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Draft (Rev. 2)

**INNOVATION CENTER AT BRENTWOOD:
SECTOR-BASED LABOR FORCE ANALYSIS &
COMMERCIAL REAL ESTATE MARKET ASSESSMENT**

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

In July 2020, the City of Brentwood selected a multidisciplinary team led by ELS Architecture and Urban Design (ELS) to prepare a master plan for the Innovation Center at Brentwood, a 400-acre development site adjacent to State Route 4 and a future BART station, shown in Figure 1-1. The purpose of the master plan is to guide the development of a commercial office jobs center that provides high-quality employment opportunities to Brentwood residents.

As a sub-consultant to ELS, Keyser Marston Associates, Inc. (KMA) prepared the following Sector-Based Labor Force Analysis and Commercial Real Estate Market Assessment to inform the master plan alternatives and the marketing strategy for the Innovation Center planning area. The Sector-Based Labor Force Analysis identifies sectors as targets for business recruitment based on the skills of the local labor force, while the Commercial Real Estate Market Assessment estimates the range of the planning area's potential share of demand for office, advanced industrial, and R&D uses.

Figure 1-1: Study Area Boundaries



Source: City of Brentwood

1.2 Summary of Findings

Sector-Based Labor Force Analysis

The size, occupational skills and educational levels of the local labor force are a competitive strength that can help attract high-quality employers to the planning area:

- *Labor Force Size* – Since 2010, Brentwood's labor force has grown at three times the countywide growth rate, reaching nearly 30,000 workers in 2019. The total labor force

within a 20-minute drive of the planning area (167,000) approaches the total labor force within a 20-minute drive of San Ramon (188,000). Employers in the planning area would have an advantage in attracting local talent, given that nearly 60% of Brentwood workers currently commute to jobs outside of Contra Costa County.

- *Educational Levels* – More than 30% of Brentwood residents over the age of 25 have earned a bachelor’s degree and another 30% have completed some college coursework or earned an associate degree. Educational attainment is higher for residents who have recently moved to Brentwood from other counties, suggesting an upward trend in the share of Brentwood residents with a bachelor’s degree or higher.
- *Office-Based Occupational Skills and Compatible Sectors* – The leading office-based occupations of Brentwood’s workforce include management occupations, business and financial occupations, office administration and sales occupations, and healthcare occupations. Approximately half of the Brentwood workforce is employed in one of these fields. Other office-based occupations including mathematical, computer, engineering, and scientific fields are underrepresented among Brentwood’s workforce compared to competing submarkets. The following sectors have hiring needs that are most compatible with the leading office-based occupations of Brentwood’s workforce:
 - insurance carriers, including life, health, and property insurance carriers;
 - outpatient medical care;
 - business support services, including accounting and bookkeeping, human resources, payment processing, and other administrative services;
 - enterprise software development and computer programming services that complement the business support sector; and
 - residential homebuilding, comprised of homebuilders, contractors, and other businesses involved in the development of residential communities.
- *Advanced Industrial Occupational Skills and Compatible Sectors* – Advanced industrial sectors rely on production occupations directly involved in the manufacturing process in addition to office-based occupations. The share of Brentwood residents employed in production occupations is on par with competing industrial submarkets. Advanced industrial sectors best positioned to benefit from the skills and experience of Brentwood residents employed in business, administrative, sales, and production occupations include research and development and manufacturing of:
 - medical equipment and electro-medical instruments;
 - electric lighting and other electrical equipment; and
 - industrial machinery, particularly machinery used in the manufacture of semiconductor devices.

Commercial Real Estate Market Assessment

Brentwood has historically captured a limited share of East Bay office and industrial demand. The City’s office supply consists primarily of medical offices and outpatient centers, while the homebuilding sector has been the primary source of demand for industrial/flex space. In the past 10 years, no office or industrial development has occurred in Brentwood, as urban Alameda County submarkets have increased their market shares of regional industrial and office demand.

Consistent with recent development trends, infill sites in urban Alameda County comprise most of the office and industrial development pipeline in the East Bay. There are very few proposed commercial developments that are comparable to the planning area in scale and location, apart from longer-term proposals such as the redevelopment of the Concord Naval Weapons Station. As a large greenfield development site with good freeway access, future transit connectivity and a vision for high-quality amenities, the planning area has the potential grow Brentwood’s share of regional office and industrial demand by appealing to companies seeking to locate closer to where their employees live.

Assuming a gradual recovery from the recession caused by the coronavirus pandemic, estimated private sector employment growth over the next 10 years would generate demand for roughly 7 million square feet of office and 3 million square feet of advanced industrial/ R&D uses across the East Bay. During this 10-year period, the planning area has the potential to capture **150,000 to 400,000 square feet of office demand and up to 200,000 square feet of advanced industrial/ R&D demand** and continue to capture market demand in the following decades (Table 1-1). The lower end of the range mirrors Brentwood’s baseline historical market share of regional demand. The upper end assumes a successful marketing effort to attract a broader industry base to Brentwood, with a focus on office and industrial /R&D users whose hiring needs are compatible with the skills and educational levels of the local labor force. The range of planning area market potential is an order-of-magnitude estimate that will vary based on factors such as financial feasibility, timing of competitive developments, as well as the uncertain long-term effects of the coronavirus pandemic on the commercial real estate market.

Table 1-1: Order-of-Magnitude Market Potential of Planning Area

	2020-2030		2030-2050	
	Low	High	Low	High
Office (sf)	150,000	400,000	300,000	600,000
Advanced Industrial/R&D (sf)	100,000	200,000	150,000	250,000

Source: KMA order-of-magnitude estimate (figures from appendix tables rounded to nearest 50,000)

2.0 SECTOR-BASED LABOR FORCE ANALYSIS

2.1 Labor Force Characteristics

Labor Force Size

Since 2010, Brentwood's labor force has grown at a rate three times faster than the average Contra Costa County growth rate, reaching nearly 30,000 workers in 2019. The homeownership rate among Brentwood workers (77%) is significantly higher than the Contra Costa County average (66%), an indicator of a stable and committed local labor force.

There are an additional 137,000 workers living in nearby communities within a 20-minute drive of the planning area, primarily along the State Route 4 corridor from Bay Point to Discovery Bay. The total labor force within a 20-minute drive of the planning area approaches the size of the labor force within a 20-minute drive of San Ramon, but is significantly less than labor pools near Pleasanton and Walnut Creek, per Table 2-1.

Table 2-1: Civilian Labor Force Over the Age of 16

Geography	Primary City	20 Minute Drive
Brentwood	29,500	167,000
San Ramon	39,700	188,000
Pleasanton	41,200	260,000
Walnut Creek	34,400	311,000

Source: ESRI Business Analyst and California EDD (2019 annual data)

Commute Patterns

As shown in Table 2-2, approximately 60% of Brentwood's workforce commutes to jobs outside of Contra Costa County, including nearly 40% commuting to jobs outside the East Bay. Businesses in the planning area would have an advantage in attracting local talent versus competitors based elsewhere in the Bay Area.

Table 2-2: Work Destination of Employed Brentwood Residents

	Brentwood	Contra Costa Balance	Alameda County	Other Counties
% of Employed Residents	12%	29%	20%	39%

Source: American Community Survey 5-Year Estimates (2014-2018).

Educational Attainment

More than 30% of Brentwood residents over the age of 25 have earned a bachelor's degree and another 30% have completed some college coursework or earned an associate degree. Most college graduates in Brentwood hold degrees in science, engineering, and business-related fields. Table 2-3 compares educational levels of Brentwood residents over the age of 25 to the

average of all Contra Costa County residents in the same age bracket. While the total share of residents who have completed at least some college coursework is higher among Brentwood residents, a smaller share of Brentwood residents has completed a bachelor's degree. Educational attainment is higher for residents who have recently moved to Brentwood from other counties, suggesting an upward trend in the share of Brentwood residents with a bachelor's degree from in-migration.

Table 2-3: Educational Attainment of Residents Over Age 25

	All Residents		New Residents from Other County*	
	Brentwood	CC County	Brentwood	CC County
Population over Age 25	39,300	777,519	2,129	45,410
No HS Diploma	7%	11%	7%	9%
HS Graduate	20%	18%	13%	13%
Associate's/ Some College	41%	30%	36%	24%
Bachelor's Degree	23%	26%	31%	33%
Graduate Degree	9%	16%	14%	21%

*Source: American Community Survey 5-Year Estimates (2014-2018). * Residents who moved in past year from a different county. Not all columns add to 100% due to rounding.*

Occupations and Industries

The leading office-based occupations of Brentwood's workforce consist of management occupations, business, financial and legal occupations, office administration and sales occupations, and healthcare occupations. Approximately half of Brentwood's workforce is employed in one of these fields. Workers in science, engineering, computer, mathematical, and creative occupations represent a smaller share of Brentwood's workforce and are underrepresented in Brentwood compared to nearby office submarkets, where between 10% and 30% of workers are employed in these fields (see Table 2-4).

Hiring needs of advanced manufacturing and research and development (R&D) sectors include production occupations directly involved in the manufacturing process in addition to office-based occupations. While the share of Brentwood residents employed in production occupations is modest (less than 5%), it is higher than the Contra Costa County average and on par with Fremont, which has emerged as an advanced manufacturing hub. Brentwood is also accessible to workers in San Joaquin County, where a greater share of the workforce is employed in production occupations.

Table 2-4: Occupations of Employed Residents

	Brentwood	Other East County	North Central Contra Costa	Tri-Valley	Fremont
Employed Residents	27,146	122,365	150,138	188,327	118,280
Management	11%	8%	14%	19%	12%
Business, Financial, & Legal	8%	5%	10%	11%	9%
Office Admin & Sales	20%	24%	22%	20%	17%
Medical	10%	10%	8%	7%	7%
STEM & Creative	7%	5%	11%	19%	29%
Production	4%	4%	2%	2%	4%
All Other	40%	43%	32%	22%	23%

Source: American Community Survey 5-Year Estimates (2014-2018). Not all columns add to 100% due to rounding

Brentwood residents are predominantly employed in the education and health sector, the trade, transportation and utilities sector, and the professional and scientific services and information sector. Per Table 2-5, the mix of sectors in which Brentwood residents are employed is generally similar to the sectoral mix for all Contra Costa County workers. The education and health sector is slightly overrepresented among Brentwood workers while the percentage of workers employed in the professional and scientific services and information sector is smaller in Brentwood compared to the average for the entire county workforce.

Table 2-5: Sectors of Employed Residents

	Brentwood	Contra Costa County
Education & Health	25%	22%
Trade, Transportation & Utilities	18%	18%
Professional/ Scientific Services & Information	14%	19%
Construction & Natural Resources	9%	8%
Finance, Real Estate & Insurance	8%	8%
Manufacturing	7%	7%
All Other Services, incl Public Admin	19%	18%

Source: American Community Survey 5-Year Estimates (2014-2018)

2.2 Sectors Compatible with Labor Force Characteristics

The skills and educational levels of workers living in Brentwood are a competitive strength that has the potential to attract high-quality employers to the planning area. Based on occupational data from the Bureau of Labor Statistics, KMA identified sectors that are users of office and/or industrial real estate and have hiring needs that correlate with the skills of the local labor force. Findings of this assessment are detailed in Appendix Tables A-1 to A-4 and summarized below.

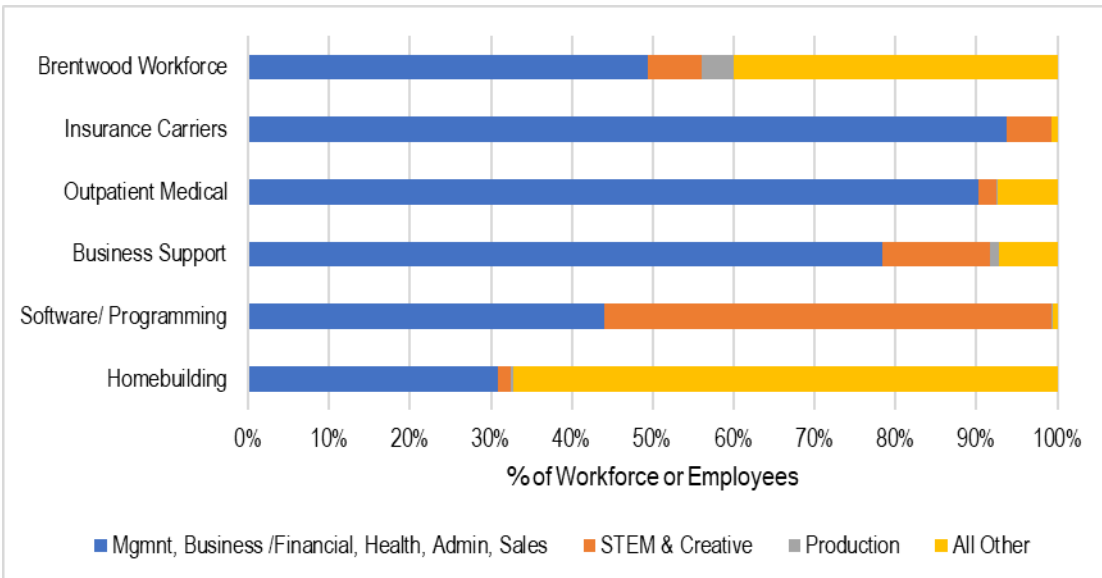
Compatible Office Sectors

The following office-using sectors have demonstrated positive job growth in the East Bay over the past five years and rely on management, business and financial, office support and sales, and healthcare occupations, which represent the top office-based occupations of the local workforce:

- *Insurance Carriers (including life, health, and property insurance carriers).* The insurance industry is a major generator of office demand in the East Bay and has recorded above-average job growth in the past five years. More than 90% of jobs in the insurance industry are concentrated in the top office-based occupations held by Brentwood residents.
- *Outpatient Medical Care.* Outpatient medical care is already the leading source of office demand in Brentwood and is a targeted sector in the City of Brentwood's Economic Development Strategy (March 2018). As with insurance carriers, more than 90% of jobs in the outpatient medical industry align with the top office-based occupations held by Brentwood residents.
- *Business Support Services.* The business support sector comprises accounting and bookkeeping, human resources, payment processing, and other administrative services. Businesses in this sector are either structured as satellite offices of larger companies or third-party providers. Business support companies locating in the planning area would have the opportunity to draw from a large pool of workers with a background in business, financial and administrative occupations.
- *Enterprise Software Development, Computer Programming, and Data Processing Services.* The high-growth software development, computer programming, and data processing sector relies on computer, mathematical and design occupations which are currently underrepresented among Brentwood's labor force. However, some companies in this sector, particularly enterprise software developers that complement the business support sector, are likely to value the business, financial, and sales expertise of the local workforce.
- *Residential Homebuilders and Related Services.* The homebuilding sector, targeted in the City's Economic Development Strategy, is comprised of homebuilders, contractors, and other businesses involved in the development of residential communities. While most jobs in the homebuilding sector are in construction occupations, approximately 30% of jobs are in business and administrative occupations commonly held by Brentwood residents. The planning area has the potential to attract homebuilders and related businesses active in Brentwood and nearby communities, although the amount of office demand generated by this sector is likely to be modest. Note that some

businesses in the homebuilding sector will prefer flex space that allows for a combination of office, warehouse, and light manufacturing uses.

Figure 2-1: Occupational Composition of Brentwood Workforce versus Compatible Office Sectors



Source: American Community Survey 5-Year Estimates (2014-2018) and May 2019 Occupational Employment Statistics by State and Industry. Note: for sectors that include more than one industry, hiring needs reflect a weighted average based on total East Bay private sector employment reported by the Quarterly Census of Employment and Wages.

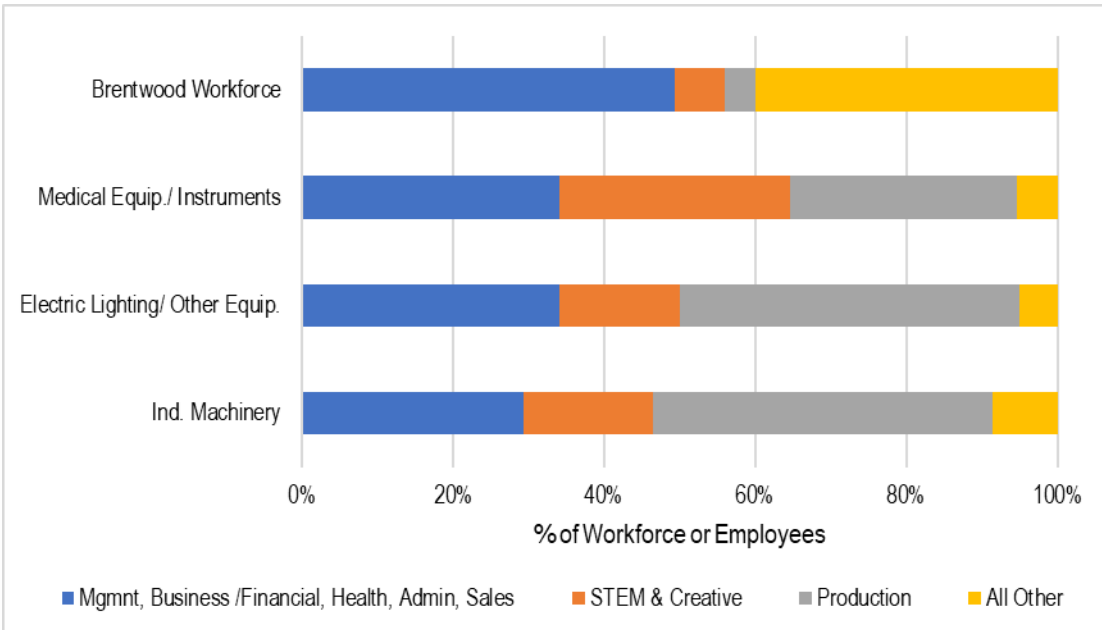
Compatible Advanced Industrial/ R&D Sectors

The City's Economic Development Strategy targets the development of an industry cluster in small-scale advanced manufacturing. Brentwood can best capitalize on the strengths of the local labor force by targeting advanced manufacturing sectors that rely more on business, administrative, and production occupations and somewhat less on science and engineering occupations. Recommended advanced industrial and R&D sectors include:

- *R&D and Manufacturing of Medical Equipment and Electro-Medical Instruments.* The leading occupations of Brentwood's workforce make up approximately 35% of employment in the medical equipment and electro-medical instrument sector; production occupations comprise another 30% of jobs in this sector. In the past five years, the electro-medical instrument manufacturing industry in the East Bay has grown faster than other industries within this sector.
- *R&D and Manufacturing of Electric Lighting and Other Electrical Equipment,* such as batteries and fiber optic cables. The leading occupations of Brentwood's workforce make up approximately 35% of employment in the electric lighting and other electrical equipment sector; production occupations comprise another 45% of jobs in this sector. Total employment in the East Bay is modest at 2,000 jobs, but growth over the last five years has been strong.

- *R&D and Manufacturing of Industrial Machinery*, particularly machinery used in the manufacture of semiconductor devices. The leading occupations of Brentwood’s workforce make up 30% of employment in the machinery sector; production occupations comprise another 45% of jobs in this sector. Industrial machinery is one of the fastest-growing advanced manufacturing sectors in the East Bay and represents a greater share of East Bay employment than the state overall.

Figure 2-2: Occupational Composition of Brentwood Workforce versus Compatible Industrial Sectors



Source: American Community Survey 5-Year Estimates (2014-2018) and May 2019 Occupational Employment Statistics by State and Industry. Note: for sectors that include more than one industry, hiring needs reflect a weighted average based on total East Bay private sector employment reported by the Quarterly Census of Employment and Wages.

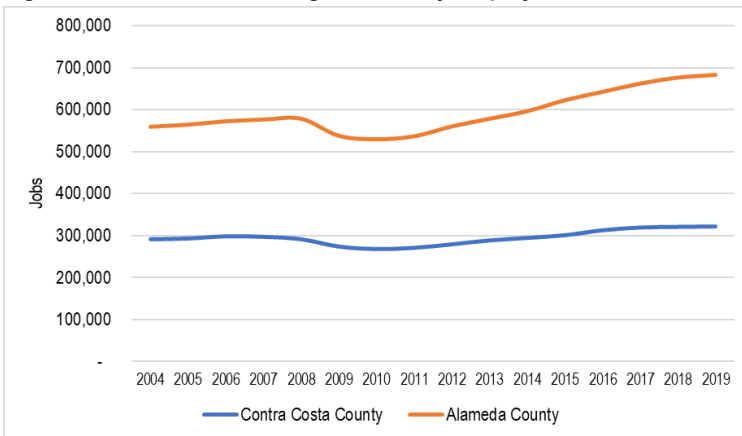
3.0 COMMERCIAL REAL ESTATE MARKET ASSESSMENT

3.1 Market Context

Industry Employment

Total private sector employment in the East Bay grew at an average annual rate of 2.6% from 2010 to 2019, as shown in Figure 3-1, adding approximately 208,000 private sector wage and salary jobs. Three-quarters of new jobs were added in Alameda County and the balance were added in Contra Costa County. While the rate of job growth in the City of Brentwood has in fact outpaced the rest of the East Bay over the past decade, the City’s employment base is concentrated in the construction, retail, and hospitality industries, which are not major generators of office demand.

Figure 3-1: Private Sector Wage and Salary Employment 2004-2019



Source: Quarterly Census of Employment and Wages

In early 2020, the coronavirus pandemic caused a sharp recession which resulted in the loss of approximately 174,000 private sector jobs in the East Bay from February to May 2020. The region has since recovered approximately 60,000 jobs, bringing the net loss of private sector jobs to 114,000, a decline of more than 10% since February. According to a national economic forecast by Deloitte, economic conditions are expected to improve in the second half of the year, but a full recovery might not occur for another two to three years, conditioned on progress controlling the virus and the timely development of an effective vaccine.

Office Market Trends

Brentwood’s office inventory represents 0.5% of the total office supply in the East Bay, which is less than the City’s share of regional employment. The health care industry is the primary driver of office demand in Brentwood, occupying more than half of the City’s total office space. The average direct asking rent for Class B office space in Brentwood is approximately 30% less than

the average of all Contra Costa County submarkets. Table 3-1 compares office real estate conditions in Brentwood, Alameda County, and Contra Costa County as of mid-2020. Since the start of the coronavirus pandemic, office occupancy in the East Bay has fallen by 1.1 million square feet (1%). Office landlords have so far resisted repricing direct lease rates, but this could change if availability continues to increase.

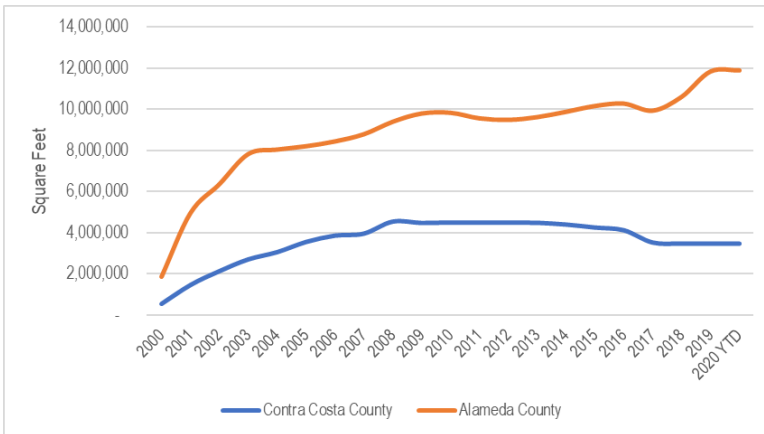
Table 3-1: Office Market Conditions (2020 YTD)

	Brentwood	Contra Costa County	Alameda County
Inventory	606,300	38,945,100	76,424,700
Total Vacancy%	4%	10%	9%
Total Available %	4%	14%	12%
Overall Gross Rent	\$1.50/sf	\$3.13/sf	\$3.67/sf
Class A Gross Rent	n/a	\$3.72/sf	\$4.39/sf
Class B Gross Rent	\$1.91/sf*	\$2.81/sf	\$3.22/sf

Source: Costar. * Reflects 2019 asking rent because current asking rent was not available.

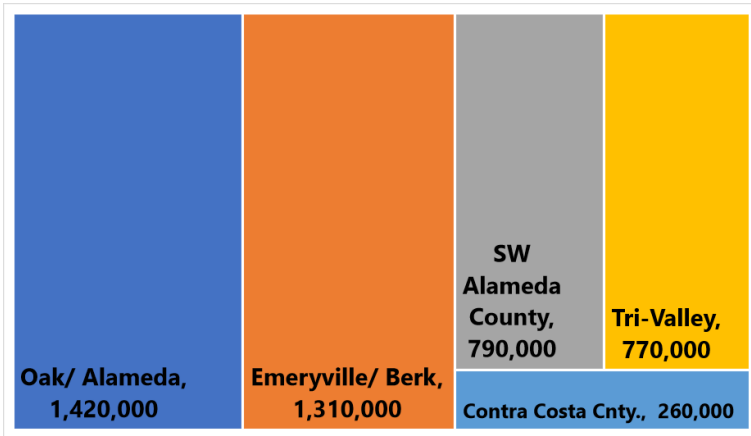
Since 2000, the East Bay office inventory has grown by more than 15 million square feet, as shown in Figure 3-2. Over the past decade, the office inventory in Alameda County has continued to increase, while the office supply in Contra Costa County has decreased from its 2010 level after accounting for the demolition of several older buildings. As shown in Figure 3-3, while most recent office development in the East Bay has occurred in urban infill locations, the delivery of nearly 800,000 square feet of office uses in the Tri-Valley cities of Dublin and Pleasanton demonstrates market support for suburban office projects with high-quality amenities similar to what is envisioned for the planning area.

Figure 3-2: Cumulative Net New East Bay Office Inventory 2000-2020 YTD



Source: Costar

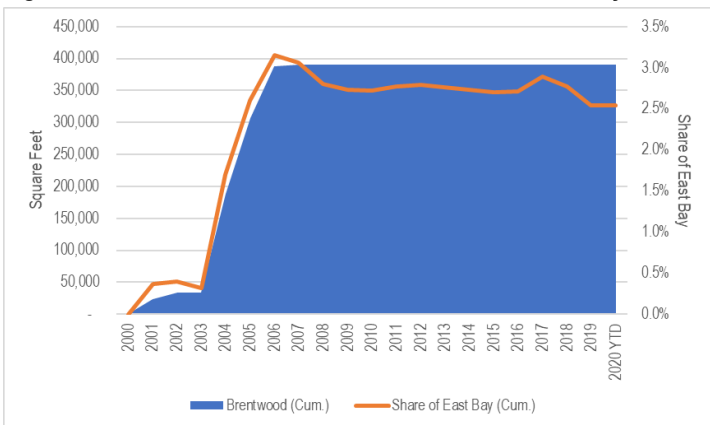
Figure 3-3: Gross Office Development in East Bay 2010-2020 YTD (Square Feet)



Source: Costar

From 2000 to 2007, eleven small office projects totaling approximately 390,000 square feet were completed in Brentwood, consisting primarily of medical offices and outpatient centers. No new office projects have been completed in Brentwood since then, although several small projects are now under construction or in planning. Figure 3-4 depicts cumulative office development in Brentwood since 2000, which now represents 2.5% of the net growth in the East Bay office inventory over the past two decades.

Figure 3-4: Cumulative Net New Brentwood Office Inventory 2000-2020 YTD



Source: Costar

Advanced Industrial/ R&D Market Trends

Class B flex properties with less than 20,000 square feet of contiguous floor area make up most of Brentwood’s industrial/ flex inventory. A primary source of industrial demand in Brentwood comes from businesses involved in the homebuilding sector such as specialty contractors, as well as suppliers, manufacturers, and installers of residential furniture, fixtures, and equipment. As shown in Table 3-2, asking rents of flex space in Brentwood fall between the Contra Costa County and Alameda County averages.

In general, the industrial real estate market has been less adversely impacted by the coronavirus pandemic than the office market. While year-to-date net absorption of East Bay flex space is negative, net absorption of East Bay industrial space remains positive since the start of 2020. It is possible that some of the industrial leasing activity includes conversions to warehouse and distribution space which has been in high demand during the pandemic as businesses place greater emphasis on supply chain resiliency.

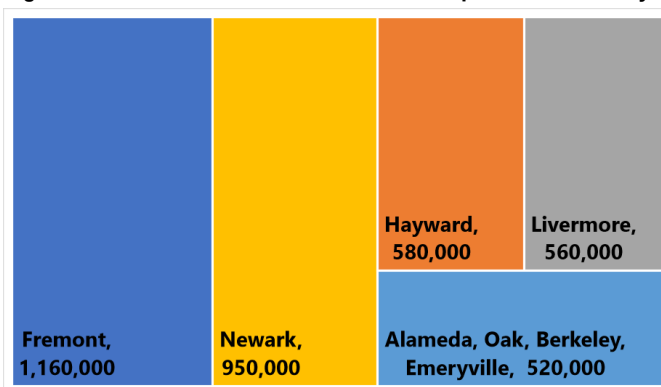
Table 3-2: Industrial/Flex Market Conditions (2020 YTD)

	Brentwood	Contra Costa County	Alameda County
Inventory	330,400	15,511,400	78,233,100
Total Vacancy%	3%	4%	6%
Total Available %	3%	7%	9%
NNN Rent Flex	\$1.47	\$1.42	\$1.59
NNN Rent Industrial	n/a	\$0.81	\$1.05

Source: Costar. * Reflects 2019 asking rent because current asking rent was not available.

Over the past decade, new industrial/ flex development in the East Bay has occurred exclusively in Alameda County. Development projects have targeted advanced industrial and research and development uses that can afford to pay higher rents needed to support the cost of new construction. As shown in Figure 3-5, new industrial/flex development has clustered in cities closest to Silicon Valley, such as Fremont and Newark, or near UC Berkeley, where a significant share of the local labor pool has a background in science, technology, engineering, and mathematical fields.

Figure 3-5: Advanced Industrial/R&D Development in East Bay 2010-2020 (Square Feet)



Source: Costar

3.2 Order-of-Magnitude Market Demand Estimate

Coronavirus Pandemic Impact on Market Demand

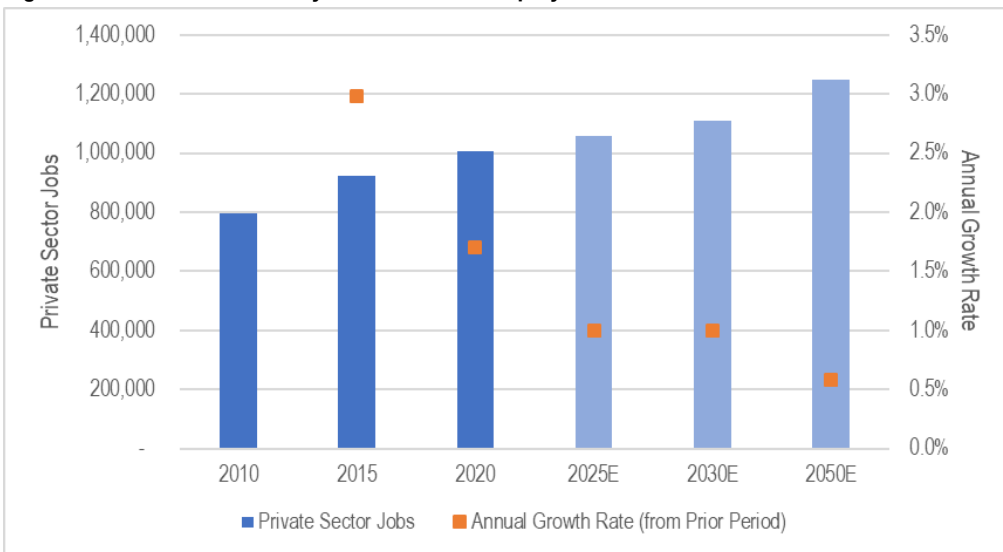
The coronavirus pandemic has had widespread impacts on society and business, including commercial real estate. Major Bay Area office tenants have paused or reassessed their leasing

plans. More office space in the East Bay is being vacated than occupied. Lenders have tightened underwriting criteria, making speculative office development unlikely in the near term. Many real estate professionals have expressed the view that the coronavirus pandemic could have long-lasting effects on the office market if adaptive measures become standard practice that endure beyond the pandemic. Expansion of remote work would decrease office demand, while reductions in employment density to allow greater physical distancing would do the opposite. End user preferences might shift toward product types and locations that are perceived to be more resilient to a future pandemic, such as lower density satellite offices close to where employees live, which would likely benefit Brentwood’s competitive position. While widely discussed, the long-term effects of the pandemic on office demand remain highly uncertain; order-of-magnitude market demand estimates provided in this report are subject to change as the long-term effects of the pandemic become better understood.

Regional Market Demand

Forecasts by the Association of Bay Area Governments (ABAG), Caltrans, and the California Employment Development Department (EDD) project that the East Bay will continue to add jobs but at a slower pace over the coming decades. Figure 3-6 presents estimated growth in private sector employment, using California EDD’s forecast for near-term job growth and the midpoint of ABAG and Caltrans forecasts for long-term job growth. The estimate assumes that as the local economy gradually recovers from the recession caused by the coronavirus pandemic, private sector employment will increase by 105,000 jobs over pre-pandemic levels by 2030.

Figure 3-6: Estimated East Bay Private Sector Employment 2020-2050



Source: Quarterly Census of Employment and Wages (historical data). Future years based on forecasts by California EDD, ABAG, and Caltrans. Note: 2020 employment reflects pre-pandemic level.

Estimated job growth over the next ten years would generate demand for roughly 7 million square feet of office and 3 million square feet of advanced industrial/ R&D uses across the East

Bay (Table 3-3). While the current pipeline of planned and proposed office projects exceeds the 10-year market demand estimate (see Appendix Table A-7), not all proposed projects will necessarily be built in the next ten years. It is also likely that developers will reassess their plans in light of the coronavirus pandemic and the perceived impacts on market demand. Consistent with recent development trends, infill sites in urban Alameda County represent most of the office and industrial development pipeline in the East Bay.

Table 3-3: Estimated East Bay Office and Advanced Industrial/R&D Demand

	2020-2030	2030-2050
East Bay Office Demand (sf)	7,000,000	10,000,000
East Bay Advanced Industrial Demand (sf)	3,000,000	4,000,000

Source: KMA order-of-magnitude estimate (figures from appendix tables rounded to nearest million)

Market Potential of Planning Area

The planning area has an opportunity to increase Brentwood’s share of East Bay office, industrial, and R&D demand, particularly from companies seeking to open satellite offices closer to where their employees live. As detailed in the site assessment prepared by the ELS team, the planning area presents many advantages that will help attract potential end users including: a large greenfield site available for build-to-suit development; public investment in backbone infrastructure; gigabit fiber internet service; good freeway access with potential for reverse commutes; future transit connectivity; proximity to housing at range of price points; and a vision for high-quality onsite amenities.

Table 3-4 provides an estimated range for the planning area’s potential share of East Bay office and advanced industrial demand. Over the next 10 years, the planning area has the potential to capture 150,000 to 400,000 square feet of office demand and up to 200,000 square feet of advanced industrial/ R&D demand. The lower end of the range reflects Brentwood’s historical market share. The upper end assumes a successful marketing effort to attract a broader industry base to Brentwood, with a focus on office and industrial /R&D users whose hiring needs are compatible with the skills and educational levels of the local labor force. As described in Section 2.0, potential office-using sectors include insurance, ambulatory healthcare, business support services, and enterprise software development. Marketing of industrial and flex development opportunities should target users engaged in manufacturing and research and development of medical equipment, electronic equipment, and industrial machinery.

Table 3-4: Order-of-Magnitude Market Potential of Planning Area

	2020-2030		2030-2050	
	Low	High	Low	High
Office (sf)	150,000	400,000	300,000	600,000
Advanced Industrial/R&D (sf)	100,000	200,000	150,000	250,000

Source: KMA order-of-magnitude estimate (figures from appendix tables rounded to nearest 50,000)

Table A-1
Assessment of Office-Based Industries
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

Industries	<u>2018</u> <u>Jobs¹</u>	<u>2013-18</u> <u>Growth %¹</u>	<u>Location</u> <u>Quotient²</u>	<u>Employment</u> <u>Compatibility³</u>
524 Insurance Carriers & Related Activities	16,190	46%	1.21	1.34
518 Data Processing & Related Services	5,948	847%	1.86	0.99
621 Ambulatory Health Care Services	67,260	16%	1.22	0.99
551 Management of Companies and Enterprises	25,471	-11%	1.53	1.18
511 Publishing (including Software)	7,324	67%	1.04	0.95
541 Professional and Technical Services	96,224	10%	1.14	0.89
522 Credit Intermediation & Related Activity	16,013	-12%	1.02	1.35
561 Administrative and Support Services	60,156	20%	0.85	0.88
523 Financial Investment & Related Activity	4,246	6%	0.69	1.32
517 Telecommunications	5,899	-38%	1.27	0.90
532 Rental and Leasing Services	4,009	-2%	0.94	1.12
519 Other Information Services	2,238	53%	0.30	1.09
425 Electronic Markets and Agents/Brokers	2,601	-46%	0.87	1.30
512 Motion Picture & Sound Recording Ind	3,604	9%	0.39	0.55
515 Broadcasting (except Internet)	1,456	-9%	0.50	0.63
531 Real Estate	13,760	16%	0.92	1.22
2361 Residential Building Construction	10,499	25%	1.35	1.00

¹ Private sector jobs in East Bay per Quarterly Census of Employment and Wages.

² Share of East Bay private sector employment versus share of California private sector employment. Quotient >1 indicates sector is more concentrated in region than state.

³ Table A-3

Table A-2
Assessment of Advanced Industrial/R&D Industries
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

<u>Industry</u>	<u>2018</u> <u>Jobs¹</u>	<u>2013-18</u> <u>Growth %¹</u>	<u>Location</u> <u>Quotient²</u>	<u>Employment</u> <u>Compatibility³</u>
3332 Industrial machinery mfg.	5,226	74%	3.82	0.81
3351 Electric lighting equipment mfg.	896	49%	1.72	0.93
3251 Basic chemical mfg.	773	85%	2.17	0.84
3259 Other chemical mfg.	636	46%	1.49	0.95
3391 Medical equipment mfg.	4,804	7%	1.32	0.87
3254 Pharmaceutical mfg.	4,235	40%	1.35	0.80
3359 Other electrical equip. mfg.	1,159	56%	1.09	0.81
5417 Scientific R&D	19,755	22%	2.08	0.72
3345 Electronic instrument mfg.	7,218	36%	1.23	0.79
3339 Other machinery mfg.	1,382	28%	1.32	0.81
3344 Semiconductor mfg.	6,664	-1%	1.14	0.76
3343 Audio and video equip. mfg.	413	-5%	0.99	0.91
3341 Computer mfg.	3,326	-3%	0.67	0.82
3399 Other misc. mfg.	1,220	-30%	0.57	0.88
3346 Magnetic and optical media mfg.	161	182%	0.51	0.82
3315 Foundries	946	-23%	2.47	0.76
3279 Other nonmetallic mineral mfg.	277	-2%	0.75	0.84
3342 Communications equip. mfg.	811	-55%	0.64	0.85
3333 Commercial machinery mfg.	615	-2%	0.78	0.81
3363 Motor vehicle parts mfg.	221	-24%	0.26	0.80

¹ Private sector jobs in East Bay per Quarterly Census of Employment and Wages.

² Share of East Bay private sector employment versus share of California private sector employment. Quotient >1 indicates sector is more concentrated in region than state.

³ Table A-4

Table A-3
Occupational Distribution of Office-Based Industries vs. Brentwood Workforce
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

Occupation	Brentwood Workforce	20-Minute drive	524 Insurance Carriers & Related Activities	518 ISPs, Search Portals, & Data Processing	621 Ambulatory Health Care Services	551 Management of Companies	511 Publishing Industries	541 Professional and Technical Services	522 Credit Intermediation	561 Administrative and Support Services	523 Financial Investment & Related Activity	517 Telecommunications	532 Rental and Leasing Services	519 Other Information Services	531 Real Estate	2361 Residential Building Construction	425 Electronic Markets and Agents/Brokers	512 Motion Picture & Sound Recording	515 Broadcasting (except Internet)
11-0000 Management	11%	9%	8%	15%	3%	22%	15%	14%	11%	4%	12%	5%	6%	16%	20%	11%	9%	4%	8%
13-0000 Business and financial operations	8%	5%	24%	18%	2%	23%	15%	15%	27%	5%	41%	9%	3%	15%	8%	6%	9%	5%	7%
15-0000 Computer and mathematical	4%	2%	5%	45%	1%	11%	33%	19%	6%	3%	4%	12%	1%	30%	1%	0%	4%	2%	7%
17-0000 Architecture and engineering	1%	1%	0%	1%	0%	3%	0%	10%	0%	1%	0%	4%	0%	0%	0%	1%	1%	0%	0%
19-0000 Life, physical, and social science	1%	1%	0%	0%	1%	1%	0%	5%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
21-0000 Community and social service	2%	2%	0%	0%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
23-0000 Legal	1%	1%	1%	1%	0%	1%	1%	7%	0%	0%	1%	0%	0%	1%	1%	0%	0%	0%	0%
25-0000 Educational instruction, and library	7%	4%	0%	0%	0%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
27-0000 Arts, design, entertainment	1%	1%	0%	2%	0%	3%	12%	4%	0%	1%	0%	1%	3%	7%	0%	0%	1%	52%	50%
29-0000 Healthcare practitioners and technical	7%	6%	1%	0%	38%	1%	0%	1%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%
31-0000 Healthcare support	3%	3%	0%	0%	24%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
33-0000 Protective service	4%	3%	0%	0%	0%	0%	0%	0%	0%	12%	0%	0%	0%	0%	1%	0%	0%	0%	0%
35-0000 Food preparation and serving related	5%	4%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	1%	0%	1%	0%	0%	6%	0%
37-0000 Building and grounds cleaning	3%	6%	0%	0%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	6%	1%	0%	0%	0%
39-0000 Personal care and service	4%	5%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	1%	0%	0%	8%	0%
41-0000 Sales and related	10%	10%	22%	7%	0%	5%	11%	4%	17%	5%	20%	15%	29%	17%	22%	3%	39%	3%	9%
43-0000 Office and administrative support	10%	14%	38%	10%	23%	22%	9%	15%	38%	16%	21%	13%	11%	14%	20%	12%	21%	9%	9%
45-0000 Farming, fishing, and forestry	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
47-0000 Construction and extraction	5%	8%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	1%	0%	1%	65%	0%	4%	0%
49-0000 Installation, maintenance, and repair	4%	4%	0%	0%	0%	1%	0%	1%	0%	3%	0%	39%	12%	0%	15%	0%	2%	0%	10%
51-0000 Production	4%	4%	0%	0%	0%	1%	1%	1%	0%	7%	0%	0%	1%	0%	0%	0%	2%	1%	0%
53-0000 Transportation and material moving	6%	6%	0%	0%	0%	2%	2%	1%	0%	16%	0%	1%	32%	0%	1%	1%	13%	6%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
<i>Compatibility Score- Brentwood</i>	1.00		1.34	0.99	0.99	1.18	0.95	0.89	1.35	0.88	1.32	0.90	1.12	1.09	1.22	1.00	1.30	0.55	0.63
<i>Compatibility Score- 20 Min Drive</i>	1.00	1.00	1.35	1.00	1.00	1.19	0.96	0.90	1.36	0.89	1.33	0.91	1.13	1.10	1.23	1.01	1.32	0.55	0.64

Source: Bureau of Labor Statistics and American Community Survey Five-Year Estimates (2014-2018)

¹ Workforce weighted by occupational distribution divided by actual workforce. A higher score indicates workforce needs are concentrated in leading occupations of Brentwood workers.

**Table A-4
Occupational Distribution of Advanced Industrial/ R&D Industries vs. Brentwood Workforce
The Innovation Center @ Brentwood
Brentwood, CA**

9/17/2020

Occupation	Brentwood Workforce	20-Minute Drive	3332 Industrial machinery mfg.	3351 Electric lighting equipment mfg.	3251 Basic chemical mfg.	3259 Other chemical mfg.	3391 Medical equipment mfg.	3254 Pharmaceutical mfg.	3359 Other electrical equip. mfg.	5417 Scientific R&D	3345 Electronic instrument mfg.	3339 Other machinery mfg.	3344 Semiconductor mfg.	3343 Audio and video equip. mfg.	3341 Computer mfg.	3399 Other misc. mfg.	3346 Magnetic and optical media mfg.	3315 Foundries	3279 Other nonmetallic mineral mfg.	3342 Communications equip. mfg.	3333 Commercial machinery mfg.	3369 Other transportation equip. mfg.	3363 Motor vehicle parts mfg.
11-0000 Management	11%	9%	9%	10%	9%	9%	11%	17%	11%	19%	12%	9%	12%	15%	10%	8%	8%	5%	13%	9%	9%	7%	7%
13-0000 Business and financial operations	8%	5%	6%	7%	4%	4%	8%	10%	5%	8%	10%	6%	7%	7%	13%	5%	8%	3%	8%	5%	5%	6%	4%
15-0000 Computer and mathematical	4%	2%	4%	1%	1%	1%	4%	4%	5%	17%	17%	4%	9%	7%	40%	2%	13%	0%	12%	3%	3%	2%	2%
17-0000 Architecture and engineering	1%	1%	12%	7%	4%	4%	9%	7%	15%	18%	22%	12%	23%	14%	13%	2%	14%	2%	19%	12%	12%	6%	8%
19-0000 Life, physical, and social science	1%	1%	1%	0%	4%	4%	1%	18%	0%	23%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
21-0000 Community and social service	2%	2%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
23-0000 Legal	1%	1%	0%	0%	0%	0%	0%	1%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
25-0000 Educational instruction, and library	7%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
27-0000 Arts, design, entertainment	1%	1%	1%	1%	0%	0%	1%	1%	0%	1%	0%	1%	0%	0%	2%	6%	4%	0%	1%	1%	1%	2%	1%
29-0000 Healthcare practitioners and technical	7%	6%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
31-0000 Healthcare support	3%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
33-0000 Protective service	4%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
35-0000 Food preparation and serving related	5%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
37-0000 Building and grounds cleaning	3%	6%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
39-0000 Personal care and service	4%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
41-0000 Sales and related	10%	10%	5%	7%	4%	4%	4%	2%	4%	1%	3%	5%	3%	5%	6%	6%	6%	0%	7%	4%	4%	5%	3%
43-0000 Office and administrative support	10%	14%	9%	17%	10%	10%	13%	7%	10%	6%	8%	9%	7%	13%	7%	14%	14%	10%	9%	10%	10%	13%	10%
45-0000 Farming, fishing, and forestry	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
47-0000 Construction and extraction	5%	8%	1%	0%	1%	1%	0%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
49-0000 Installation, maintenance, and repair	4%	4%	4%	1%	6%	6%	1%	4%	2%	1%	2%	4%	2%	1%	1%	3%	0%	3%	2%	4%	4%	0%	3%
51-0000 Production	4%	4%	45%	46%	45%	45%	40%	26%	44%	1%	23%	45%	34%	33%	7%	48%	34%	72%	27%	48%	48%	55%	56%
53-0000 Transportation and material moving	6%	6%	3%	3%	10%	10%	6%	3%	3%	0%	1%	3%	2%	5%	1%	6%	0%	5%	2%	3%	3%	5%	5%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Compatibility Score- Brentwood	1.00	0.99	0.81	0.93	0.84	0.84	0.87	0.80	0.81	0.72	0.79	0.81	0.76	0.91	0.82	0.88	0.82	0.76	0.85	0.81	0.81	0.85	0.80
Compatibility Score- 20 Minute Drive	0.93	0.92	0.75	0.86	0.78	0.78	0.81	0.74	0.76	0.67	0.73	0.75	0.71	0.85	0.76	0.82	0.77	0.71	0.79	0.75	0.75	0.79	0.74

Source: Bureau of Labor Statistics and American Community Survey Five-Year Estimates (2014-2018)

¹ Workforce weighted by occupational distribution divided by actual workforce. A higher score indicates workforce needs are concentrated in leading occupations of Brentwood workers.

Table A-5
Estimated Regional Office and Advanced Industrial Market Demand (Order of Magnitude)
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

		2020-2025	2025-2030	2030-2040	2040-2050	Cumulative
Employment Growth Rates						
Cal EDD		1.33%				
ABAG		0.78%	0.62%	0.56%	0.61%	0.62%
Caltrans		<u>0.58%</u>	<u>0.43%</u>	<u>0.37%</u>	<u>0.41%</u>	<u>0.43%</u>
<i>Assumed</i>		1.00%	1.00%	0.56%	0.61%	0.72%
		2020	2025	2030	2040	2050
<u>Private Sector Employment</u>						
Contra Costa County		321,833	336,604	352,129	370,663	391,721
Alameda County		683,489	720,000	758,372	804,184	856,233
Total		1,005,322	1,056,604	1,110,501	1,174,847	1,247,954
		2020-2025	2025-2030	2030-2040	2040-2050	Cumulative
<u>Private Sector Employment Growth</u>						
Contra Costa County		14,771	15,525	18,534	21,058	69,888
Alameda County		36,511	38,372	45,812	52,049	172,744
Total		51,282	53,897	64,346	73,107	242,632
<u>Regional Office Market Demand</u>						
Office-Based Employment Growth	33% jobs ¹	17,128	18,001	21,491	24,418	81,038
Office Square Feet	210 sf/emp ²	3,600,000	3,780,000	4,510,000	5,130,000	17,020,000
<i>Rounded to Nearest Million</i>			7,000,000		10,000,000	
<u>Regional Advanced Ind. Demand</u>						
Advanced Ind. Employment Growth	5% jobs ¹	2,564	2,695	3,217	3,655	12,131
Advanced Ind. Square Feet	600 sf/emp ²	1,540,000	1,620,000	1,930,000	2,190,000	7,280,000
<i>Rounded to Nearest Million</i>			3,000,000		4,000,000	

¹ Share of office/ industrial employment is estimated based on the occupational composition of local industries.

² KMA estimate includes an 8% vacancy factor.

Table A-6

**Estimated Planning Area Share of Office and Advanced Manufacturing Market Demand
The Innovation Center @ Brentwood
Brentwood, CA**

9/17/2020

		<i>Near-Term 2020-25</i>	<i>Mid-Term 2025-2030</i>	<i>Long Term 2030-2050</i>	<i>Cumulative</i>
Office Market Demand					
Regional Demand ¹		3,600,000	3,780,000	9,640,000	17,020,000
<u>City Share</u>					
Low	3.0%	110,000	110,000	290,000	510,000
High	6.0%	220,000	230,000	580,000	1,030,000
(less) Planned Supply ²		-60,000	0	0	0
<u>Net Project Share</u>					
Low		50,000	110,000	290,000	510,000
High		160,000	230,000	580,000	1,030,000
<i>Rounded to Nearest 50,000</i>					
Low			150,000	300,000	
High			400,000	600,000	
Advanced Industrial Market Demand					
Regional Demand ¹		1,540,000	1,620,000	4,120,000	7,280,000
<u>City Share</u>					
Low	3.0%	50,000	50,000	130,000	230,000
High	6.0%	90,000	100,000	250,000	440,000
(less) Planned Supply		0	0	0	0
<u>Net Project Share</u>					
Low		50,000	50,000	130,000	230,000
High		90,000	100,000	250,000	440,000
<i>Rounded to Nearest 50,000</i>					
Low			100,000	150,000	
High			200,000	250,000	

¹ Table A-5² Table A-7; assumes 75% of planned supply is built.

Table A-7
East Bay Office Development Pipeline
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

Property	City	Office	
		RBA	Notes
<u>Brentwood</u>			
Walnut Commercial Bldg C	Brentwood	10,000	Proposed
Walnut Commercial Bldg A	Brentwood	13,100	UC
Zovich Office/Warehouse	Brentwood	6,600	UC
200 Oak Street	Brentwood	16,834	Approved
Rodda Electric Building	Brentwood	18,164	Approved
Tri City Plaza D	Brentwood	10,815	UC
Western Dental Building	Brentwood	4,480	Approved
		<u>80,000</u>	
<u>Other Contra Costa County</u>			
Acorn Business Park	Antioch	11,088	
Deer Valley Business Park	Antioch	35,878	
1910 N Broadway	Walnut Creek	38,000	
Platform 2990	Walnut Creek	310,000	
North Concord BART	Concord	800,000	
The Offices at Hilltop	Richmond	1,000,000	For sale; life sciences
		<u>2,195,000</u>	
<u>Alameda County</u>			
The Zeiss Innovation Center, Ph 2	Dublin	224,440	
Dublin Blvd	Dublin	45,000	
Dublin Gateway Medical Center	Dublin	168,000	
Sobrato Warm Springs (R&D)	Fremont	568,440	
The Union 1.2 @ BART	Union City	1,200,000	
Creekside Plaza Building D	San Leandro	77,757	
20630-20642 John Dr	Castro Valley	25,000	
Beacon Tower	Oakland	871,755	
465 25th St	Oakland	99,788	
2715 Adeline St	Oakland	122,600	
2619 Magnolia St	Oakland	92,400	
5601 Oakport St	Oakland	160,000	
1261 Harrison St	Oakland	132,270	
Telegraph Tower	Oakland	875,000	
Regatta Commons BTS	Alameda	96,000	
Onni Christie Mixed Use Project	Emeryville	258,000	
1450 Sherwin St	Emeryville	79,600	
Emeryville Center for Innovation	Emeryville	500,000	
		<u>5,596,100</u>	
Total Office Pipeline, Excluding Long Term		7,871,009	
<u>Long Term</u>			
Concord Naval Weapons Station			+/-3,000,000 seeking new developer

Source: Costar

Table A-8
East Bay Advanced Industrial/R&D Development Pipeline
The Innovation Center @ Brentwood
Brentwood, CA

9/17/2020

<u>Property</u>	<u>City</u>	<u>RBA</u>	<u>Notes</u>
Sobrato Warm Springs Station	Fremont	108,560	
Ardenwood Blvd @ Paseo Padre Pkwy	Fremont	500,000	
Pacific Commons So, Bldg 5	Fremont	38,427	
25800 Clawiter Rd	Hayward	232,192	Bus manufacturer
2100 Ferry Pt	Alameda	355,452	
1410 Harbor Bay Pky	Alameda	105,000	Life sciences
2350 Saratoga St	Alameda	265,000	
6200 Shellmound St	Emeryville	206,010	Life sciences
600 Addison St, A	Berkeley	250,000	R&D
600 Addison St, B	Berkeley	<u>250,000</u>	R&D
Total		2,310,641	

Source: Costar