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Housing Needs and Displacement Assessment Report for University Circle Phase II

Prepared for the City of East Palo Alto

September 28, 2021

bae urban economics

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Dear Ms. Lee:

BAE is pleased to submit this revised draft Housing Needs and Displacement Assessment report for the proposed University Circle Phase II project. We look forward to receiving your comments on this draft report and working with you to complete a final report.

Sincerely,

Stephanie Hagar
Associate Principal

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EXECUTIVE SUMMARY

The City of East Palo Alto (City) has retained BAE Urban Economics (BAE) to conduct a Housing Needs and Displacement Assessment for University Circle Phase II (the Project), a proposed office development at 1900-2000 University Avenue in the City of East Palo Alto. The Assessment presented in this report provides an estimate of the need for housing that the Project would generate as a result of workers employed at the Project as well as the estimated housing need generated by the indirect and induced employment associated with the Project. The Assessment also provides an evaluation of the potential for the Project to lead to the displacement of existing households.

The report provides a quantitative estimate of the direct, indirect, and induced housing need from the Project and a qualitative assessment of the potential displacement impacts. The analysis relies on a qualitative approach to evaluating displacement due to the methodological limitations associated with quantifying the potential displacement impacts from a specific development project.

Summary of Findings

An overview of the findings from the analysis are as follows:

Existing Conditions Findings

- **Some households in East Palo Alto are likely to be vulnerable to displacement pressures, both under current market conditions and if regional housing costs continue to increase.** East Palo Alto has a large number of renter households, which tend to be more susceptible to involuntary displacement than owners. An estimated 800 renter households in East Palo Alto are not protected from large increases in market-rate rents that could cause displacement. Many East Palo Alto renter households live in single-family homes, which are exempt from local rent stabilization ordinances under California State Law. In addition to vulnerabilities due to potential rent increases, renters living in single-family homes could be involuntarily displaced to allow for owner-occupancy. Many households in East Palo Alto have a high housing cost burden, which often makes households vulnerable to displacement.

- **Findings from the Urban Displacement Project indicate that households in parts of Menlo Park may face a similar risk of displacement.** Other areas of Menlo Park have similar market pressures, but a relatively low proportion of existing low-income households that could be affected.

- **Households that are priced out of their current units are likely to face considerable challenges finding homes within the region.** Home sale prices in East Palo Alto and

San Mateo County overall generally exceed the affordability threshold for households with below moderate or moderate incomes. Average market-rate rents are also unaffordable to many below moderate- and moderate-income households.

- **While housing costs in East Palo Alto are typically more affordable than in San Mateo County overall, both the City and the County have experienced substantial recent increases in housing costs.** The January 2021 median home sale price in East Palo Alto was $947,500, up 261 percent from the February 2012 median. The 2021 median home sale price in the County was approximately $1.4 million, up 161 percent from the February 2012 median. The average multifamily asking rent in East Palo Alto was $2,800 as of March 2021, slightly higher than the County average multifamily asking rent. These rents reflect consistent increases over the past decade.

- **Regional housing production has not kept pace with the rapid pace of employment growth in the region, which is likely one factor that has contributed to regional housing cost increases.** The jobs-housing ratio increased between 2010 and 2019 in the Counties of San Mateo, Santa Clara, San Francisco, and Alameda. In San Mateo County, the employment-to-housing unit ratio increased from 1.2 to 1.5 between 2010 and 2019. Other factors that have likely contributed to regional housing cost increases include low interest rates, the effects of the housing market recovery from the foreclosure crisis, and increased demand as Millennials have entered the housing market.

- **Increases in rents and home sale prices in East Palo Alto are tied to regional increases in housing costs.** Increases in rents and sale prices in the City have generally been consistent with Countywide increases. Over the past ten years, residential rents and home sale prices have generally increased in tandem with increases countywide, despite East Palo Alto experiencing a slower rate of employment growth than neighboring cities. These data indicate that broad trends within the regional housing market impact housing cost increases in East Palo Alto to a much larger degree than more localized factors.

- **To the extent that increases in regional employment have impacted housing costs during recent years, the impact of any individual employer or development is likely minimal.** Significant regional and local increases in housing costs over the past decade have coincided with considerable increases in regional employment, rather than any one specific employer or commercial development. While the collective impact of large increases in employment are likely to be a considerable factor affecting housing costs, the impact of any individual employment-based use has likely been minimal.

- **The City of East Palo Alto has enacted policies that partially counteract displacement pressures.** These policies include the City's Rent Stabilization and Eviction for Good

Cause Ordinance as well as programs and policies that increase the City's affordable and market-rate housing supply.

Housing Demand Analysis Findings

- **The Project would generate an estimated 1,067 direct, indirect, and induced jobs.** Of this total, 720 are directly attributable to the Project and 705 are due to the multiplier effects from the Project.[1]

- **Direct, indirect, and induced housing need from the Project would total an estimated 761 units.** An estimated 57 to 131 units of this housing demand would be for units in East Palo Alto, while the Project would generate an estimated need for 17 to 35 housing units in Menlo Park.

Findings Regarding Potential Impacts from the Project

- **The Project would support a small increase in the number of jobs in East Palo Alto.** To the extent that the Project affects the jobs-to-housing unit ratio in East Palo Alto, the change would bring the City marginally closer to the regional jobs-to-housing unit ratio.

- **Due to the regional nature of the housing market, the Project is unlikely to have any measurable impact on displacement pressures in East Palo Alto.** The Project would generate a need for housing among households across a range of income levels, a portion of which would seek housing in East Palo Alto. A significant share of these households would be higher-income households that may be more able to afford higher rents and sale prices than many existing East Palo Alto residents, while other households would be lower-income households that would seek out affordable housing options. Although the cumulative impact of increases in employment throughout the region has likely contributed to significant housing cost increases in East Palo Alto and regionally, the impact on housing costs from any individual project with 720 workers is unlikely to be significant enough to cause the displacement of existing East Palo Alto residents. As discussed in the Existing Conditions chapter of this report, recent housing cost increases in East Palo Alto have generally tracked housing cost increases in the County overall, which suggests that displacement pressures are largely the result of regional housing market trends and East Palo Alto's position within the regional housing market, rather than individual projects that add employment at the scale anticipated from the Project.

- **While existing and planned residential units in East Palo Alto and Menlo Park can potentially accommodate the housing need that the Project would generate in these**

[1] The sum of the direct housing need and the indirect and induced housing need do not sum to the total housing need due to independent rounding.

cities, these existing and planned units may be needed to address existing housing needs. The estimated direct, indirect, and induced housing that the Project would generate in East Palo Alto and Menlo Park could potentially be accommodated through absorption of residential units through the course of typical annual turnover or though absorption of a portion of units in the development pipeline. However, due in part to long-term shortages in regional housing production, these existing and planned housing units are likely needed to address existing housing needs in the region, rather than addressing any net increase in housing need attributable to the Project.

- **The Project is unlikely to have a perceptible impact on the regional housing supply or regional jobs-housing balance.** The Project is estimated to generate 1,425 direct, indirect, and induced jobs in San Mateo and Santa Clara Counties, and a need for 761 housing units. These impacts are well within the range of recent and projected future growth in San Mateo and Santa Clara Counties, and would represent a minimal increase in the number of households in the region. The direct, indirect, and induced employment from the Project would represent a negligible increase in employment in the two Counties and would have virtually no impact on the regional employment-to-housing unit ratio even if no new housing units are built.

- **Because the Project would have a minimal effect on the regional housing supply and jobs-housing balance, it is unlikely to have an impact on displacement on a regional scale.** Recent housing cost increases in the region have coincided with dramatic employment growth and lagging housing production. The cumulative impact of these trends is likely to have been a key contributor to the considerable recent increases in housing costs in the region, rather than individual specific developments at the scale of the Project. The amount of employment growth that the Project would generate is minimal in relation to the amount of growth that was necessary to drive recent housing cost increases in the region. To the extent that employment growth from the Project may have a marginal impact on housing demand and resulting displacement pressures in the region, these impacts are likely to be partially counteracted by new housing unit production and local policies and programs that help to address displacement pressures.

- **Though the Project is unlikely to have a noticeable impact on the local or regional housing market, housing affordability and displacement remain key issues locally and throughout the region, and addressing the incremental impact of the Project and other projects that generate new housing demand will be essential to addressing cumulative housing needs and mitigating displacement pressures over the long term.** Housing costs have increased considerably throughout the region and that many lower- and moderate-income households are unable to afford housing. Meanwhile, some households in East Palo Alto and elsewhere in the region are currently at risk of displacement, while others will likely become vulnerable to displacement if housing

costs continue to increase. Confronting these challenges requires a multifaceted approach to addressing housing affordability at the local and regional level, including the production of housing at various affordability levels.

- **The Project would directly generate revenue that would enable the City of East Palo Alto to partially address the affordable housing need attributable to the Project.** The Project would generate approximately $2.49 million in Affordable Housing Impact Fee — Nonresidential Development (commercial linkage fees), which may be sufficient to enable the City to fund the units needed to address the extremely low-, very low-, and low-income housing need within East Palo Alto that the Project would generate. To the extent that the linkage fees leave a remaining need for extremely low-, very low-, and low-income units in East Palo Alto, the parcel tax (Measure HH) that East Palo Alto voters approved in 2018 would generate enough revenue to enable the City to fund the remaining units within eight years or less. Other strategies will be needed to address the need for housing among new moderate-income and above moderate-income households.

- **There is a continued need for the City of East Palo Alto and cities and counties throughout the region to explore policies to prevent displacement and address housing needs at all income levels.** While the City of East Palo Alto has adopted many policies in support of these objectives, East Palo Alto and other cities and counties throughout the region should continually evaluate options for generating affordable housing funds, facilitating the production of housing for households at all income levels, and preventing displacement.

INTRODUCTION

The City of East Palo Alto (City) retained BAE Urban Economics (BAE) to conduct a Housing Needs and Displacement Assessment (the Assessment) for University Circle Phase II (the Project), a proposed office development at 1900-2000 University Avenue in the City of East Palo Alto. The Assessment presented in this report provides an estimate of the need for housing that the Project would generate as a result of workers employed at the Project as well as the estimated housing need generated by the indirect and induced employment associated with the Project. The Assessment also provides an evaluation of the potential for the regional housing market to meet these housing needs and the potential for the Project to lead to the displacement of existing households.

One goal of the Assessment is to fulfill the City of East Palo Alto's obligations under a January 2017 settlement agreement between the City of East Palo Alto and the City of Menlo Park, which reads as follows:

> *2.6 Study of Multiplier Effect. When the preparation of an EIR is required pursuant to this Agreement, concurrent with the preparation of the EIR, Menlo Park or East Palo Alto, whichever is the lead agency for the Development Project, will conduct a Housing Needs Assessment ("HNA"). The scope of the HNA will, to the extent possible, include an analysis of the multiplier effect for indirect and induced employment by that Development Project and its relationship to the regional housing market and displacement. Nothing In this section Indicates an agreement that such an analysis is required by CEQA.*

In addition to fulfilling these terms of the settlement agreement, a second purpose of this report is to respond to requests that community groups have submitted in response to other similar project proposals, which have requested that the City provide an analysis of the induced demand for affordable housing and displacement impacts that could potentially result from new development. Given the substantial overlap between the analysis requested by community groups for prior projects and the analysis required by the settlement agreement, this report provides analyses to serve both purposes.

Project Description

The proposed Project would include a six-story, 180,000-square foot office building and a three-level, 219,935-square-foot parking garage with 513 spaces. The Project would join an existing office park complex that includes three office buildings, a hotel, and an above-ground parking structure. The consultant preparing the Draft Environmental Impact report for the Project, David J. Powers and Associates, estimates that 720 workers would be employed at the Project. The Project applicant has not announced any future tenant(s) for the Project.

Challenges Associated with Projecting Displacement

In the context of neighborhood change, the term "displacement" typically refers to existing residents' involuntary movement out of the community, usually due to increases in housing costs. Therefore, estimating the projected displacement impacts from a specific project requires an analysis of the impact that the project would have on housing costs and the extent to which increases in housing costs would displace existing households. This section describes the challenges associated with estimating the potential displacement impacts from a specific project due to methodological complications associated with projecting the impact that a specific employment-based use would have on housing costs as well as quantifying the number of households that might be displaced as a result of future housing cost increases.

Challenges Associated with Projecting a Project's Impact on Housing Costs

While employment growth and an associated increase in the demand for housing can be one factor that leads to an increase in housing costs in a region, as is evaluated in this report, increases in housing costs are usually the result of numerous factors, rather than employment growth alone. In addition to increased market demand from new workers, factors that have likely contributed to recent housing cost increases in East Palo Alto and the surrounding region include:

- historically low interest rates;
- macroeconomic events, such as impacts on the housing market as the region has rebounded from the foreclosure crisis since the Great Recession;
- increased market demand as Millennials have moved out of their childhood homes and entered the rental and ownership market; and
- the impact of California Proposition 13 on property tax rates, which creates an incentive for Baby Boomer retirees and empty-nesters to stay in their homes rather than downsizing.

Meanwhile, factors that have partially counteracted upward pressure on housing costs include the City of East Palo Alto's rent stabilization ordinance and the addition of new market-rate and affordable residential units to the local and regional housing supply.

Housing cost increases are the result of a complex interplay between the factors that contribute to cost increases and the factors that counteract upward pressure on housing costs. The relative impact of each of these factors shifts over time and through economic cycles, adding to the challenge of quantifying the impact of new employment, or any other factor individually, on housing costs.

Challenges Associated with Quantifying Future Displacement Effects

In addition to the challenges associated with estimating the impact that new employment or other factors will have on housing costs, there are further challenges associated with quantifying the extent to which future housing cost increases will lead to displacement. Some households in East Palo Alto and the surrounding region have undoubtedly been displaced

during recent years due to housing cost increases, while other households remain vulnerable to displacement if housing cost increases continue or accelerate. However, due to the absence of data that tracks individual households over time, even a detailed analysis of demographic data provides only a general indication of neighborhood change over time, rather than a reliable means of quantifying the number of households that have been displaced involuntarily. These data can provide insight on whether it is likely that displacement has occurred, but not the number of households that have been affected.

Similarly, data on current demographic and housing characteristics provide insight on whether there are a significant number of households that are vulnerable to displacement, but not the number of households that will be displaced due to regional housing cost increases. In general, renter households are more susceptible to displacement than homeowners because homeowners' housing costs are not impacted by changes in the housing market after the homeowner purchases the unit. However, some renter households are protected from market-rate rent increases by rent stabilization ordinances, rent restrictions on affordable units, or due a landlord's decision to limit rent increases on existing tenants. Other renter households may have sufficient income to absorb future rent increases. While increases in housing costs have a real and substantial impact on some households, data are not available to allow for a reliable quantification of the magnitude of future displacement impacts.

Approach Used in this Report

Due to the challenges associated with quantifying the effect that an employment-based use has on housing costs, as well as the impact that increases in housing costs have on displacement, this report provides a qualitative assessment of the potential displacement effects from the Project rather than numerical estimates. A qualitative approach is appropriate given the methodological limitations associated with reliably quantifying the potential future displacement impacts resulting from a specific proposed project.

Report Organization

The remainder of this report is organized as follows:

- **Existing Conditions**, including demographic, housing, and residential real estate market trends in East Palo Alto and San Mateo County. This section also includes a qualitative evaluation of existing displacement risk factors for East Palo Alto residents.
- **Housing Demand Analysis**, which quantifies the total estimated direct, indirect, and induced housing need attributable to the Project, including estimates of the housing need in East Palo Alto and Menlo Park.
- **Potential Impacts from the Project**, which evaluates the potential impacts from the Project on the local and regional housing supply, jobs-housing balance, and displacement pressures.

EXISTING CONDITIONS

This chapter presents demographic, employment, and real estate market data, and provides a qualitative assessment of the existing risk displacement factors in East Palo Alto, as well as more limited qualitative assessment of displacement risk factors in Menlo Park. The data indicate that some existing East Palo Alto and Menlo Park residents may be at risk of displacement, both under current market conditions and if housing costs continue to increase.

This chapter uses a variety of data sources to evaluate existing demographic and housing market trends in East Palo Alto and the wider region. Due to East Palo Alto's location on the border of San Mateo County and adjacent to Santa Clara County, some of the data and analysis presented below use data on both San Mateo and Santa Clara Counties for regional comparison. Because this chapter draws from a number of data sources, the data presented below differ somewhat with respect to the time period for data collection, the methodology for data collection, the types of housing units captured in the data, and the universe of people and households captured in the data. Despite differences between these sources, the data are generally consistent in capturing overall trends related to housing market conditions and displacement risk for the purpose of informing the findings in this report.

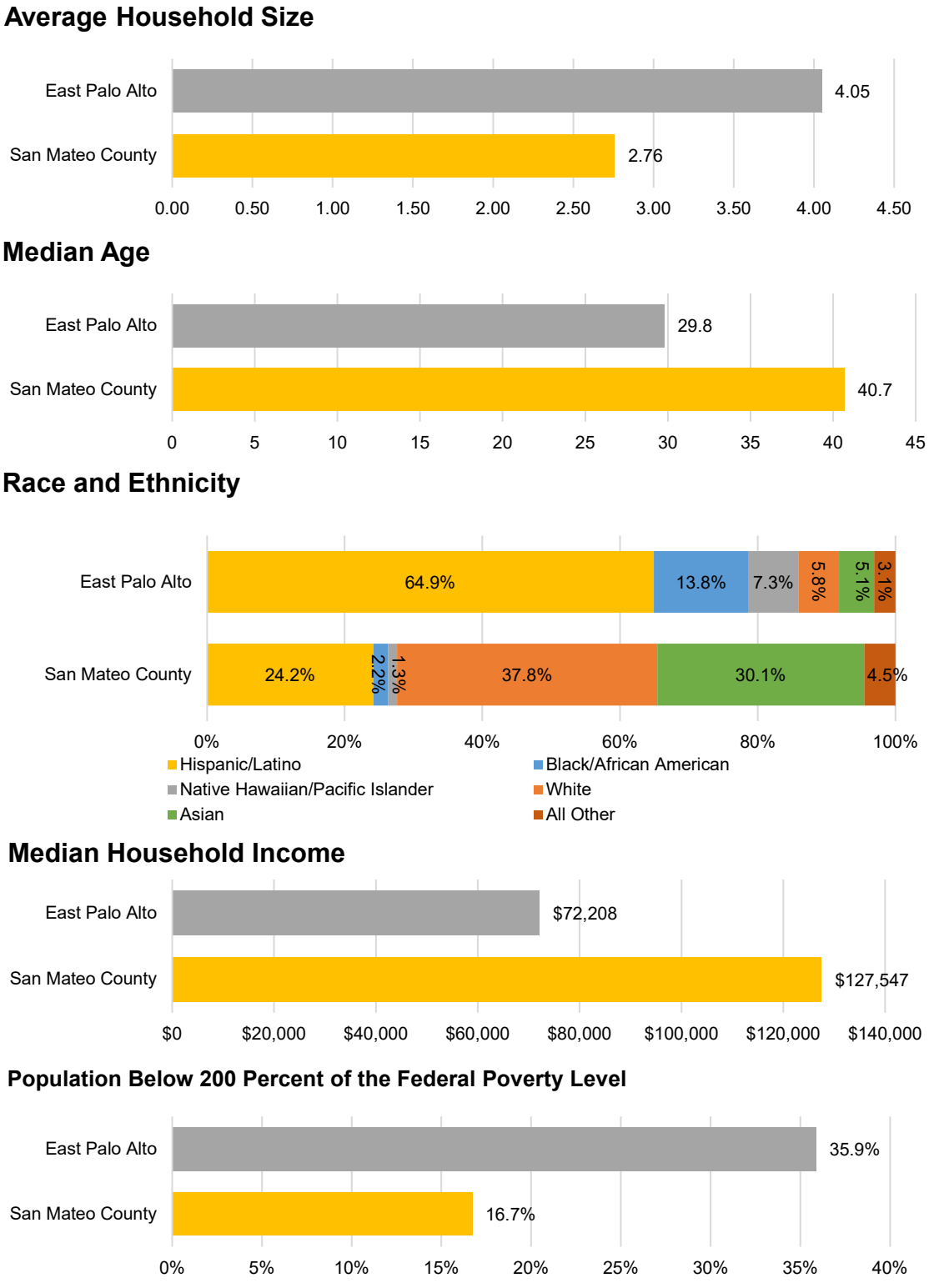
East Palo Alto Demographic Overview

East Palo Alto is demographically distinct from San Mateo County overall, with larger households, a younger population, a higher proportion of Hispanic/Latino residents, and a higher proportion of Black/African American residents. As of 2020, East Palo Alto had a population of approximately 28,600 residents and 7,000 households, according to data from Esri.[2] The average household size in East Palo Alto is 4.05 persons, slightly larger than the City's average household size in 2010 (4.03 persons per household), and significantly larger than the average in San Mateo County overall (2.76 persons per household). The city's median age of 29.8 is 10.9 years younger than the median age in the county. The city's median annual household income of approximately $72,000 is more than $55,000 below that of the county. In addition, the share of the population that is below 200 percent of the Federal Poverty Line in the city (35.9 percent) is more than double the countywide share (16.7 percent).

[2] Esri forecasts demographic summary totals based on a variety of data sources including the U.S. Census Bureau, Bureau of Labor Statistics (BLS), Bureau of Economic Analysis (BEA), American Community Survey (ACS), Current Population Survey (CPS), Housing Vacancy Survey (HVS), Internal Revenue Services (IRS), U.S. Postal Service (USPS), jurisdictional building permits and housing starts and sources from private data vendors such as Zonda and RealPage. Annual Esri demographic updates are point estimates representing July 1st of each update year. For more information see: https://downloads.esri.com/esri_content_doc/dbl/us/J10268_Methodology_Statement_2020-2025_Esri_US_Demographic_Updates.pdf.

In addition, individuals who identify as Hispanic or Latino comprise nearly two-thirds of all East Palo Alto residents as of 2020, compared to just under one-quarter of residents countywide. Non-Hispanic Black/African American residents represent the second largest racial or ethnic group in East Palo Alto, comprising approximately 14 percent of the city's residents in 2020. The number of Black/African American residents fell by nearly 12 percent between 2010 and 2020, by far the largest decline of any racial or ethnic group and in line with the decline in Black/African American residents in San Mateo County. This decline coincided with a 1.4 percent overall population growth in the city and 3.9 percent population growth in the county. Demographic characteristics of East Palo Alto and San Mateo County's population and households are summarized in Figure 1.

Figure 1: Demographic Snapshot, East Palo Alto and San Mateo County, 2020



Sources: Esri Business Analyst, 2019; U.S. Census Bureau, 2013-2017 American Community Survey; BAE, 2019.

Housing Occupancy Trends

This section provides information on housing conditions and occupancy trends for current East Palo Alto residents, including information on tenure, overcrowding, and housing cost burden. As shown, East Palo Alto has a large number of renter households, many of which live in single-family homes, and a large number of households with a high housing cost burden.

Tenure

Unlike San Mateo County, East Palo Alto is a majority-renter city. Renter households comprise 56 percent of East Palo Alto households, compared to just under 41 percent countywide (see Table 1). East Palo Alto saw a 1.0 percent decline in renter-occupied units between 2010 and 2020, while the overall number of occupied housing units increased by just over one percent. Meanwhile, the number of owner-occupied units increased by four percent, which is above and beyond the overall household growth rate. These trends could indicate a loss of rental units in East Palo Alto as single-family rental units have shifted from the rental market and are now owner-occupied.

Table 1: Tenure of Occupied Housing Units, 2010-2020

	2010		2020		2010-2020 Change	
East Palo Alto	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner Occupied Units	2,971	42.8%	3,089	44.0%	118	4.0%
Renter Occupied Units	3,969	57.2%	3,931	56.0%	-38	-1.0%
Total Occupied Units	**6,940**	**100.0%**	**7,020**	**100.0%**	**80**	**1.2%**

	2010		2020		2010-2020 Change	
San Mateo County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Owner Occupied Units	153,110	59.4%	158,601	59.4%	5,491	3.6%
Renter Occupied Units	104,727	40.6%	108,497	40.6%	3,770	3.6%
Total Occupied Units	**257,837**	**100.0%**	**267,098**	**100.0%**	**9,261**	**3.6%**

Note: Totals may not match totals in other tables due to independent rounding.

Sources: Esri Business Analyst; BAE, 2019.

Single-family units comprise a significant share of the rental housing supply in East Palo Alto. Approximately 38 percent of renter households in East Palo Alto live in single family units compared to approximately 30 percent of renter households countywide. However, most renter households live in multifamily units in both geographies.

Table 2: Type of Housing by Tenure, 2015-2019

	City of East Palo Alto		San Mateo County	
Housing Type	**Renter**	**Owner**	**Renter**	**Owner**
Single-Family Units	38.1%	89.9%	30.3%	88.8%
Multifamily Units	61.6%	5.9%	69.0%	9.9%
Mobile Home and Other (a)	0.3%	4.2%	0.8%	1.4%
Total Occupied Units	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note:
(a) Includes boats, RVs, vans, or any other non-traditional residences.

Sources: U.S. Census Bureau, American Community Survey, 2015-2019 Five-Year Sample Data, Table B25032; BAE, 2021.

Overcrowding

East Palo Alto has high rates of overcrowded housing, which is often an indication that households are struggling to afford housing. The U.S. Census defines moderately overcrowded housing units as those that are occupied by more than one person per room but fewer than 1.5 persons per room, and severely overcrowded units as those that are occupied by more than 1.5 persons per room. As shown in Table 3, five-year American Community Survey (ACS) data collected between 2015 and 2019 suggests that 26 percent of all East Palo Alto households are either moderately or severely overcrowded. Overcrowding is more prevalent among East Palo Alto's renter households, 36 percent of which are moderately or severely overcrowded. Despite containing less than three percent of the County's occupied housing stock, East Palo Alto accounts for approximately 19 percent of the moderately or severely overcrowded units in San Mateo County.

Table 3: Housing Unit Overcrowding, 2015-2019

	Renter-Occupied Units		Owner-Occupied Units		Total Occupied Units	
East Palo Alto	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Not Overcrowded	2,984	64.2%	2,734	88.9%	5,718	74.0%
Moderately Overcrowded (a)	849	18.3%	244	7.9%	1,093	14.2%
Severely Overcrowded (b)	815	17.5%	98	3.2%	913	11.8%
Total Occupied Units	**4,648**	**100.0%**	**3,076**	**100.0%**	**7,724**	**100.0%**

	Renter-Occupied Units		Owner-Occupied Units		Total Occupied Units	
San Mateo County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Not Overcrowded	89,512	85.2%	153,087	96.6%	242,599	92.1%
Moderately Overcrowded (a)	8,354	8.0%	3,979	2.5%	12,333	4.7%
Severely Overcrowded (b)	7,134	6.8%	1,477	0.9%	8,611	3.3%
Total Occupied Units	**105,000**	**100.0%**	**158,543**	**100.0%**	**263,543**	**100.0%**

Notes:
(a) The American Community Survey defines a moderately overcrowded unit as being occupied by more than one but fewer than 1.5 persons per room.
(b) The American Community Survey defines a severely overcrowded unit as being occupied by more than 1.5 persons per room.

Sources: U.S. Census Bureau, American Community Survey, 2015-2019 Five-Year Sample Data, Table B25014; BAE, 2021.

Cost Burden

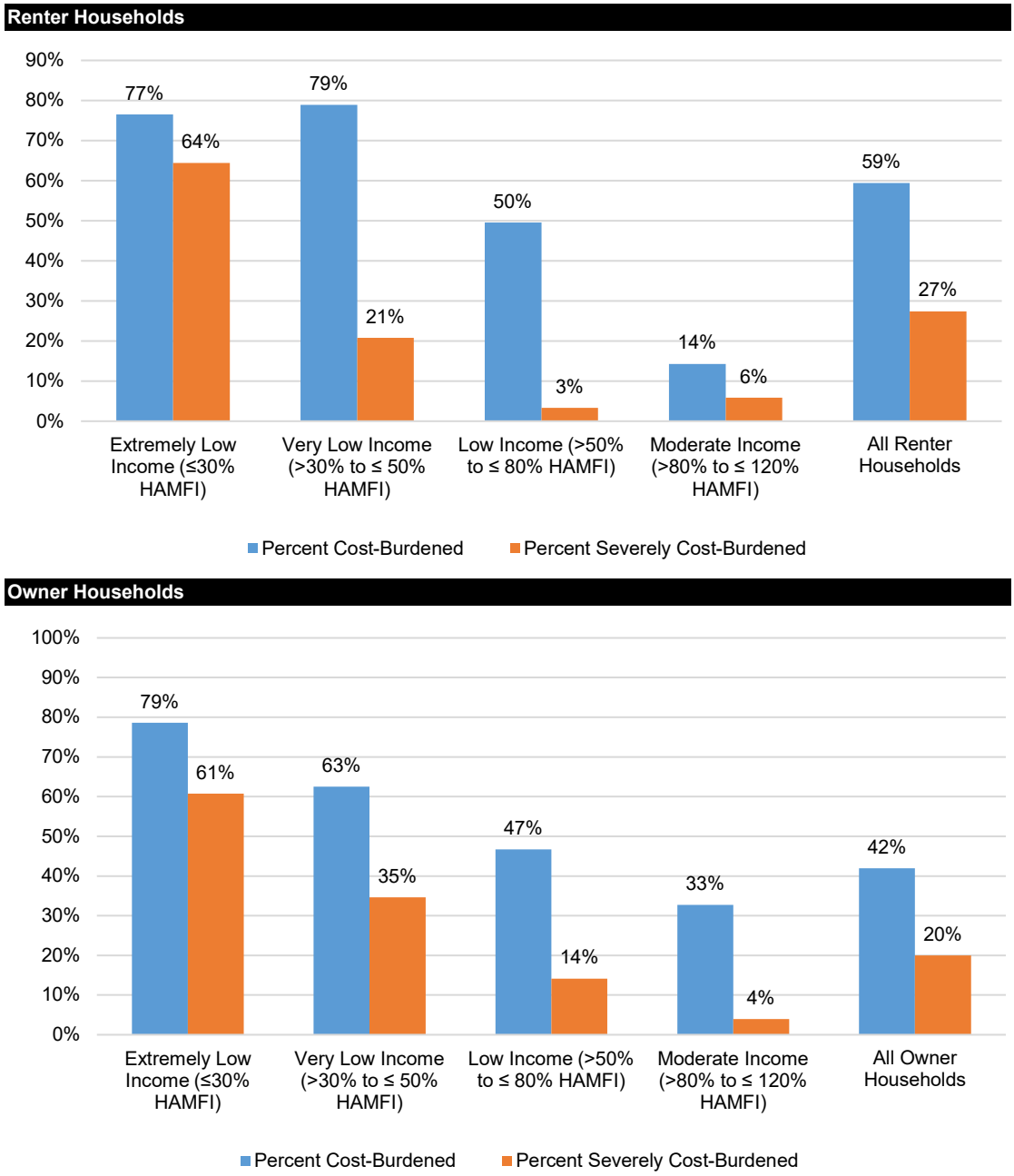
East Palo Alto has high proportions of cost-burdened and severely cost-burdened households. According to the U.S. Department of Housing and Urban Development, cost-burdened households are those that spend more than 30 percent of their gross household incomes on housing costs. Those who spend more than 50 percent of their gross household incomes on housing costs are considered severely cost-burdened. According to ACS data collected between 2013 and 2017[3], 53 percent of all East Palo Alto households were cost-burdened, including 59 percent of renter households and 42 percent of owner households. By comparison, 36 percent of county households are cost burdened, including 46 percent of renter households and 30 percent of owner households.

As Figure 2 shows, rates of cost burdened and severely cost burdened households are particularly high among lower income groups. For example, almost 80 percent of extremely low-income and very low-income renter households in East Palo Alto have a high housing cost burden.

These data indicate that many households in East Palo Alto are struggling to afford their housing and may be vulnerable to displacement if housing costs increase or if they experience a loss of income or unexpected expenses. Lower-income households are particularly vulnerable due to high housing cost burden and because lower-income households are often less able to save money for financial emergencies. Thus lower-income households are more vulnerable to displacement.

[3] At the time these data were collected for this report, the most recent data available at the level of detail shown were collected between 2013 and 2017.

Figure 2: East Palo Alto Cost-Burdened Households by Tenure, 2013-2017



Note: HUD-defined income categories are based on the HUD Area Median Family Income (HAMFI).

Sources: U.S. Department of Housing and Urban Development, 2013-2017 Comprehensive Housing Affordability Strategy (CHAS) data; BAE, 2021.

Housing Market Trends

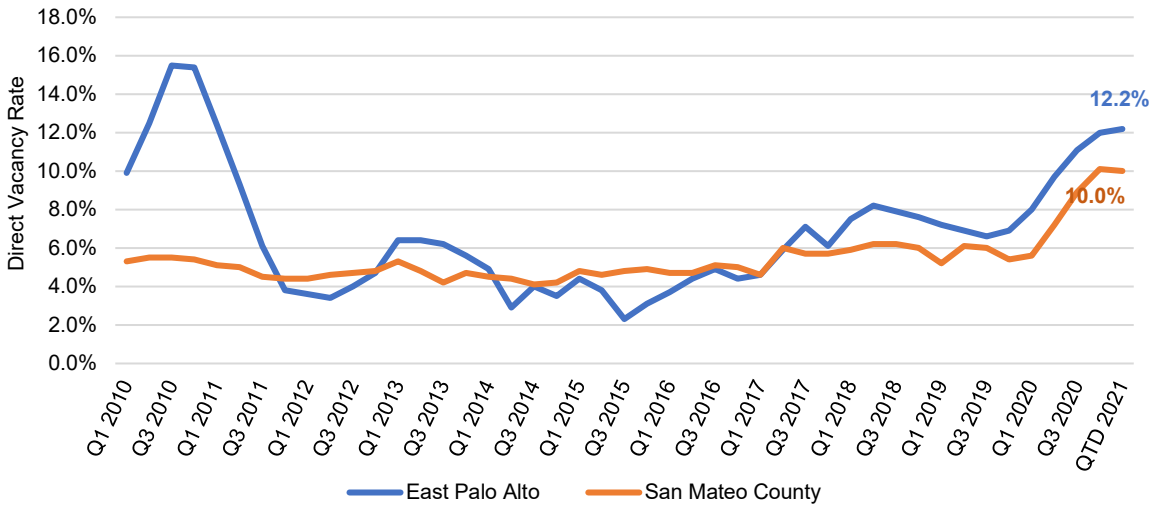
This section provides information on the housing market in East Palo Alto and San Mateo County, including an analysis of existing conditions and trends in housing vacancy, cost, and affordability. This context is critical for evaluating the ability of the current housing market to accommodate the needs of existing and future households.

Vacancy

Data from CoStar[4] demonstrates that East Palo Alto tends to have a slightly higher vacancy rate than San Mateo County overall, though vacancy rates in both the city and county remained relatively low over the past decade until early 2020, when California began to enact restrictions in response to the COVID-19 pandemic. Figure 4 shows that between the fourth quarter of 2019 and the first quarter of 2021, the multifamily rental vacancy rate in East Palo Alto increased from 6.9 percent to 12.2, while the multifamily rental vacancy rate in San Mateo County overall increased from 5.4 percent to 10.0 percent. Although vacancy rates seem to have stabilized somewhat during 2021, these data indicate that some East Palo Alto renters may have been displaced due to the economic impacts of the COVID-19 pandemic. Housing analysts typically cite a five percent rental vacancy rate as a rate that indicates healthy market demand while providing enough vacant units to allow for normal movement of tenants between units within the rental market. Given that vacancy rates are currently well over five percent, these data may indicate potential for existing vacant units to absorb some of the existing and future housing demand.

[4] CoStar is a private data vendor that develops comprehensive commercial and residential real estate research and data through their independent research organization. CoStar gathers market information through extensive data mining of land registry and tax assessor's information and real estate broker surveys. CoStar's market real estate information is also derived from a variety of real estate data platforms such as LoopNet, Apartments.com, BizBuySell, Lands of America, and STR.

Figure 3: Multifamily Rental Vacancy Rate, East Palo Alto and San Mateo County, 2010-2019



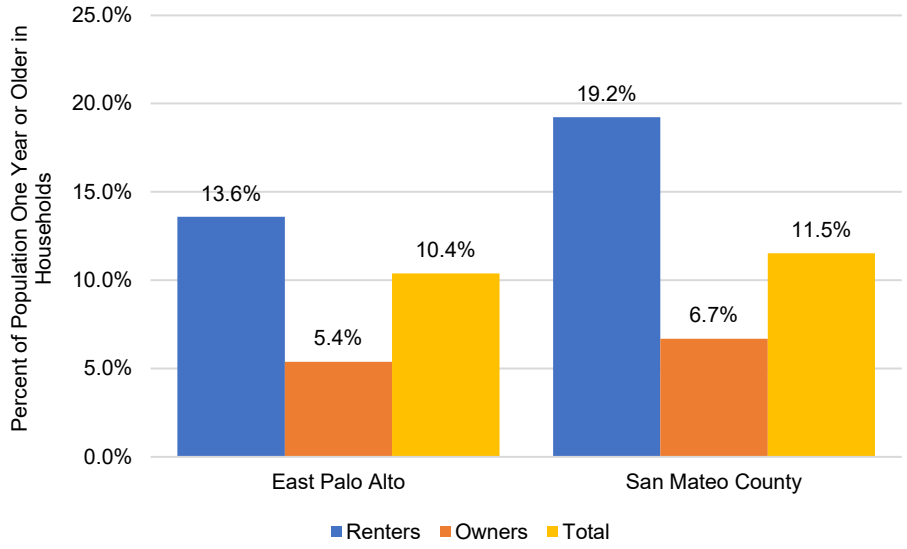
Note:
Data reflect units in market rate multifamily complexes with 5 units or more. QTD 2021 data reflect data as of late March 2021.

Sources: Costar; BAE, 2021.

Housing Unit Turnover

ACS data suggest that 14 percent of rental units and five percent of owner-occupied units in East Palo Alto turn over per year on average during recent years. Figure 4 shows, by household tenure, the percentage of the population that moved in the past year, based on ACS data collected between 2015 and 2019. These data do not provide a direct indication of unit turnover, in part because the data are based on householder responses collected over a defined time period and capture net absorption of any new units added to the inventory in addition to re-tenanting of existing units. Nonetheless, these data provide a general indication of the number of units that are vacated and re-tenanted each year. Based on these estimates, approximately 530 rental units in East Palo Alto and 170 owner-occupied units in East Palo Alto turned over each year during the period covered by these data.

Figure 4: Residents that Moved in the Past Year, 2015-2019



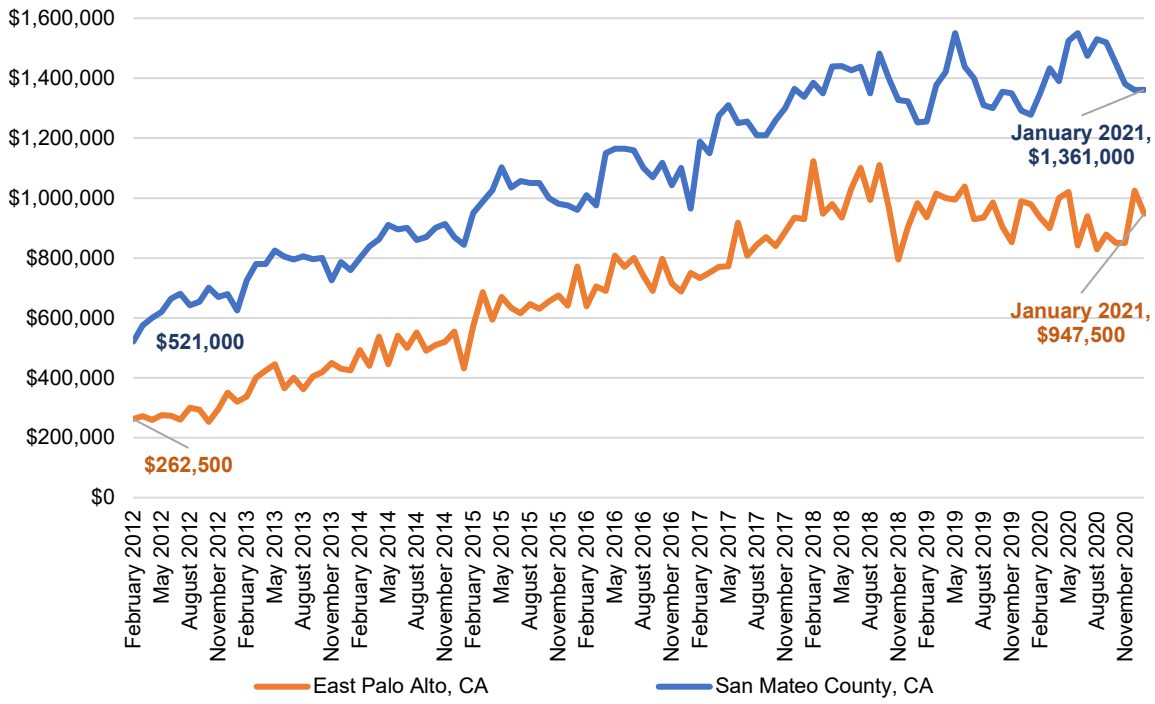
Note:
(a) Universe is population one-year-old or older in households. Geographic mobility status and movement date/origin based on householder response at time of survey.

Sources: U.S. Census Bureau, 2013-2017 American Community Survey, Table B07013; BAE, 2019.

Home Sale Trends

Although the median home sale price in East Palo Alto has remained considerably lower than the Countywide median home sale price, the City has experienced dramatic recent increases in home sale prices, far outpacing the rate of home sale price increases in the County overall. Figure 5 shows annual median sale prices for homes sold in East Palo Alto and San Mateo County between February 2012 and January 2021. In February 2012, the median sale price of homes sold in East Palo Alto was $262,500, approximately half of the median in San Mateo County. By January 2021, the median home sale price in East Palo Alto was $947,500, up 261 percent from the February 2012 median and equal to 70 percent of the February 2021 median for San Mateo County. Between 2012 and 2021, the annual median home sale price in East Palo Alto generally increased in tandem with countywide increases. The median sale price in San Mateo County as of January 2021 was approximately $1.4 million, up 161 percent since February 2012.

Figure 5: Median Home Sale Price Trends, 2012-2021



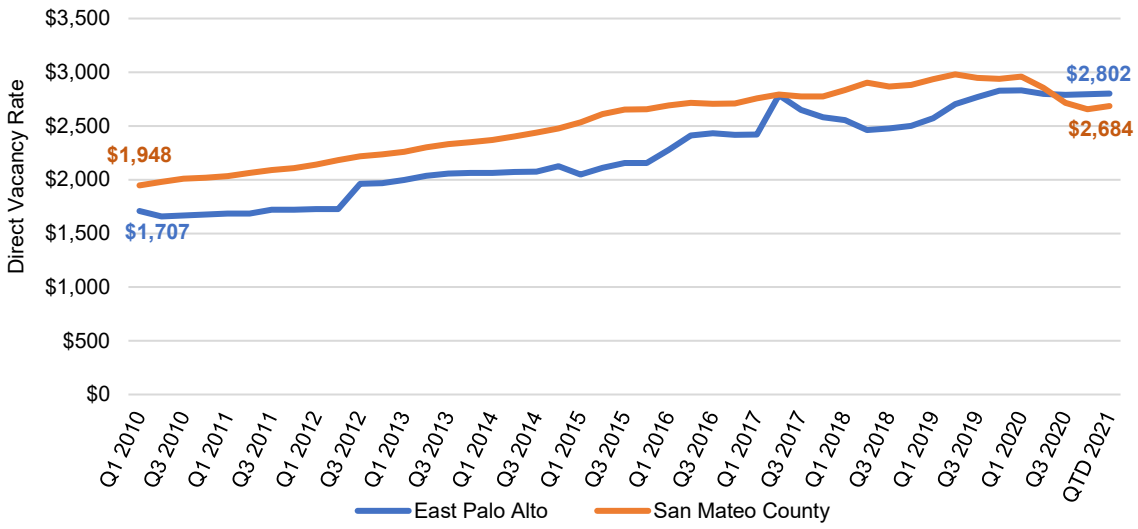
Sources: Redfin Data Center; BAE, 2021.

Rental Market Trends

Residential rents in East Palo Alto tend to be slightly lower than average for San Mateo County, though increases in rents in East Palo Alto generally keep pace with rent increases in the County overall. CoStar tracks 27 market-rate multifamily rental properties in East Palo Alto with five units or more, with a total of 2,258 units. Among these units, the average asking rent was $2,802 per month as of the first quarter of 2021, as shown in Figure 6. Although East Palo Alto has historically offered slightly more affordable rental options within the high-cost San Mateo County housing market, since the third quarter of 2021 the average rent among these units has been slightly higher than the average countywide asking rent for multifamily rental properties with five units or more. The data indicate that rental rates in East Palo Alto increase in tandem with rent increases in the wider regional housing market, making the rental market in the City more expensive over time as housing costs increase throughout the region.

Market-rate rents in East Palo Alto have been substantially more stable during the COVID-19 pandemic than rents countywide; as of March 2021, the average multifamily asking rent in East Palo Alto was one percent lower than in the first quarter of 2020, while the countywide average multifamily asking rent had decreased by approximately nine percent.

Figure 6: Average Asking Rents, Q1 2010 – Q1 2021



Note:
(a) Data reflect units in market rate multifamily complexes with 5 units or more.

Sources: CoStar, 2021; BAE, 2021.

East Palo Alto's residential rental inventory includes approximately 2,700 units that are subject to the City's Rent Stabilization Ordinance, which tend to have rental rates that are lower than the Citywide average. This total includes over 2,500 multifamily rental units and approximately 150 mobile home spaces that are covered by rent stabilization. In 1984, residents approved the City's first rent stabilization ordinance, which limited annual rent increases for units built before that date. However, since 1999, landlords have been allowed to charge market-rate rents every time a unit is vacated and leased to a new tenant.[5]

Housing Affordability

Current market-rate housing costs in East Palo Alto exceed the affordability threshold for most lower- and moderate-income households. Table 4 and Table 5 show the affordable single-family home and condominium sale price for households at various sizes and income levels and compares these affordable sale prices to current home sale prices in East Palo Alto.[6] As shown, the median single-family home sale price in East Palo Alto is higher than the sale price that would be affordable to extremely low-income, very low-income, low-income, and moderate-income households. The median condominium sale price in East Palo Alto is potentially

[5] Vacancy decontrol was mandated after the State legislature passed the Costa-Hawkins Rental Act in 1995, which allows rent to increase to market rates after a qualifying vacancy occurs and reinstates rent control for a new tenant. Costa-Hawkins went into effect in 1999.
[6] Affordable condominium sale prices are lower than affordable single-family home sale prices for households at a given income level because condominium owners are required to pay homeowner's association fees, which reduce the monthly income available for mortgage payments.

affordable to some larger low-income and moderate-income households. However, it should be noted that the median condominium sale price in East Palo Alto fluctuates significantly between months and is often substantially higher than the January 2021 median of $628,000 that was used to inform the calculations shown in Table 5 below. Moreover, there is a limited inventory of condominium units in East Palo Alto, and many may be too small for larger households, making this option unavailable for many households.

Table 4: Affordable Single-Family Home Sale Price, East Palo Alto, 2021

	Household Size				
Maximum Affordable Sale Price	**1 Person**	**2 Person**	**3 Person**	**4 Person**	**5 Person**
Extremely Low Income (up to 30% AMI)					
Household Income (a)	$36,550	$41,800	$47,000	$52,200	$56,400
Max. Affordable Sale Price (b)	$185,701	$212,354	$238,833	$265,312	$286,565
Amount Above (Below) Median Sale Price (c)	($819,299)	($792,646)	($766,167)	($739,688)	($718,435)
Very Low Income (31-50% AMI)					
Household Income (a)	$60,900	$69,600	$78,300	$87,000	$94,000
Max. Affordable Sale Price (b)	$309,386	$353,634	$397,881	$442,129	$477,667
Amount Above (Below) Median Sale Price (c)	($695,614)	($651,366)	($607,119)	($562,871)	($527,333)
Low Income (51-80% AMI)					
Household Income (a)	$97,600	$111,550	$125,500	$139,400	$150,600
Max. Affordable Sale Price (b)	$495,958	$566,859	$637,586	$708,313	$765,277
Amount Above (Below) Median Sale Price (c)	($509,042)	($438,141)	($367,414)	($296,687)	($239,723)
Moderate Income (81-120% AMI)					
Household Income (a)	$120,200	$137,350	$154,550	$171,700	$185,450
Max. Affordable Sale Price (b)	$610,758	$697,860	$785,311	$872,412	$942,268
Amount Above (Below) Median Sale Price (c)	($394,242)	($307,140)	($219,689)	($132,588)	($62,732)

Notes:
(a) Based on California Department of Housing and Community Development income limits for 2020.
(b) Based on a tabulation of how much housing a household could afford with 35% of its gross monthly income given premium and interest, homeowner's insurance, property taxes, and other payments.
(c) Per Redfin Data Center, the median sale price for a single-family home sold in East Palo Alto in January 2021 was $1,005,000.

Sources: Redfin Data Center, 2021; California Department of Housing and Community Development, 2020; Federal Housing Administration, 2020; Freddie Mac, 2020; California Department of Insurance; San Mateo County Controller's Office, 2019-2020; BAE, 2021.

Table 5: Affordable Condominium Sale Price, East Palo Alto, 2021

Market Rents and Utilities	Household (Unit) Size 1 Person (Studio)	2 Person (1 BD)	3 Person (2 BD)	4 Person (3 BD)	5 Person (4 BD)
Average Market-Rate Rent (a)	$1,849	$2,332	$3,216	$6,105	$5,051
Utility Costs (b)	$23	$28	$36	$43	$51
Maximum Affordable Monthly Rent					
Extremely Low Income (up to 30% AMI)					
Household Income (c)	$36,550	$41,800	$47,000	$52,200	$56,400
Max. Affordable Monthly Rent (d)	$891	$1,017	$1,139	$1,262	$1,359
Amount Above (Below) Market Rate Rent	($958)	($1,315)	($2,077)	($4,843)	($3,692)
Very Low Income (31-50% AMI)					
Household Income (c)	$60,900	$69,600	$78,300	$87,000	$94,000
Max. Affordable Monthly Rent (d)	$1,500	$1,712	$1,922	$2,132	$2,299
Amount Above (Below) Market Rate Rent	($350)	($620)	($1,295)	($3,973)	($2,752)
Low Income (51-80% AMI)					
Household Income (c)	$97,600	$111,550	$125,500	$139,400	$150,600
Max. Affordable Monthly Rent (d)	$2,417	$2,761	$3,102	$3,442	$3,714
Amount Above (Below) Market Rate Rent	$568	$429	($115)	($2,663)	($1,337)
Moderate Income (81-120% AMI)					
Household Income (c)	$120,200	$137,350	$154,550	$171,700	$185,450
Max. Affordable Monthly Rent (d)	$2,982	$3,406	$3,828	$4,250	$4,585
Amount Above (Below) Market Rate Rent	$1,133	$1,074	$612	($1,856)	($466)

Notes:
(a) Based on California Department of Housing and Community Development income limits for 2020.
(b) Based on a tabulation of how much housing a household could afford with 35% of its gross monthly income given premium and interest, homeowner's insurance, property taxes, and other payments.
(c) Per Redfin Data Center, the median sale price for a condominium sold in East Palo Alto in January 2021 was $628,000.

Sources: Redfin Data Center, 2021; California Department of Housing and Community Development, 2020; Federal Housing Administration, 2020; Freddie Mac, 2020; California Department of Insurance; San Mateo County Controller's Office, 2019-2020; BAE, 2021.

Market-rate rental units in East Palo Alto are similarly unaffordable to most households with moderate or below-moderate incomes. As shown in Table 6, current average market-rate asking rents for units in multifamily rental properties exceed the affordability threshold for extremely low-income and very low-income households for all household sizes shown, as well as for larger low-income and moderate-income households. However, it should be noted that the income levels shown in Table 6 are based on countywide income thresholds set by the State. As shown in Figure 1, the median annual income among East Palo Alto residents ($72,208) is substantially lower than the countywide income limits for low-income households.

Table 6: Affordable Rent, East Palo Alto, 2021

Market Rents and Utilities	Household (Unit) Size 1 Person (Studio)	2 Person (1 BD)	3 Person (2 BD)	4 Person (3 BD)	5 Person (4 BD)
Average Market-Rate Rent (a)	$1,849	$2,332	$3,216	$6,105	$5,051
Utility Costs (b)	$23	$28	$36	$43	$51
Maximum Affordable Monthly Rent					
Extremely Low Income (up to 30% AMI)					
Household Income (c)	$36,550	$41,800	$47,000	$52,200	$56,400
Max. Affordable Monthly Rent (d)	$891	$1,017	$1,139	$1,262	$1,359
Amount Above (Below) Market Rate Rent	($958)	($1,315)	($2,077)	($4,843)	($3,692)
Very Low Income (31-50% AMI)					
Household Income (c)	$60,900	$69,600	$78,300	$87,000	$94,000
Max. Affordable Monthly Rent (d)	$1,500	$1,712	$1,922	$2,132	$2,299
Amount Above (Below) Market Rate Rent	($350)	($620)	($1,295)	($3,973)	($2,752)
Low Income (51-80% AMI)					
Household Income (c)	$97,600	$111,550	$125,500	$139,400	$150,600
Max. Affordable Monthly Rent (d)	$2,417	$2,761	$3,102	$3,442	$3,714
Amount Above (Below) Market Rate Rent	$568	$429	($115)	($2,663)	($1,337)
Moderate Income (81-120% AMI)					
Household Income (c)	$120,200	$137,350	$154,550	$171,700	$185,450
Max. Affordable Monthly Rent (d)	$2,982	$3,406	$3,828	$4,250	$4,585
Amount Above (Below) Market Rate Rent	$1,133	$1,074	$612	($1,856)	($466)

Notes:
(a) Data reflect average asking rates of units in multifamily properties of five units or more in East Palo Alto as of late March 2021.
(b) Housing Authority of the County of San Mateo allowances for tenant-furnished utilities and other services for a multifamily unit that uses gas cooking, heating, and water heating, as well as electricity for lights and appliances. The allowance is based on the number of bedrooms in the unit and a household is assumed to have one bedroom fewer than the number of people in the household.
(c) Based on California Department of Housing and Community Development income limits for 2020.
(d) These figures are 30% of gross monthly household income, the maximum amount that a household can spend on housing expenses without being considered cost-burdened.

Sources: California Department of Housing and Community Development, 2020; CoStar Group, 2021; BAE, 2021.

Residential Construction Trends

East Palo Alto has experienced a slower pace of housing production in recent years than the county overall. Between 2010 and 2020, the total number of housing units in the city increased by 1.3 percent, compared to an increase of 3.6 percent in the county overall. The city's housing inventory increased by 98 units between 2010 and 2020, at an annual average rate of ten units per year. East Palo Alto experienced particularly slow growth in multifamily units during this period; multifamily units in structures of five or more units increased by just one percent in East Palo Alto, compared to ten percent in San Mateo County overall. The comparatively slow pace of recent growth in East Palo Alto may be partly attributable to an ordinance that the City passed in 2016 that prohibited most new or expanded water connections within the City's water system service area, which essentially prevented processing of all major development applications until the ordinance was recently lifted.

Table 7: Housing Units by Type, 2010-2020

	2010		2020		2010-2020 Change	
	Number	Percent	Number	Percent	Number	Percent
East Palo Alto						
Single Family Detached	4,211	53.9%	4,280	54.1%	69	1.6%
Single Family Attached	328	4.2%	321	4.1%	-7	-2.1%
2-4 Units	267	3.4%	267	3.4%	0	0.0%
5+ Units	2,865	36.6%	2,900	36.6%	35	1.2%
Mobile Homes	148	1.9%	149	1.9%	1	0.7%
Total Units	**7,819**	**100.0%**	**7,917**	**100.0%**	**98**	**1.3%**
San Mateo County						
Single Family Detached	155,189	57.3%	156,638	55.8%	1,449	0.9%
Single Family Attached	25,015	9.2%	25,562	9.1%	547	2.2%
2-4 Units	17,471	6.4%	17,972	6.4%	501	2.9%
5+ Units	70,178	25.9%	77,532	27.6%	7,354	10.5%
Mobile Homes	3,178	1.2%	3,175	1.1%	-3	-0.1%
Total Units	**271,031**	**100.0%**	**280,879**	**100.0%**	**9,848**	**3.6%**

Sources: CA Dept. of Finance, E-5, 2020; BAE, 2021.

Jobs-Housing Balance

During recent decades, housing production in San Mateo County and other parts of the Bay Area has lagged employment growth, which is widely believed to be a primary factor that has contributed to recent increases in housing costs throughout the region. Table 8 shows total employment, number of housing units, and the employment to housing unit ratio trend for San Mateo County since 2010, as well as for Santa Clara, San Francisco, and Alameda Counties. As shown, the employment-to-housing ratio in all four counties has increased since 2010, with all four counties adding significantly more jobs than housing units during this period. Collectively, employment growth in these four counties surpassed housing unit growth by a factor of more than eight to one between 2010 and 2019, meaning that less than one housing unit was added for every eight jobs. San Mateo County had the most significant mismatch between housing unit production and job growth, with fewer than one housing unit added for every 12 jobs. As of 2019, the employment-to-housing unit ratio in San Mateo County was 1.5, up from 1.2 in 2010.[7]

[7] As of the writing of this report, the 2019 employment data are the most recent employment data available from Bureau of Labor Statistics Quarterly Census of Employment and Wages.

Table 8: Employment and Housing Unit Growth, 2010-2019

San Mateo County	2010	2015	2019	2010-2019 Change Number	2010-2019 Change Percent
Employment (a)	317,576	383,668	415,999	98,423	31.0%
Housing Units (b)	271,031	274,612	279,248	8,217	3.0%
Employment-to-Housing Ratio	1.2	1.4	1.5		
Alameda County					
Employment (a)	630,343	728,995	793,213	162,870	25.8%
Housing Units (b)	581,372	591,236	605,977	24,605	4.2%
Employment-to-Housing Ratio	1.1	1.2	1.3		
San Francisco County					
Employment (a)	545,721	674,646	760,775	215,054	39.4%
Housing Units (b)	376,162	384,657	399,372	23,210	6.2%
Employment-to-Housing Ratio	1.5	1.8	1.9		
Santa Clara County					
Employment (a)	842,581	1,017,071	1,119,639	277,058	32.9%
Housing Units (b)	631,920	652,007	671,439	39,519	6.3%
Employment-to-Housing Ratio	1.3	1.6	1.7		

Notes:
(a) Employment data are sourced from Bureau of Labor Statistics, Quarterly Census of Employment and Wages.
(b) Housing unit counts are sourced from CA Dept. of Finance, E-5.

Sources: Bureau of Labor Statistics, Quarterly Census of Employment and Wages; California Department of Finance, E-5 Population and Housing Estimates, 2020; BAE, 2021.

East Palo Alto Jobs-Housing Balance

In contrast to the County overall, East Palo Alto has more housing units than jobs. As shown in Table 7 above, the California Department of Finance estimates that there are 7,917 housing units in East Palo Alto as of 2020. Esri estimates that there were 5,104 jobs in East Palo Alto as of 2020. Based on these figures, East Palo Alto has an estimated employment-to-housing unit ratio of approximately 0.64, essentially the inverse of the countywide ratio.

Relevant City Policies

The City of East Palo Alto has adopted various ordinances, policies, and programs to support the development and preservation of affordable and market-rate housing and protect existing tenants from evictions and rent increases. In 2018, the City adopted an Affordable Housing Strategy with ten major goals, including construction of 500 additional affordable housing units, preservation of 200 deed-restricted units, providing housing for 80 additional homeless residents, approving 50 additional accessory dwelling units, and reestablishing the City's inclusionary housing ordinance, among other goals. The City has made significant progress toward implementing the strategy. The City's affordable housing and anti-displacement efforts, including but not limited to those that have arisen from the affordable housing strategy, help to partially counteract some of the displacement pressures in the regional housing market by increasing the supply of housing at a range of affordability levels and

enacting protections for households that might otherwise be displaced due to changes in the housing market. Some of the major policies that are relevant to this analysis are described below.

Affordable Housing Development Policies

The City of East Palo Alto has implemented a number of programs and policies to increase the City's affordable housing supply. The City of East Palo Alto adopted an inclusionary housing ordinance in 2019, which requires 20 percent of units in a residential development to be income-restricted at levels that range from 35 percent to 120 percent of AMI, depending on whether the project is rental or for-sale. The ordinance applies to all new residential developments, with developments of fewer than five units required to pay a portion of an in-lieu fee. An alternative compliance option to providing the units on-site is payment of an in-lieu fee, which is set at $197,880 for for-sale units and $255,000 for rental units through the 2021-22 fiscal year; the inclusionary obligation for alternatives to on-site units is 25 percent. Additional funding for affordable housing is generated through the City's Affordable Housing Impact Fee — Nonresidential Development (Commercial Linkage Fee), which applies to commercial office development projects in the City at a rate of $11.76 per square foot. Like the Affordable Housing Impact Fee, funds generated by the Commercial Linkage Fee can be used for the construction, acquisition, and rehabilitation of affordable housing.

The City recently worked with MidPen Housing to develop an affordable housing development on a City-owned site at 965 Weeks Street that will provide 136 affordable units. The City approved the project in December 2019 and is expected to break ground in 2023, depending on financing. In addition, the City appropriated $4 million from the Catalyst Housing Fund for the renovation of the Light Tree affordable housing project. The renovation will include nearly doubling the number of units on the project site, resulting in a total of 185 affordable units. The City is also a joint recipient of and Affordable Housing and Sustainable Communities (AHSC) grant for the Light Tree project, and therefore has contributed to the project both directly and indirectly.

Furthermore, in November 2018 East Palo Alto voters approved a ballot measure (Measure HH) to assess a parcel tax on all office buildings in the City at a rate of $2.50 per office square foot. Revenue from the parcel tax accrues to a special fund and is used to create and maintain affordable housing programs and programs that facilitate job opportunities for East Palo Alto residents, with an emphasis on jobs in the science, technology, engineering, and mathematics sectors and building trades. The ballot measure specified that at least 35 percent of the revenues must be reserved for the construction of new affordable housing. This parcel tax creates an ongoing source of revenue for affordable housing in East Palo Alto. The remaining funds will go to assist residents of East Palo Alto with accessing job opportunities, and thus the parcel tax could enable residents to increase their incomes and be better able to afford housing costs overall.

Housing Preservation and Anti-Displacement Policies

The City has a robust rent stabilization program to protect tenants from unreasonable rent increases and arbitrary evictions, thereby helping to prevent displacement of existing residents. Under the City's Rent Stabilization and Eviction for Good Cause Ordinance, owners of multifamily rental units that are covered by the ordinance are permitted to increase rents annually by up to 80 percent of the change in the Consumer Price Index (CPI) for San Francisco. For mobile home tenancies, the maximum allowable rent increase is 100 percent of CPI for San Francisco. Although vacancy decontrol has made it difficult to stabilize rents over the long term, the City has enacted several policies to help curb the removal and conversion of its existing rent-stabilized inventory. Property owners who demolish rent-stabilized properties are required to pay tenant relocation assistance between approximately $10,000 and $17,000 per tenant, as well as moving costs. In 2014, the City adopted a tenant relocation ordinance that tightened restrictions on demolitions of residential properties, provided tenants with protection from landlord harassment, and provided relocation assistance for tenants that are displaced. The City also charges an affordable housing mitigation fee when a property owner converts a rental unit to a condominium and the City's Condominium Conversion Ordinance allows the City to limit conversions when the rental vacancy rate in the City is low. In 2020, the City adopted a local preference policy that applies to all inclusionary units and 50 percent of City-supported, deed-restricted affordable units in a project, to the extent that outside funding sources allow. The policy uses a lottery system with points to give preference for these units to prospective tenants that live or work in East Palo Alto, with the most points for those that live and work in East Palo Alto. This policy helps to target affordable units to existing low-income residents, potentially providing high-quality affordable housing to tenants that may have otherwise been displaced due to increases in housing costs.

In July 2018, the City implemented the RV Safe Parking Program, which provides overnight RV parking space for 20 vehicles on a City-owned site. The goal of the program is to provide displaced East Palo Alto residents, especially families with children in the local school system, with a safe location to park while they search for alternative housing.

Projected Growth

This section provides an overview of planned residential units in East Palo Alto and Menlo Park as well as projected population, household, and employment growth in East Palo Alto, Menlo Park, and San Mateo County. This section includes information on Menlo Park in addition to East Palo Alto to facilitate comparisons between the estimated housing need in each City from the Project, calculated in the next chapter of this report, and projected growth in each City. These comparisons are discussed in the last chapter of this report.

Residential Development Pipeline

Future growth in the residential inventory throughout the region will help to address future housing needs that arise from employment growth and other sources, and could help to

mitigate housing cost increases by adding to the region's housing supply. East Palo Alto currently has a total of 1,324 net new units in the development pipeline, including planned, approved, and under construction projects. The City of Menlo Park has a total of 3,834 units in the development pipeline.

Projected Long-Term Population, Household, and Employment Growth

Table 9 shows projected population, household, and employment growth in East Palo Alto, Menlo Park, and San Mateo County through 2040, according to projections prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC). As shown, ABAG and MTC estimate that East Palo Alto will gain 5,420 residents, 1,065 households, and 845 jobs between 2020 and 2040, bringing the City's employment to household ratio from 0.76 to 0.77. During the same period, Menlo Park is projected to gain 2,290 households and 6,065 jobs, increasing the employment to household ratio in Menlo Park from 2.37 to 2.40. ABAG and MTC project that San Mateo County will gain 33,695 households and 72,750 jobs overall between 2020 and 2040, increasing the Countywide employment to household ratio from 1.40 to 1.48.

Table 9: Projected Population, Household, and Employment Growth, 2020-2040

						2020-2040 Change	
Population	**2020**	**2025**	**2030**	**2035**	**2040**	**Number**	**Percent**
East Palo Alto	30,670	30,965	31,285	34,575	36,090	5,420	17.7%
Menlo Park	44,530	48,485	52,865	53,455	54,920	10,390	23.3%
San Mateo County	796,885	816,405	853,215	877,965	916,545	119,660	15.0%
Households							
East Palo Alto	7,610	7,690	7,750	8,415	8,675	1,065	14.0%
Menlo Park	15,390	16,215	17,260	17,335	17,680	2,290	14.9%
San Mateo County	284,220	290,290	302,470	308,360	317,915	33,695	11.9%
Employment							
East Palo Alto	5,810	6,075	6,295	6,400	6,655	845	14.5%
Menlo Park	36,410	36,965	37,195	37,770	42,475	6,065	16.7%
San Mateo County	399,245	415,270	422,960	436,160	471,995	72,750	18.2%

Sources: Association of Bay Area Governments/Metropolitan Transportation Commission, Plan Bay Area 2040 Projections; BAE 2021.

Existing Displacement Risk Analysis

The data on existing conditions presented above and analysis provided by the Urban Displacement Project indicate that some existing households in East Palo Alto are vulnerable to displacement under current conditions, and additional households may be vulnerable if housing costs continue to increase in the area. These findings are consistent with trends in other historically-affordable neighborhoods throughout the Bay Area, many of which have experienced significant recent increases in housing costs.

This section summarizes findings from the Urban Displacement Project in addition to findings from the existing conditions analysis presented above. While the existing conditions analysis

focused on East Palo Alto, this section provides an overview of findings from the Urban Displacement Project as they relate to both East Palo Alto and Menlo Park. This section includes findings for Menlo Park because one purpose of this report is to address displacement analysis requirements outlined in a settlement agreement between the Cities of East Palo Alto and Menlo Park.

Urban Displacement Project

The Urban Displacement Project is a research initiative led by UC Berkeley Professor of City and Regional Planning Karen Chapple and Miriam Zuk, PhD. Using demographic and real estate data, the project has developed a methodology to assess displacement risk in the Bay Area at the Census tract level. In addition to identifying predominantly low income tracts that are losing or are susceptible to losing low income households due to gentrification, the project also identifies moderate-to-high income tracts that are preventing or are at risk of preventing low income households from moving in ("exclusive" areas).

There are four Census tracts partially or fully within East Palo Alto, two of which overlap with parts of northeast Menlo Park. As shown in Table 10, three of the four tracts are categorized as "Low Income – Susceptible to Displacement" while the remaining tract is categorized as "Stable Middle/Moderate Income."

Unlike East Palo Alto, Menlo Park includes several higher-income census tracts. Of the eleven Census tracts partially or fully within Menlo Park, three are predominantly low income and are categorized as "Low Income – Susceptible to Displacement." Two of these tracts are those shared with East Palo Alto. The other low-income tract includes the Belle Haven neighborhood adjacent to East Palo Alto. The remaining Menlo Park tracts, all located southwest of Highway 101, are moderate-to-high income. One is categorized as "Stable Middle/Moderate Income," while the remaining seven are categorized as "Stable Advanced Exclusive."

Table 10: Urban Displacement Project Typologies for East Palo Alto and Menlo Park Census Tracts, 2018

East Palo Alto		
6118	Low Income Susceptible to Displacement	Shared with City of Menlo Park
6119	Stable Middle/Moderate Income	
6120	Low Income Susceptible to Displacement	
6121	Low Income Susceptible to Displacement	Shared with City of Menlo Park
Menlo Park		
6116	Stable Advanced Exclusive	
6117	Low Income Susceptible to Displacement	
6118	Low Income Susceptible to Displacement	Shared with City of Menlo Park
6121	Low Income Susceptible to Displacement	Shared with City of Menlo Park
6125	Stable Advanced Exclusive	
6126	Stable Middle/Moderate Income	
6127	Stable Advanced Exclusive	
6128	Stable Advanced Exclusive	
6129	Stable Advanced Exclusive	
6130	Stable Advanced Exclusive	
6139	Stable Advanced Exclusive	

Sources: Zuk, M., & Chapple, K. (2015). Urban Displacement Project; BAE, 2018.

Existing Displacement Risk Findings

The preceding existing conditions analysis and information from the Urban Displacement Project support the following findings related to existing displacement risk factors:

- **Findings from the Urban Displacement Project indicate that households in East Palo Alto and in Menlo Park's Belle Haven neighborhood are at risk of displacement.** Other areas of Menlo Park have similar market pressures, but a relatively low proportion of existing low-income households that could be affected.

- **East Palo Alto has a large number of renter households, which tend to be more susceptible to involuntary displacement than owners.** Renter households that are not protected from large rent increases tend to be more susceptible to involuntary displacement than homeowners because increases in rents are often based on current market rates for a similar unit. Homeowners are comparatively less susceptible because mortgage and property tax payments do not change based on changes in the market during the time that the homeowner maintains ownership. East Palo Alto has a high proportion of renter households in single-family homes, which are exempt from local rent stabilization ordinances under California State Law. Renters in single-family homes are also more likely than renters in multifamily properties to be forced to move from their units to allow for owner-occupancy, if the landlord decides either that they want to move into the unit or that they want to sell the unit to a new owner that intends to occupy the unit.

- **An estimated 800 renter households in East Palo Alto are not protected from large increases in market-rate rents that could cause displacement.** Households that do not live in units with restrictions on rent increases are at higher risk of unaffordable rent increases in the future as property owners adjust rents to match market rates. There are approximately 3,900 renter households in East Palo Alto, approximately 2,500 of which live in units that are covered by the City's Rent Stabilization Program (not including residents that own their mobilehomes with rent-stabilized space rents) and 571 of which live in deed-restricted affordable units. Some of the remaining 800 renter households might be protected from rent increases through Section 8 rental assistance, while other renter households may have annual incomes that are sufficient to absorb an increase in rents. However, it is likely that at least some of these 800 renter households would be vulnerable to displacement if their rent were to increase.

- **High housing cost burdens among current residents, coupled with increasing market-rate rents, further underscore displacement risk for some existing residents.** For many cost-burdened households, factors such as a large unexpected expense, job loss among a member of the household, or a reduction in work hours can make rent or mortgage payments unaffordable. Because cost burdened households use a large portion of household income for housing costs, these households are often unable to save money to cover unanticipated costs or unforeseen reductions in income. Therefore, many of the City's cost-burdened households may currently be vulnerable to displacement, even without any changes in the market, while other cost-burdened households may become vulnerable to displacement if rents continue to increase. Renter households with high housing cost burdens, especially those that do not live in rent-stabilized units, can be particularly vulnerable to displacement in housing markets with rapidly increasing rents.

- **Households that are priced out of their current units are likely to face considerable challenges finding homes within the region.** Home sale prices in East Palo Alto and San Mateo County overall generally exceed the affordability threshold for households with below moderate or moderate incomes. Average market-rate rents are also unaffordable to many below moderate-income and moderate-income households.

- **While housing costs in East Palo Alto are typically more affordable than in San Mateo County overall, both the City and the County have experienced substantial recent increases in housing costs.** The January 2021 median home sale price in East Palo Alto was $947,500, 3.6 times the February 2012 median. The January 2021 median home sale price in the County was approximately $1.36 million, 2.6 times the February 2012 median. The average multifamily asking rent in East Palo Alto was $2,800 as of the first quarter of 2021, approximately $100 higher than the average multifamily asking rent countywide. These rents reflect consistent increases over the past decade,

with little recent impact on rents in East Palo Alto due to the COVID-19 pandemic, even as rents elsewhere in San Mateo County have experienced a larger impact.

- **Increases in rents and home sale prices in East Palo Alto are tied to regional increases in housing costs.** Increases in rents and sale prices in the City have generally been consistent with Countywide increases. As shown in Figure 5 and Figure 6, multifamily rents and home sale prices in East Palo Alto have generally increased in tandem with rent and sale price increases throughout San Mateo County. Meanwhile, East Palo Alto has captured a considerably smaller share of regional employment growth than other cities in the region. These data indicate that broad trends within the regional housing market impact housing cost increases in East Palo Alto to a much larger degree than more localized factors.

- **Regional housing production has not kept pace with the rapid pace of employment growth in the region, which is likely a major contributor to regional housing cost increases.** The jobs-housing ratio has increased between 2010 and 2019 in the Counties of San Mateo, Santa Clara, San Francisco, and Alameda. In San Mateo County, the employment-to-housing unit ratio increased from 1.2 from 1.5 between 2010 and 2019.

- **To the extent that increases in regional employment have impacted housing costs during recent years, the impact of any individual employer or development is likely minimal.** Between 2015 and 2019, the number of people employed in San Mateo County increased by 32,331. Between the end of 2015 and the end of 2019, the average market-rate asking rent for multifamily units in the County increased by $283 per month and the median home sale price in the County increased by approximately $317,000. While it is not possible to quantify the extent to which these housing cost increases are due to the increase in employment, it is reasonable to assume that approximately 25 to 75 percent of the increase in cost is attributable to the impacts of new employment on the regional housing market, which provides a fairly large range for the extent to which other factors may affect housing costs. Using this assumption yields an estimate that every 100 new workers in the County leads to an increase in average rents totaling $0.22 to $0.66 per month and an increase the median home sale price of $245 to $735. These figures are equal to 0.01 to 0.02 percent of current market rate rents in East Palo Alto and 0.03 to 0.08 percent of current market-rate home sale prices in East Palo Alto. These figures are provided for illustrative purposes only and are not meant to serve as actual estimates of the direct impact of new employment on housing costs.

- **The City of East Palo Alto has enacted policies that partially counteract displacement pressures.** These policies include the City's Rent Stabilization and Eviction for Good Cause Ordinance as well as programs and policies that increase the City's affordable and market-rate housing supply. In addition, in November 2018 East Palo Alto voters

approved a ballot measure to assess a parcel tax on office properties in the City at a rate of $2.50 per office square foot (Measure HH), with funds from the parcel tax reserved for affordable housing and to facilitate job opportunities for East Palo Alto residents.

HOUSING DEMAND ANALYSIS

This chapter provides an estimate of the direct, indirect, and induced housing demand by income level that the Project would generate and describes the methodology used for the analysis. The housing demand estimates described in this chapter inform the assessment of potential displacement impacts in the following chapter.

Overview of Methodology

This analysis includes a study of the housing demand directly attributable to workers that would be employed at the Project as well as the housing demand attributable to the multiplier effects of the Project and the resulting indirect and induced employment. To estimate the mix of workers directly employed on site and absent any information on actual tenants, BAE generated a hypothetical mix of industries for workers that would be employed in the Project based on a selection of industry sectors likely to be office users. BAE then took the distribution of workers by industry for these sectors in Santa Clara and San Mateo Counties combined and applied that distribution to the estimated total employment for the proposed Project.[8]

Using the overall employment levels by sector as inputs, BAE analyzed the employment multiplier effect from the Project using the IMPLAN input-output model and used the most recently available five-year Public Use Microdata Sample from the American Community Survey from the U.S. Census to estimate the resulting number of worker households by income level. IMPLAN is a widely-accepted and utilized software model that estimates the total economic implications, including new employment and total spending, that results from new economic activity within a specified geographic area (see Appendix B for additional information on IMPLAN). This assessment uses IMPLAN to estimate the total number of jobs that the project would generate within the region, which this analysis uses to estimate the total resulting housing demand attributable to the project. This methodology is described in additional detail in each subsection below.

Employment Estimate for University Circle Phase II

For the purposes of the following analysis, the IMPLAN sectors shown in Table 11 were assumed to be the most likely potential users of office space in the Project.

[8] This analysis analyzed impacts in both San Mateo and Santa Clara Counties because East Palo Alto is on the border of San Mateo County and adjacent to Santa Clara County. Therefore, housing demand impacts due to the project would likely to affect both counties.

Table 11: Estimated Distribution of Workers in Proposed Project by Industry Sector

IMPLAN Industry Code	Industry Name	Employment in 2-County Region		Project
		Number	Percent	
423	Newspaper publishers	439	0.07%	0.47
424	Periodical publishers	1,343	0.20%	1.44
425	Book publishers	494	0.07%	0.53
426	Directory, mailing list, and other publishers	107	0.02%	0.11
427	Greeting card publishing	-	0.00%	0.00
428	Software publishers	43,272	6.46%	46.53
438	Internet publishing and broadcasting and web search portals	72,724	10.86%	78.19
439	Nondepository credit intermediation and related activities	12,999	1.94%	13.98
440	Securities and commodity contracts intermediation and brokerage	10,297	1.54%	11.07
442	Other financial investment activities	36,202	5.41%	38.92
443	Direct life insurance carriers	1,248	0.19%	1.34
444	Insurance carriers, except direct life	3,433	0.51%	3.69
445	Insurance agencies, brokerages, and related activities	12,384	1.85%	13.32
446	Funds, trusts, and other financial vehicles	5,767	0.86%	6.20
455	Legal services	13,459	2.01%	14.47
456	Accounting, tax preparation, bookkeeping, and payroll services	15,967	2.38%	17.17
457	Architectural, engineering, and related services	25,281	3.78%	27.18
458	Specialized design services	1,739	0.26%	1.87
459	Custom computer programming services	96,075	14.35%	103.30
460	Computer systems design services	63,468	9.48%	68.24
461	Other computer related services, including facilities management	8,998	1.34%	9.67
462	Management consulting services	15,294	2.28%	16.44
463	Environmental and other technical consulting services	6,481	0.97%	6.97
464	Scientific research and development services	124,890	18.65%	134.28
465	Advertising, public relations, and related services	4,781	0.71%	5.14
466	Photographic services	540	0.08%	0.58
468	Marketing research & all other misc. professional, scientific, & tech. services	4,261	0.64%	4.58
469	Management of companies and enterprises	25,668	3.83%	27.60
470	Office administrative services	7,203	1.08%	7.75
472	Employment services	47,771	7.13%	51.36
473	Business support services	3,750	0.56%	4.03
474	Travel arrangement and reservation services	3,307	0.49%	3.56
	Total Employment in Office-Related Sectors	**669,640**	**100.00%**	**720**

Notes:
Parts may not sum to totals due to independent rounding. Total employment by sector from IMPLAN, for Santa Clara and San Mateo Counties combined. Distribution of total employment by sector for the two counties has been applied to the proposed Project. Total employment in project from EIR.

Sources: IMPLAN; BAE, 2021.

Worker Households by Income Level

In order to determine the household income distribution for workers that would be employed at the Project, as well for the indirect and induced employment attributable to the Project, this analysis uses 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 actual responses from households per the American Community Survey, and available for certain defined areas of 100,000 or more of population (known as "PUMAs" or Public Use Microdata Areas), this data source allows one to cross-tabulate variables such as employment by industry and household income. The analysis presented in this chapter uses the data from the 2015 through 2019 five-year period, the most recent data available at the time of this analysis in 2021. The study

region for determining incomes by industry and household size by income encompasses all of Santa Clara and San Mateo Counties, on the assumption that the labor market for this region is generally consistent in wages by occupation and industry as well as typical worker household size by income category.

For the purposes of determining housing needs, households are typically grouped into income categories based on total household income and household size. The income categories are as defined by the California Department of Housing and Community Development (HCD) and are derived using a formula based largely on the percentage of the HCD Area Median Income (AMI), adjusted for household size. This analysis uses 2019 HCD income limits, because the most recent PUMS data available at the time of this analysis were collected between 2015 and 2019, with all incomes adjusted to 2019 dollars. This analysis used PUMS data for workers in San Mateo and Santa Clara Counties to determine the distribution of workers by industry, household size, and income, and categorized each worker reflected in the PUMS data into a household income category according to the household income limits published by (HCD). Table 12 shows the resulting estimated worker household income distribution by major industry group for San Mateo and Santa Clara Counties.

Table 12: Household Income Level by Industry, Working Persons by 2019 Household Income Limits

		Estimated Household Income as a Percent of AMI				
NAICS Code	Industry	Extremely Low	Very Low	Low	Moderate	Above Moderate
Private Sector						
11, 21	Agriculture & Natural Resources	16.2%	24.2%	22.2%	10.7%	26.8%
23	Construction	11.6%	16.0%	24.8%	14.6%	32.9%
31-33	Manufacturing	4.0%	7.1%	14.5%	12.4%	62.0%
42	Wholesale Trade	5.6%	12.1%	18.3%	11.7%	52.3%
44-45	Retail Trade	10.4%	14.7%	24.5%	12.5%	37.9%
48-49, 22	Transportation, Warehousing, & Utilities	9.0%	16.4%	26.3%	14.0%	34.3%
51	Information	2.4%	3.3%	10.3%	8.3%	75.6%
52-53	Finance, Insurance, & Real Estate	4.4%	7.1%	14.9%	10.7%	62.8%
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	2.7%	3.7%	9.6%	10.7%	73.3%
56	Admin, Support, & Waste Mgmt Srvcs	15.6%	19.3%	24.7%	12.4%	28.0%
61	Educational Services	6.2%	9.8%	19.3%	13.9%	50.8%
62	Health Care & Social Assistance	7.2%	10.1%	19.3%	13.3%	50.0%
71-72	Leisure & Hospitality	15.7%	17.4%	26.3%	12.3%	28.4%
81	Other Services Except Public Admin	15.0%	19.0%	22.1%	13.0%	31.0%
Public Sector		6.5%	8.4%	19.6%	15.5%	50.0%

Notes:
Based on a cross tabulation of Public Use Microdata Samples (PUMS) from the 2015-2019 American Community Survey. These incomes were compared to household income limits published by the State of CA Department of Housing and Community Development (HCD) 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) 2015-2019; CA State Department of Housing and Community Development (HCD); BAE, 2021

Housing Need by Income Level from Workers Employed at the Project

As noted above, BAE used the total employment count provided by the Project EIR and generated assumptions about the industry sector of workers that would be employed at the Project, based on the job distribution by industry for San Mateo and Santa Clara Counties. The assumed industry employment mix as shown above in Table 11 reflects typical industries for office workers. BAE then used the PUMS household income distribution by industry data from Table 12 to estimate a household income distribution for workers that would be employed at the Project.

Because households often include more than one worker, new employment at the Project would generate demand for less than one housing unit per worker. BAE queried the PUMS data set to identify the average number of workers per household for households in each income category and used these averages to convert the workers that would be employed at the Project into worker households. Based on this analysis and shown in Table 13, the project would generate an estimated 379 worker households from direct employment, 128 of which would be extremely low-, very low-, low-, and moderate-income worker households. These figures do not include worker households resulting from the indirect and induced employment that the project would generate. Indirect and induced employment and the resulting worker housing demand are evaluated in the following section.

Table 13: Project-Only (Direct) Employment Household Generation by Income Level at University Circle Phase II

NAICS Code	Industry	Total Jobs (b)	Estimated Jobs by Percent of AMI (a) Extremely Low	Very Low	Low	Moderate	Above Moderate
51	Information	127.3	3.1	4.2	13.2	10.6	96.3
52-53	Finance, Insurance, & Real Estate	88.5	3.9	6.3	13.2	9.5	55.6
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	437.5	11.6	16.2	41.8	47.0	320.9
56	Admin, Support, & Waste Mgmt Srvcs	66.7	10.4	12.9	16.5	8.3	18.7
ıt							
	Total Jobs	**720**	**29**	**40**	**85**	**75**	**491**
	Workers per Households (c)	1.90	1.40	1.71	1.89	1.93	1.95
	Number of Households	**379**	**21**	**23**	**45**	**39**	**252**

Notes:
(a) Based on 2019 HCD Income Limits in order to match PUMS data vintage.
(b) Job estimates are the output of the IMPLAN model. Columns to right may not sum to Total Jobs due to independent rounding. Assumes private sector workers only.
(c) Average number of workers per worker household by income category calculated based on American Community Survey PUMS Analysis, 2015-2019.

Sources: American Community Survey, 2015-2019, including the Public User Microdata Sample; CA Department of Housing and Community Development (HCD); IMPLAN; BAE, 2021.

Housing Need by Income Level from Indirect and Induced Employment

To estimate the multiplier effects of the Project's operations on employment, this study uses IMPLAN, 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 B provides 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 based on the amount of spending available to flow through the local economy. IMPLAN estimates 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.
- 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 Project at full operations and fully leased. By IMPLAN definition, the associated expenditures of the occupants of the project and their employment and worker compensation are *direct* impacts, and the resulting spending of the entities that occupies the Project and their workers generates *indirect* and *induced* impacts. For instance, the household expenditures of the Project's workers generate jobs for cashiers and baggers at grocery stores patronized by the new households. The process initiated by household expenditures continues as these grocery 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 Santa Clara and San Mateo County economies. These are all part of the induced impacts linked to the household expenditures.

As the tenants in the Project purchase services and supplies from other establishments in the region and workers employed in the Project spend money on retail goods, food, health care, personal and professional services, education, and other goods and services, this spending would support job growth across many sectors of the economy. Based on the direct employment by industry sector, IMPLAN was used to estimate these multiplier effects. As shown in Table 14, the indirect and induced employment in Santa Clara and San Mateo Counties is estimated to generate 382 households, with 209 of these households at extremely low-, very low-, low-, and moderate-income levels. This household income distribution was estimated based on industry distribution for the indirect and induced employment, as estimated by IMPLAN, and the PUMS data on industry, household income level, and household size.

Table 14: Indirect and Induced Employment and Household Generation by Income Level from University Circle Phase II

			Estimated Jobs by Percent of AMI (a)				
NAICS Code	Industry	Total Jobs (b)	Extremely Low	Very Low	Low	Moderate	Above Moderate
Private Sector							
11, 21	Agriculture & Natural Resources	0.95	0.15	0.23	0.21	0.10	0.25
23	Construction	4.11	0.48	0.66	1.02	0.60	1.35
31-33	Manufacturing	5.52	0.22	0.39	0.80	0.69	3.42
42	Wholesale Trade	11.62	0.66	1.41	2.12	1.36	6.07
44-45	Retail Trade	54.10	5.64	7.94	13.27	6.77	20.48
48-49, 22	Transportation, Warehousing, & Utilities	51.43	4.65	8.41	13.55	7.19	17.63
51	Information	36.84	0.88	1.21	3.81	3.06	27.87
52-53	Finance, Insurance, & Real Estate	115.63	5.10	8.19	17.27	12.41	72.66
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	103.87	2.75	3.85	9.92	11.16	76.18
56	Admin, Support, & Waste Mgmt Srvcs	90.72	14.14	17.53	22.38	11.25	25.42
61	Educational Services	18.41	1.15	1.80	3.55	2.55	9.36
62	Health Care & Social Assistance	76.40	5.48	7.74	14.78	10.17	38.22
71-72	Leisure & Hospitality	85.21	13.34	14.80	22.37	10.51	24.19
81	Other Services Except Public Admin	47.21	7.08	8.95	10.42	6.12	14.65
Public Sector		3.10	0.20	0.26	0.61	0.48	1.55
ıt							
	Total Jobs	**705**	**62**	**83**	**136**	**84**	**339**
	Workers per Households (c)	1.84	1.40	1.71	1.89	1.93	1.95
	Number of Households	**382**	**44**	**49**	**72**	**44**	**174**

Notes:
(a) Based on 2019 HCD Income Limits in order to match PUMS data vintage.
(b) Job estimates are the output of the IMPLAN model. Columns to right may not sum to Total Jobs due to independent rounding.
(c) Average number of workers per worker household by income category calculated based on American Community Survey PUMS Analysis, 2015-2019.

Sources: American Community Survey, 2015-2019, including the Public User Microdata Sample; CA Department of Housing and Community Development (HCD); IMPLAN; BAE, 2021.

Total New Worker Households

Table 15 shows the combined total of direct, indirect, and induced employment related to the proposed Project, along with the estimated number of households related to that employment. Overall, the Project is estimated to be associated with the formation of 761 households, of which 336 are at extremely low-, very low-, low-, and moderate-income levels. Some of the housing need shown in the table would be due to indirect and induced employment that the project would generate, rather than the workers employed at the project itself. Because this indirect and induced employment would occur outside of the Project, it is possible that these impacts will be analyzed separately by the City of East Palo Alto or other jurisdictions as new office, retail, and other employment-based uses are proposed to accommodate the new employment. To the extent that there are policies and programs in place to address the housing need from these new developments, such as commercial linkage fees, some of the indirect and induced housing need associated with the Project may be addressed separately from any actions taken related to the Project itself.

Table 15: Project Employment and Household Generation by Income Level from University Circle Phase II

			Estimated Jobs by Percent of AMI (a)				
NAICS Code	Industry	Total Jobs (b)	Extremely Low	Very Low	Low	Moderate	Above Moderate
Private Sector							
11, 21	Agriculture & Natural Resources	0.95	0.15	0.23	0.21	0.10	0.25
23	Construction	4.11	0.48	0.66	1.02	0.60	1.35
31-33	Manufacturing	5.52	0.22	0.39	0.80	0.69	3.42
42	Wholesale Trade	11.62	0.66	1.41	2.12	1.36	6.07
44-45	Retail Trade	54.10	5.64	7.94	13.27	6.77	20.48
48-49, 22	Transportation, Warehousing, & Utilities	51.43	4.65	8.41	13.55	7.19	17.63
51	Information	164.12	3.94	5.41	16.98	13.65	124.14
52-53	Finance, Insurance, & Real Estate	204.15	9.01	14.46	30.49	21.90	128.29
54-55	Professional, Scientific, & Technical Services, & Mgmt of Companies	541.37	14.35	20.07	51.71	58.18	397.06
56	Admin, Support, & Waste Mgmt Srvcs	157.41	24.53	30.42	38.83	19.51	44.11
61	Educational Services	18.41	1.15	1.80	3.55	2.55	9.36
62	Health Care & Social Assistance	76.40	5.48	7.74	14.78	10.17	38.22
71-72	Leisure & Hospitality	85.21	13.34	14.80	22.37	10.51	24.19
81	Other Services Except Public Admin	47.21	7.08	8.95	10.42	6.12	14.65
Public Sector		3.10	0.20	0.26	0.61	0.48	1.55
ıt							
	Total Jobs	**1,425**	**91**	**123**	**221**	**160**	**831**
	Workers per Households (c)	1.87	1.40	1.71	1.89	1.93	1.95
	Number of Households	**761**	**65**	**72**	**116**	**83**	**425**

Notes:
(a) Based on 2019 HCD Income Limits in order to match PUMS data vintage.
(b) Job estimates are the output of the IMPLAN model. Columns to right may not sum to Total Jobs due to independent rounding.
(c) Average number of workers per worker household by income category calculated based on American Community Survey PUMS Analysis, 2015-2019.

Sources: American Community Survey, 2015-2019, including the Public User Microdata Sample; CA Department of Housing and Community Development (HCD); IMPLAN; BAE, 2021.

Geographic Distribution of Housing Need

One of the goals of the Housing Needs Analysis is to estimate the direct, indirect, and induced housing needs from the Project in order to satisfy the requirements of a settlement agreement between the Cities of East Palo Alto and Menlo Park. Therefore, this section evaluates the geographic distribution of the total 761-unit housing need (as shown above in Table 15) from the direct, indirect, and induced employment generated by the Project to estimate the future housing need from the Project in East Palo Alto and Menlo Park.

Based on data derived from the Census Longitudinal Employer-Household Dynamics program, approximately 14 percent of existing jobs in East Palo Alto are held by City residents, and an additional four percent of jobs in East Palo Alto are held by workers that live in Menlo Park (see Table 16 below).

Since the indirect and induced jobs could occur anywhere in Santa Clara or San Mateo Counties, those worker households may be more broadly distributed geographically than the workers directly employed in the Project. As also shown in the Table, only 0.6 percent of those working in the two counties live in East Palo Alto, with only 0.8 percent living in Menlo Park.

Table 16: Residence of Persons by Place of Work for East Palo Alto and San Mateo and Santa Clara Counties, 2018

	Place of Work			
	East Palo Alto		Two Counties	
	Jobs		Jobs	
Place of Residence	Number	Percent	Number	Percent
San Mateo County	**1,350**	**32.9%**	**218,719**	**14.5%**
East Palo Alto	590	14.4%	8,649	0.6%
Redwood City	158	3.9%	28,228	1.9%
Menlo Park	156	3.8%	11,808	0.8%
San Mateo	106	2.6%	34,349	2.3%
Remainder of County	340	8.3%	135,685	9.0%
Santa Clara County	**1,015**	**24.8%**	**719,224**	**47.5%**
San Jose	403	9.8%	384,599	25.4%
Sunnyvale	136	3.3%	61,908	4.1%
Mountain View	110	2.7%	34,837	2.3%
Santa Clara	89	2.2%	50,763	3.4%
Palo Alto	83	2.0%	23,673	1.6%
Remainder of County	194	4.7%	163,444	10.8%
Alameda County	**708**	**17.3%**	**167,868**	**11.1%**
Hayward	149	3.6%	19,352	1.3%
Fremont	128	3.1%	49,232	3.3%
Oakland	101	2.5%	19,457	1.3%
Union City	81	2.0%	12,739	0.8%
Newark	49	1.2%	9,414	0.6%
Remainder of County	200	4.9%	57,674	3.8%
San Francisco City & County	**166**	**4.0%**	**88,232**	**5.8%**
Contra Costa County	**148**	**3.6%**	**51,508**	**3.4%**
San Joaquin County	**86**	**2.1%**	**24,337**	**1.6%**
Santa Cruz County	**71**	**1.7%**	**25,550**	**1.7%**
All Other Places	**557**	**13.6%**	**217,383**	**14.4%**
Total	**4,101**	**100.0%**	**1,512,821**	**100.0%**

Note: Only top five cities and top eight counties with workers at jobs in East Palo are listed.
Sources: U.S. Census Bureau, Longitudinal Employer-Household Dynamics via OnTheMap; BAE, 2021.

While the suppliers, service providers, and retailers serving the Project occupants per the IMPLAN estimates could be anywhere in the two counties, it is likely that to some extent they will tend to be closer to East Palo Alto and nearby Menlo Park, as worker daytime expenditures would occur near the Project, and where services and suppliers are available in proximity to the Project, they would be more likely to be used by the Project's tenants. As a result, the geographic distribution of worker households due to direct and indirect employment will likely fall somewhere between the distribution for workers employed in East Palo Alto and the distribution for workers employed anywhere in the two counties. Therefore, to bracket the range of likely impacts, this analysis uses two different baseline assumptions to estimate the housing need in East Palo Alto and Menlo Park that would result from the Project:

1. Low scenario – New worker household residence patterns for the direct employment mirror the residential location patterns of current East Palo Alto workers, and new worker residence patterns for indirect and induced employment mirror the residential patterns of those working anywhere in the two counties.
2. High scenario –Worker household residence patterns for all the workers associated with the Project through direct, indirect, and induced employment mirror the residential location patterns of current East Palo Alto workers.

As shown in Table 17, in the baseline scenario the estimated worker households attributed to the Project ranges from 57 to 109 for East Palo Alto and 17 to 29 for Menlo Park. If the housing need in both East Palo Alto and Menlo Park is 20 percent higher than indicated by the baseline assumptions, a total of 68 to 131 households would live in East Palo Alto and 21 to 35 would live in Menlo Park. Detailed assumptions regarding this estimate can be found in Appendix C.

Table 17: New Worker Households by Place of Residence

Using Current Distribution of Workers

Place of Residence	Low Estimate	High Estimate
East Palo Alto	**57**	**109**
Menlo Park	**17**	**29**
All Other Places	687	623
Total	761	761

20% Increase in Workers Living in East Palo Alto & Menlo Park

Place of Residence	Low Estimate	High Estimate
East Palo Alto	**68**	**131**
Menlo Park	**21**	**35**
All Other Places	672	595
Total	761	761

Note: For detail, see Appendix C.

Sources: U.S. Census Bureau, Longitudinal Employer-Household Dynamics via OnTheMap; American Community Survey, 2015-2019, including the Public User Microdata Sample; IMPLAN; BAE, 2021.

POTENTIAL IMPACTS FROM THE PROJECT

This chapter uses the information provided in the Existing Conditions chapter and the Housing Demand Analysis chapter of this report to evaluate the potential impacts that the Project could have on the local and regional housing supply, jobs-housing balance, and displacement pressures. The Project would represent a small increase the amount of employment in East Palo Alto and would have a minimal impact on employment at the regional level. Based on the analysis presented in this report, the Project is likely to have a negligible impact on the regional housing market, jobs-housing balance, and displacement pressures, despite causing a moderate increase in employment locally in East Palo Alto. However, addressing the incremental housing need generated by the Project and other projects that would bring workers to the region remains critical as part of a long-term strategy to address housing needs in East Palo Alto and throughout the region.

It should be noted that many of the findings presented below are based on the total estimated direct, indirect, and induced employment associated with the Project, and therefore may overlap with future analyses of projects that would be proposed to accommodate the jobs supported by the economic multiplier effects from the Project. Some of the impacts associated with these multiplier effects might be addressed in the future through policies and programs that would apply to any projects that will be proposed to accommodate this new employment, such as commercial linkage fees. For example, if employment at the Project supports additional growth in office-based employment, which in turn creates market demand for new office space in East Palo Alto, the City of East Palo may conduct a separate analysis of office projects that are proposed to satisfy this demand. In addition, the City would assess a commercial linkage fee on those projects as well as the City's parcel tax that was approved in 2018, which would address at least part of the affordable housing need associated with those projects.

Potential Impacts to Housing Supply

Although the housing demand from the Project would constitute a minimal share of the current and future regional housing supply and is within the range of growth that could be accommodated in East Palo Alto and Menlo Park, a continued expansion of the housing supply to accommodate the incremental increase in new housing demand in the region remains critical to addressing the region's housing challenges. As discussed in the previous chapter, the Project would generate 1,425 jobs (720 direct jobs and an additional 705 indirect and induced jobs). As shown in Table 15, this direct, indirect, and induced employment would generate demand for a total of 761 housing units; based on the scenario alternatives, demand in East Palo Alto would be for an estimated 57 to 131 housing units, and demand in Menlo Park would be for an estimated 17 to 35 housing units. The total estimated need in East Palo Alto from direct, indirect, and induced impacts is equivalent to:

- **Approximately eight to 19 percent of annual residential unit turnover in East Palo Alto.** As discussed in the Existing Conditions chapter of this report, approximately 530 rental units and 170 owner-occupied units in have turned over in East Palo Alto each year, on average, during recent years. However, these units are likely needed to address existing housing needs rather than new housing need generated by the Project.

- **Approximately four to ten percent of the units in the City of East Palo Alto's current residential development pipeline.** The Existing Conditions chapter of this report showed that there are 1,324 net new units in the City's residential pipeline. However, like the units that become available through typical turnover of existing units, these planned units are likely needed to address existing housing needs rather than new housing need generated by the Project.

- **Approximately five to 12 percent of the long-term projected household growth in East Palo Alto.** The Existing Conditions chapter of this report showed that ABAG and MTC project that East Palo Alto will gain 1,065 households between 2020 and 2040.

The total estimated need in Menlo Park from direct, indirect, and induced impacts is equivalent to:

- **Less than one percent of the units in the City of Menlo Park's current residential development pipeline.** The Existing Conditions chapter of this report showed that there are 3,834 units in the City's residential pipeline. Like the planned units in East Palo Alto, these units might be needed to address existing housing needs rather than new housing needs associated with the Project.

- **Approximately one to two percent of long-term projected household growth in Menlo Park.** The Existing Conditions chapter of this report showed that ABAG and MTC project that Menlo Park will gain 2,290 households between 2020 and 2040. Because the number of housing units in the City's development pipeline already exceeds these household growth projection figures, the projections may underestimate household growth in Menlo Park by 2040. To the extent that household growth in the City exceeds projections, the Project would constitute a smaller share of future household growth.

Overall, the total estimated need for 761 worker housing units is equivalent to:

- **Less than two percent of the housing unit growth in San Mateo and Santa Clara County between 2010 and 2019.** The Existing Conditions chapter of this report showed that the number of housing units in the San Mateo and Santa Clara Counties increased by a total of 47,736 units during this period.

- **Approximately two percent of long-term projected household growth in San Mateo County.** The Existing Conditions chapter of this report showed that ABAG and MTC project that San Mateo County will gain 33,695 households between 2020 and 2040. It should be noted that the total estimated housing need of 761 units includes indirect and induced housing demand from jobs in both San Mateo and Santa Clara Counties, and therefore actual housing need in San Mateo County may be equivalent to a smaller proportion of housing unit growth in San Mateo County.

Potential Impacts to Jobs-Housing Balance

The Project would directly generate 720 jobs, while indirect and induced jobs associated with the Project would total an estimated 705 jobs in San Mato and Santa Clara Counties, totaling 1,425 direct, indirect, and induced jobs. This employment growth is equal to:

- **A 14-percent increase in employment in East Palo Alto due to the employment directly attributable to the Project.** If any of the indirect or induced employment associated with the Project is located in East Palo Alto, the increase in Citywide employment would exceed 14 percent.

- **A 0.09 percent increase in employment in San Mateo and Santa Clara Counties.** The jobs directly attributable to the Project would represent a 0.17-percent increase in employment in San Mateo County.

- **Approximately one percent of the employment growth in San Mateo County between 2010 and 2019.** The Existing Conditions chapter of this report showed that employment in the County increased by 98,423 jobs during this period.

- **Approximately two percent of long-term projected employment growth in San Mateo County.** The Existing Conditions chapter of this report showed that ABAG and MTC project that San Mateo County will gain 72,750 jobs between 2020 and 2040.

As a result of this employment, impacts to the jobs housing balance would be:

- **A small increase in the jobs-housing ratio in East Palo Alto, from 0.64 to 0.74, assuming no new housing production.** These figures are based on the direct employment from the Project only. To the extent that the indirect and induced jobs resulting from the multiplier effects are also located in East Palo Alto, the jobs-housing ratio in East Palo Alto would increase further. The increase in employment in East Palo Alto would bring the jobs-housing ratio in East Palo Alto marginally closer to the regional jobs-housing ratio, though any construction of new housing would at least partially offset the impact of the Project on the City's jobs-housing balance.

- **Virtually no impact on the jobs-housing ratio in San Mateo County overall.** The San Mateo County jobs-housing ratio is currently 1.49 and would remain at 1.49 following the addition of the 720 employees projected for the Project. The countywide jobs-housing ratio would also remain at 1.49 if all of the indirect and induced employment from the Project were also located in San Mateo County.

Potential Displacement Impact Findings

The information provided above on the potential impacts of the Project on the local and regional housing supply and jobs-housing balance, as well as in the preceding chapters of this report, indicate that the Project is not likely to have a perceptible impact on local and regional displacement pressures. However, there is nonetheless a need to address the incremental impacts from new development as well as addressing housing needs more generally. Findings related to the potential displacement impacts from the Project are as follows:

- **The Project would support a small increase in the number of jobs in East Palo Alto.** To the extent that the Project affects the jobs-to-housing unit ratio in East Palo Alto, the change would bring the City marginally closer to the regional jobs-to-housing unit ratio.

- **While existing and planned residential units in East Palo Alto and Menlo Park can potentially accommodate the housing need that the Project would generate in these cities, these existing and planned units may be needed to address existing housing needs.** The estimated direct, indirect, and induced housing that the Project would generate in East Palo Alto could potentially be accommodated through absorption of residential units through the course of typical annual turnover, absorption of vacant units, or absorption of a portion of units in the development pipeline. Similarly, the housing need that the Project would generate in Menlo Park would account for only a small share of the units in the City's current development pipeline. However, due in part to long-term shortages in regional housing production relative to the rate of regional employment growth, these existing and planned housing units are likely needed to address existing housing needs in the region, rather than addressing any net increase in housing need attributable to the Project.

- **Due to the regional nature of the housing market, the Project is unlikely to have any measurable impact on displacement pressures in East Palo Alto.** The Project would generate a need for housing among households across a range of income levels, a portion of which would seek housing in East Palo Alto. A significant share of these households would be higher-income households that may be more able to afford high rents and sale prices than existing East Palo Alto residents, while other households would be lower-income households that would seek out affordable housing options. Although the cumulative impact of increases in employment throughout the region has likely contributed to significant housing cost increases in East Palo Alto and regionally,

the impact on housing costs from any individual project with fewer than 600 workers is unlikely to be significant enough to cause the displacement of existing East Palo Alto residents. As discussed in the Existing Conditions chapter of this report, recent housing cost increases in East Palo Alto have generally tracked housing cost increases in the County overall, which suggests that displacement pressures are largely the result of regional housing market trends and East Palo Alto's position within the regional housing market, rather than individual projects that add employment at the scale anticipated from the Project.

- **The Project is unlikely to have a perceptible impact on the regional housing supply or regional jobs-housing balance.** The Project is estimated to generate 1,425 direct, indirect, and induced jobs in San Mateo and Santa Clara Counties, and a need for 761 housing units. These impacts are well within the range of recent and projected future growth in San Mateo and Santa Clara Counties, and would represent a minimal increase in the number of households in the region. The direct, indirect, and induced employment from the Project would represent a negligible increase in employment in the two Counties and would have virtually no impact on the regional employment-to-housing unit ratio even if no new housing units are built.

- **Because the Project would have a minimal effect on the regional housing supply and jobs-housing balance, it is unlikely to have an impact on displacement on a regional scale.** As stated in the Existing Conditions chapter of this report, recent housing cost increases in the region have coincided with dramatic employment growth and lagging housing production. The cumulative impact of these trends is likely to have been a key contributor to the considerable recent increases in housing costs in the region, rather than individual specific developments at the scale of the Project. The amount of employment growth that the Project would support is minimal in relation to the amount of growth that was necessary to drive recent housing cost increases in the region. To the extent that employment growth from the Project may have a marginal impact on housing demand and resulting displacement pressures in the region, these impacts are likely to be partially counteracted by new housing unit production and local policies and programs that help to address displacement pressures.

- **Though the Project is unlikely to have a noticeable impact on the local or regional housing market, housing affordability and displacement remain a key issue locally and throughout the region, and addressing the incremental impact of the Project and other projects that generate new housing demand will be essential to addressing cumulative housing needs and mitigating displacement pressures over the long term.** The existing conditions analysis indicates that housing costs have increased considerably throughout the region and that many lower- and moderate-income households are unable to afford housing. The data suggest that some households in East Palo Alto and elsewhere in the region are currently at risk of displacement, while others will

likely become vulnerable to displacement if housing costs continue to increase. Confronting these challenges requires a multifaceted approach to addressing housing affordability at the local and regional level, including the production of housing at all affordability levels.

- **The Project would directly generate revenue that would enable the City of East Palo Alto to partially address the affordable housing need attributable to the Project.** As shown in Table 17, the Project would create an estimated need for 57 to 131 housing units in East Palo Alto to accommodate new worker households. If the income mix among the new worker households that live in East Palo Alto mirrors the income mix among new households generated by the Project overall (see Table 15), the new worker households in East Palo Alto would include approximately 19 to 44 extremely low-, very low-, and low-income households, six to 14 moderate-income households, and 32 to 73 above moderate-income households.

  The Project would generate approximately $2.0 million ($11.14 per square foot x 180,000 square feet) in commercial linkage fees, which the City can use to fund future affordable housing developments in East Palo Alto. Due to the constraints on the various funding sources that will be needed to construct these units, units built with these City funds will likely target extremely low-, very low-, and low-income households. Assuming a City funding contribution of $75,000 to $125,000 per unit, these linkage fee funds will support the construction of approximately 16 to 27 affordable units, leaving a remaining need for zero to 28 extremely low-, very low-, and low-income units in East Palo Alto. In addition to the linkage fee revenues, the Project would generate approximately $450,000 per year in parcel tax revenue for affordable housing and to expand job opportunities for residents due to Measure HH. To the extent that the linkage fees leave a remaining need for up to 28 extremely low-, very low-, and low-income units in East Palo Alto, this parcel tax would generate enough revenue to enable the City to fund these units within eight years or less. If the combined revenue from linkage fees and the parcel tax exceed the revenue needed to address the extremely low-, very low-, and low-income housing need in East Palo that arises from the Project, these additional funds can be used to provide additional affordable units in the City to offset the regional increase in affordable housing need that would arise from the Project.

- **There is a continued need for the City of East Palo Alto and cities and counties throughout the region to explore policies to prevent displacement and address housing needs at all income levels.** While the City of East Palo Alto has adopted many policies in support of these objectives, East Palo Alto and other cities and counties throughout the region should continually evaluate options for generating affordable housing funds, facilitating the production of housing for households at all income levels, and preventing displacement.

APPENDIX A: DETAILED DEMOGRAPHIC AND REAL ESTATE TABLES

Table 18: Population and Households, 2010-2020

			2010-2020 Change	
Population	**2010**	**2020**	**Number**	**Percent**
East Palo Alto	28,155	28,561	406	1.4%
San Mateo County	718,451	746,752	28,301	3.9%

			2010-2020 Change	
Households	**2010**	**2020**	**Number**	**Percent**
East Palo Alto	6,940	7,020	80	1.2%
San Mateo County	257,837	267,098	9,261	3.6%

Avg. Household Size	**2010**	**2020**
East Palo Alto	4.03	4.05
San Mateo County	2.75	2.76

Sources: Esri Business Analyst; BAE, 2021.

Table 19: Age Distribution, 2010-2020

	2010		2020		2010-2020 Change	
City of East Palo Alto	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	8,976	31.9%	8,557	30.0%	-419	-4.7%
18-24	3,487	12.4%	3,176	11.1%	-311	-8.9%
25-34	4,923	17.5%	5,217	18.3%	294	6.0%
35-44	3,974	14.1%	4,023	14.1%	49	1.2%
45-54	3,129	11.1%	3,162	11.1%	33	1.1%
55-64	1,991	7.1%	2,350	8.2%	359	18.0%
65 or older	1,675	5.9%	2,081	7.3%	406	24.2%
Total Population (a)	**28,155**	**100.0%**	**28,566**	**100.0%**	**411**	**1.5%**
Median Age	**28.1**		**29.8**			

	2010		2020		2010-2020 Change	
San Mateo County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Under 18	159,772	22.2%	162,361	21.7%	2,589	1.6%
18-24	55,127	7.7%	57,732	7.7%	2,605	4.7%
25-34	99,334	13.8%	94,913	12.7%	-4,421	-4.5%
35-44	108,100	15.0%	100,668	13.5%	-7,432	-6.9%
45-54	110,669	15.4%	102,829	13.8%	-7,840	-7.1%
55-64	89,187	12.4%	100,165	13.4%	10,978	12.3%
65 or older	96,262	13.4%	128,084	17.2%	31,822	33.1%
Total population (a)	**718,451**	**100.0%**	**746,752**	**100.0%**	**28,301**	**3.9%**
Median Age	**39.2**		**40.7**			

Note:
(a) Totals may not match totals in other tables due to independent rounding.

Sources: Esri Business Analyst; BAE, 2021.

Table 20: Race and Ethnicity, 2010-2020

	2010		2020		2010-2020 Change	
City of East Palo Alto	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**18,147**	**64.5%**	**18,538**	**64.9%**	**391**	**2.2%**
Not Hispanic/Latino	**10,008**	**35.5%**	**10,023**	**35.1%**	**15**	**0.1%**
White	1,754	6.2%	1,669	5.8%	-85	-4.8%
Black/African American	4,458	15.8%	3,928	13.8%	-530	-11.9%
Native American	30	0.1%	29	0.1%	-1	-3.3%
Asian	1,025	3.6%	1,456	5.1%	431	42.0%
Native Hawaiian/Pacific Islander	2,083	7.4%	2,085	7.3%	2	0.1%
Other	49	0.2%	51	0.2%	2	4.1%
Two or More Races	609	2.2%	805	2.8%	196	32.2%
Total Population (b)	**28,155**	**100.0%**	**28,561**	**100.0%**	**406**	**1.4%**

	2010		2020		2010-2020 Change	
San Mateo County	**Number**	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Hispanic/Latino (a)	**182,502**	**25.4%**	**180,585**	**24.2%**	**-1,917**	**-1.1%**
Not Hispanic/Latino	**535,949**	**74.6%**	**566,167**	**75.8%**	**30,218**	**5.6%**
White	303,609	42.3%	282,181	37.8%	-21,428	-7.1%
Black/African American	18,763	2.6%	16,076	2.2%	-2,687	-14.3%
Native American	1,125	0.2%	1,018	0.1%	-107	-9.5%
Asian	175,934	24.5%	224,561	30.1%	48,627	27.6%
Native Hawaiian/Pacific Islander	9,884	1.4%	9,555	1.3%	-329	-3.3%
Other	2,709	0.4%	2,714	0.4%	5	0.2%
Two or More Races	23,925	3.3%	30,062	4.0%	6,137	25.7%
Total Population (b)	**718,451**	**100.0%**	**746,752**	**100.0%**	**28,301**	**3.9%**

Note:
(a) Includes all races for those of Hispanic/Latino background.
(b) Totals may not match totals in other tables due to independent rounding.

Sources: Esri Business Analyst; BAE, 2021.

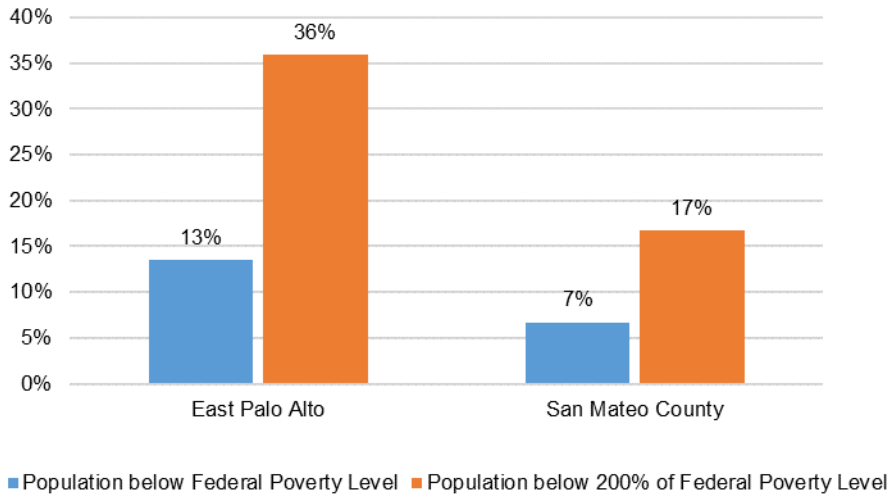
Table 21: Household Income Distribution, 2020

	City of East Palo Alto		San Mateo County	
Income Level	**Number**	**Percent**	**Number**	**Percent**
Less than $15,000	707	10.1%	14,517	5.4%
$15,000-$24,999	466	6.6%	10,283	3.8%
$25,000-$34,999	582	8.3%	11,063	4.1%
$35,000-$49,999	706	10.1%	13,527	5.1%
$50,000-$74,999	1,143	16.3%	26,496	9.9%
$75,000-$99,999	875	12.5%	28,630	10.7%
$100,000-$149,999	1,139	16.2%	45,441	17.0%
$150,000-$199,999	694	9.9%	35,199	13.2%
$200,000 or more	709	10.1%	81,942	30.7%
Total Households (a)	**7,021**	**100.0%**	**267,098**	**100.0%**
Median HH Income	**$72,208**		**$127,547**	
Per Capita Income	**$23,991**		**$62,492**	

Note:
(a) Totals may not match totals in other tables due to independent rounding.

Sources: Esri Business Analyst; BAE, 2021.

Figure 7: Poverty Status, 2013-2017



Note:
(a) Total population for which poverty status is determined.

Sources: U.S. Census Bureau, American Community Survey, 2015-2019 Five-Year Sample Data, Table C17002; BAE, 2021.

Table 22: Residents that Moved in the Past Year, 2015-2019

	City of East Palo Alto			San Mateo County		
Geographic Mobility	**Renter**	**Owner**	**Total**	**Renter**	**Owner**	**Total**
Did Not Move in Past Year	**81.2%**	**93.1%**	**88.4%**	**87.6%**	**92.0%**	**89.2%**
Moved in the Past Year	**18.8%**	**6.9%**	**11.6%**	**12.4%**	**8.0%**	**10.8%**
Moved Within Same County	8.3%	3.5%	5.4%	6.6%	5.1%	6.1%
Moved from Different CA County	5.9%	2.3%	3.7%	3.8%	1.7%	3.1%
Moved from Different State	2.5%	0.5%	1.3%	1.6%	0.6%	1.2%
Moved from Abroad	2.2%	0.6%	1.2%	0.4%	0.7%	0.5%
Total Population	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note:
(a) Universe is population one-year-old or older in households. Geographic mobility status and movement date/origin based on householder response at time of survey.

Sources: U.S. Census Bureau, American Community Survey, 2015-2019 Five-Year Sample Data, Table B07013; BAE, 2021.

APPENDIX B: 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. 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 new commercial and housing projects.

What is IMPLAN?

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 some 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 546 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*[9] 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.

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 this analysis, IMPLAN uses economic data for a two-county region consisting of Santa Clara and San Mateo Counties. 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 consumption functions of regional households and local government, taking into account the availability of each commodity within the specified geography.

[9] The byproducts refer to any secondary commodities that the industry creates.

Multipliers. IMPLAN combines these 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 have been described above, and also are described here:

- 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 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.

- 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 the analyst is considering. In the case of the ongoing economic impacts of a new institutional development such as a school, the "event" would be the operations of a school, including the resulting new jobs and the worker compensation.

Running the Model. Once the event is specified, IMPLAN runs the event through the model to generate the results. By default, IMPLAN applies the local data on average output per worker and compensation per worker to determine the direct impacts. For the analysis here, worker compensation was derived from earnings as shown in the PUMS analysis of a hypothetical mix of workers and their occupations. The model 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 546 sectors. IMPLAN generates these tables for three types of impacts: employment, output, and value added. The IMPLAN analysis of this study is focused on the employment impacts.

- *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.
- *Output* refers to the total economic value of the project in the local economy.
- *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 C: DETAIL ON WORKER HOUSEHOLD RESIDENCE LOCATION

New Worker Households by Place of Residence, Using Current Distributions of Workers (Baseline)

DIRECT WORKERS (a)	Low and High Estimates	
Place of Residence	Number	Percent
East Palo Alto	55	14.4%
Menlo Park	14	3.8%
All Other Places	310	81.8%
Total	379	100.0%

INDIRECT & INDUCED WORKERS	Low Estimate (b)		High Estimate (c)	
Place of Residence	Number	Percent	Number	Percent
East Palo Alto	2	0.6%	55	14.4%
Menlo Park	3	0.8%	15	3.8%
All Other Places	377	98.6%	313	81.8%
Total	382	100.0%	382	100.0%

TOTAL WORKERS	Low Estimate (b)		High Estimate (c)	
Place of Residence	Number	Percent	Number	Percent
East Palo Alto	57	7.5%	109	14.4%
Menlo Park	17	2.3%	29	3.8%
All Other Places	687	90.3%	623	81.8%
Total	761	100.0%	761	100.0%

New Worker Households by Place of Residence, Assuming 20 Percent More Workers Living in East Palo Alto and Menlo Park

DIRECT WORKERS (a)	Low and High Estimates	
Place of Residence	Number	Percent
East Palo Alto	65	17.3%
Menlo Park	17	4.6%
All Other Places	296	78.2%
Total	379	100.0%

INDIRECT & INDUCED WORKERS	Low Estimate (b)		High Estimate (c)	
Place of Residence	Number	Percent	Number	Percent
East Palo Alto	3	0.7%	66	17.3%
Menlo Park	4	0.9%	17	4.6%
All Other Places	376	98.4%	299	78.2%
Total	382	100.0%	382	100.0%

TOTAL WORKERS	Low Estimate (b)		High Estimate (c)	
Place of Residence	Number	Percent	Number	Percent
East Palo Alto	68	8.9%	131	17.3%
Menlo Park	21	2.7%	35	4.6%
All Other Places	672	88.3%	595	78.2%
Total	761	100.0%	761	100.0%

Notes:
Baseline assumes those jobs associated with the Project are likely to be distributed geographically by residence in patterns similar to current workers, with the low estimate based on indirect and induced workers distributed residentially as for the two counties overall, and the high estimate with those workers distributed as for East Palo Alto. Parts may not sum to totals due to independent rounding.
(a) Since the direct jobs are all in East Palo Alto, both low and high estimates use the distribution of current workers in East Palo Alto by place of residence.
(b) For the indirect and induced jobs, the low estimate estimates the geographic distribution of new workers using the distribution of workers in the two counties by place of residence. Indirect and and induced jobs might be anywhere in the two counties.
(c) For the indirect and induced jobs, the high estimate estimates the geographic distribution of new workers using the distribution of East Palo workers by place of residence, as with the direct jobs. While indirect and and induced jobs might be anywhere in the two counties, they may tend to be closer to East Palo Alto. For example, workers are likely to make daytime expenditures that generate retail jobs near their place of work in East Palo Alto. The businesses in the Project might also be likely to contract for services and supplies with nearby establishments.

Sources: U.S. Census Bureau, Longitudinal Employer-Household Dynamics via OnTheMap; American Community Survey, 2015-2019, including the Public User Microdata Sample; IMPLAN; BAE, 2021.