\$32.34	\$34.46	7%
Moderate-wage industries	268,100	267,750	-350	0%	\$24.88	\$27.46	9%
Construction and Extraction	29,930	31,880	1,950	7%	\$31.14	\$30.11	-3%
Installation, Maintenance, Repair	22,830	24,740	1,910	8%	\$28.77	\$29.09	1%
Education, Training, Library	45,000	44,140	-860	-2%	\$27.50	\$27.97	2%
Community, Social Services	12,990	15,170	2,180	17%	\$23.54	\$26.44	12%
Office and Admin. Support	157,350	151,820	-5,530	-4%	\$22.48	\$23.67	5%
Low-wage industries	379,940	423,330	43,390	11%	\$16.19	\$18.00	7%
Healthcare Support	15,690	14,880	-810	-5%	\$18.71	\$22.77	22%
Protective Service	21,920	23,560	1,640	7%	\$21.13	\$20.01	-5%
Sales and Related	98,750	98,110	-640	-1%	\$18.32	\$19.60	7%
Transportation, Material Moving	52,250	61,770	9,520	18%	\$17.17	\$19.43	13%
Production	24,290	25,170	880	4%	\$18.12	\$18.57	2%
Building and Grounds Cleaning and Maintenance	37,480	36,630	-850	-2%	\$15.00	\$17.09	14%
Farming, Fishing, and Forestry	370	700	330	89%	\$14.84	\$15.04	1%
Food Preparation, Serving-Related	100,400	107,660	7,260	7%	\$12.68	\$14.74	16%
	28,790						

Source: CA Employment Development Department, Occupational Employment Statistics and Wages, 2016 and 2018.

Housing Production

Between 2010 and 2018, the number of housing units in San Francisco increased 6.5 percent from 376,942 to 401,613, or by 24,671 units. This increase represents a reduction in housing units relative to jobs during that time, placing upward pressure on housing prices.

The Planning Department reports that 24,671 housing units were added to the housing stock in San Francisco between 2010 and 2018. This level of housing production did not keep pace with the City's housing inventory relative to the number of new jobs created during that period. There were 210,000 new jobs created in San Francisco between 2010 and 2018, but only 24,671 housing units added during that period.

As shown in Table 5, this represents a major reduction in housing units per job, with 8.5 new jobs created for every housing unit between 2010 and 2018 as compared to 1.9 housing units per job in place in 2018 and 1.5 housing units per job in 2010. Since household size has not increased over the 2010 to 2018 time period, this indicates that a smaller share of workers are living in San Francisco compared to the number of jobs in the City. Given the change in the distribution of household income shown above in Figure 1, it appears that a greater share of workers with low and moderate wage jobs are not living in the City.

	2010	2018	2010-2018
Jobs	550,300	760,300	210,000
Housing Units	376,942	401,613	24,671
Jobs/Housing Unit	1.5	1.9	8.5

Table 5: Reduction in Housing Production Relative to Job Growth in San Francisco, 2010-2018

Sources: CA Employment Development Department, Current Employment Statistics – San Francisco County, December 2010 and December 2018. SF Planning, Housing Inventory 2018, p.34.

The jobs to housing unit ratio accounts for the fact that not all of the individuals in the new jobs will choose to live in San Francisco, that households often have more than one worker, and that some households have no workers. This is why the ratio is greater than one; a housing unit is not needed for every job. It should also be noted that the creation of every 1.9 new jobs does not necessarily translate to a need for a new housing unit. Specifically, some of the new jobs during the 2010 to 2018 period were likely taken by existing City residents that may have lost their jobs during the recession starting in 2008. However, any lost jobs from the recession have now been more than replaced and many of the reported new jobs now represent a net gain since the recession and thus reflect a need for new housing to keep up with the existing jobs-housing relationship.

Housing Prices

Reflecting the impact of reduced housing production, housing prices in San Francisco have increased significantly in the last nine years with disproportionate impacts on low- and moderate-income households. In 2017, more than 75 percent of households making less than \$35,000 were housing cost-burdened³. In the same year, only 11% of households making over \$100,000 were cost-burdened.

The median sale price for homes in San Francisco increased from \$703,000 in January 2010 to \$1.3 million in January 2019, or by 85%. Rent listings for a two-bedroom apartment increased between 2010 and 2019 from \$3,300 to \$4,500, or by 36%.⁴ Wage growth has not kept pace with the increases in housing costs in San Francisco. Table 6 provides the household income needed to rent or buy a home at the median price in 2010 and 2019. A four-person household that could afford to purchase a median priced home in 2010 had to have an income of at least 137% of the AMI. To purchase a median priced home in 2019, that same household would need an income of at least 197% of the AMI.

	2010	2019
Median Rent	\$3,300	\$4,500
Household Income Needed	\$132,000	\$180,000
% AMI for 4-Person Household	133%	146%
Median Sale	\$703,000	\$1,300,000
Household Income Needed	\$135,720	\$243,040
% AMI for 4-Person Household	137%	197%

Table 6: Household Income Needed to Rent or Buy at Median Prices, 2010 and 2019

Source: Zillow, San Francisco Home Prices and Values, <u>https://www.zillow.com/san-francisco-ca/home-values</u>

Note: This estimate assumes a down payment of 20% and a mortgage payment (including principal and interest payments, property taxes, and homeowners insurance) at an interest rate of 4% over a 30-year fixed loan term.

The U.S. Department of Housing and Urban Development (HUD) considers households to be cost-burdened if they pay more than 30% of their income for housing. As shown in Table 7, in 2017, more than 62% of households making less than \$50,000 were cost-burdened. For households making less than \$35,000, over 75% of households were cost-burdened. In the same period, only 11% of households making over \$100,000 were cost-burdened.

³ Paying more than 30 percent of their gross income on housing.

⁴ Zillow, San Francisco Home Prices and Values, <u>https://www.zillow.com/san-francisco-ca/home-values/</u>

Table 7: Percent of Households Cost-Burdened by Housing Expenses by Income Level,
San Francisco County, 2017

Household Income	Percent Cost- Burdened
Less than \$10,000	94%
\$10,000 to \$20,000	76%
\$20,000 to \$35,000	75%
\$35,000 to \$50,000	62%
\$50,000 to \$75,000	48%
\$75,000 to \$100,000	38%
More than \$100,000	11%

Source: Metropolitan Transportation Commission, Vital Signs: Housing Affordability, County by Income, updated January 14, 2019.

Although the increase in market rate housing prices has outpaced wage growth since 2010, the median percent of income that San Francisco households spend on rent has not changed substantially, as shown in Figure 2. Between 2010 and 2017, the median low-wage household spent 42.8% of their gross income on rent, which increased slightly to 44.3% of income spent on rent in 2017. For moderate-wage households, the amounts increased slightly from 23.5% in 2010 to 24.7% in 2017, and for high-wage households the amount remained at 16.0% in 2010 and 2017. This could be the impact of rent control on many households in San Francisco, which prevents some households from experiencing the rent burden that they would experience if facing market rate housing.



Figure 2: Percent of Household Income Spent on Rent, 2010-2017

Sources: IPUMS USA: Version 9.0 [dataset]. Minneapolis, MN: IPUMS, 2019. Mayor's Office of Housing and Community Development, Maximum Income by Household Size, 2010 and 2017.

Affordable Housing

- Of the 24,671 new housing units added in San Francisco between 2010 and 2018, 6,224 were affordable for low- and moderate-income households, or those making up to 120 percent of AMI.
- For just 2016 through 2018, 2,913 affordable units were constructed, but an estimated 27,546 low and moderate income jobs were created in San Francisco, resulting in a jobs-to-housing ratio of 9.5. To achieve San Francisco's 2018 jobs to housing ratio of 1.9, 14,498 housing units affordable for low- and moderate-income households would have needed to be produced, or 11,585 more than was produced.

Affordable housing is housing that is rented or owned at prices affordable to households with low to moderate incomes. HUD determines the thresholds by household size for these incomes for the San Francisco HUD Metro Fair Market Rent Area. In 2019, the AMI for a four-person household in the San Francisco area was \$123,150.⁵

In 2018, 645 affordable units were completed through programs overseen by the San Francisco Mayor's Office of Housing and Community Development (MOHCD), representing 24 percent of the new housing units added in 2018. The number of affordable units built in 2018 (645) is 23 percent lower than the five-year average of 840 affordable housing units built and 56% less than the 1,466 in 2017. Table 8 below shows

⁵ Mayor's Office of Housing and Community Development, Maximum Income by Household Size, 2019.

the number of units built by income level over time and Table 9 shows the housing types constructed.

Year	Low (< 80% AMI)	Moderate (80-120% AMI)	Total Affordable Units	Total All New Units	% of All New Units
2010	501	81	582	1,438	40%
2011	140	78	218	418	52%
2012	357	156	513	1,471	35%
2013	448	264	712	2,499	28%
2014	149	608	757	3,654	21%
2015	213	316	529	3,095	17%
2016	248	554	802	4,895	16%
2017	686	780	1,466	4,511	32%
2018	40	605	645	2,690	24%
Total	2,782	3,442	6,224	24,671	25%

Table 8: New Affordable Housing Construction by Income Level, 2010-2018

Source: SF Planning, Housing Inventory 2014, p.32, and Housing Inventory 2018, p.34.

Year	Family	Senior	Individual/SRO	Homeowner	Other	Total
2010	128	348	59	47	-	582
2011	67	-	140	11	-	218
2012	157	-	269	87	-	513
2013	432	100	164	16	-	712
2014	536	90	3	128	-	757
2015	282	-	-	194	53	529
2016	452	147	20	118	65	802
2017	1,116	39	55	157	99	1,466
2018	434	-	19	51	141	645
Total	3,604	724	729	809	358	6,224
% of Total	58%	12%	12%	13%	6%	100%

Table 9: New Affordable Housing Construction by Housing Type, 2010-2018

Source: SF Planning, Housing Inventory 2014, p.32, and Housing Inventory 2018, p.34.

Note: The category "Other" signifies the units that are considered secondary units or ADUs and are not incomerestricted.

Using EDD jobs data presented above, we estimate that 27,546 jobs low- and moderatewage jobs were created in San Francisco for just 2016 through 2018. During that same time, 2,913 affordable housing units were constructed, as shown in Table 8 above, resulting in in a jobs-to-housing ratio of 9.5. To achieve San Francisco's 2018 jobs to housing ratio of 1.9 reported above in Table 5, 14,498 housing affordable housing units for low- and moderate-income households would have to have been produced, or 11,585 more than was produced.

While housing production and job creation do not occur in perfect unison year by year, the estimated 11,585 affordable housing unit deficit above indicates that San Francisco has an affordable housing deficit that needs to be addressed in addition to considering low- and moderate-income jobs that will be created in the future, as discussed further below.

Jobs-Housing Linkage Fee

- The City has various development impact fees in place to generate funds for affordable housing. The Jobs-Housing Linkage fee is applied to non-residential development based on size and type of development (office, retail, etc.).
- Between FY 2009-10 and FY 2018-19, the City collected \$89.2 million in Jobs-Housing Linkage fee revenue, or an average of \$8.9 million per year. Over this period, MOHCD spent approximately one-third, or \$30.2 million of the Jobs-Housing Linkage fee funds collected, an average of approximately \$3.0 million per year.
- MOHCD also reports it was committed to spending an additional \$63.7 million in Jobs-Housing Linkage fee funds as of the end of FY 2018-19. This is based on available fund balance and expected future fee revenue that will be used for future affordable housing construction projects over the next two years.

MOHCD is responsible for administering the Citywide Affordable Housing Fund, which is used to increase the supply of housing affordable to qualifying households. A variety of development impact fee revenues are deposited into the Citywide Affordable Housing Fund⁶ including revenue from the Jobs-Housing Linkage fee, the Inclusionary Affordable Housing fee, the Eastern Neighborhoods Area Plan Affordable Housing fee, the Van Ness and Market Downtown Residential Special Use District Affordable Housing fee, bond proceeds, and the Market and Octavia and Upper Market Neighborhood Commercial District Affordable Housing fee. MOHCD uses the Citywide Affordable Housing Fund, along with funding from federal and state agencies and private investors, to finance the development, rehabilitation, and purchase of affordable housing.

The Jobs-Housing Linkage fee is based on the development of non-residential workplace buildings, in contrast with other affordable housing fees that are based on residential development. The purpose of the Jobs-Housing Linkage fee is to mitigate the impact of development of new non-residential buildings and the employees that work in them on the demand for affordable housing.

⁶ The Citywide Affordable Housing Fund has other sources of revenue in addition to fees, such as loan repayments and gift deposits.

Nexus Study: Basis of Jobs-Housing Linkage Fees

The basis of the Jobs-Housing Linkage fee is the jobs-housing nexus analysis prepared by a consultant to the City that documents and quantifies the impact of the development of non-residential buildings on the demand for housing. The State's Mitigation Fee Act requires that all development impact fees be supported by nexus analyses that demonstrate the link between the fee amount charged and the impact of the development. ⁷ The City's most recent nexus study was prepared by a consultant to the Office of Economic and Workforce Development and issued in May 2019.⁸

The 2019 nexus study identifies the demand for low and moderate income housing that will be generated by these types of non-residential development:

- Office
- Research and development
- Retail
- Entertainment
- Hotel
- Production, Distribution, and Repair
- Medical
- Institutional (educational, government, cultural, religious)

The nexus study identifies the number of workers that are expected to be working in new non-residential buildings by the types listed above, breaking out the workers by the following four income segments:

- 1. extremely low income: under 30% of AMI
- 2. very low: 30 under 50% of AMI
- 3. low: 50 under 80 % of AMI
- 4. moderate: 80 120% of AMI

Average employment densities are developed by the nexus study consultant for each building type based on various sources including the Planning Department's Land Use Allocation Model, analyses prepared by the Institute of Transportation Engineers and the Association of Bay Area Governments, environmental impact reports, other separate analyses prepared by the nexus study consultant, and other sources. Average employment densities are expressed as number of employees per square foot such as 238 square feet per employee on average for office buildings.

⁷ California Government Code Sect. 66000.

⁸ Jobs Housing Nexus Analysis, Keyser Marston Associates, May 2019.

> Average incomes for workers by building type and workers per household are calculated in the nexus study based on U.S. Census Bureau American Community Survey data. Through these calculations, the study identifies the number of housing units needed for the new households that will be established in San Francisco due to the new building. These calculations identify the number of extremely low, very low, low, and moderate income households that will be established based on the likely incomes for the mix of jobs in the new building. For example, for office, the nexus study reports that 33.5 percent of the new worker households will earn low or moderate wages. For a retail development, the percentage low and moderate income workers is assumed to be 65.4 percent, or nearly double the 33.5 percent level for office buildings.

> The nexus study produces affordable unit demand factors for the eight non-residential building types, or number of housing units needed per 1,000 square feet of gross floor area in the new buildings. These factors are then multiplied by the amount the City elects to charge to subsidize each unit of affordable housing to determine fee levels for each type of non-residential development. The nexus study itself does not provide the results of such calculations. The fees are set by the Board of Supervisors, in some cases with input provided by the Planning Commission.

The Planning Department advises that the fees are based on a combination of target subsidy levels needed per unit of affordable housing combined with an assessment of what amount can be added to development costs through the Jobs-Housing Linkage fee before projects become financially unfeasible for developers. A financial feasibility analysis was produced in 2019 for office development.

The Jobs-Housing Linkage fee applies to projects with at least 25,000 gross square feet of entertainment, hotel, office, research and development, retail, production, distribution, and repair (PDR), or small enterprise workspace uses. Though included in the nexus analysis, no fees have been established for institutional and medical development or Production, Distribution and Repair.

The fees by type of commercial use as of August 2019 are shown in Table 10 below. The fees are indexed on the annual percent change in the Construction Cost Index for San Francisco as published by Engineering News-Record.

Amount per Square Foot
\$28.57
\$26.66
\$26.66
\$22.46
\$22.46
\$21.39
\$19.04

Table 10: Jobs-Housing Linkage Fees, 2019

Source: SF Planning, Master Impact Fee Schedule 2019.

Over the ten-year period between FY 2009-10 and FY 2018-19, the City collected a total of \$89,198,633 in Jobs-Housing Linkage fee revenue, or an average of \$8,919,863 per year, as shown in Table 11 below. Over this period, MOHCD spent approximately \$30,197,636, or approximately one-third of the funds from the Jobs-Housing Linkage fee, for an average of \$3,019,764 per year. MOHCD reports that \$19,325,778 of these funds were expended to partially finance 527 units of affordable housing for formerly homeless adults, low-income families, seniors, transition-age youth, and middle-income families.

MOHCD reports that it has also committed and encumbered, but not yet expended, \$63,656,874 in Jobs-Housing Linkage fee funding to partially finance 543 units of affordable housing as of June 30, 2019. These funds represent available fund balance and expected Jobs-Housing Linkage fee revenue to be collected in future years based on anticipated development projects. These units are expected to be completed and occupied by mid-2021 and include the projects at 88 Broadway, 490 South Van Ness, 1950 Missions, and 17th and Folsom. Due to the method of assembling project financing, there is not a direct connection between this unit count and the number of affordable housing units determined to be needed by the Jobs-Housing Linkage fee calculations.

Based on the available data about projects funded between FY 2009-10 and FY 2015-16, MOHCD reports that the average subsidy from the Jobs-Housing Linkage fee amounted to \$36,671 per unit. As mentioned above, for MOHCD affordable housing projects, Jobs-Housing Linkage Fee funding is typically combined with other funding sources to subsidize the cost of acquiring or developing affordable housing. Among completed projects that received Jobs-Housing Linkage fee funding between FY 2009-10 and FY 2015-16, Jobs-Housing Linkage fee funding represented an average of 40 percent of the total City subsidy for acquiring or developing the affordable housing project. The total City subsidy is higher because Jobs-Housing Linkage fee funds are typically combined with other City sources such as other Inclusionary Housing fees, bond proceeds, or other sources. According to MOHCD, the total development cost of recently completed housing projects averages \$89,365,370, of which an average of \$27,401,819, or 31 percent, is City subsidy.

Jobs-Housing Linkage fee collections and expenditures vary widely from year to year. For example, no fee revenue was collected in FYs 2008-09 through 2010-11, and a high of \$30,198,421 was collected in FY 2015-16. Expenditures ranged from \$0 in FY 2011-12 and FY 2012-13 to an estimated \$9,249,025 in FY 2018-19.

Fiscal Year	Fee Revenue Collected	Funds Expended	Housing Units Funded ^b	Funds Committed [°]	Housing Units Committed
FY 2009-10	\$(8,775)	\$1,012,000	-		
FY 2010-11	15,878	4,581,613	199		
FY 2011-12	567,229	-	-		
FY 2012-13	5,678,329	-	-		
FY 2013-14	11,974,893	9,290,000	71		
FY 2014-15	8,918,731	450,000	72		
FY 2015-16	30,198,421	3,992,165	185		
FY 2016-17	16,075,251	1,440,991 ^a	а		
FY 2017-18	3,036,705	181,842 ^a	а		
FY 2018-19	12,741,971	9,249,025 ^a	а	63,656,874	543
Total	\$89,198,633	\$30,197,636	527 ^a	\$63,656,874	543
Annual Average	\$8,919,863	\$3,019,764	а		
Average Subsidy			\$36,671 ^d		\$117,232

Table 11: Jobs-Housing Linkage Fee Summary, FY 2010-11 through FY 2018-19

Sources: Controller's Office, FY 2014-15 & FY 2015-16 Biennial Development Impact Fee Report, December 30, 2016; MOHCD.

^a The Controller's Office is in the process of preparing the Development Impact Fee Report for FY 2016-17 through FY 2018-19. These figures are estimates prepared by MOHCD and are subject to change upon verification by the Controller's Office. The number of units funded by expenditures in FY 2016-17 through FY 2018-19 was not available by the date of this report.

^b The Jobs-Housing Linkage fee is typically one of multiple funding sources for each affordable housing project in which it is used. Therefore, the units shown were partially funded by the Jobs-Housing Linkage fee.

^c Represents funds committed and encumbered for specific projects but not yet expended or disbursed. The Jobs-Housing Linkage fee is typically one of multiple funding sources for each affordable housing project in which it is used. Therefore, the units shown were partially funded by the Jobs-Housing Linkage fee.

^d Average subsidy based on the seven years (FY 2009-10 through FY 2015-16) for which there is available data.

While the Jobs-Housing Linkage fees are designed to generate revenues for specific numbers of housing units in the four income segments identified above – extremely low, very low, low, and moderate – MOHCD does not program its funding or track its development of affordable housing by those income categories to ensure that the number of affordable housing units built is consistent on a one-for-one basis with the Jobs-Hosing Linkage fees generated. Instead, MOHCD assembles funding from different sources, including Jobs-Housing Linkage fees, and acquires properties or works with

developers that have acquired properties where development of affordable housing is feasible.

Though a one for one relationship between fee revenue and affordable housing generation cannot be made for a single year or even a few years given the long lead time of some affordable housing projects, the 527 affordable housing units developed by MOHCD between FY 2009-10 and 2015-16 was far less than the need stemming from non-residential development during that time. While the Planning Department reports that 6,224 affordable housing units were built during that period in the City, or substantially more than those subsidized by Jobs-Housing Linkage fees, 5,697 of those units were funded by sources other than Jobs-Housing Linkage fees (6,224 units built less 527 subsidized by Jobs-Housing Linkage fees = 5,696 units).

For the approximately 5.8 million square feet of office space added in San Francisco between 2010 and 2018, the Jobs-Housing Linkage fee alone should have resulted in development of approximately 4,692 low and moderate income housing units, based on the assumed 238 square feet per worker in office developments and the 33.5 percent rate of low and moderate income jobs in office developments according to the nexus study. However, as reported above, only 527 affordable housing units have been produced from Jobs-Housing Linkage fees by MOHCD. However, other sources were used to produce a total of 6,224 low and moderate income units between 2010 and 2018 identified above in Table 8. The Planning Department reports that some of the fees and affordable housing units produced were under the auspices of the Office of Community Investment and Infrastructure and not included in the Controller's report that is the source of the fee collections information presented in Table 11,

While additional affordable housing units may eventually be constructed that will be subsidized by Jobs-Housing Linkage fees, MOHCD does not have a set timetable or tracking of affordable housing units by type relative to the Jobs-Housing Linkage fee.

Housing Production Goals

Based on the State-defined Regional Housing Need Allocation goals for San Francisco for 2015-2022, as of 2018, San Francisco has produced 96% of the housing target goal for high wage workers but only 39% of the target for low-wage workers and 15% of the target for moderate-income workers. This count includes substantially rehabilitated affordable units in addition to net new housing units so some of those counted as completed units may not represent net new units.

Every eight years, the California Department of Housing and Community Development determines the total number of new homes that the Bay Area needs to build by income segment to meet the housing needs of its residents. The Association of Bay Area

Governments (ABAG) distributes a share of the region's housing need to each city and county in the region. These needs consider not only changes in the number of jobs but other factors as well such as migration, births, and deaths.

Table 12 shows housing allocation goals for the City and County of San Francisco for 2015-2022 and the percentage of production targets achieved. As of 2018, or approximately 50 percent of the way through the eight year reporting period, San Francisco is above target in production of homes for high-income residents but behind target in production of low- and moderate-income residents, where only 39 and 15 percent of the goals have been achieved, respectively. Actual production of low-wage housing represents 24.9 percent of all housing produced between 2015 and 2018, lower than the 37.7 percent goal. Similarly, production of moderate-wage housing as of 2018 represented 4.8 percent of all units produced, compared to the goal of 18.9 percent of all units. High-wage housing, at 70.4 percent of all units. Further, the actual production statistics reported by the Planning Department and shown in Table 12 include substantially rehabilitated existing affordable units, as allowed by the State for Regional Housing Needs Allocation reporting, but may not represent net new housing to accommodate new households resulting from new jobs generated.

Wage Level	Housing Goals 2015- 2022	% Total Housing Goal	Actual Production as of 2018 ^a	% Total Housing Production	% of Production Target Achieved	Production Deficit as of 2018
Low-wage	10,873	37.7%	4,270	24.9%	39%	6,603
Moderate- wage	5,460	18.9%	816	4.8%	15%	4,644
High-wage	12,536	43.4%	12,071	70.4%	96%	465
Total	28,869	100.0%	17,157	100.0%	59%	11,712

Table 12: Regional Housing Needs Allocation, Planning Period 2015-2022, San FranciscoCounty

Source: SF Planning, Housing Inventory 2018, p.13.

^a Includes new units certified for occupancy and substantial rehabilitation of existing affordable housing units, as allowed by the State. Substantial rehabilitation of existing affordable housing units is not included in the count of 6,224 newly produced affordable housing units presented in Table 8.

As can be seen in Table 12, even with inclusion of rehabilitated affordable units, which in many cases do not actually represent net new housing units, there has been a production deficit of affordable units between 2015 and 2018.

The Planning Department points out that RHNA goals are minimal goals based on a variety of factors including job growth, and because they were made in 2015, may not reflect current need.

Jobs-Housing Fit: Projections

Projections: Population and Households

Table 13 shows the projected population, number of households, and housing units for San Francisco County from 2010 through 2040, according to the Association of Bay Area Governments (ABAG).

Table 13: Projected Population, Households, and Housing Units, San Francisco County, 2010-2040

	2010	2020	2030	2040	% Change (2010-2040)
Total population	809,145	959,405	1,034,175	1,169,485	45%
Households	345,810	408,600	437,505	483,695	40%
Total housing units	376,480	423,550	446,190	495,035	31%
Multifamily units	263,240	309,615	332,650	382,105	45%
Single family units	113,240	113,935	113,540	112,930	0%

Source: ABAG, Plan 2040. Data for 2010 is designed to approximate (but may still differ from) Census 2010 counts.

Projections: Jobs Creation

The California Employment Development Department (EDD) projects that between 2016 and 2026, San Francisco area high-wage jobs and low-wage jobs will both increase at rates close to one another: 14% for high-wage jobs and 11% for lowwage jobs. Moderate-wage jobs are projected to increase but at a slower rate of 5%.

Table 14 shows the number of jobs by wage level that are projected by EDD to be added between 2016 and 2026 for the San Francisco-Redwood City-South San Francisco Metropolitan Division.⁹

⁹ EDD's 10-year employment projections are based on annual average employment levels by industry and the assumption that historical trends will continue into the future. EDD applies change factors, produced by the U.S. Bureau of Labor Statistics (BLS), to project shifts in occupations within particular industries. The BLS change factors project employment changes at the national level over a 10-year period and are not tailored to the local level.

Wage Level	2016	2026	Change	% Change
	Employment	Employment		
Low-wage	430,440	479,930	49,490	11%
Moderate-wage	297,630	312,090	14,460	5%
High-wage	454,190	517,190	63,000	14%
Total	1,182,260	1,309,210	126,950	11%

Table 14: Projected Jobs by Wage Level, San Francisco-Redwood City-South San Francisco,2016-2026

Source: CA Employment Development Department, 2016-2026 Employment Projections.

Table 15 shows EDD's projections of the top five fastest growing occupations between 2016 and 2026 for the San Francisco-Redwood City-South San Francisco area. As can be seen, excluding software developers, the other four fastest growing occupations are low-wage occupations. These projections demonstrate the mixed forecast for growth in the region, with growth in both high-wage and low-wage occupations, but, as discussed above, new housing mostly being produced for workers with high-wage occupations.

Table 15: Top Five Fastest Growing Occupations, San Francisco-Redwood City-South SanFrancisco, 2016-2026

Occupational Title	2016	2026	% Change	Median
	Employment	Employment		Hourly Wage
Taxi Drivers and Chauffeurs	5,450	9,440	73%	\$18.57
Couriers and Messengers	2,060	3,210	56%	\$14.84
Software Developers	26,760	39,170	46%	\$67.39
Personal Care Aides	33,860	48,690	44%	\$12.16
Home Health Aides	1,640	2,260	38%	\$14.15

Source: CA Employment Development Department, 2016-2026 Employment Projections. Note: Occupations with employment below 400 in 2016 have been excluded.

To estimate the number of projected jobs in San Francisco County alone, we used EDD's data for the total number of jobs in each county in 2016.¹⁰ Of the total number of jobs in both counties, jobs in San Francisco County made up approximately 64 percent of total jobs for both counties combined We applied the 64 percent to the total number of jobs for the two counties combined to project the number of jobs and new housing units needed for San Francisco only, by income segment. We divided the total number of jobs in San Francisco by 1.74, or the number of workers per worker household¹¹ according to the 2011-2015 ACS, and subtracted the number of housing units that were constructed between 2016 and 2018. Table 16 provides estimates of projected jobs for

¹⁰ While total jobs data is available from EDD at the county level, data on jobs by occupation and wages is only available at the regional level, with San Francisco data combined with San Mateo County data.

¹¹ This is a conservative estimate because it excludes all non-worker households, such as students and the retired.

San Francisco County alone and the number of new housing units needed going forward (2019-2026).

As shown in Table 16, using our estimates of job growth by income segment between 2016 and 2026, progress has been made to fill the housing needs of workers in high-wage and moderate-wage job growth. Housing for high wage occupations has been the most constructed thus far in the 11 year period, with 9,185 units, or 40 percent of projected need, constructed. Housing for workers in the moderate-income occupations has been a smaller quantity, at 1,940 units, representing 36.4 percent of estimated need through 2026. Housing for new low-wage jobs however, has been very low compared to need, with only 974 units, or 5.3 percent of estimated need constructed in the first three years of the 11-year projection period.

Wage Level	2016 Employment	2026 Employment	Change	Housing Needed	Housing Constructed 2016-2018	% Housing Needed	Housing Needed 2019- 2026
Low-wage	275,868	307,586	31,718	18,229	974	5.3%	17,255
Moderate- wage	190,750	200,018	9,267	5 <i>,</i> 326	1,939	36.4%	3,387
High-wage	291,089	331,466	40,377	23,205	9,183	40.0%	14,022
Total	757,707	839,069	81,362	46,760	12,096	25.9%	34,664

Table 16: Projected Jobs by Wage Level, Estimate for San Francisco County Only, 2016-2026

Source: CA Employment Development Department, 2016-2026 Employment Projections.

Note: Housing needed accounts for the housing that was completed between 2016 and 2018 according to the SF Planning Housing Inventory 2018.

Projections: Housing Production

Using estimates of the number of housing units that will be needed to match job growth through 2026 and the number of housing units currently in the pipeline in San Francisco, we estimate that there will continue to be a severe shortage in the number of housing units for low-wage households in the coming years while there will be enough housing constructed for the future needs of high-wage households.

In addition to reporting actual production of housing, the Planning Department also reports entitled units, or those that have been approved by the Planning Commission and are at various stages of development but not yet built. Units under construction and projects with active building permits are likely to be completed within the current Regional Housing Needs Allocation period of 2015-2022. The Planning Department reports that not all filed building permits will necessarily turn into constructed housing units as project plans and financing sometimes change after a building permit is filed. However, it is reasonable to assume that most will be built. Typical duration from filing

of building permit to building completion typically ranges from two to four years, depending on the size and complexity of the project.

Table 17 shows the housing pipeline as of the second quarter of 2018. Of the 28,764 housing units entitled, or approved by the Planning Commission, housing for high-wage households make up the majority of housing units entitled (86.1%), while housing for low-wage households makes up 7.5% and housing for moderate-wage households makes up 2.1%.

The Planning Department advises that some of the housing now classified as "high income" may turn out to be designated as affordable housing as not all developers have declared how they will meet Below Market Rate (BMR) housing requirements at this stage. Further, not all units for which building permits have been issued actually end up being built or built in the originally designated time period as circumstances such as financing for projects can change after building permits are issued.

Income Level	Building Permit Filed	Building Permit Approved or Issued	Under Construction	Entitled, No Permits Filed	Total Entitled	% Entitled
Low income	32	557	887	150	1,626	7.5%
Moderate income	179	118	265	15	577	2.7%
High income	4,524	5,768	5,414	2,921	18,627	86.1%
TBD	120	115	512	56	803	3.7%
Total	4,855	6,558	7,078	3,142	21,633	100%

Table 17: Housing Pipeline by Income Level, San Francisco, 2018 Q2

Source: SF Planning, Housing Development Pipeline Report 2018 Q2; income level distribution from Planning Department. Excludes seven major development projects that have been entitled but are not expected to be completed by 2022, the end of the current Reginal Housing Needs Allocation period.

Based on the housing pipeline and our estimated number of housing units needed for the projected number of jobs that will be created in San Francisco,

Table 18 shows the difference, or gap, by wage level. Based on this estimate, there is a severe shortage in the number of housing units for low-wage households in the housing pipeline. The estimated need shown in Table 18 is in addition to the existing affordable housing deficit discussed above and estimated to be 11,585 affordable housing units for just 2016-2018.

Table 18: Difference between Housing Units in the Pipeline as of 2018 and ProjectedHousing Needed by Income Level through 2026, San Francisco

Income Level	Housing Needed	Total Entitled	Difference
Low income	17,255	1,626	15,629
Moderate income	3,387	577	2,810
High income	14,022	18,627	-4,605
Total	34,664	20,830	13,834

Notes: Total entitled pipeline data as of Quarter 2, 2018. Units classified as TBD in Table 17 are not included.

The Budget and Legislative Analyst has reviewed Planning Department Pipeline data from 2019 which shows that progress has been made in reducing the gap between housing needed and housing entitled. Though the Planning Department has not vetted the pipeline estimated prepared by our office or provided updates on low and moderate income housing entitlements, we have estimated that with entitlements as of the second quarter of 2019, the gap may be approximately 9,327.

Policy Options

The Board of Supervisors could:

- 3. Request the Planning Department to prepare annual projections of new jobs for San Francisco, by income segment, and new affordable housing completed and in the pipeline to identify any gap between employment projections and new housing.
- 4. Request that MOHCD track new housing to be funded by Jobs-Housing Linkage fee revenue by income segment and report to the Board of Supervisors annually on new affordable housing completed and in the pipeline by income segment.

Limitations

- Employment projections are based on national-level estimates of employment changes that assume that historic employment trends will continue into the future. However, events that are impossible to predict, such as major business closures or natural disasters, may occur during the projection period.
- Occupation-level employment and wage data is only available at the San Francisco-San Mateo County level.

- Assignment to low, moderate, or high wage categories is based on the median hourly wage within an industry. Within each industry, there could be individual workers who fall under the low, moderate, and high wage categories, but individual-level data is not available.
- Prior to 2016, occupation-level employment and wage data for San Francisco County was combined with data for San Mateo and Marin Counties. As of 2016, Marin County is now a separate area, the San Rafael Metropolitan Division, is no longer part of San Francisco-San Mateo Metropolitan Division. This limits the ability to compare current occupational employment and wage levels with data from before 2016.
- The housing pipeline underestimates the amount of affordable housing that will eventually be built.
- Our estimate of projected housing need is based on EDD's 2016-2026 employment projections, which are presented in the number of **jobs**, and Keyser-Marston's nexus study estimate of the number of **workers** per housing unit. Our estimate is slightly skewed due to the fact that the number of jobs is not the same as the number of workers because some workers have more than one job and some individuals in the workforce are unemployed.