

East Bay Economic **OUTLOOK** **2020**





Sunol wildflowers. Photo by: Ramu Ramaswamy. Courtesy of East Bay Regional Park District.

ABOUT THIS REPORT

The **East Bay Economic Development Alliance** (East Bay EDA) is a cross-sector partnership with 30 years of supporting strategic economic development in Alameda and Contra Costa counties. East Bay EDA convenes diverse stakeholders including business, government and community leaders who recognize the extraordinary value of our region as a global leader and an unrivaled place to live, work and do business. We provide valuable information about trends impacting the East Bay economy through original research and reports, as well as promote the assets of the East Bay through educational business forums, comprehensive networking events, access to business resources and regional marketing.

The 2020 East Bay Economic Outlook Report is a summary of key economic indicators for the East Bay as it compares to the Bay Area region and the state of California. Due to the timing of this report, most of the data presented preceded the COVID-19 pandemic. Nevertheless, the report is intended to provide business leaders with information and perspectives on the health of the East Bay economy. The situation continues to evolve, and some of the perspectives in this report may fall rapidly out of date. As the region looks ahead toward economic recovery, this data will be critical to inform current and prospective policy responses. East Bay EDA remains committed to collaborating with our business and civic leaders about effective and resilient approaches that will help the East Bay economy emerge stronger than ever.

ACKNOWLEDGEMENTS

Report Sponsors

Bank of America
Alameda County Workforce Development Board
Workforce Development Board of Contra Costa County

East Bay EDA

Stephen Baiter, *Executive Director*
Robert Sakai, *Technology & Trade Director*
Jackie Keliiaa, *Regional Economic Development Director*
Carline Au, *Senior Economic Development Analyst*
Xian Ballesteros, *Senior Economic Development Analyst*
Maribel Purificacion, *Administrative Associate*

Beacon Economics

Christopher Thornberg, Ph.D., *Founding Partner*
Taner Osman, Ph.D., *Research Manager*
Mazen Bou Zeineddine, *Practice Lead*

Special Acknowledgements

Bay East Association of Realtors | California Employment Development Department
CBRE | Cushman & Wakefield | Port of Oakland | TRI Commercial

Reproduction of this document or any portion therein is prohibited without the express written permission of East Bay Economic Development Alliance and Beacon Economics LLC.

Copyright ©2020 by the East Bay Economic Development Alliance.

To learn more about East Bay EDA, please visit: www.EastBayEDA.org



East Bay Economic Development Alliance
1221 Oak Street, Suite 555, Oakland CA 94612
(510) 272-6746 | info@EastBayEDA.org

EAST BAY ECONOMIC OUTLOOK 2020

CONTENTS

EXECUTIVE SUMMARY	2
EAST BAY BUSINESS ACTIVITY	4
Overview 4	Establishment Growth 9
COVID-19 and Business Activity 5	Air Travel and Accommodation 9
Taxable Sales 6	International Trade 10
GRP Performance 8	Interest Rates and Inflation 12
EAST BAY VENTURE CAPITAL	13
Overview 13	Multiple on Invested Capital 15
Venture Capital Investment 14	Regional Investment Trends 16
EAST BAY COMMERCIAL REAL ESTATE	18
Overview 18	Industrial 22
Office 19	Hospitality 24
Retail 21	
EAST BAY EMPLOYMENT	25
Overview 25	Average Weekly Hours and Wages 28
Industry Employment 26	Employment by Occupation 30
Unemployment Rate and Labor Force 27	Commuting Patterns 31
EAST BAY DEMOGRAPHICS	33
Overview 33	Net Migration 35
Population Growth 34	Commuting 40
EAST BAY RESIDENTIAL REAL ESTATE	41
Overview 41	Home Supply and Sales 44
Single-Family Home Prices 42	Apartment Rents and Vacancies 44
Condominium Sales Prices 43	Residential Permitting 46
Housing Affordability 43	Housing Bills 47



EXECUTIVE SUMMARY

IN MARCH 2020, the rapid spread of the novel coronavirus (COVID-19) forced large swaths of the nation to issue stay-at-home orders for all but essential businesses. The rapid slowdown in economic activity has been profound. Unfortunately, such efforts started late, and it is difficult to estimate just how long these public health orders will have to remain in place before the virus is brought under control. The immediate economic consequences of these actions are clear—a sharp decline in consumer and business spending. The economic contraction at the tail end of the first quarter of the year is likely to have been more than sufficient to wipe out the 2.5% growth path the economy had been on. There is little doubt that the second quarter will see a large downturn in economic growth.

We are finally starting to see the effects of COVID-19 appear in the national economic data. In most cases, the news is as bad as many had feared. New claims for unemployment insurance, retail sales and measures of manufacturing activity have all posted their worst performances on record, while new housing starts have taken a nose dive. The US economy is in a recession, although this will not be officially announced for several months. Very few regions are immune to a national recession, and there's no reason to believe that the East Bay will be any different.

Nonetheless, government public health mandates have caused massive economic disruptions cutting off millions of workers and businesses from their primary source of income. Their impacts will show up through financial markets if loans start to be unpaid, and in supply chains if the current set of job losses and business closures start to cause further downstream effects. The immediate revenue losses will also severely impact the budgets of state and local governments which rely heavily on sales and use tax revenue to fund their services. The extent of the damage will largely depend on the following key issues:

- How long it takes to get the virus under control and the mandates substantially lifted
- How long it takes the economy to get back up and running after the shutdown ends
- How healthy the economy truly was prior to the pandemic
- The extent to which government relief actions can continue to safeguard individuals and businesses

However, there is more reason to be optimistic than some might believe. Some major forecasting agencies see a return to growth in the third quarter of this year, and many anticipate the economy returning to trend at some point in 2021—although precisely when differs by organization. For the East Bay, questions around the COVID-19 pandemic revolve around how quickly shuttered 'non-essential' businesses will be able to re-open; when consumers will feel secure enough to resume spending; and how much their spending patterns change.

Undoubtedly, many households and small businesses will have immediate financial distress to endure, but aggressive intervention at the federal, state and local levels will help bridge the wide chasm between the pre-virus and post-virus economy.

Clearly there are a lot of unknowns, but we do know that the East Bay's economy entered the current crisis in healthy shape. Due to the timing of this report, most of the data presented preceded the COVID-19 pandemic. Nevertheless, the report is intended to provide business leaders and policymakers with information and perspectives on the health of the East Bay economy. The situation continues to evolve, and some of the perspectives in this report may fall rapidly out of date. As the region prepares for economic recovery, it will be important to use economic data to inform policy responses going forward.

BUSINESS ACTIVITY

- The East Bay received \$52.9 billion in taxable sales in 2019. This represents a 0.8% increase year-over, a significant slowdown compared to the 7.3% growth between 2017 and 2018. Sales tax revenue is expected to fall precipitously due to the coronavirus.
- Trends in trade remained healthy throughout 2019, with year-to-date exports as of November 2019 increasing 2.1% and imports growing 4.2% year-over-year.
- Travel activity through Oakland International Airport (OAK) reached 13.4 million passengers in 2019, the second highest level in a decade. As of April 2020, passenger traffic has declined 95% due to the global pandemic.

VENTURE CAPITAL

- 2019 saw the second highest amount of venture capital raised in the region for any year on record.
- The median level of VC investment in East Bay companies for biotechnology, medical devices, clean tech and software was higher than the levels raised in all but three states.
- In 2019, 37% of total venture capital activity was in five categories. Financial Software, Food Products and Energy Storage had the largest shares of investment funds at 9% each, followed by Business/Productivity Software at 7% and Biotechnology at 5%.

COMMERCIAL REAL ESTATE

- In 2019, the East Bay's \$693 million in commercial permit valuation for new construction set a new high, rising 12.7% above the previous peak during the 2000-2001 dot-com boom.
- The East Bay office market continued to attract firms across several industries, including the life sciences, healthcare, and financial sectors.
- A surge in demand from direct-to-consumer and logistics companies fueled robust construction and new supply continued to hit the market, much of which was pre-leased. Total net absorption in 2019 was roughly 6 million square feet. Due to the coronavirus pandemic, leasing activity may decline but properties with an e-commerce focus are better positioned than ones that rely on manufacturing and trade with global markets.

EMPLOYMENT

- The East Bay's unemployment rate was 3.9% in March 2020, above the year-ago estimate of 3.2%. This compares with an unadjusted unemployment rate of 5.6% for California and 4.5% for the nation during the same period.¹
- East Bay's employment growth has slowed considerably compared to previous years, increasing by only 0.2% between March 2019 to March 2020, compared to the 1.5% growth the year prior.
- WARN Act filings for the months of March and April revealed mass pandemic-related layoffs, totaling over 25,560 jobs in the East Bay. This represents nearly 30% of job cuts in the nine-county Bay Area.

- While job losses are mounting in some sectors, demand for healthcare workers will continue to rise. Industry employment projections published in 2019 from the California Employment Department forecasts healthcare to expand by 14%, or 24,382 workers by 2026 in the East Bay.

DEMOGRAPHICS

- The East Bay's population increased by 0.6% from 2018 to 2019, slowing from the previous year's growth of 0.9%. Between 2018 and 2019, Alameda County's population grew by 0.7% while Contra Costa's increased by 0.5%.
- The East Bay's ethnic and racial composition in 2018 was 35.9% non-Hispanic White, 25.0% Asian, 23.8% Hispanic, 9.5% Black, 4.6% two or more races, 0.7% Native Hawaiian and Other Pacific Islander, 0.3% Native American and 0.3% other race.
- In 2019, total net migration to the East Bay was 4,653, a decrease from 6,700 in 2018 and 8,000 in 2017. Net migration continued to decline for the fifth consecutive year.

RESIDENTIAL REAL ESTATE

- New listings and pending sales remain sluggish compared to pre-pandemic levels, and any recent upticks have been very modest. Overall, home prices have remained relatively stable despite very low inventory. According to the California Association of Realtors, the outlook for closed sales remains depressed through June.
- According to third quarter 2019 data, the median single-family home price in Alameda County was \$874,500 and \$636,000 in Contra Costa County, well above the statewide figure of \$500,000. Effective rent has increased about 12% in the East Bay since 2016 with an average year-over-year price growth of 3.8%.

While extreme economic disruption will take place in the first half the year, there are too many unknowns surrounding the extent to which the novel coronavirus can be contained to make definitive judgments about the extent of the economic collapse or the subsequent recovery. For now, there is some reassurance that the fundamentals of the economy entering the crisis were sound in the East Bay, and that federal and state governments are taking aggressive relief actions to mitigate the economic damage to individuals and businesses.

¹ CA EDD's March survey reference period covers the week that contains the 12th day of the month, which predated the shelter-in-place orders.



BART train rides over Pringle Avenue in Walnut Creek. Source: Courtesy of City of Walnut Creek.

EAST BAY BUSINESS ACTIVITY



OVERVIEW

THE ECONOMIC IMPACTS associated with COVID-19 are still being tallied and it is challenging to predict the depth and breadth of the negative consequences the economy will suffer. The months ahead will probably be quite volatile and dynamic as

restrictions get lifted. Typically, the East Bay's business activity is measured in four primary ways: gross regional product (GRP)¹, taxable sales, trade activity and airport traffic.

International trade declines due to coronavirus.

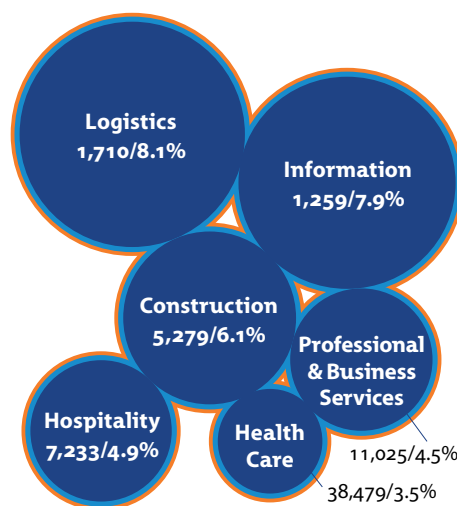
As of March 2020, overall import and export volume was down 11% compared to the prior year. Imports were down 10.3% and exports were down 5%.

Leisure, hospitality, retail, and manufacturing most impacted by shelter-in-place.

These sectors comprise about 13% of GRP in Alameda County and 9% in Contra Costa County.

Fastest Establishment Growth, 2018–2019

(Establishments/1-Year % Growth)



\$52.9 billion in taxable sales

This represents a 0.8% increase over 2019, a significant slowdown compared to the 7.3% growth between 2018 and 2019.

KEY FINDINGS:

- Between 2018 and 2019, the East Bay's taxable sales increased by 0.8%, with Contra Costa County growing by 2.3% while Alameda County growth was flat at 0%.
- GRP in Alameda and Contra Costa counties increased 3.9% and 2.6% respectively year over year in 2018.
- Trends in trade remained healthy throughout 2019, with year-to-date exports as of November 2019 increasing 2.1% and imports growing 4.2% in year-over-year terms. However, the Port of Oakland reported a total volume decline of 11% in March compared to the previous year, due to global efforts to stop the spread of COVID-19.
- Travel activity through Oakland International Airport (OAK) reached 13.4 million passengers in 2019—declining by 1.5% from the previous year. As of April 2020, passenger traffic has declined 95 percent, a ubiquitous result of the COVID-19 pandemic.
- Between the first half of 2018 and the first half of 2019 (year-to-date Q1-Q2) the number of establishments in the East Bay increased by 3.1% to 194,430.

COVID-19 AND BUSINESS ACTIVITY

Beyond the public health implications, the outbreak of COVID-19 will have an impact on the global and local economies. During March 2020, many states and local governments took action to restrict the movement of people, including closing non-takeout restaurants, bars, concerts and other venues. Schools and universities across the country had moved online. Social distancing and remote work had become common in most metropolitan areas throughout the United States. Air travel took a severe hit, with United Airlines announcing that March revenues are likely to be \$1.5 billion lower in 2020 compared to 2019, and capacity was expected to be cut by 50%².

When assessing the overall economic implications of the COVID-19 outbreak, it is important to differentiate between the short-term and long-term impacts. In the short-term, leisure and hospitality, and retail are likely to be the most affected industries, as many restaurants and shops were closed to slow the spread of the outbreak. More than



Red Bay Coffee Box on Broadway. Source: Courtesy of UrbanBloc.

4.1 million California workers applied for unemployment benefits during March and April 2020. Spending on household goods including groceries and food and drugs increased as consumers stocked up in panic, not knowing how long they would be required to shelter-in-place.

From a long-term perspective, the impact will depend on the magnitude and the length of the outbreak. At the time of this writing, there are several projections as to when the virus is expected to reach its “peak”—i.e., the date which marks the start of a decline from the highest number of cases per day. According to a report by the Imperial College of London, most simulations (depending on the policy response to contain the spread) indicate the peak will be reached between May or June of 2020. This would indicate significant business closures for roughly three months. If this is the case, then a contraction in US GDP for the second quarter of 2020 is likely, followed by an uptick in spending towards the second half of the year. However, if the transmission rate continues well into the summer, then the negative economic effects of containment policies will continue beyond the second quarter of the year.

The Fed has taken action to prevent a major economic downturn, including reducing interest rates to zero and introducing unlimited bond purchases³. Congress has

¹ Gross regional product is a monetary measure of the market value of all final goods and services produced in a region.

² Josephs, Leslie. “Coronavirus Forces Airlines to Consider a Once Unthinkable Possibility - Halting US Flights.” CNBC, March 16, 2020. <https://www.cnbc.com/2020/03/16/coronavirus-makes-airlines-consider-chances-for-a-halt-to-us-flights.html>.

³ Long, Heather. “Fed Announces Unlimited Bond Purchases in Unprecedented Move to Help U.S. Economy Weather Coronavirus Meltdown.” The Washington Post. WP Company, March 23, 2020. <https://www.washingtonpost.com/business/2020/03/23/fed-unlimited-credit-coronavirus/>.

EAST BAY BUSINESS ACTIVITY

authorized several trillions of dollars in fiscal stimulus, including direct payments to individuals earning less than \$99,000 per year, forgivable loans to businesses retaining employees and expanded SBA loans among many other measures. These actions have been taken to mitigate the damage to individuals and businesses and to preserve as much capacity as possible to recover.

The amount of damage to the East Bay economy will depend on how quickly the virus can be contained and controlled. For the East Bay, questions around the COVID-19 pandemic revolve around how quickly shuttered ‘non-essential’ businesses will be able to re-open; when consumers will feel secure enough to resume spending; and how much their spending patterns change. Activity at the ports and (especially) airports will see a big drop through at least the spring months due to tightening regulations and containment policy. When business resumes there will be careful evaluation of global supply chains and previous international markets may have diminished.

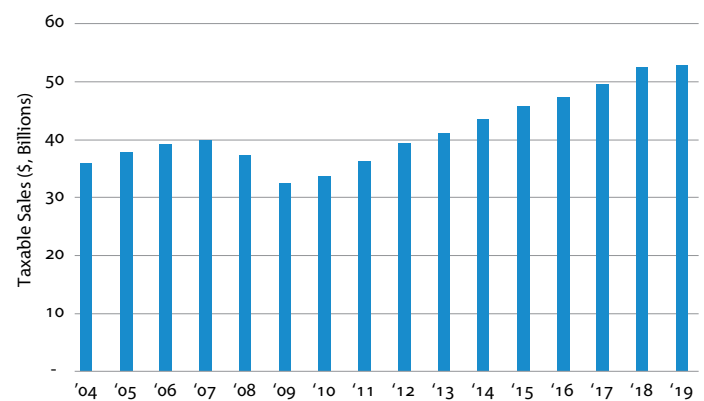
TAXABLE SALES

Taxable sales measures local business activity by gauging the level of sales across the region’s retailers, providing a read on the health of local consumption. Throughout 2019, the East Bay’s business activity expanded moderately, with Contra Costa County driving total taxable sales growth. In 2019, taxable sales in the East Bay climbed to \$52.9 billion, with \$35.0 billion in Alameda and \$17.9 billion in Contra Costa. Year-over-year taxable sales growth for the East Bay was 0.8% between 2018 and 2019. Taxable sales in the East Bay during 2019 were the highest on record for the region.

Compared with 2018, taxable sales growth slowed considerably in Alameda County during 2019. Year-over-year growth in 2019 was flat at 0%—far lower than the 7.0% growth in 2018. This was largely due to a decline in taxable sales in the City of Fremont that followed a significant spike in 2018 resulting from Tesla’s Model 3 release.

Contra Costa County’s year-over-year growth slowed, but at a less significant pace. Between 2018 and 2019, taxable sales increased by 2.3%, a slight slowdown from the previous year’s 4.6%. Overall, the East Bay’s taxable sales growth of 0.8% fell short of some neighboring regions, including San Mateo County (4.2%) and Santa Clara County (3.6%) as well as the State of California (3.5%). But the East Bay far outpaced San Francisco County, where year-over-year growth fell 10.9% between 2018 and 2019.

Figure 1.1: East Bay Taxable Sales
2004 to 2019



Source: CDTFA; Analysis by Beacon Economics

At the local level, taxable sales in several East Bay cities grew considerably throughout 2019 as seen in Figure 1.2. The largest year-over-year growth was 12.4% in Hercules, followed by Hayward (10.6%), San Ramon (10.0%) and Antioch (7.7%). Fremont’s taxable sales fell by 23.0% between 2018 and 2019. Despite the large year-over-year decline in Fremont, in reality, the city’s 2019 taxable sales were the second highest on record since 2000. Between 2017 and 2019, Fremont’s taxable sales modestly increased by 1.1%, meaning that 2018’s growth was due to extraordinary circumstances, including increased auto sales and the effects of federal tax cuts resonating through local economies. Other cities with notable declines in year-over-year growth were Piedmont (-3.1%), Richmond (-10.8%), Martinez (-8.1%) and Moraga (-6.3%). Small cities tend to experience greater volatility in taxable sales because their revenues are smaller and are more susceptible to one-off “shocks.” A single car dealership or business headquarters opening or closing in a small city can dramatically change taxable sales in a given year.

Figure 1.2: East Bay Taxable Sales by City

Alameda County		
City	2019 Taxable Sales (\$, Millions)	1-Year % Growth
Hayward	3,325	10.6
San Leandro	2,801	5.6
Alameda	988	4.9
Albany	244	4.3
Unincorporated Areas	978	4.1
Livermore	2,973	2.1
Emeryville	802	2.0
Pleasanton	1,985	0.5
Dublin	1,989	0.4
Berkeley	1,614	0.2
Union City	922	-1.0
Oakland	4,863	-1.2
Newark	1,112	-2.5
Piedmont	16	-3.1
Fremont	4,692	-23.0

Contra Costa County		
City	2019 Taxable Sales (\$, Millions)	1-Year % Growth
Hercules	226	12.4
San Ramon	936	10
Antioch	1,320	7.7
Pleasant Hill	795	7.4
Unincorporated Areas	1,095	5.9
Clayton	41	4.6
San Pablo	211	2.6
El Cerrito	264	-0.3
Danville	488	-0.7
Concord	3,109	-1.5
Walnut Creek	2,250	-1.8
Pittsburg	785	-2.1
Pinole	325	-3.9
Oakley	162	-4.1
Brentwood	731	-4.6
Lafayette	250	-4.9
Orinda	86	-5.0
Moraga	92	-6.3
Martinez	387	-8.1
Richmond	1,400	-10.8

Source: CDTFA; Analysis by Beacon Economics



Diners at Todos Santos Plaza in Downtown Concord.

Source: Courtesy of City of Concord.

The 1% city portion of the sales tax levied on purchases reached \$396.9 million in 2019, the highest level of sales tax receipts of any year other than 2018. Restaurants and Hotels, and Building and Construction were the primary drivers. It is important to note that 2018 was remarkable for the effects of the federal tax cuts, which drove up consumer spending temporarily, and for Tesla's increased sales. As a result, the cities' portion of East Bay sales tax receipts contracted by 0.5% in 2019 compared to 2018, despite recording one of the highest sales tax receipts figures for the region of any year.

As noted, a slowdown in Auto and Transportation receipts was a big reason for the total decline in the East Bay's sales tax activity, which experienced a 11.5% drop over 2019 compared to 2018. This was not just due to Tesla. Vehicle sales appeared to be falling not only in the East Bay but in most of California. New light vehicle registration declined 6.2% through September 2019 for the San Francisco Bay Area, with cars and light trucks down 8.8% and 4%, respectively. Statewide, vehicle registrations overall decreased by 5.4%, with cars down 10.2%⁴.

The uptick in earnings for East Bay workers increased leisure spending, reflected in the 2% increase in year-over-year growth for Restaurants and Hotels. Meanwhile, General Consumer Goods experienced a 2.6% decrease, as consumer preferences changed and brick and mortar shopping continued to decline. The Building and Construction category rose only slightly at 0.7% in the same

⁴ California Auto Outlook, Volume 15, Number 4. November 2019. California New Car Dealers Association. <https://www.cncda.org/wp-content/uploads/Cal-Covering-3Q-19.pdf>

EAST BAY BUSINESS ACTIVITY



Peet's Coffee at the Village in San Leandro.

Source: Courtesy of City of San Leandro.

period despite many permitted projects remaining to be built.

Amid the financial turmoil brought on by the COVID-19 crisis, the State of California announced a “one year reprieve” on the payment of sales and use taxes for certain businesses. Needless to say, the immediate revenue losses will severely impact the budgets of cities, counties and special districts which rely heavily on sales and use tax revenue to fund their services.

Figure 1.3: East Bay Sales Tax Receipts by Category

Category	2019	1-Year % Growth
Restaurants and Hotels	60.3	2.0
Building and Construction	49.6	0.7
Food and Drugs	27.4	-0.2
Business and Industry	80.1	-0.8
General Consumer Goods	93.8	-2.6
Fuel and Service Stations	39.9	-5.5
Autos and Transportation	89.8	-11.5
Total	535.4	-0.5

Source: HdL Cos.; Analysis by Beacon Economics

GRP PERFORMANCE

In 2018, the East Bay's year-over-year gross regional product (GRP) growth topped 3.5%, with Alameda County and Contra Costa County increasing by 3.9% and 2.6%,

respectively. The East Bay's growth fell slightly behind California's GRP growth of 4.3% from 2017 to 2018.

There was notable output growth in certain industries. In Alameda County, Information had the largest absolute and percentage growth of any industry, with an increase of \$1.5 billion and growth of 11.6%.

In Contra Costa County, Professional and Business Services saw the largest percentage growth in output, growing more than \$5 billion from 2017 to 2018. Contra Costa County's largest percentage growth was in Mining, Quarrying, and Oil & Gas Extraction (Mining/Resources) - with a substantial 230% increase. However, it is important to note that Mining/Resources represents less than 0.3% of total GRP in Contra Costa County. Small industries tend to have more volatile growth resulting from minor changes in overall economic activity, such as a significant change in activity at a single dominant business.

Figure 1.4: Alameda County Real GRP and % Growth by Industry

Industry	2018 GRP (\$, Thousands)	1-Year % Growth
Information	12,609,503	11.6
Construction	5,250,794	6.6
Utilities	410,502	6.2
Professional and business services	19,994,409	5.9
Retail trade	6,708,421	5.3
Arts, entertainment, recreation, accommodation, and food services	4,528,556	4.9
Other services (except government and government enterprises)	2,280,676	4.5
Educational services, health care, and social assistance	10,257,592	3.3
Wholesale trade	8,822,311	3.0
Transportation and warehousing	3,516,677	2.7
Manufacturing	16,596,929	2.4
Finance, insurance, real estate, rental, and leasing	21,941,039	1.0
Agriculture, forestry, fishing and hunting	152,855	-5.2
Mining, quarrying, and oil and gas extraction	112,209	-36.3
Private Industries Total	130,701,879	3.9

Source: BEA; Analysis by Beacon Economics

Figure 1.5: Contra Costa County Real GRP and % Growth by Industry

Industry	2018 GRP (\$, Thousands)	1-Year % Growth
Mining, quarrying, and oil and gas extraction	214,220	230.0
Utilities	2,239,447	10.0
Professional and business services	8,827,835	5.3
Other services (except government and government enterprises)	1,333,011	5.2
Retail trade	3,495,603	4.4
Information	4,775,245	4.2
Wholesale trade	2,801,836	3.2
Educational services, health care, and social assistance	6,636,799	3.2
Manufacturing	19,472,126	2.3
Arts, entertainment, recreation, accommodation, and food services	1,956,704	2.1
Finance, insurance, real estate, rental, and leasing	16,316,355	0.9
Construction	2,999,967	-0.8
Private Industries Total	72,284,027	2.7

Source: BEA; Analysis by Beacon Economics

ESTABLISHMENT GROWTH

During the first two quarters of 2019, the East Bay saw a net increase of roughly 2,900 business establishments across all industries compared to 2018. As seen in Figure 1.6, Logistics had the largest percentage growth in establishments—with an increase of 8.1% between the first half of 2018 and the first half of 2019. Health Care had the largest growth in absolute terms, with 1,284 establishments added during this period—or a growth of 3.5%. Professional & Business Services increased by 4.5%, adding roughly 476 establishments. Square is one of the more noteworthy new establishments in the region, which began moving its employees into newly leased space in Oakland's Uptown.

Figure 1.6: Establishments Added by Industry

East Bay

Industry	2019* Establishment Count	1-Year % Growth	1-Year Absolute Change
Health Care	38,479	3.5	1,284
Professional & Business	11,025	4.5	476
Hospitality	7,233	4.9	336
Construction & Mining	5,729	6.1	329
Finance	6,891	2.6	178
Admin Support	3,434	4.8	157
Logistics	1,710	8.1	128
Information	1,259	7.9	93
Education	2,365	3.6	82
Manufacturing	2,763	1.7	47
Retail	6,468	0.6	39
Agriculture	192	4.3	8
Wholesale Trade	3,352	-0.1	-5
Other Services	7,899	-3.1	-251
Total	98,795	3.0	2,898

*Year-to-date Q1-Q2

Source: Quarterly Census of Employment and Wages; Analysis by Beacon Economics

AIR TRAVEL AND ACCOMMODATION

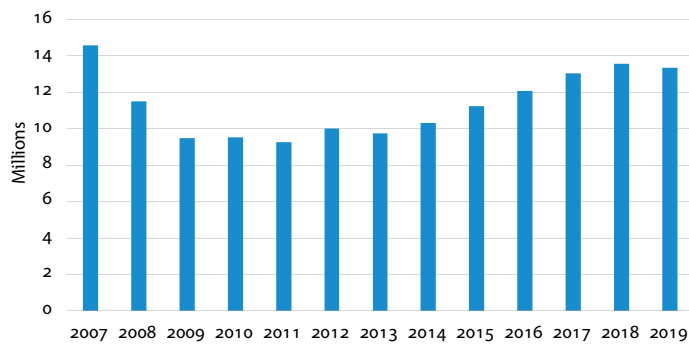
Travel activity through Oakland International Airport (OAK) reached 13.4 million passengers in 2019—declining by 1.5% from the previous year. Passenger activity had previously averaged 6.9% in year-over-year growth between 2014 and 2018. There were notable changes in 2019 that impacted passenger activity. Domestically, nonstop routes to Fort Lauderdale, FL, and Hawaii were added. However, JetBlue and Norwegian Airlines ended service to and from OAK in moves to consolidate operations at nearby San Francisco International Airport.

As of April 2020, passenger traffic data declined by 95%, a ubiquitous result of global containment efforts. According to the Port of Oakland, OAK is expected to receive approximately \$44 million as part of the \$10 billion CARES Act aid for U.S. airports. However, many airports

including OAK expect that the grant funds will be far outweighed by the loss of revenues during what is expected to be a lengthy recovery period ⁵.

Figure 1.7: Oakland International Airport Passenger Traffic

2007 to 2019



Source: VisitCalifornia; Oakland International Airport; Analysis by Beacon Economics

The hit to East Bay's hospitality industry came right as its hotels reached new heights. Coming into 2020, the East Bay's hotel price metrics were notably strong. From November 2018 to November 2019, the average daily rate for a room rose 7.8% to \$179.80, outpacing Sacramento's 0.7% and San Jose's -0.3%, while falling short of San Francisco's 11.1% growth. Furthermore, revenue per available room increased significantly in the East Bay, rising 15.6% and outpacing Sacramento (-2.0%) and San Jose (1.3%) but falling behind San Francisco (23.7%).

Visitor spending throughout 2018 (the latest available data from Visit California) showed significant increases for both Alameda and Contra Costa Counties. Alameda County's visitor spending totaled \$4.3 billion in 2018—a 3.7% increase from the previous year. In Contra Costa County, visitor spending totaled \$1.9 billion and rose by 7.1% year-over-year. Accommodation accounted for 18.3% of total visitor spending in Alameda County (\$791 million) and 14% in Contra Costa County (\$271 million) ⁶.

Many hotels in the East Bay are currently housing health care workers and others in need to contain the spread of

COVID-19. Although the hotel industry is a long way from recovery, industry experts believe that companies that were quick to respond to healthcare groups and local, county and state governments to secure demand for emergency shelter, are better poised for recovery.⁷

INTERNATIONAL TRADE

Over the past two years, trade policy uncertainty has been a major source of concern. The East Bay, however, reported strong overall exports and imports. While tariffs had an impact, China remained the top source of imports through the Port of Oakland, and trade picked up elsewhere as a result of recent policy decisions. Imports at the Port of Oakland increased 4.2% from November 2018 to November 2019 (year to date), slightly less than the 4.5% year-over-year growth seen in the previous year. Although Chinese imports were down 11.8%, Taiwanese imports rose a substantial 90%, and imports from Japan increased 29.1%.

Exports also fared well in 2019. From November 2018 to November 2019, exports rose 2.1% through the Port of Oakland, outpacing the previous year's growth of 1.3%. As seen in Figure 1.8, exports to China fell 13.2%, due to the trade disputes. With China imposing higher tariffs on U.S. imports, US exporters looked for opportunities elsewhere, including South Korea (+13.8%), Taiwan (+9.8%) and India (+3.7%).

Imports of Electrical Machinery, Industrial Machinery and Vehicles (except railway/train) accounted for 36% of all imports, the largest category of imports through November 2019. Fruits and Nuts, Meat and Beverages were the top exports from the Port of Oakland, which accounted for 51.4% of all exports.

The Port of Oakland is one of the busiest ports on the West Coast and has recently begun developments aimed at improving infrastructure that will allow for the flow of billions of dollars' worth of trade⁸. The recently opened

⁵ Port of Oakland Press Release, April 20, 2020.

⁶ "2018 Economic Impact." VisitCalifornia, July 7, 2019. <https://industry.visitcalifornia.com/research/economic-impact>.

⁷ "Housing health care workers yields rewards for hotels." Hotel News Now, April 24, 2020.

⁸ Bowman, Richard J. "Port of Oakland Outlook: A Conversation With New Executive Director." SupplyChainBrain RSS, January 2, 2020. <https://www.supplychainbrain.com/articles/30651-a-conversation-with-port-of-oakland-executive-director-danny-wan>.

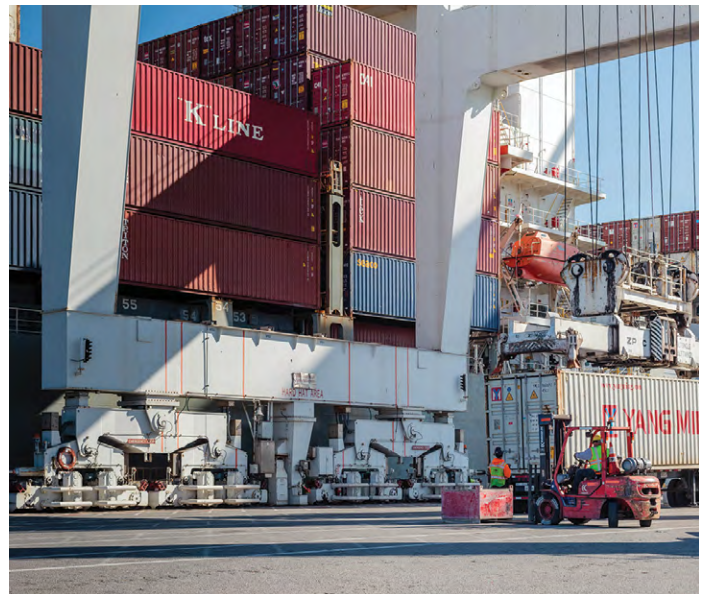
Cool Port is a state-of-the-art temperature regulated complex that will improve trans-shipment of frozen and refrigerated goods. And in 2019, the Port issued a building permit for a 460,000 square-foot Seaport Logistics Complex that was expected to be completed in the summer of 2020. The Logistics Complex will help speed the transfer of cargo from ships to trucks and trains, as well as increase the volume of shipments through the port⁹.

The global effort to stop the spread of COVID-19 has slowed containerized freight activity. According to the Port of Oakland, March containerized import volume dropped 10.3% from March 2019 and export loads were off 5%. The return of empty containers to origins in Asia decreased 23%. Total volume, which combines all three measures, declined 11%. Despite these declines, the Port and its supply chain partners have been declared critical infrastructure and remained fully operational despite regional shelter-in-place orders.¹⁰

Figure 1.8: Top 3 Exports by Partner Country and by Commodity

Top 3 Exports by Partner Country			
	2018*	2019*	1-Year % Growth
Total Exports	\$18,078,268,642	\$18,456,864,379	2.1
Top 3 Export Partner Country			
Japan	\$4,023,487,306	\$4,031,346,120	0.2
China **	\$2,242,310,610	\$1,946,884,734	-13.2
South Korea	\$1,611,455,924	\$1,834,171,500	13.8

Top 3 Exports by Commodity			
Commodity	2018*	2019*	1-Year % Growth
Fruits and Nuts	\$4,905,984,030	\$5,248,835,060	7
Meat	\$3,330,074,056	\$3,492,796,534	4.9
Beverages	\$812,007,285	\$797,546,064	-1.8



Shipping containers at the Port of Oakland.

Source: Courtesy of Port of Oakland.

Figure 1.9: Top 3 Imports by Partner Countries and by Commodity

Top 3 Imports by Partner Country			
	2018*	2019*	1-Year % Growth
Total Imports	\$27,279,891,438	\$28,419,521,846	4.2
Top 3 Import Partner Country			
China**	\$11,951,293,021	\$10,544,596,041	-11.8
Taiwan	\$1,560,059,810	\$2,963,790,128	90.0
Japan	\$1,688,198,630	\$2,179,136,894	29.1

Top 3 Imports by Commodity			
Commodity	2018*	2019*	1-Year % Growth
Electrical Machinery	\$3,884,358,273	\$4,141,093,159	6.6
Industrial Machinery, Including Computers	\$3,727,218,422	\$3,899,815,931	4.6
Vehicles, Except Railway and Tramway; and Parts Etc	\$2,211,766,585	\$2,337,469,804	5.7

*Year-to-date as of November

**Excludes Taiwan and Hong Kong

Source: World Institute for Strategic Economic Research; Analysis by Beacon Economics

9 "Construction of Port of Oakland's Logistics Complex Gets Go Ahead." The Maritime Executive, July 18, 2019. <https://www.maritime-executive.com/article/construction-of-port-of-oakland-s-logistics-complex-gets-go-ahead>.

10 Port of Oakland Press Release, April 13, 2020.



Modern homes on Mulholland Avenue in Dublin.

Source: Courtesy of City of Dublin.

INTEREST RATES AND INFLATION

Two common indicators of economic health are interest rates and inflation. In 2019 interest rates and inflation did not pose a threat to economic expansion. Currently, however, the Fed's interest rate policy is to minimize, as much as possible, further damage to the economy by sustaining a zero percent interest rate. However, COVID-19 has established itself as the greatest threat to the economy since the Great Recession.

Mortgage rates declined steadily throughout 2019, as uncertainty surrounding the global economy and trade policy created uncertainty about longer-term investment and put downward pressure on yields. Although mortgage rate declines are attractive for potential homebuyers, prices will likely continue to climb as long as supply remains low.

Under normal economic circumstances, low interest rates should be a boon to the housing market. However, with the COVID-19 outbreak disrupting businesses and personal finances, it is yet to be seen how the real estate market will

react to the lower mortgage rates. Meanwhile, millions of homeowners and businesses have requested forbearance on their mortgage payments.

Figure 1.10: 30-Year Mortgage Rate

Jan 1971 to Jan 2020

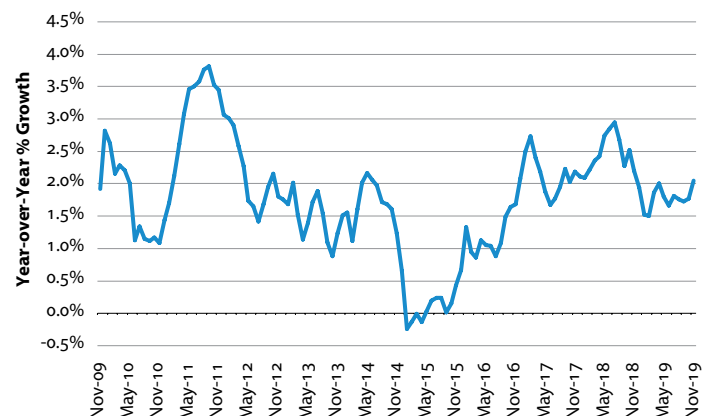


Source: Freddie Mac; Analysis by Beacon Economics

Inflation hovered around 2.0% over the past three years. In mid-2018, annual CPI growth reached 2.9%, but price growth subsequently slowed. As of November 2019, price growth was back down to 2.0%. No longer concerned about potential inflation in 2019 the Fed changed course, based on a yield curve reflecting lack of investor confidence in the future, and lowered rates twice in the third quarter and once in the final quarter, thus reducing the impact of the rate cuts available to mitigate the effects of the pandemic.

Figure 1.11: CPI Year-over-Year % Growth

National, November 2009 to November 2019



Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics



Perfect Day, based in Emeryville, produces flora-made dairy foods. Source: Courtesy of Perfect Day.

EAST BAY VENTURE CAPITAL

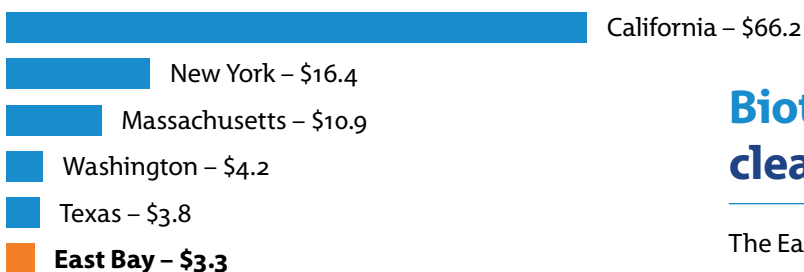


OVERVIEW

This chapter provides an overview of venture capital activity in the East Bay over the past year, prior to the coronavirus pandemic. The direction of future investments, however, will not become clear until later in the year. The COVID-19

outbreak will certainly affect the industry over the next 12 months, although the precise extent is unclear. PitchBook expects activity in the first quarter of 2020 to be relatively unaffected, but they expect a decline in transactions over the next four quarters.

East Bay's Position Among the Top 5 States for Venture Capital Funding (\$ Billions)



Top 5 Venture Capital Deals, 2019



Biotechnology, medical devices, clean tech and software

The East Bay's leadership in multiple technologies creates synergy for cross-discipline innovation.

EAST BAY VENTURE CAPITAL

The degree to which such a contraction will occur will depend on how quickly the economy is able to transition back to some sense of normalcy. According to PitchBook, venture capital funds have an ample amount of cash, but circumstances have changed radically from the start of 2020. Some of these funds will likely be used to protect companies that are already in their portfolios. Companies that address critical issues such as telemedicine may attract additional investment.

Compared to 2018, there were slightly fewer East Bay deals and less venture capital raised in 2019. However, 2018 was an exceptional year, and 2019 saw the second highest amount of venture capital raised in the region. The difference between 2018 and 2019 can be seen in the largest investments. The top ten deals in the East Bay raised \$2.2 billion in 2018 but only \$1.2 billion in 2019.

While the future of post-pandemic venture investments is uncertain, the history of those investments over the past two decades has demonstrated that East Bay creativity and entrepreneurship is grounded in a wealth of creative talent and the power of the Bay Area to support innovation.

VENTURE CAPITAL INVESTMENT

Venture capital typically funds relatively high-risk pursuits by firms primarily engaged in tech-related activities. The amount of venture capital invested can be an indicator of the innovative, entrepreneurial and potentially sector-disrupting activities in a regional economy. Often, the companies receiving such funding spur increases in labor demand, real estate value and substantial long-term gains for the regional economy.

The East Bay's success in attracting venture capital investment in 2019 was impressive. Based on data from PitchBook, the median levels of investment in biotechnology, medical devices, clean tech and software were higher than in all but three states. Moreover, the Bay Area retained a dominant position in attracting venture investments indicating the extremely rich environment for East Bay creativity.

In 2019, companies in the nine-county Bay Area attracted over \$52.9 billion in venture capital, although it was approximately \$1.9 billion less than the amount raised in



Employees of 10x Genomics celebrate company's debut on NASDAQ.

Source: Courtesy of City of Pleasanton.

2018. Flexport, a freight forwarding and customs brokerage company, and DoorDash, an on-demand food delivery service, each landed billion-dollar deals. Nuro, a robotics company; Juul, the e-cigarette company; Aurora Innovation, a self-driving technology developer and others attracted investments in the hundreds of millions.

Figure 2.1: Top 10 Venture Capital Deals

Bay Area, 2019

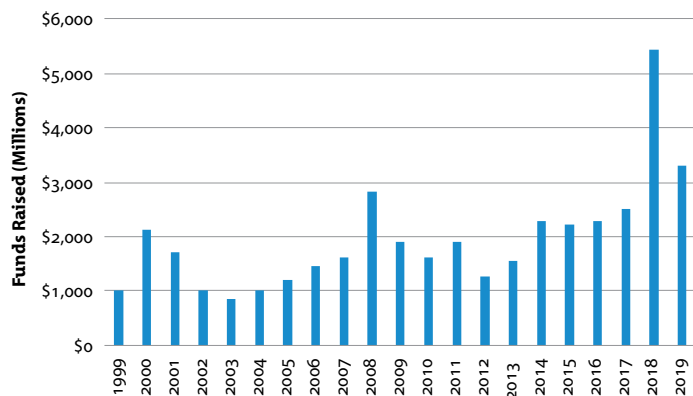
Company Name	Deal Size (\$ millions)	Key Vertical*	HQ Location
1. Flexport	1,000	SaaS	San Francisco
2. Nuro	940	A.I.	Mountain View
3. JUUL	785.2	Electronics	San Francisco
4. DoorDash	700	FoodTech	San Francisco
5. Aurora Innovation	600	A.I.	Palo Alto
6. Chime (Financial Software)	500	FinTech	San Francisco
7. SoFi	500	FinTech	San Francisco
8. PAX Labs	420	Cannabis	San Francisco
9. Databricks	400	A.I.	San Francisco
10. DoorDash	400	FoodTech	San Francisco

* An industry vertical can be defined as a highly specific field in which a company operates, with the field itself usually considered relatively new and innovative.

Source: Pitchbook; Analysis by Beacon Economics

Although venture investment in East Bay companies fell in 2019, it was still the second-best year after the record-breaking \$5.5 billion in capital invested in 2018. There were 495 deals in 2019, or 9% fewer than the 545 deals in 2018.

Figure 2.2: Venture Capital Funding in the East Bay
1999 to 2019



Note: Amounts are in nominal dollars

Source: Pitchbook; Analysis by Beacon Economics

MULTIPLE ON INVESTED CAPITAL

The Multiple on Invested Capital (MOIC), a primary performance measurement of private fund investing, is calculated by dividing the exit value by the total amount of venture capital raised by that startup. For example, if you invest \$1 million and the return is \$10 million, the MOIC is 10.

The MOIC in all the California MSAs declined from 2018 to 2019, but increased in some other areas. This may mean that in the future, the interest of venture investors may not be as tightly focused on California and the Bay Area.

While the Bay Area as a whole has been incredibly successful in attracting venture capital it is easy to overlook the fact that over the past several years the East Bay alone has attracted more VC funding than most states. Aside from California overall, New York and Massachusetts, the East Bay's median investment deal of \$2.4 million outranks all other states. However, the East Bay's average capital invested per company of \$8.2 million has fallen sharply from \$18 million in 2018 when several companies, led by Farasis Energy's \$790 million, received exceptionally large investments. Nevertheless, as far back as 2000, the East Bay has received more venture capital funding than five of the top 10 states. Overall, the East Bay has accounted for nearly 10% of the San Francisco MSA venture capital funding during this period.¹

¹ As of February 11, 2020

Figure 2.3: Median Multiple on Invested Capital (MOIC) by Metropolitan Statistical Area

2019

MSA	2018	2019
Washington, D.C.	4.4	6.2
New York	3.5	5.2
Los Angeles	5.0	4.3
San Diego	6.9	3.8
Boston	3.6	3.4
Seattle	3.1	3.3
Chicago	4.4	3.2
San Francisco*	4.3	3.1
San Jose	4.7	2.6
Philadelphia	5.5	2.0

* The East Bay is part of the San Francisco Metropolitan Statistical Area (MSA).

Source: PitchBook²

Figure 2.4: East Bay Comparison to Top Ten States to Receive Venture Capital Funding

2019

Area	Total Venture Capital Invested (\$ millions)	Median Deal Size (\$ millions)	Average Capital Invested Per Company (\$ millions)	Total Venture Capital Invested Since 2000 (\$ millions)
1. California	66,224.3	4.0	15.9	520,202.0
2. New York	16,422.8	2.5	10.4	96,662.0
3. Massachusetts	10,894.1	3.0	12.8	105,841.4
4. Washington	4,222.0	2.0	8.7	31,247.1
5. Texas	3,795.8	1.5	5.3	41,601.1
6. East Bay	3,315.2	2.4	8.2	40,154.1
7. Florida	3,012.8	1.1	9.9	18,847.1
8. Illinois	2,882.6	1.4	8.3	21,394.8
9. Pennsylvania	2,683.4	1.0	8.4	20,470.6
10. Colorado	2,544.9	1.1	6.1	20,681.4
11. Georgia	1,678.3	1.5	7.8	15,694.9

Source: Pitchbook; Analysis by Beacon Economics

² Olsen, Dana. "The Bay Area & Beyond: Ranking US Metro Areas by VC Invested and Returns [interactive Maps]." PitchBook. March 19, 2018. <https://pitchbook.com/news/articles/the-bay-area-beyond-ranking-us-metro-areas-by-vc-invested-and-returns-interactive-maps>.

REGIONAL INVESTMENT TRENDS

In 2019, the East Bay's largest venture capital deal of \$260 million was raised by Marqeta, a payment platform provider in Oakland. The region's second-largest deal of \$218.78 million was raised by battery materials manufacturer Sila Nanotechnologies in the City of Alameda.

Figure 2.5 lists the East Bay's top 10 venture capital deals of 2019, providing a look at what investors see as the cutting-edge technologies most likely to boost the East Bay economy.

In 2019, 37% of total venture capital activity was in five categories. Financial Software, Food Products and Energy Storage had the largest shares of investment funds at 9% each, followed by Business/Productivity Software at 7% and Biotechnology at 5%. "Other" industries comprise 94 separate sectors, the largest of which were Alternative Energy Equipment (4.4%), Other Commercial Services (3.9%) and Monitoring Equipment (3.7%).

Figure 2.7 shows the East Bay's 10 largest venture capital deals since 2007. Five of the top 10 deals took place in 2018 and 2019, reflecting the industry trend of amassing increasingly large venture funds requiring commensurately larger investments. The specific investments point to investor interest in the East Bay's leadership in multiple sectors and verticals, but particularly in clean-tech innovation which continues to lead the nation.

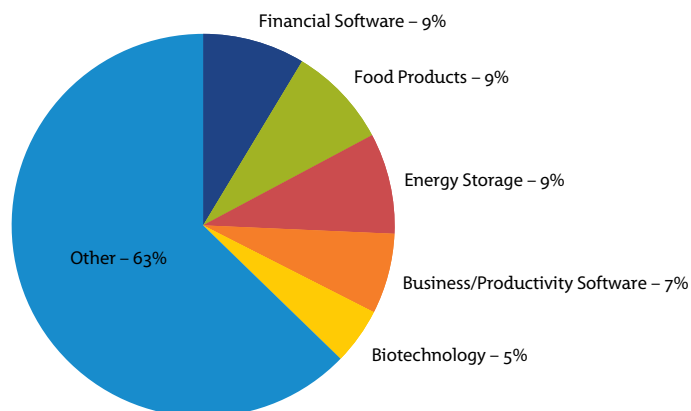
Figure 2.5: Top 10 Venture Capital Deals

East Bay, 2019

Company Name	Deal Size (\$ millions)	Primary Industry	Key Industry Vertical	HQ Location
1. Marqeta	260	Financial Software	B2B Payments	Oakland
2. Sila Nanotechnologies	218.8	Energy Storage	CleanTech	Alameda
3. Perfect Day	140	Food Products	LOHAS & Wellness	Emeryville
4. Think Surgical	134.2	Other Healthcare Technology Systems	HealthTech	Fremont
5. MobiTV	124.8	Other Commercial Services	SaaS	Emeryville
6. Kinestral	100	Building Products	CleanTech	Hayward
7. Amprius	51.1	Energy Storage	CleanTech	Fremont
8. Alif Semiconductor	50	Other Consumer Products and Services	Other	Pleasanton
9. Roofstock	50	Real Estate Services	Real Estate Technology	Oakland
10. DayTwo	48	Other Services (B2C Non-Financial)	HealthTech	Walnut Creek

Source: Pitchbook; Analysis by Beacon Economics

Figure 2.6: Share of Venture Capital by Major Industry
East Bay, 2019



Note: "Other" categories include 94 distinct sectors.
Source: Pitchbook; Analysis by Beacon Economics

In the beginning of 2020 venture capital activity in the East Bay was off to a solid start. Through February 11, San Leandro food tech firm Memphis Meats raised the largest amount at \$161 million. The economy, venture investment interest and the viability of startups are now all in question due to disruptions caused by COVID-19.

In 2019, the Bay Area raised \$53.0 billion in venture capital funding. The counties of San Francisco and Santa Clara increased their Bay Area shares to 52.5% and 24.6%, respectively while San Mateo County's share decreased to 17.1%. Reflecting the decline from a record setting year in 2018, the East Bay's share of Bay Area funding decreased 3.7 percentage points to 6.3% in 2019.

Figure 2.7: Top 10 Venture Capital Deals on Record in the East Bay

2007-2019

Company	Deal Size (\$ millions)	Year	Primary Industry	Key Industry Vertical
1. Farasis Energy	790.0	2018	Electrical Equipment	CleanTech
2. Zymergen	406.5	2018	Health Technology Systems	Artificial Intelligence
3. Solyndra	286.0	2009	Alternative Energy Equipment	CleanTech
4. Marqeta	260.0	2019	Financial Software	B2B Payments
5. NEOS Geosolutions	248.0	2016	Electrical Equipment	Industrials
6. Solar Mosaic	220.0	2016	Consumer Finance	FinTech
7. Sila Nanotechnologies	218.78	2019	Energy Storage	CleanTech
8. BrightSource Energy	203.0	2011	Energy Production	CleanTech
9. Tanium	200.0	2018	Network Management Software	Cybersecurity
10. BrightSource Energy	175.02	2010	Energy Production	CleanTech

Source: Pitchbook; Analysis by Beacon Economics

While the long term dollar value of East Bay venture investment has generally increased and competed well nationally, the East Bay's decline in share of the total Bay Area investment, shown in Figure 2.9, indicates that other parts of the Bay Area are attracting VC investments at an even faster pace.

While the future of the economy and venture investment is uncertain, 2019 venture investment in the Bay Area is an indication of the incredibly dynamic and rich economic environment that provides the context for East Bay growth.

Figure 2.8: Top 5 Venture Capital Deals

East Bay (2020 Year-to-date*)

Company	Deal Size (\$ Millions)	Primary Industry	Key Industry Vertical	HQ Location
Memphis Meats	161	Food Products	FoodTech	San Leandro
LaunchDarkly	54	Business/Productivity Software	E-Commerce	Oakland
Roofstock	50	Real Estate Services	Real Estate Technology	Oakland
Eureka Therapeutics	45	Biotechnology	Life Sciences	Emeryville
LogiNext Solutions	39	Logistics	Industrials	Fremont

*Through February 11, 2020

Source: Pitchbook; Analysis by Beacon Economics

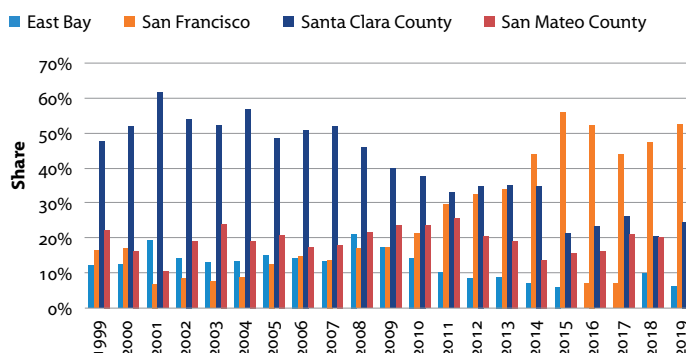


Sila Nanotechnologies is headquartered in Alameda.

Source: Courtesy of City of Alameda.

Figure 2.9: Share of Bay Area Venture Capital in Major Bay Area* Counties

1999 to 2019



*Not shown: Marin, Napa, Solano, and Sonoma Counties

Source: Pitchbook; Analysis by Beacon Economics



740 Heinz Avenue is a flexible state-of-the-art life science R&D building in Berkeley. Source: Courtesy of Wareham Development.

EAST BAY COMMERCIAL REAL ESTATE



OVERVIEW

THE COVID-19 OUTBREAK looms large over the commercial real estate market. As with the residential real estate market, there have been significant short-term disruptions and longer-term implications for the health of the commercial real estate industry. At the time of this writing, record-setting layoffs and the mandated shutdown of large sectors of the economy, including construction, retail, restaurants, schools and leisure activities, have ground commercial activity to a virtual halt. Vacant space has been unfilled and commercial rents were being negotiated between tenants and landlords. Additionally, the commercial real estate industry will also have to grapple with longer-term impacts, such as behavioral changes and new physical working arrangements, which could lead to significant space becoming obsolete in a post-coronavirus environment.

+12.7%



\$693 million in commercial permit valuation.

In 2019, the East Bay's total commercial permit valuation for new construction set a new high, rising 12.7% above the previous peak during the 2000-2001 dot-com boom.



6 million square feet of net industrial absorption, driven by a surge in demand from direct-to-consumer and third-party logistics companies.

During this coronavirus era, properties with an e-commerce focus are better positioned than ones that rely on manufacturing and trade with global markets.

The commercial real estate market in the East Bay continued its momentum in 2019, marking a year of sustained demand and moderating construction activity. Coming into 2020, there was continued optimism among the commercial real estate industry, evidenced by strong consumer spending that translated into increased demand for property space across all commercial types¹ and drove both rent and appreciation gains. Every property type will need to adapt quickly, particularly as consumers and businesses change how they use and interact with different spaces.

KEY FINDINGS

In 2019, the East Bay's \$693 million in commercial real estate permit value set a new high, rising 12.7% above the previous peak during the 2000-2001 dot-com boom. However, annual growth in commercial permit valuations cooled to 3.2%, down from double-digit growth in 2017 (37.0%) and 2018 (10.4%).

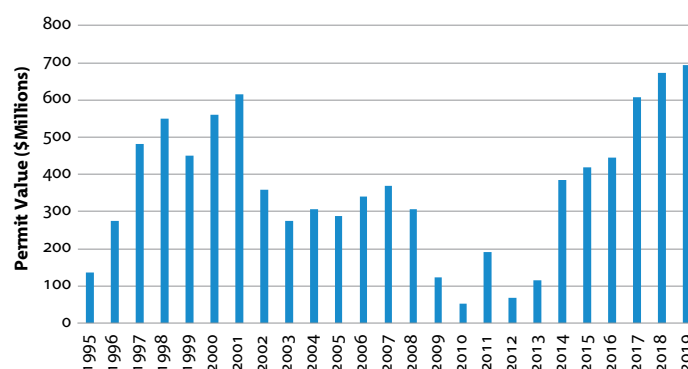
The migration of firms from San Francisco into the East Bay reflected the region's strategic location and relative affordability. Company move-ins into the East Bay revealed that, in a tight labor market, the motivation of some companies was to move or expand to where their employees were living. The East Bay office market continued to attract firms across several industries, including the life sciences, healthcare, and financial sectors. In the City of Alameda, biotech companies Exelixis, Penumbra and the diabetes care unit of Abbott Laboratories expanded recently². A surge of fintech companies moved into Downtown Oakland, including fast-growing Credit Karma in 2019 and the highly anticipated opening of Square in Uptown Station in February 2020. At the end of 2019, healthcare company Blue Shield opened its new headquarters in Downtown Oakland.

With the continued growth of e-commerce and just-in-time manufacturing, the East Bay's proximity to the ports in Oakland and Richmond attracted demand for industrial space from firms such as United Parcel Service. A surge in demand from direct-to-consumer and third party logistics companies fueled robust construction and new supply continued to hit the market, much of which was pre-leased.

The East Bay's market for retail space in 2019 was characterized by relatively stable inventory. With little construction underway, total inventory will not increase in the short term. It remains to be seen when new permitting activity will increase in the long term. After an extended period of shelter-in-place, it is likely that consumers will continue the long-term trend toward increased online purchasing. The extent of lingering concerns about congregating in large public settings will be a determinant in how successfully the retail landscape recovers.

Figure 3.1: Total Commercial Permit Valuations

East Bay, 1995 to 2019



Note: Values are not inflation-adjusted.

Source: Construction Industry Research Board,
Analysis by Beacon Economics

OFFICE

MARKET OVERVIEW

Demand for office space in the East Bay remained robust in 2019, fueled by a strong labor market and relatively lower costs compared to other parts of the Bay Area. Occupancy growth in recent years had been largely driven by tenants migrating from San Francisco. This shift into the East Bay was motivated by comparable value at lower costs and the desire of some employers to move closer to where many of their employees live.³ From the fourth quarter of 2018 to the fourth quarter of 2019, the office market vacancy rate in the East Bay increased 110 basis points to 10.8%. This increase was driven primarily by new construction completions hitting the market in 2019 rather than any decrease in demand for office space.

¹ Commercial real estate refers to all non-residential, income-generating property.

² "How Alameda—again—became a biotech hotspot," San Francisco Business Times, January 28, 2020. <https://www.bizjournals.com/sanfrancisco/news/2020/01/28/how-alameda-again-became-a-biotech-hotspot.html>

³ Cushman and Wakefield, MarketBeat Q4 2019 East Bay Office Report

EAST BAY COMMERCIAL REAL ESTATE

The Life Sciences industry dominated the East Bay office market with over half of the 25 largest leases in the fourth quarter taken by life sciences companies.⁴ The East Bay continued to experience solid growth with demand from seed and startup life science firms as well. Local organic growth from fintech companies, such as Marqeta Inc. and Everlaw in Oakland, continued to expand and fuel a diverse range of demand in the region's office market. Demand for office space was expected to remain strong, and along with it new supply was projected to enter the construction pipeline.

The pandemic has pushed many office workers to work from home, and many of them will likely return to a different office environment. Some major tech employers across the region have decided to extend teleworking arrangements, which may reduce overall office demand. The extent of this shift in work culture remains to be seen, especially when non-essential offices reopen.

Figure 3.2: East Bay Office Market Overview

Variable	2018-Q4	2019-Q4	% Growth
Total Inventory (Sq. Ft.)	30,444,000	31,850,000	4.6
Overall Vacancy (%)	9.7	10.8	1.1*
Net Absorption (Sq. Ft.)	115,000	65,000	-43.5
Under Construction (Sq. Ft.)	1,585,000	435,000	-72.6
Average Monthly Asking Rent Per Sq. Ft. (NNN)	\$3.70	\$4.36	17.8

*Percentage point change

Source: Cushman and Wakefield, MarketBeat Q4 2019 Office Report

SUBMARKETS

The cost of rent for office space varied widely across East Bay submarkets. In the fourth quarter of 2019, the City Center Oakland CBD⁵ and Lake Merritt Oakland CBD submarkets commanded the highest rents, on average, \$5.30 per square foot and \$5.47 respectively. In terms of vacancy rates, West Berkeley (2.7%) and Berkeley CBD (4.7%) had the lowest, while Northern Alameda (28.8%) and City Center Oakland CBD (16.7%) recorded the highest. Total net absorption was positive at 612,000 square feet in 2019, marking three consecutive years of occupancy

growth.⁶ The two submarkets with the highest rent costs, City Center Oakland CBD and Lake Merritt Oakland CBD, had negative net absorption, while the remaining submarkets recorded positive net absorption. New office space was the primary driver behind the increasing vacancy in the two Oakland submarkets. Total net absorption in the East Bay was expected to remain positive in the near term due to Square taking possession of Uptown Station in Q1 2020.⁷ Through 2019 the share of East Bay Class A office space relative to Class B and C office space rose steadily.⁸ The higher quality Class A space commanded rents roughly \$1.11 more per square foot than Class B and C buildings and average rents increased at a faster rate in Class A office properties.

Figure 3.3: East Bay Office Submarket Snapshot

Submarket	Inventory (Sq. Ft.)	Vacancy Rate (%)	Monthly Asking Rent* (\$)
Lake Merritt Oakland CBD	7,249,000	8.0	5.47
City Center Oakland CBD	5,825,000	16.7	5.30
Emeryville	4,682,000	10.4	3.90
Richmond	2,734,000	9.0	2.16
Berkely CBD	2,517,000	4.7	3.63
Oakland Coliseum	2,055,000	8.2	2.34
Southern Alameda	2,009,000	9.7	2.42
Northern Alameda	1,754,000	28.8	4.39
Jack London Square	1,738,000	7.6	3.17
West Berkeley	1,283,000	2.7	4.35

*Full service for all office class types

Source: Cushman and Wakefield, MarketBeat Q4 2019 Office Report

OFFICE CONSTRUCTION PERMITS

Although permitting activity for new office construction in the East Bay office market remained above the levels prior to the 2008 recession, permit values issued in 2019 (\$145 million) were down 12% (\$20 million) from 2018. But this decline was less severe than the 37.4% decline in San Francisco.

In Alameda County, the City of Dublin reported the highest level of 2019 office permit values (\$79 million), followed

4 CBRE, East Bay Office Q4 2019 Market Report

5 Central Business District

6 Cushman and Wakefield, MarketBeat Q4 2019 East Bay Office Report

7 CBRE, East Bay Office Q4 2019 Market Report

8 A Class A building is an investment-grade property with the highest-quality construction, significant architectural features and abundant amenities. They're usually occupied by major tenants at premium rental rates.

by Pleasanton (\$19 million). In Contra Costa County, San Pablo (\$18 million) and San Ramon (\$4.5 million) saw the highest office permit valuations. These cities also had the greatest increases in office permitting from 2018 to 2019, while the unincorporated area of Contra Costa County, the City of Oakland and the City of Alameda had the largest declines in office permit valuations during that period.

Figure 3.4: East Bay Office Market Permitting Activity

City	2018	2019	Absolute Change (\$)
	(\$, Thousands)		
Dublin	0	79,367	79,367
Pleasanton	200	19,783	19,583
San Pablo	3,963	18,005	14,042
San Leandro	0	10,572	10,572
Berkeley	0	10,000	10,000
San Ramon	100	4,522	4,422
Brentwood	0	1,201	1,201
Alameda	10,111	900	-9,211
Pittsburg	0	676	676
Oakland	63,898	150	-63,748

Note: Top ten permitting cities listed

Source: CIRB. Analysis by Beacon Economics

RETAIL

MARKET OVERVIEW

A strong labor market continued to fuel the East Bay's retail property market in 2019. Employment gains and declining unemployment contributed to healthy personal income growth across the region, with per capita personal income rising 7.1% from 2017 to 2018 in Alameda County and 7.3% in Contra Costa County. Growth in personal income in the East Bay outpaced the statewide average over the past five years. A more complete discussion of personal income can be found in the Demographics section.

A healthy labor market and rising incomes led to strong consumer demand and retail spending. This in turn fueled demand for retail space and drove both rent and appreciation gains in the retail property market. At the end of 2019, the average asking rent was \$29.04 per square foot and the vacancy rate hovered around 5.6%, according



Rosewood Commons is a modern commercial development with a campus-like feel. Source: Courtesy of City of Pleasanton.

to Cushman and Wakefield. Although this represented a 28% increase in rent growth from the same period a year earlier, vacancy rates rose 140 basis points over the period. The uptick in 2019 retail market vacancies, 284,000 square feet, was a substantial change from the 958,000 square feet of positive net absorption in 2018. The rise in the 2019 vacancy rate was primarily due to the strategic closures of a number of big-box stores.⁹

Even prior to the pandemic, e-commerce continued to challenge traditional brick and mortar retailers. E-commerce retail sales as a percent of total retail sales increased significantly over the past twenty years, from 1% to 11% and it has no doubt increased during 'shelter-in-place' requirements. East Bay taxable sales, which measures local business activity by the level of sales across the region's retailers, continued to increase in 2019. With the shelter-in-place policy closing all but essential businesses, the future of taxable sales is expected to decline precipitously.

As e-commerce continues to capture a larger share of consumption, it remains to be seen to what extent traditional retailers will return to business as usual, and whether the trend of transitioning from retail-only shopping malls to mixed-use centers that include health and wellness, entertainment and other experiential, high growth segments will resume as previously anticipated.¹⁰

⁹ Cushman and Wakefield, MarketBeat Q4 2019 East Bay Retail Report
¹⁰ CBRE Research, 2020 U.S. Real Estate Market Outlook

Figure 3.5: East Bay Retail Market Overview

Variable	2018-Q4	2019-Q4	Growth
Total Inventory (Sq. Ft.)	52,631,000	52,199,000	-0.8%
Overall Vacancy (%)	4.2	5.6	1.4*
Net Absorption (Sq. Ft.)	530,000	-23,000	-104.3%
Under Construction (Sq. Ft.)	68,000	154,000	126.5%
Average Annual Asking Rent Per Sq. Ft. (NNN)	\$22.68	\$29.04	28.0%

*Percentage Point Increase

Source: Cushman and Wakefield, MarketBeat Q4 2019 Retail Report

SUBMARKETS

The retail property market varied widely in the East Bay. On average, retail space in Alameda County (\$33.85 per sf) leased at a much higher rate than in Contra Costa County (\$24.30), with the lowest average rent recorded in Contra Costa's Highway 4 submarket. The I-880 and I-580 corridors reported the highest rent per square foot. Vacancy rates also varied throughout the East Bay, with the South I-80 corridor recording the lowest vacancy rate at 2.9% and Oakland the highest at 11.0%. The East Bay had negative net absorption of roughly 284,000 square feet, but this decline was not universal.

Figure 3.6: East Bay Retail Submarket Snapshot

(Fourth Quarter 2019)

Submarket	Inventory (Sq. Ft.)	Vacancy Rate (%)	Average Asking Rent* (\$)
I-880 Corridor	15,931,800	4.4	33.13
I-680 Corridor	11,540,400	4.3	28.98
Highway 4	9,090,500	8.6	19.20
I-580 Corridor	7,549,300	5.6	35.64
North I-80 Corridor	3,993,000	5.3	27.50
Oakland	2,371,700	11.0	28.96
South I-80 Corridor	1,722,100	2.9	28.05

*Asking \$PSF/year

Source: Cushman and Wakefield, MarketBeat Q4 2019 Retail Report

RETAIL CONSTRUCTION PERMITS

Permitting activity was strong in the East Bay retail property market in 2019. In fact, the 2019 value of East Bay

retail construction permits was the highest since 1995, with 2019 values 77% above the peak prior to the recession. Following the 30.1% growth in permit values in 2018, the East Bay issued 30% more permits in 2019, increasing the total value of permits by \$83 million. In 2019, Fremont issued the highest total value of retail permits with \$241 million, followed by Oakland (\$30,946) and Lafayette (\$23,221). Fremont and Lafayette had substantial increases in the number of retail permits issued. Despite issuing a considerable number of retail permits in 2019, Oakland experienced a 50% decline in total value from 2018.

Figure 3.7: East Bay Retail Market Permitting Activity

City	2018 (\$, Thousands)	2019 (\$, Thousands)	Absolute Change (\$)
Fremont	104,164	241,299	137,135
Oakland	49,420	30,946	-18,474
Lafayette	0	23,221	23,221
Hercules	2,547	8,523	5,977
Hayward	48,279	6,074	-42,205
Brentwood	1,037	5,565	4,527
Livermore	17,751	5,413	-12,338
San Leandro	0	4,336	4,336
Walnut Creek	3,309	2,258	-1,051
Alameda	0	2,247	2,247

Note: Top ten permitting cities listed

Source: CIRB, Analysis by Beacon Economics

INDUSTRIAL

MARKET OVERVIEW

With the rise of e-commerce and just-in-time manufacturing, the East Bay's ports in Oakland and Richmond make the region a strategic logistics location with demand for industrial space. Total net absorption in 2019 was roughly 6 million square feet, with 700,000 square feet coming in the fourth quarter. A major development in the region was the delivery of the 815,000-square-foot Pacific Commons Industrial Center, which finished construction in the fourth quarter of 2019 and was leased to United Parcel Service.¹¹ Leasing activity

¹¹ Cushman and Wakefield, MarketBeat Q4 2019 East Bay Industrial Report

had been steadily moderating since 2014, but this reflected market tightness rather than a slowdown in demand. And although vacancy rates in the industrial property market had reached 5% in the fourth quarter of 2019, up 110 basis points from the same period a year earlier, the vacancy rates were still hovering near historic lows.

The strong rent growth in the East Bay industrial market was driven primarily by robust demand and low vacancies.¹² It had been anticipated that despite the roughly 3.7 million square feet of industrial space scheduled to hit the market in 2020, rents would likely continue to increase.¹³ What will happen with new construction scheduled to hit the market and whether there will be strong demand from direct-to-consumer and third party logistics companies has yet to be determined. It is also unclear whether existing warehouse and distribution space of lower quality and not meeting modern standards will remain in demand or be redeveloped and added to the supply. In terms of manufacturing, the Fremont and Newark submarkets indicated a strong demand for advanced manufacturing space, while many Contra Costa submarkets were driven by demand for warehouse and manufacturing space.

Figure 3.8: East Bay Industrial Market Overview

Variable	2018-Q4	2019-Q4	Growth
Total Inventory (Sq. Ft.)	169,865,000	172,550,000	1.6%
Overall Vacancy	3.9	5.0	1.1*
Net Absorption (Sq. Ft.)	549,000	700,000	27.5%
Under Construction (Sq. Ft.)	5,635,000	3,700,000	-34.3%
Average Annual Asking Rent Per Sq. Ft. (NNN)	\$0.96	\$0.97	1.0%

*Percentage Point Increase

Source: Cushman and Wakefield, MarketBeat Q4 2019 Industrial Report

SUBMARKETS

Strength in the East Bay industrial submarkets varied in 2019. The Richmond submarket had the highest vacancy rate at 9.1% in the fourth quarter, followed by Newark (6.8%) and San Leandro (5.6%). The tightest submarkets in the East Bay were Berkeley and Emeryville, with fourth-



Pacific Commons South is Class A industrial complex in Fremont.

Source: Courtesy of City of Fremont.

quarter vacancy rates of 2.3% and 3.3% respectively. The strong demand in these submarkets translated into higher asking rents, with these two submarkets recording the highest asking rents in the fourth quarter of 2019. The lowest average asking rents were in the Richmond and Union City submarkets, at \$0.81 per square foot in each market.

Figure 3.9: East Bay Industrial Submarket Snapshot

(Fourth Quarter 2019)

Submarket	Inventory (Sq. Ft.)	Vacancy Rate (%)	Average Asking Rent* (\$)
Hayward	39,300,000	4.3	0.85
Oakland	38,200,000	3.7	1.18
San Leandro	28,700,000	5.6	0.90
Fremont	21,800,000	5.4	1.06
Union City	13,600,000	4.6	0.81
Richmond	13,000,000	9.1	0.81
Newark	8,700,000	6.8	0.90
Berkeley	6,300,000	2.3	1.68
Emeryville	2,600,000	3.3	1.30

*Asking \$PSF/year

Source: Cushman and Wakefield, MarketBeat Q4 2019 Industrial Report

¹² Ibid.

¹³ Ibid.

INDUSTRIAL CONSTRUCTION PERMITS

In 2019, the value of East Bay industrial construction permits fell sharply by 97.2% to \$8 million. The largest declines were in Fremont and Richmond, where 2019 valuations were \$202 million and \$45 million less than in 2018. Livermore issued the largest value of industrial permits at nearly \$5.3 million, followed by Concord (\$1.6 million) and Brentwood (\$1.4 million). Although there was a decline in permitting activity in 2019 this did not indicate a decline in demand. Roughly 1 million square feet of industrial space was delivered to the market in 2019, and an additional 3.7 million square feet was under construction. Given the previously strong demand for industrial space in 2019, permitting had been expected to pick up to meet anticipated demand.

Figure 3.10: East Bay Industrial Permitting Activity

City	2018 (\$, Thousands)	2019 (\$, Thousands)	Absolute Change (\$)
Livermore	0	5,288,452	5,288,452
Concord	0	1,580,000	1,580,000
Brentwood	2,132,425	1,394,493	-737,932
Newark	34,787,125	350,000	-34,437,124
Fremont	202,564,133	0	-202,564,133
Richmond	45,292,440	0	-45,292,440
Hayward	14,466,828	0	-14,466,828
Martinez	3,178,100	0	-3,178,100
Pleasanton	1,806,200	0	-1,806,200
Oakland	180,000	0	-180,000

Note: Top ten permitting cities listed

Source: CIRB, Analysis by Beacon Economics

HOSPITALITY

MARKET OVERVIEW

According to hotel market data from CBRE, average daily room rates in the East Bay increased to \$179.75 in 2019, up 7.8% from 2018. This growth represented a substantial increase in average daily rates compared to 2018 (2.2%) and 2017 (3.5%). Hotel occupancy rates rose 5.0 percentage points in 2019 to 75.4%, reversing the trend of falling occupancy recorded in the previous two years. But occupancy rates in the region did not return to the high level of 86% in 2016. The market's revenue per available

room (RevPAR), a performance metric used in the hotel industry, rebounded 15.6% in 2019, to \$135.60.

Prior to shelter in place requirements the short-term rental market had been making a significant impact on the hotel market. Despite many local government efforts to contain the coronavirus outbreak by banning or restricting Airbnb and other short term rentals, demand could potentially continue to grow in the years ahead depending on the level of consumer safety concerns. Nationally, while the growth rate of short-term rentals moderated in 2019, new units had averaged over 100,000 per year since 2016, according to CBRE Research. The share of short-term rental supply by location type has also evolved in recent years, with suburban and rural areas capturing an increasingly large share of the market. The high elasticity of the short-term rental supply, which can be delivered during times of demand spikes and then removed shortly after, limits the pricing power that traditional hotel operators have historically relied on to optimize room rates during high-compression periods.¹⁴

Figure 3.11: East Bay Hotel Market

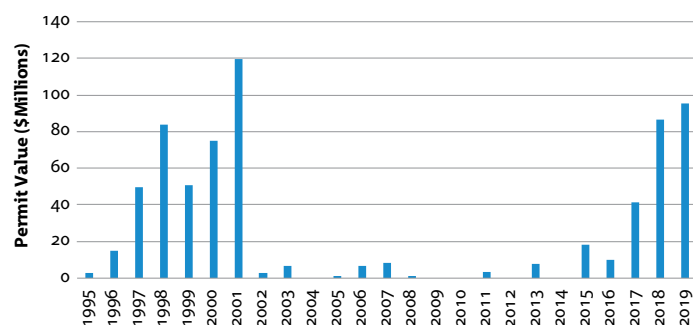
Year	Average Daily Room Rate (\$)	Occupancy Rate (%)	Revenue Per Available Room* (\$)
2016	157.68	86.1	135.71
2017	163.23	85.7	139.97
2018	166.76	70.4	117.33
2019	179.75	75.4	135.60

Note: *Total room revenue divided by the total number of available rooms.

Source: CBRE Hotels, Analysis by Beacon Economics

Figure 3.12: East Bay Hotel Permit Valuations

1995 to 2019



Note: Values are not inflation-adjusted.

Source: Construction Industry Research Board, Analysis by Beacon Economics

14 CBRE Research. "Short-Term Rentals: A Maturing U.S. Market & Its Impact on Traditional Hotels".



Drake's Brewing Company based in San Leandro. Source: Courtesy of City of San Leandro.

EAST BAY EMPLOYMENT



OVERVIEW

A CONSISTENT THEME WEAVES throughout this report. The emergence of the COVID-19 outbreak casts a cloud over the economy.

How long the clouds remain over the economy is difficult to predict. The virus will create major disruptions to the economy in the short-term, as evidenced by the weekly releases of new unemployment claims. Early data suggest that local services jobs, such as in restaurants and bars, as well as in the tourism industry and all associated occupations, will see the most jobs lost. But in reality, the longer shelter-in-place requirements remain, the more enduring and pervasive the economic damage.

25,556 WARN* Layoffs

At least 315 East Bay employers have notified state labor agencies of plans to eliminate 25,556 workers in March and April. This represents nearly 30% of job cuts in the nine-county Bay Area.

* Worker Adjustment and Retraining Notification (WARN)



34% of Jobs in Most Vulnerable Sectors

Some of the most vulnerable sectors impacted by the shelter-in-place lockdowns are leisure/entertainment, hospitality and retail, which comprise 20% of the East Bay's employment. Manufacturing and construction account for 14%.



24,400 Healthcare Workers Needed by 2026.

CA EDD projects demand for healthcare workers to increase by 14% in the East Bay.

EAST BAY EMPLOYMENT

This chapter discusses how the economy has fared in the past year. The East Bay enters the crisis from a position of strength, with low levels of unemployment. A large part of the chapter presents forecasts of employment and industry growth out until 2026. Most major financial organizations—Merrill Lynch, Bank of America and Wells Fargo, for example—expect the economy to return to trend at some point over the next 18 months. As such, current events have not yet caused 2026 industry and occupations projections to change.

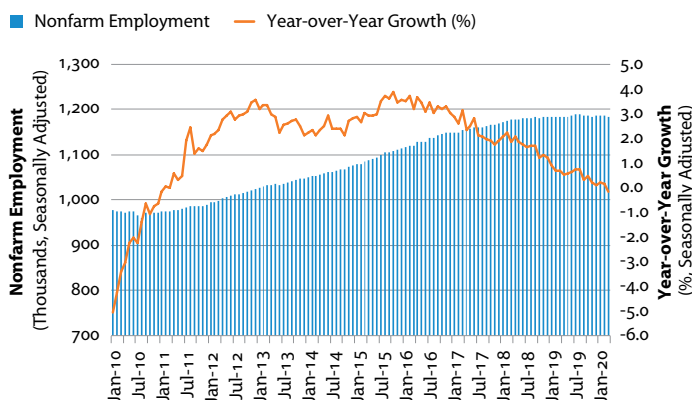
Prior to the COVID-19 pandemic, nonfarm employment was expected to expand by 79,358 jobs from 2020 to 2026 in the East Bay, an increase of 6.7% (1.1% on an annual basis), which would be on par with growth over the last several years. Health Care; Professional, Scientific and Technical Services; and the Construction sectors were expected to lead this growth.

INDUSTRY EMPLOYMENT

The economic expansion in the East Bay slowed considerably over the last two years. Nonfarm employment (1,178,400) in the East Bay decreased by -0.2% from March 2019 to March 2020, a slowdown from the tepid 1.5% growth a year earlier. This growth trailed that of San Francisco and San Mateo counties (1.5%) and San Benito and Santa Clara counties (0.5%).

Figure 4.1: East Bay Nonfarm Employment

2010-2020



Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics

Between March 2019 and March 2020, the total number of jobs located in the East Bay decreased by 2,900, or 0.2%. Leisure and hospitality reported the largest year-over loss of -2.6% (3,100 jobs). Employment in Transportation, Warehouse and Utilities declined by -2.1% (800 jobs). Manufacturing dropped -1.4% (1,380 jobs). Aside from Government, which gained 1,400 jobs, three other industries noted year-over improvements: Health Care and Social Assistance (up 3,000 jobs), Construction (up 900 jobs), and Financial Activities (up 800 jobs).

Figure 4.2: East Bay Nonfarm Employment by Industry

March 2019 – March 2020

	Employment	% of Total Nonfarm	One-Year Change
By Industry			
Government	177,900	15%	0.8%
Health Care	175,300	15%	0.6%
Leisure and Hospitality	115,700	10%	-2.6%
Retail Trade	110,200	9%	-0.5%
Professional, Scientific and Technical Services	100,100	8%	1.3%
Manufacturing	99,800	8%	-1.4%
Construction	74,100	6%	1.2%
Administrative Support	63,900	5%	-2.0%
Financial Activities	55,600	5%	1.5%
Wholesale Trade	45,000	4%	-1.3%
Transportation, Warehouse and Utilities	42,000	4%	-2.1%
Other Services	40,400	3%	-0.7%
Information	27,900	2%	0.0%
Management	25,400	2%	-0.8%
Educational Services (Private)	24,900	2%	0.4%
Natural Resources and Mining	200	0%	0.0%
Total Nonfarm	1,178,400		-0.2%
Total Private	1,000,500		-0.3%

Note: CA EDD's March survey reference period covers the week that contains the 12th day of the month, which predated the shelter-in-place orders.

Source: CA EDD, March 2020.



Server at Danville Brewing Company. Source: Courtesy of City of Danville.

At the time of this writing, it is both premature and infeasible to depart from existing 2026 employment projections, published by the California Employment Development Department in May 2019. Nonfarm employment¹ is expected to expand by 79,358 jobs from 2020 to 2026 in the East Bay, an increase of 6.7% (1.1% on an annual basis), which is on par with growth over the last several years. Health Care is expected to account for most of these new positions, with the industry expanding 14.0%, or by 24,382 workers. Professional, Scientific and Technical Services, which currently comprises 8.6% of all jobs, is forecast to grow 10.8%, or 11,007 jobs. Manufacturing, which accounts for 8.4% of jobs, is projected to add 9.1%, or 9,060 jobs. Jobs in Leisure and Hospitality, which accounts for 10.1% of total jobs, is also expected

to grow by 8,306 jobs, or 6.9% over the period. The only major industry predicted to contract from 2020 to 2026 is Government, where payrolls are expected to decline 1.5%, or by 2,643 positions.

Figure 4.3: Industry Employment Forecast

2020 to 2026

Industry Title	Base Year Employment Estimate 2020	Projected Year Employment Estimate 2026	Percent Change (2020-26)
Health Care	174,200	198,582	14.0%
Professional, Scientific and Technical Services	101,600	112,607	10.8%
Construction	77,200	86,597	12.2%
Manufacturing	99,700	108,760	9.1%
Leisure and Hospitality	120,000	128,306	6.9%
Wholesale Trade	45,800	49,546	8.2%
Administrative Support	64,800	68,051	5.0%
Management	25,100	28,281	12.7%
Other Services	41,400	44,384	7.2%
Educational Services	23,900	26,193	9.6%
Financial Activities	55,500	57,517	3.6%
Retail Trade	110,700	112,352	1.5%
Transportation, Warehousing and Utilities	42,600	43,640	2.4%
Information	27,800	28,363	2.0%
Natural Resources	200	168	-15.9%
Government	175,300	172,657	-1.5%
Total Nonfarm	1,185,900	1,265,258	6.7%

Source: California Employment Development Department (EDD), 2019; Analysis by Beacon Economics

UNEMPLOYMENT RATE AND LABOR FORCE

The East Bay's unemployment was 3.9 percent in March 2020, up from a revised 3.0 percent in February 2020, and above the year-ago estimate of 3.2 percent. This compares with an unadjusted unemployment rate of 5.6 percent for California and 4.5 percent for the nation during the same period. The unemployment rate was 3.8 percent in Alameda County, and 4.0 percent in Contra Costa County.

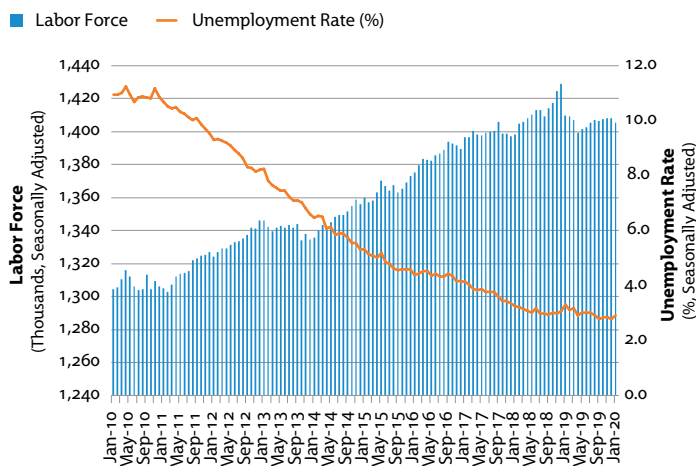
¹ Nonfarm employment is the number of people on establishment payrolls employed full or part time in a defined area who received pay for any part of the pay period that includes the 12th day of the month. People on the payroll of more than one establishment are counted in each establishment. Data exclude proprietors, self-employed, unpaid family or volunteer workers, farm workers and domestic workers. The establishment payroll survey, known as the Current Employment Statistics (CES) survey, is based on a survey of approximately 145,000 businesses and government agencies representing approximately 697,000 worksites throughout the United States.

EAST BAY EMPLOYMENT



Mizuho OSI manufactures in Union City. *Source:* Courtesy of City of Union City.

Figure 4.4: East Bay Labor Force and Unemployment Rate



Source: California Employment Development Department; Analysis by Beacon Economics

The East Bay's labor force² declined slightly over the last year, falling by -1.5% to 1,387,700. The East Bay's decline outpaced that of San Francisco and San Mateo counties (-0.4%) and San Benito and Santa Clara counties (-1.0%) over the period. Household employment³ declined by -2.2% to 1,333,600. If conditions return to anything close to

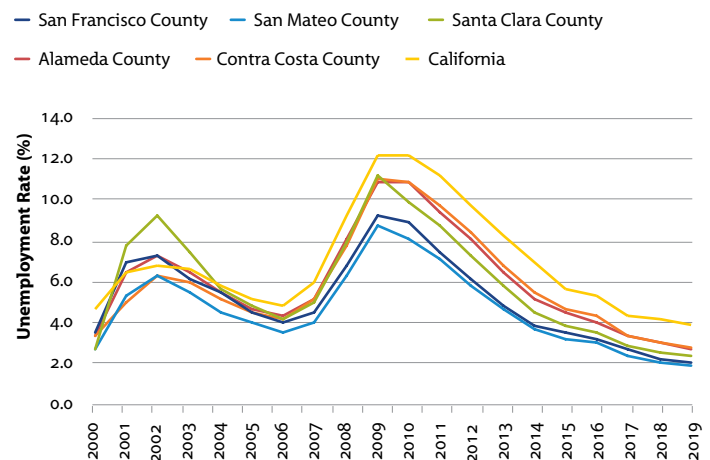
² The labor force comprises employed and unemployed people age 16 or older living in a defined area.

³ Household employment is the number of employed persons living in a defined area.

normal, the lack of growth in the region's labor force could be a boon for workers. Wages in a number of occupations could face upward pressure as employers in the East Bay and the broader Bay Area compete to attract workers. Still, a constrained housing supply would continue to place upward pressure on home prices and could limit the East Bay economy's ability to expand and retain residents and workers.

Figure 4.5: Unemployment Rate by Location

2000-19



Source: California Employment Development Department; Analysis by Beacon Economics

AVERAGE WEEKLY HOURS AND WAGES

According to the U.S. Bureau of Labor Statistics, the average workweek in the East Bay was 34.8 hours in December 2019 on a seasonally adjusted⁴ basis, a 0.1-hour decline from December 2018. The average workweek in the East Bay was slightly above the nation overall, where average weekly hours were 34.4 hours on a seasonally adjusted basis. In addition, the number of workers employed part time for economic reasons steadily declined statewide over the last year, falling 0.3% from December 2018 to December 2019.⁵

⁴ Seasonal adjustment is a statistical technique that seeks to measure and remove the influences of predictable seasonal patterns to reveal changes from month to month.

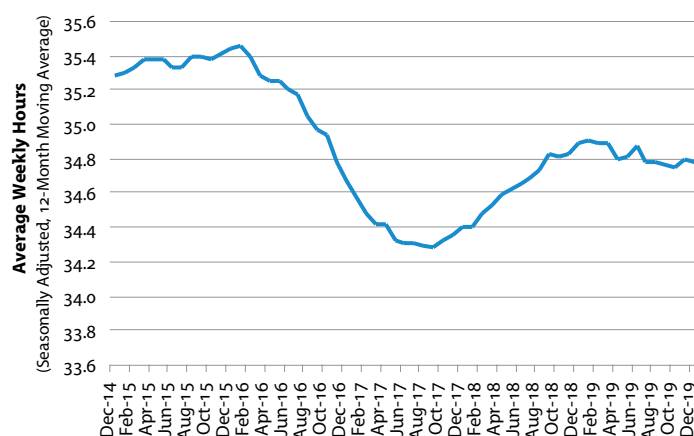
⁵ California Employment Development Department, California Labor Market Review, January 2019.



C3Nano based in Hayward. Source: Courtesy of City of Hayward.

Figure 4.6: East Bay Average Weekly Hours

2014-19



Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics

Wages grew throughout the East Bay in 2019. As of the third quarter of 2019 (the latest data available), the average annual wage was \$77,015, increasing by 4.3% year over year. In Alameda County, the average was \$78,468, increasing 4.4% year over year. Wage growth was more modest in Contra Costa County, increasing 3.1% to \$70,052. Compared to statewide figures, which showed more modest wage growth (4.1% to \$69,915), the East Bay outpaced wage growth in San Mateo County (0.9% to \$127,979) and Santa Clara County (1.6% to \$135,420). However, the East Bay was eclipsed by wage gains in San

Francisco County (12.1% to \$129,380). Still, with not enough skilled workers to meet businesses' demand, there appeared to be upward pressure on wages in the East Bay and in the broader Bay Area.

Over the last year, wage growth was spread across almost all industries in the region. From 2018 to 2019, the Information sector had the largest jump in percentage terms, 18.4%, to \$187,827. Among the higher-wage industries, annual average wages grew significantly in the Finance and Insurance (7.0%) and Management (3.7%) sectors. Among the lower-wage industries, wages grew in Leisure and Hospitality (5.2%) and Retail Trade (3.8%)—which are among the most impacted sectors from the COVID-19 pandemic.

Figure 4.7: East Bay Average Annual Wage by Industry
2018-19

Industry	2018	2019	One-Year Change (%)
East Bay	\$73,872	\$77,015	4.3
Alameda County	\$75,455	\$78,768	4.4
Contra Costa County	\$67,954	\$70,052	3.1
By Industry			
Information	\$158,579	\$187,827	18.4
Management	\$150,687	\$156,295	3.7
Finance and Insurance	\$114,194	\$122,143	7.0
Professional, Scientific and Technical Services	\$114,655	\$115,780	1.0
Manufacturing	\$97,992	\$98,040	0.0
Wholesale Trade	\$83,157	\$86,230	3.7
Natural Resources and Construction	\$81,054	\$83,315	2.8
Government	\$77,378	\$80,858	4.5
Real Estate	\$68,429	\$70,339	2.8
Transportation, Warehouse and Utilities	\$68,208	\$69,775	2.3
Health Care	\$62,744	\$65,122	3.8
Administrative Support	\$51,169	\$53,577	4.7
Other Services	\$44,044	\$45,845	4.1
Educational Services (Private)	\$43,009	\$43,124	0.3
Retail Trade	\$38,290	\$39,753	3.8
Leisure and Hospitality	\$29,402	\$30,946	5.2

Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics



Concreteworks design and fabrication studio in Alameda.

Source: Courtesy of City of Alameda. Photographer: Maurice Ramirez.

EMPLOYMENT BY OCCUPATION

Employment levels increased across most occupations in the East Bay in recent years. From 2017 to 2018, occupational employment expanded 5%, or by 53,900 jobs, reaching 1,138,240.⁶ Personal Care and Service occupations were responsible for nearly half of these gains, growing by 25,960. Other occupations that increased by healthy margins in absolute terms were Transportation and Material Moving (4,590); Arts, Design, Entertainment, Sports and Media (3,100); Healthcare Practitioners and Technical Occupations (2,770); and Construction and Extraction (2,710).

⁶ Occupational Employment Statistics from the U.S. Bureau of Labor Statistics come from a different sample than the monthly employment data reported earlier. The sampling frame (the list from which establishments to be surveyed are selected) is derived from the list of establishments maintained by State Workforce Agencies (SWAs) for unemployment insurance purposes. As a result, there can be some variation from the figures and growth rates in each dataset.

Figure 4.8: East Bay Employment, Change and Average Annual Wages by Occupation

Occupation	Employment, 2018	One-Year Change (%)	Five-Year Change (%)	Average Annual Wage, 2018
Office and Administrative Support	163,130	0.0	2.0	\$45,580
Sales and Related	107,180	2.0	9.1	\$47,360
Food Preparation and Serving Related	95,220	2.9	20.0	\$29,660
Education, Training and Library	73,900	2.2	19.0	\$62,150
Management	72,200	3.1	17.8	\$140,340
Business and Financial Operations	69,560	3.8	16.7	\$89,530
Transportation and Material Moving	69,490	7.1	20.6	\$43,420
Production	64,530	3.2	30.6	\$43,270
Personal Care and Service	61,210	73.6	142.7	\$30,350
Healthcare Practitioners and Technical	59,430	4.9	11.3	\$103,110
Construction and Extraction	55,440	5.1	43.4	\$68,180
Computer and Mathematical	41,500	-2.6	5.5	\$107,880
Installation, Maintenance & Repair	36,660	3.6	13.5	\$58,820
Building/Grounds Cleaning and Maintenance	30,430	-0.2	14.3	\$37,630
Architecture and Engineering	28,210	0.1	-6.8	\$98,960
Healthcare Support	26,070	3.3	1.9	\$39,600
Protective Service	20,220	-1.6	3.4	\$63,460
Arts, Design, Entertainment, Sports and Media	19,660	18.7	42.2	\$56,470
Community and Social Service	17,660	10.4	16.0	\$57,870
Life, Physical and Social Science	17,660	-5.0	11.6	\$90,370
Legal	8,240	4.3	22.4	\$122,450
Farming, Fishing and Forestry	650	16.1	-52.2	\$33,130
Total	1,138,240	5.0	17.2	\$62,810

Source: U.S. Bureau of Labor Statistics; Analysis by Beacon Economics

Over the five-year period between 2013 to 2018, occupational employment levels expanded 17% in the East Bay. Personal Care and Service occupations had the largest increase in percentage terms (142.7%). Other occupations posting sizable gains were Construction and Extraction (43.4%); Arts, Design, Entertainment, Sports and Media (42.2%); Production (30.6%) and Legal (22.4%).

Prior to the onset of the COVID-19 pandemic, occupational employment was expected to expand by 103,566 jobs from 2018 to 2026 in the East Bay, an increase of 9.1% (1.1% on an annual basis). Food Preparation and Serving Related jobs were expected to account for most of the new positions, expanding 17.3%, or by 16,492. Personal Care and Service (10,460, 17.1%), Healthcare Practitioners and Technical Occupations (9,424, 15.9%), Business and Financial Operations (7,470, 10.7%), Computer and

Mathematical (7,411, 17.9%), Management (6,852, 9.5%), and Construction and Extraction (6,343, 11.4%) had also been expected to grow considerably.

COMMUTING PATTERNS

In 2013, 68.2% of East Bay residents worked in Alameda or Contra Costa counties. In 2018, this share decreased to 66.2%, according to the latest available data from the U.S. Census' American Community Survey. More than one-third of East Bay residents were leaving the region for work each day. San Francisco County (12.6%) and Santa Clara County (6.9%) were the top destinations, accounting for over half of total outbound commuters in 2018, while commuting to the Bay Area's four northern counties declined. On the

Figure 4.9: Occupational Employment Forecast

2018 to 2026

Occupational Title	Base Year Employment Estimate, 2018	Projected Year Employment Estimate, 2026	Percent Change, 2018-26
Food Preparation and Serving Related	95,220	111,712	17.3%
Personal Care and Service	61,210	71,670	17.1%
Healthcare Practitioners and Technical	59,430	68,854	15.9%
Business and Financial Operations	69,560	77,030	10.7%
Computer and Mathematical	41,500	48,911	17.9%
Management	72,200	79,052	9.5%
Construction and Extraction	55,440	61,783	11.4%
Production	64,530	70,856	9.8%
Education, Training and Library	73,900	79,465	7.5%
Transportation and Material Moving	69,490	74,231	6.8%
Healthcare Support	26,070	30,625	17.5%
Sales and Related	107,180	111,361	3.9%
Office and Administrative Support	163,130	167,034	2.4%
Building/Grounds Cleaning and Maint.	30,430	34,077	12.0%
Architecture and Engineering	28,210	30,997	9.9%
Arts, Design, Entertainment, Sports and Media	19,660	21,387	8.8%
Installation, Maintenance and Repair	36,660	37,974	3.6%
Community and Social Service	17,660	18,879	6.9%
Life, Physical and Social Science	17,660	18,698	5.9%
Legal	8,240	8,672	5.2%
Protective Service	20,220	20,559	1.7%
Farming, Fishing and Forestry	650	631	-2.9%
Total	1,138,240	1,241,806	9.1%

Source: California Employment Development Department; Analysis by Beacon Economics

EAST BAY EMPLOYMENT

other hand, the share of East Bay residents commuting to counties outside the nine Bay Area counties (San Joaquin, Sacramento, Yolo, Santa Cruz and San Benito) increased from 7.5% to 8.4% from 2013 to 2018. This dynamic has increased congestion throughout the region and has contributed to rising housing and transportation costs.

Figure 4.10: Place of Work for East Bay Residents

2013 and 2018

Place of Work	Employed Residents (2013)	2013 Share (%)	Employed Residents (2018)	2018 Share (%)	Five Year Change (%)
East Bay (Alameda and Contra Costa counties)	868,902	68.2	971,204	66.4	11.8
San Francisco County	146,538	11.5	184,126	12.6	25.7
Santa Clara County	87,235	6.8	100,162	6.9	14.8
San Mateo County	45,628	3.6	59,034	4.0	29.4
Marin County	14,581	1.1	12,413	0.8	-14.9
Solano County	10,148	0.8	8,950	0.6	-11.8
Sonoma County	3,022	0.2	1,390	0.1	-54.0
Napa County	2,205	0.2	1,263	0.1	-42.7
Other	95,660	7.5	123,086	8.4	28.7
Total	1,273,919	100.0	1,461,628	100.0	14.7

Source: U.S. Census Bureau, American Community Survey; Analysis by Beacon Economics

Traffic congestion and housing costs have been symptoms of the lack of sustained housing production in the Bay Area and more generally throughout California. In particular, the Bay Area's strong economic growth created fierce competition for housing and pushed low- and moderate-income workers to commute long distances. On the other hand, higher real estate costs and workforce retention challenges in other parts of the Bay Area encouraged more companies to move or expand their presence in the East Bay.

As job opportunities increased in the East Bay, so did commuting from outside the two counties. San Joaquin County was the largest source of those workers accounting for 4.1% of East Bay workers in 2018, an increase from

2.9% in 2013. This was followed by Santa Clara County (4.0%), Solano County (3.0%) and San Francisco County (2.0%).

Figure 4.11: Place of Residence for East Bay Workers

2013 and 2018

Place of Residence	Workers (2013)	2013 Share (%)	Workers (2018)	2018 Share (%)	Five Year Change (%)
East Bay (Alameda and Contra Costa counties)	868,902	82.0	971,204	81.0	11.8
San Joaquin County	30,438	2.9	49,502	4.1	62.6
Santa Clara County	39,785	3.8	48,581	4.0	22.1
Solano County	29,127	2.8	36,418	3.0	25.0
San Francisco County	28,699	2.7	23,875	2.0	-16.8
San Mateo County	12,997	1.2	15,229	1.3	17.2
Stanislaus County	10,291	1.0	10,317	0.9	0.3
Marin County	6,264	0.6	7,366	0.6	17.6
Other	32,558	3.1	37,039	3.1	13.8
Total	1,059,061	100.0	1,199,531	100.0	13.3

Source: U.S. Census Bureau, American Community Survey; Analysis by Beacon Economics

It remains to be seen whether remote work will persist in a post-virus economy, particularly as more corporations decide on flexible work arrangements. This transformation may result in reduced demand for housing near job centers and less traffic congestion.



Oakley Cityhood Celebration. Source: Courtesy of City of Oakley.

EAST BAY DEMOGRAPHICS

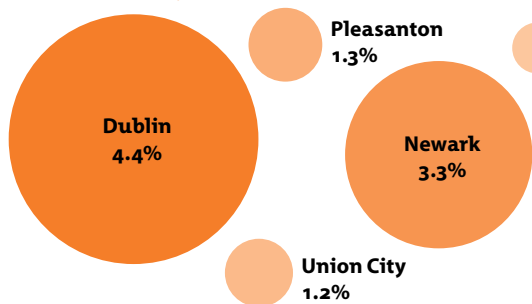


OVERVIEW

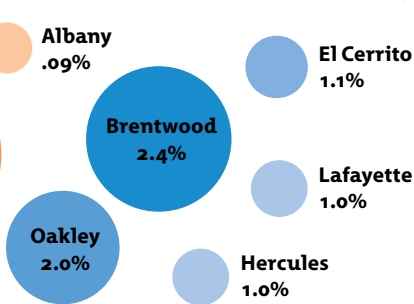
FROM 2018 TO 2019, the East Bay's population increased slightly to 2.8 million, with Alameda County accounting for 1.7 million residents and Contra Costa County for 1.2 million. Since 2010, the East Bay has added over 260,000 residents. Alameda County accounted for over 60% of this growth, adding over 160,000 people from 2010 to 2019. Foreign migration has been a significant driver of population growth in the region, a trend that applies to much of the Bay Area.

Fastest Growing Cities (1-Year)

Alameda County

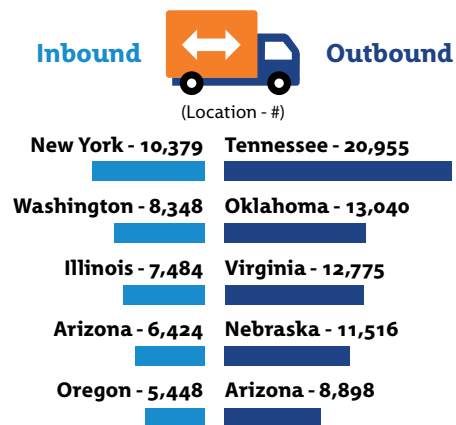


Contra Costa County



Top 5 In & Outbound East Bay Migrants

2015-2018



0.6% Annual Population Growth

The East Bay's population growth rate continued to decline for the fifth consecutive year.



STEM Day at Fairyland, Oakland. Source: Courtesy of East Bay EDA.

KEY FINDINGS:

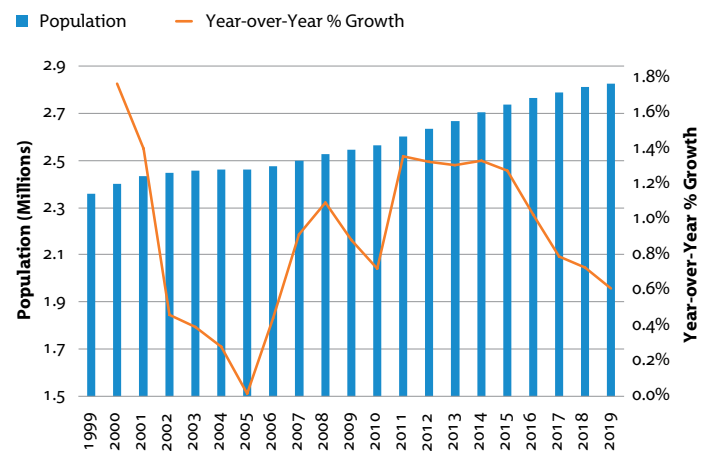
- The East Bay's population increased by 0.6% from 2018 to 2019, slowing from the previous year's growth of 0.9%. Between 2018 and 2019, Alameda County's population grew by 0.7% while Contra Costa's increased by 0.5%.
- The East Bay's ethnic and racial composition in 2018 was 35.9% non-Hispanic White, 25.0% Asian, 23.8% Hispanic, 9.5% Black, 4.6% two or more races, 0.7% Native Hawaiian and Other Pacific Islander, 0.3% Native American and 0.3% other race. The share of non-Hispanic White residents has decreased by 3.7 percentage points since 2010, and Hispanics (of all races) increased by 0.5 percentage points. Meanwhile, the share of the Black population to the overall total decreased by 1.3 percentage points.
- Between 2010 and 2018, the share of residents in the age groups between 25 to 39, and over 55 increased. Meanwhile, the under 10 and 40 to 54 age groups experienced declines.
- Over the last few years, the financial characteristics of East Bay households changed significantly. In 2018, the median household income reached \$102,125 in Alameda County and \$101,618 in Contra Costa County, growing 52.0% and 37.8% since 2010, respectively.
- In 2019, total net migration to the East Bay was 4,653, a decrease from 6,700 in 2018 and 8,000 in 2017. Net migration continued to decline for the fifth consecutive year.
- Between 2012 and 2018, the total share of workers who live and work in the East Bay fell from 72.2% to 69.4%, indicating an increasing number of residents employed in San Francisco, Santa Clara and elsewhere.

POPULATION GROWTH

Although population is overall increasing, the East Bay's annual growth rate has declined since 2014, as shown in Figure 5.1. From 2018 to 2019, the East Bay added more than 17,000 residents, with over two-thirds of the growth in Alameda County. However, population growth has slowed to 0.6%, compared to 0.9% the year prior. Nonetheless, the East Bay slightly outpaced growth in neighboring counties, including San Mateo County at 0.2% as well as San Francisco and Santa Clara counties both at 0.3%. Growth statewide was 0.4%, the slowest since 1971.

Figure 5.1: East Bay Population

1999 to 2019



Source: California Department of Finance; Analysis by Beacon Economics

As seen in Figure 5.2, between 2018 and 2019, the fastest growing cities in the East Bay were Dublin (4.4%), Newark (3.3%), Brentwood (2.4%), and Oakley (2.0%). Among these cities, the total population growth was more than 7,280—accounting for 42% of the total population growth throughout the East Bay.

Greater housing supply in these cities over the past few years contributed to this growth. Between 2014 and 2019 the aforementioned cities issued more residential permits per capita than other cities in the region. On average, over the past 5 years, for every 1,000 persons in the East Bay 3 permits were issued. By comparison, Dublin issued 13 permits per 1,000 persons between 2014 and 2019; Brentwood issued 7 permits per 1,000; and Oakley issued 5 permits per 1,000. Newark issued 4 permits per 1,000, only slightly higher than the East Bay average.

Figure 5.2: Top 20 Fastest Growing Cities in the East Bay

2019

City	2019 Population	1-Year % Growth
Dublin	64,577	4.4
Newark	48,712	3.3
Brentwood	63,662	2.4
Oakley	41,759	2.0
Pleasanton	80,492	1.3
Union City	74,916	1.2
El Cerrito	25,459	1.1
Hercules	26,224	1.0
Lafayette	26,327	1.0
San Ramon	83,957	0.9
Albany	19,393	0.9
Walnut Creek	70,121	0.9
Berkeley	123,328	0.8
Livermore	91,039	0.8
Orinda	19,475	0.7
Pittsburg	72,541	0.7
Antioch	113,901	0.6
Fremont	232,532	0.6
Hayward	159,433	0.5
Piedmont	11,420	0.5

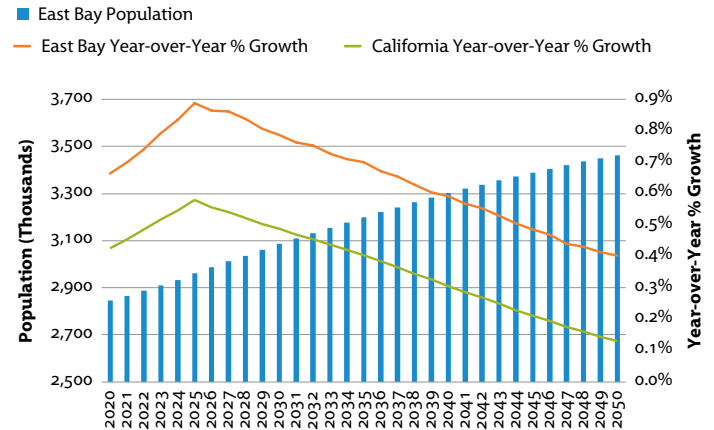
Source: California Department of Finance; Analysis by Beacon Economics

POPULATION PROJECTIONS

Even before the COVID-19 pandemic the East Bay's population growth was expected to slow considerably during the next 30 years, along with much of the state. The California Department of Finance (DOF) estimated that between 2020 and 2050, average year-over-year population growth in the East Bay would be roughly 0.7%. According to those estimates, population growth rates are expected to peak in 2025 at 0.9% in the East Bay, followed by a steady decline to 0.4% in 2050. This is a result of slowing birth rates, as well as declining domestic net migration. While the growth rate trajectory will resemble that of California, the East Bay's population growth will nonetheless remain higher than the statewide projections of year-over-year change, as seen in Figure 5.3.

Figure 5.3: East Bay Population Projections

2020 to 2050



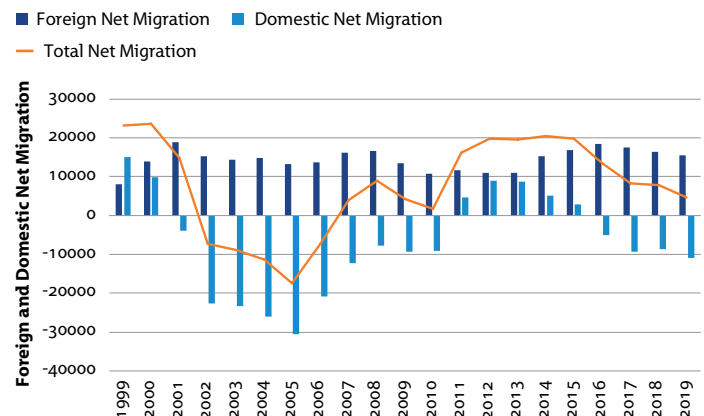
Source: California Department of Finance, January 2020; Analysis by Beacon Economics

NET MIGRATION

In 2019, total net migration to the East Bay was 4,653, a decrease from 6,700 in 2018 and 8,000 in 2017. Net migration continued to decline for the fifth consecutive year. This trend also accelerated in many other parts of California with housing costs driving people to more affordable states. Although net foreign migration remained positive, the number was trending lower while the number of residents leaving the East Bay increased, as shown in Figure 5.4.

Figure 5.4: East Bay Net Migration Trends

1999 to 2019



Source: California Department of Finance; Analysis by Beacon Economics

EAST BAY DEMOGRAPHICS

Between 2015 and 2018 the most popular states for East Bay outbound migration were Tennessee, Oklahoma, Virginia, Nebraska and Arizona (Figure 5.5). A total of roughly 67,180 people have relocated from the East Bay to the aforementioned five states. Conversely, the most popular states for migrants coming into the East Bay were New York, Washington, Illinois, Arizona and Oregon—accounting for roughly 38,080 people moving to the East Bay.

Figure 5.5: Top Ten States for Outbound & Inbound Migration

East Bay 2015-2018 Total

Outbound Migration by State	Number of Migrants	Inbound Migration by State	Number of Migrants
Tennessee	20,955	New York	10,379
Oklahoma	13,040	Washington	8,348
Virginia	12,775	Illinois	7,484
Nebraska	11,516	Arizona	6,424
Arizona	8,898	Oregon	5,448
Colorado	8,355	Texas	5,378
New Hampshire	6,333	New Jersey	4,872
Florida	5,241	Florida	4,680
New Mexico	5,219	Massachusetts	4,644
Ohio	5,106	Virginia	4,264

Source: 1-Year American Community Survey Public Use Microdata Sample; Analysis by Beacon Economics

NATURAL INCREASE AND HOUSEHOLDS WITH CHILDREN

Over the past three years the population growth due to natural increase (the difference between births and deaths) was just over 12,400 a year. However, this trend has changed considerably from only a decade ago. From 1999 to 2009, the average yearly natural increase was over 18,150. From 2009 to 2019, it dropped 18.5% to 14,800 annually.

From 2010 to 2018, the share of households with no children reached 65.3%, increasing by nearly 3 percentage points. Furthermore, the share of households with four or more children decreased by 2.4 percentage points to 6.7% of total households, while the share of households with one child dropped by 1.4 percentage points to 12.2%. Only

households with two children increased, growing by 0.7 percentage point from 2010 to 2018.

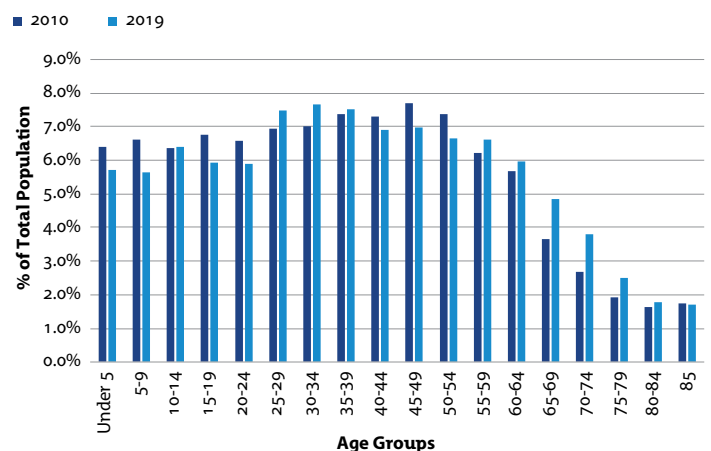
Changes in birth rates have been occurring across California and nationwide, with various socioeconomic drivers, such as career development, homeownership and costs of living, driving people to have fewer children and to have them later in life. Only foreign net migration has been strong enough to keep population growth steady. As the natural increase declines, the challenge will be to sustain the number of workers needed for economic growth.

AGE

Within the population, the East Bay's age profile changed notably from 2010 to 2018. As indicated above, households have had fewer children compared to earlier generations, resulting in proportionately fewer younger residents and a shift in the population pyramid to older adults. The share of people under 25 fell by 3.1 percentage points from 2010 to 2018, while the share of people 60 and over increased by 3.3 percentage points. The share of individuals from 25 to 49 stayed relatively constant, increasing by 0.2 percentage point from 2010 to 2018.

Figure 5.6: Population by Age

East Bay, 2010 and 2018



Source: 1-Year American Community Survey; Analysis by Beacon Economics

RACE/ETHNICITY

The East Bay's racial and ethnic composition also changed between 2010 and 2018. In 2018, the East Bay's non-Hispanic White population accounted for nearly 36% of the population, representing a decline of 3.7 percentage points

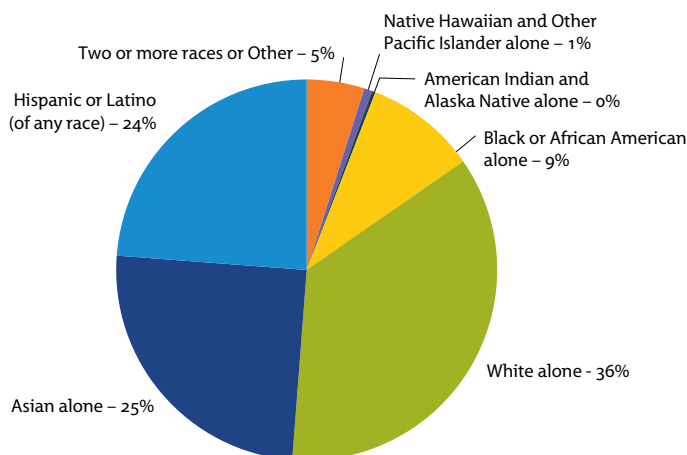


Concord Farmers' Market. Source: Courtesy of City of Concord.

from 2010. Meanwhile, the Asian American population increased from 21.5% in 2010 to 25.0% in 2018. Hispanics (of any race) increased by 0.5 percentage point over the same period, with a share of 23.8% in 2018. The Black population decreased from 10.8% in 2010 to 9.5% in 2018.

Figure 5.7: Share of East Bay Population by Ethnicity/Race

2018



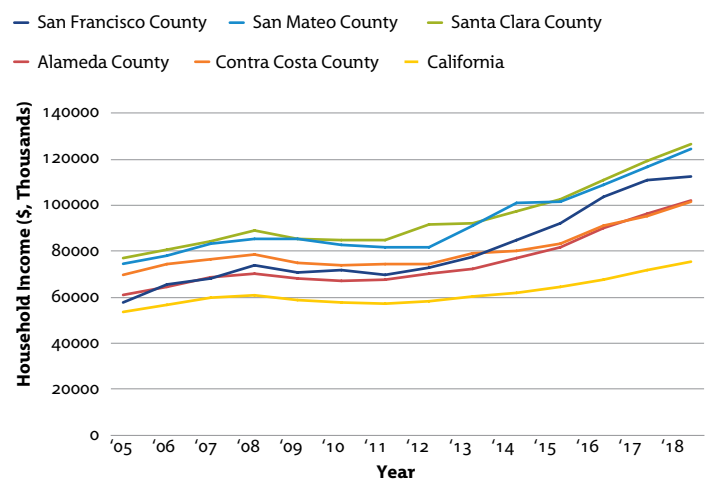
Source: 1-Year American Community Survey; Analysis by Beacon Economics

INCOME AND EDUCATION

Since 2010, the financial characteristics of East Bay households changed significantly, consistent with the trend of increasing household incomes throughout much of California. From 2010 to 2018, median household income reached \$102,125 in Alameda County (+52%) and \$101,618 in Contra Costa County (+38%). Both counties have far surpassed the state's median household income of \$75,277 and outpaced the state's median household income growth of 30.4% over the same period. However, compared with neighboring regions, the East Bay was slightly short in both absolute terms and income growth. Median household incomes grew to \$112,376 (+57%) and \$126,606 (+53%) in San Francisco and Santa Clara counties respectively.

Figure 5.8: Median Household Income

East Bay, Neighboring Counties and State



Note: Not inflation-adjusted

Source: 1-Year American Community Survey; Analysis by Beacon Economics

The East Bay distribution of wealth among households also experienced dramatic shifts from 2010 to 2018 (Figure 5.9). During that time the East Bay's largest income group, the share of households earning \$150,000 or more, increased by nearly 15 percentage points to 32.7% of all households. By comparison, the share of statewide households earning more than \$150,000 increased by 9.2 percentage points and accounted for 21.3% of households in 2018. Meanwhile, the share of all East Bay household income groups earning \$99,999 or less declined. Households earning less than \$25,000 declined by 5.6 percentage points from 2010 to 2018.

EAST BAY DEMOGRAPHICS

Figure 5.9: Share of Households by Income Bracket

East Bay and California

Household Income	East Bay		California	
	2018	2010-18 Percentage Point Change	2018	2010-18 Percentage Point Change
Less than \$25K	12.0%	-5.6	16.5%	-5.0
\$25K to \$49.9K	12.6%	-6.2	17.6%	-4.7
\$50K to \$99.9K	24.1%	-5.0	27.9%	-1.9
\$100K to \$149.9K	18.5%	1.9	16.6%	2.4
\$150K or More	32.7%	14.9	21.3%	9.2
Total Number of Households	971,543	7.3%	13,072,122	5.4%

Source: 1-Year American Community Survey; Analysis by Beacon Economics

From 2010 to 2018, earnings of individuals in the East Bay across all educational attainment levels grew, outpacing California in most categories. Earnings of individuals with less than a high school degree rose 38.8% in Alameda County and 37.4% in Contra Costa County, surpassing California's growth of 35.3%. For high school graduates, who earn considerably more than similar workers statewide, earnings rose 33.4% and 21.2% in Alameda and Contra Costa counties respectively, outpacing California's 17.8%. Unsurprisingly, graduate or professional degree holders have the highest earnings. On average, those with a graduate degree earn roughly \$10,000 more in the East Bay than in the state overall.

Figure 5.10: 2018 Median Earnings by Educational Attainment

Alameda County, Contra Costa County and California

Educational Attainment	2018			Percent Growth (2010-2018)		
	Alameda County	Contra Costa County	California	Alameda County	Contra Costa County	California
Less than high school graduate	\$27,524	\$28,581	\$24,263	38.8%	37.4%	35.3%
High school graduate (includes equivalency)	\$41,205	\$37,782	\$31,954	33.4%	21.2%	17.8%
Some college or associate degree	\$47,446	\$46,789	\$39,614	18.2%	14.5%	10.9%
Bachelor's degree	\$76,660	\$76,070	\$62,347	35.6%	23.6%	19.3%
Graduate or professional degree	\$100,893	\$100,113	\$90,204	26.3%	16.3%	21.2%
Median Earnings for Population 25 years & Over	\$59,730	\$55,192	\$42,156	41.5%	26.6%	18.3%

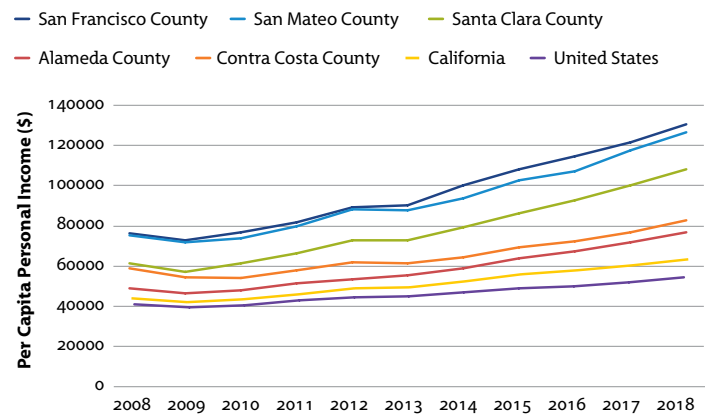
Note: Values are in nominal terms

Source: 1-Year American Community Survey, 2018; Analysis by Beacon Economics

From 2017 to 2018, Alameda County's per capita personal income increased 7.1%, while Contra Costa County's increased 7.3%. These growth rates represent a significant increase compared to previous years. Furthermore, growth in per capita personal income in the East Bay paralleled some neighboring regions', with San Francisco's growth reaching 7.3% and Santa Clara County's growth leading slightly at 7.7%.

Figure 5.11: Per Capita Personal Income

2008 to 2018



Note: Values are in nominal dollars.

Source: BEA; Analysis by Beacon Economics

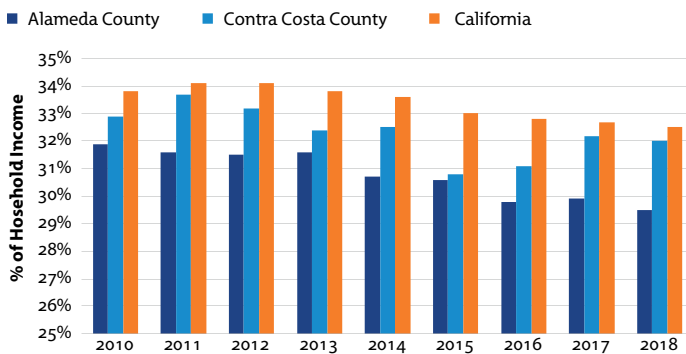
As of 2018, Alameda County's per capita personal income was \$76,644, and Contra Costa County's was \$82,506. Comparatively, the East Bay counties are far higher than statewide and national incomes, with California's per

capita personal income at \$63,557 and the U.S. at \$54,446. Compared with neighboring regions, however, the East Bay trails areas to the west and south: in 2018, San Francisco's per capita personal income was \$130,696, while Santa Clara County reached \$107,877.

Due in part to rising incomes, the percentage of household incomes spent on rent has fallen slightly in the East Bay, as shown in Figure 5.12.

Figure 5.12: Median Rent as Percent of Household Income

2010 to 2018



Source: 1-Year American Community Survey;
Analysis by Beacon Economics

From 2010 to 2018, as East Bay household incomes rose, the share of households spending more than 40% of their income on home costs declined by 10.4 percentage points in Alameda County and 8.1 percentage points in Contra Costa



Families stroll through San Leandro Plaza. Source: Courtesy of City of San Leandro.

County, as seen in Figure 5.13. Meanwhile, the share of households with a mortgage paying less than 20% of their income increased substantially, with Alameda County's share increasing by 14.9 percentage points to 38.6% and Contra Costa County's by 13.8 percentage points to 36.9%. While over one-third of households in both Alameda and Contra Costa pay less than 20% of their annual income on housing, only a slightly higher share of households statewide (34%), pay less than 20% of their income on

Figure 5.13 Owner Costs by Households with a Mortgage

Alameda County, Contra Costa County and California

Category	2018			Percentage-Point Change (2012-2018)		
	Alameda County	Contra Costa County	California	Alameda County	Contra Costa County	California
Less than 20%	38.6%	36.9%	34.1%	14.9	13.8	11.2
20% to 29.9%	28.6%	28.5%	27.4%	2.8	1.0	1.7
30% to 39.9%	13.7%	13.5%	14.7%	-7.0	-6.6	-3.6
40% or More	18.8%	20.9%	23.3%	-10.4	-8.1	-9.4
Not Computed	0.4%	0.2%	0.6%	-0.3	-0.2	0.0
Housing units with a mortgage	225,196	194,502	4,988,711	2%*	2%*	-3.8%*

*Expressed as percentage growth

Source: 1-Year American Community Survey; Analysis by Beacon Economics

EAST BAY DEMOGRAPHICS

Figure 5.14: Share of East Bay Residents by Place of Work (Top Ten Regions)

2012-2018

Work County*	2012		2018		Percentage Point Change
	Number of Workers	Share of Workers	Number of Workers	Share of Workers	
East Bay	866,322	72.2%	971,204	69.4%	-2.8
San Francisco	136,982	11.4%	184,126	13.2%	1.7
Santa Clara	89,177	7.4%	100,162	7.2%	-0.3
San Mateo	44,022	3.7%	59,034	4.2%	0.5
Marin	11,542	1.0%	12,413	0.9%	-0.1
Solano	8,753	0.7%	8,950	0.6%	-0.1
San Joaquin	4,683	0.4%	4,359	0.3%	-0.1
Outside of State	3,874	0.3%	4,297	0.3%	0.0
Sacramento	1,466	0.1%	1,764	0.1%	0.0
Sonoma	2,337	0.2%	1,390	0.1%	-0.1
Total	1,200,000	100%	1,400,000	100%	17%**

*Work county is the county of work for East Bay residents

**Expressed as percentage growth

Source: 1-Year American Community Survey; Analysis by Beacon Economics

housing. This points to the fact that despite the higher cost of East Bay housing, higher household incomes make East Bay housing roughly as “affordable” as the state overall.

COMMUTING

According to the American Community Survey, between 2012 and 2018, the total share of workers who lived and worked in the East Bay fell from 72.2% to 69.4%—indicating greater job opportunities outside the East Bay (Figure 5.14). A primary reason for this is the higher average wages paid in San Francisco, Santa Clara and other neighboring counties coupled with a lower cost of living in Alameda and Contra Costa counties.

Of the East Bay’s 1.4 million employed residents, over 96% work in one of the ten counties or regions listed in Figure 5.14. Outside of the East Bay, San Francisco remains a top work destination of East Bay Residents (13.2%), followed by Santa Clara County (7.2%) and San Mateo County (4.2%). The share of workers from the East Bay working in San Francisco has increased by 1.2 percentage points

between 2012 and 2018, followed by San Mateo at 0.5 percentage points. In light of the pandemic, it remains to be seen whether remote work will persist, particularly as more corporations decide on flexible work arrangements. This transformation may result in reduced commute times.

Figure 5.15: Commute Times for Contra Costa and Alameda Counties

2018

Commute Time	2018		Change (2012 – 2018)	
	Contra Costa Share	Alameda Share	Contra Costa	Alameda
Less than 20 minutes	28.5%	29.4%	-3.3	-4.1
20 to 34 minutes	24.9%	29.5%	-2.7	-5
35 to 59 minutes	19.4%	21.7%	-1.2	1.3
60 or more minutes	27.2%	19.4%	7.2	7.7
Total	100.0%	100.0%		
Average Travel Time	40 min.	34.8 min.	5.6 min.	5.3 min.

Source: 1-Year American Community Survey; Analysis by Beacon Economics



Housing development in Dublin with golfer in the foreground. Source: Courtesy of City of Dublin.

EAST BAY RESIDENTIAL REAL ESTATE

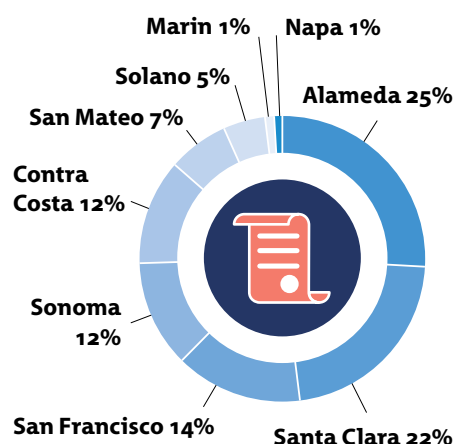


OVERVIEW

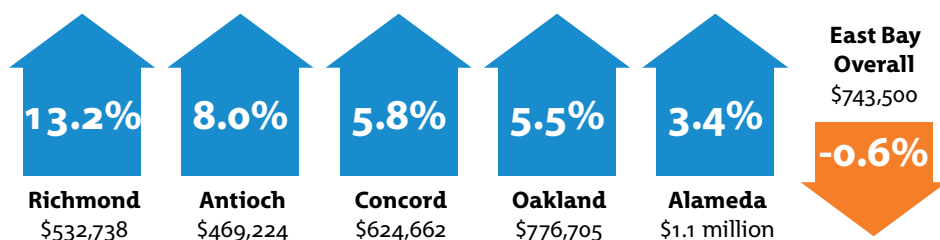
WITH THE ARRIVAL OF COVID-19, an otherwise strong housing market faces short-term headwinds. How long these headwinds last is uncertain. In the short-term, the housing market has ground to a halt. Despite that, many realtors remain bullish on the housing

market, believing that housing prices will remain resilient, since the underlying dynamics of supply and demand in the market are unchanged. Inventories remain low, and housing supply remains tight. That said, there has been a big drop in sales volume in the months of March and April as buyers and sellers were frozen out of the market. If the economy is unable to rebound quickly, it will put a strain on existing homeowners and new entrants will be delayed in entering the market.

2019 Residential Permitting by County



Highest Single-Family Home Price Growth (1-Year)



Median Single-Family Home Prices

5.2% increase in rents (1-Year)

From 2016 to 2019, the East Bay experienced an average year-over-year price growth of 3.8%.



Housing development in Brentwood. *Source:* Courtesy of City of Brentwood.

The narrative of the East Bay's residential market is similar to that of other regions in California: housing shortages continued to drive up home prices and apartment rents through 2019. Despite an urgent need for more housing, residential permitting declined over the past year, particularly for multifamily units. Although declines in mortgage rates made borrowing cheaper, homeownership remained out of reach for many households in the East Bay. As measured by sales prices and days-on-market in some East Bay communities, real estate markets cooled in 2019, but market demand remained robust. According to consumer behavior research conducted by the California Association of Realtors (CAR), buyers were willing to pay a premium for high quality schools and easy access to job centers.

Apartment vacancy rates increased slightly, although increases occurred only in the most expensive cities as a number of people quickly moved into lower-cost units that became available in other areas. In terms of rental costs, the East Bay's rental market remained relatively less expensive than other Bay Area counties, although the gap narrowed as rent growth in the East Bay (5.2%) outpaced that of San Francisco (4.4%) and San Jose (2.8%) from 2018 to 2019.

While the East Bay's economic record through 2019 was mainly one of healthy growth, with the coronavirus outbreak resulting in record unemployment and unprecedented government stimulus programs, 2020 figures to be a totally new situation with much left to be determined.

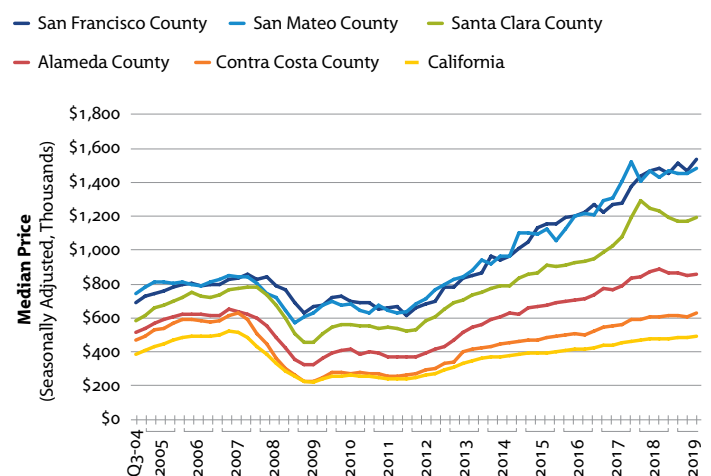
SINGLE-FAMILY HOME PRICES

Single family homes comprise the vast majority of all housing units in the East Bay—60.4% in Alameda County and 75.7% in Contra Costa County. According to third quarter 2019 data from CoreLogic, the median single-family home price in Alameda County was \$874,500 and \$636,000 in Contra Costa County, well above the statewide figure of \$500,000.

However, annual increases in home prices since 2011 started to subside in the East Bay by the end of 2018. Single-family home prices decreased 2.9% in Alameda County and increased 2.7% in Contra Costa County between the third quarters of 2018 and 2019. These changes contrasted with price growth over the same period between 2017 and 2018, when prices increased 11.8% in Alameda County and 8.1% in Contra Costa County. The price slowdown in the Bay Area was attributable to the dampening effect of a rise in mortgage rates in 2018 and the prohibitive cost of housing, which had nearly doubled at the end of 2019 in some parts of the region since the Great Recession.

Figure 6.1: Median Home Price of Existing Single-Family Homes

Q3-2004 to Q3-2019



Note: Dollar amounts are nominal

Source: CoreLogic; Analysis by Beacon Economics

Figure 6.2 shows single-family median home prices and price growth in select cities in the East Bay. Richmond and Antioch were the most affordable cities in terms of

housing costs, and both had the largest price increases from 2018 to 2019: 13.2% in Richmond and 8.0% in Antioch. Richmond led in price growth, with prices jumping nearly 80% since 2014. Besides relatively lower housing costs, these communities also offer amenities such as suburban environments and hilly landscapes, parks and waterfront views, as well as accessibility to other Bay Area cities through public transportation offered by BART and Amtrak.

Brentwood, Hayward and Fremont experienced high growth rates from 2017 to 2018, but these trends reversed from 2018 to 2019 when price growth turned negative. In particular, in Fremont, one of the East Bay's most expensive cities, prices rose 20.7% from 2017 to 2018 but declined by 8.3% from 2018 to 2019. In higher-cost cities such as Alameda and Berkeley, prices rose 3.4% and 2.3% respectively from 2018 to 2019, but the rate of increase fell from the previous period.

Figure 6.2 Single-Family Median Home Prices and Change in Select East Bay Cities

City	2019-Q3 (\$)	Change (%)		
		2018-19	2017-18	2014-19
Richmond	532,738	13.2	16.4	79.3
Antioch	469,224	8.0	4.8	53.8
Concord	624,662	5.8	9.6	43.9
Oakland	776,705	5.5	16.1	55.3
Alameda	1,102,213	3.4	4.3	42.1
Berkeley	1,281,330	2.3	5.4	56.4
Brentwood	589,801	-0.4	10.0	41.9
Hayward	661,726	-3.0	11.2	51.7
Fremont	1,092,056	-8.3	20.7	42.9

Note: Third quarter values each year are shown

Source: CoreLogic; Analysis by Beacon Economics

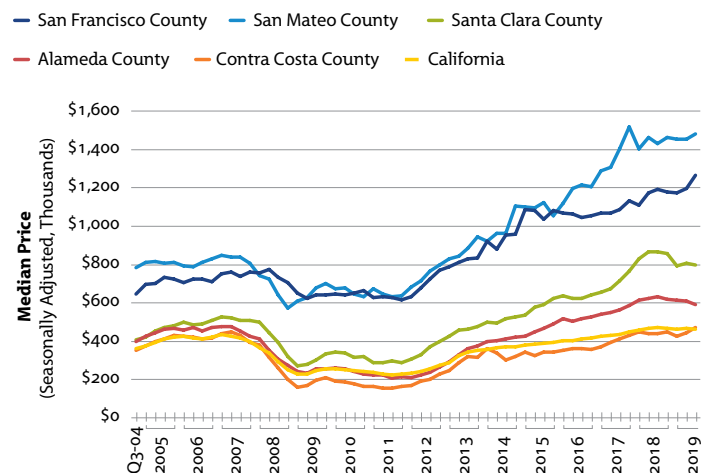
CONDOMINIUM SALES PRICES

As of the third quarter of 2019, the median existing¹ condominium sale price was \$473,844 in Contra Costa County and \$593,220 in Alameda County, compared to the

¹ Existing condominium and townhomes that have been owned and occupied before opening up to the market.

statewide median of \$464,103. According to Figure 6.3, the median condominium price in Contra Costa County increased 7.8% while Alameda County decreased by 8.1%. The increased demand for condominiums in Contra Costa County was fueled by potential buyers reacting to single-family home price increases in Richmond, Antioch and Concord, as well as newer condominium construction on the market. According to real estate data service REIS, 117 condominium buildings were completed in 2019, up from 31 in 2018. Meanwhile, the decline in condominium prices in Alameda County can be attributed to buyers responding to the price decline of single-family homes in Fremont and Hayward.

Figure 6.3: Median Price of Existing Condominiums
Q3-2004 to Q3-2019



Note: Dollar amounts are nominal

Source: CoreLogic; Analysis by Beacon Economics

HOUSING AFFORDABILITY

Following the outbreak of the novel coronavirus, Congress passed the Coronavirus Aid, Relief, and Economic Security (CARES) Act, which puts in place two protections for homeowners with federally backed mortgages. The first of these was a foreclosure moratorium, and the second was the right of forbearance for homeowners who are experiencing financial hardship due to the COVID-19 pandemic. In the short term, these measures are expected to assist homeowners affected by COVID-19.



Luxury high rise apartments under construction in Downtown Oakland. Source: Courtesy of City of Oakland.

In 2019, the average household in Alameda County would have had to spend \$38,448, or 38% of their income each year, to afford the mortgage payment for the median priced home of \$874,500. Contra Costa County was slightly more affordable, where the average household would have needed to spend \$27,960, or 28% of their income to afford the mortgage on the median priced home costing \$636,000². Due to the decline in mortgage rates in 2019, homeownership became more affordable. In 2018, the average household would have had to spend 42% of their income on the mortgage payment for the median priced home in Alameda County, and 30% in Contra Costa County.

Although there is no question households in the East Bay have been mortgage burdened (household spending more than 30% of their income on mortgage payments), the region remained more affordable than San Mateo, San Francisco and Santa Clara counties. At the same time, people moving out of more costly cities and into more affordable areas in the East Bay create upward pressure on those lower cost areas.

² Assumes a 20% down payment is made with a 30-year fixed 3.66% interest rate loan where no private mortgage insurance is needed, based on household income data from the 2018 American Community Survey.

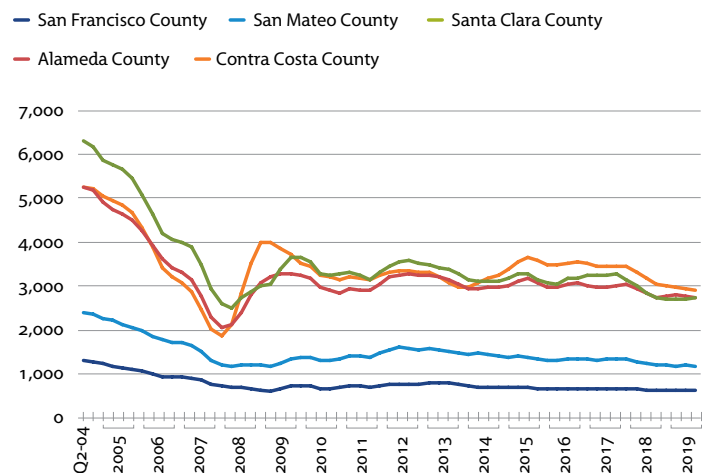
HOME SUPPLY AND SALES

Parts of the Bay Area hit a housing cost ceiling in 2019. San Francisco and Santa Clara counties continued declines in home sales primarily because of high costs, while Contra Costa County with lower housing costs had more home sales since 2015 than any other Bay Area county.

As of March 2020, single-family detached home sales declined by 19% year-over-year in Alameda County and 8% in Contra Costa County. Unsold inventory grew to 1.7 months, up nearly 23% year-over-year in Alameda County, and 1.9 months, up 27% in Contra Costa County.

Figure 6.4: Single-Family Home Sales

Q2-2004 to Q4-2019



Source: CoreLogic; Analysis by Beacon Economics

APARTMENT RENTS AND VACANCIES

Effective rent, the cost of asking rent minus any rent specials or offers, increased about 12% in the East Bay from 2016 to 2019 with an average year-over-year price growth of 3.8%. Historically, apartment rents in the East Bay have remained below those in the San Francisco³ and San Jose⁴ regions (Figure 6.5). In 2019, apartment

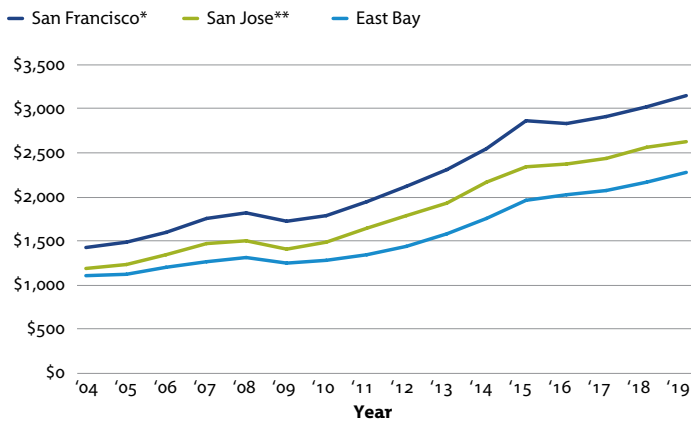
³ The San Francisco region includes San Francisco, San Mateo, and Marin counties.

⁴ The San Jose region includes areas in Santa Clara County north of CA-85.

effective rent was \$2,274 in the East Bay, \$3,153 in the San Francisco region and \$2,630 in the San Jose region. However, demand created by relatively lower costs caused significant rent increases in the East Bay. From 2018 to 2019 rent increases outpaced those in the San Francisco and San Jose regions with apartment rents increasing 5.2% in the East Bay, compared with 4.4% and 2.8% in San Francisco and San Jose, respectively.

Figure 6.5: Apartment Effective Rents

2004 to 2019



*San Francisco includes San Francisco, San Mateo and Marin counties

**San Jose includes regions of Santa Clara County north of CA-85

Note: Dollar amounts are nominal

Source: REIS; Analysis by Beacon Economics

It is somewhat surprising that the East Bay experienced moderate growth in apartment vacancy rates over the last three years, because from 2014 to 2019 the East Bay added 122,194 residents but only built 3,140 housing units. Nevertheless, compared with San Francisco and San Jose, the East Bay was the only region that experienced an increase in its vacancy rate (Figure 6.6). Over the last three years, vacancy rates in the East Bay increased by 0.4 percentage-point, while those in San Francisco and San Jose decreased by 0.8 and 0.1 percentage-point, respectively.

From the second quarter of 2018 to the second quarter of 2019, apartment effective rents rose substantially in some East Bay submarkets. As shown in Figure 6.7, the greatest rent growth occurred in regions with the lowest rents, indicating increased demand for lower-cost submarkets and downward pressure on vacancy rates.

This is especially evident in Northeast Contra Costa County. Lower rent submarkets in Contra Costa County generally had almost doubled their rent growth compared to submarkets in Alameda County. Northeast Contra Costa County, the lowest cost submarket in the East Bay, experienced the greatest growth in apartment rent year-over-year from 2017 through 2019.

According to recent analysis of rent trends from RentCafe, rental market prices are expected to drop due to the pandemic. As the stability of the housing market and

Figure 6.6: Rents and Vacancy Rates by Submarket

Submarket	Effective Rent (\$)	Year-over-Year Percentage Point Change		Vacancy Rate (%)	Year-over-Year Percentage Point Change	
		2018-2019	2017-2018		2018-2019	2017-2018
Alameda County						
Oakland/Berkeley	2,922	2.0	-0.8	4.8	0.1	0.2
San Ramon/Dublin	2,544	2.3	1.1	4.6	0.3	0.7
Livermore/Pleasanton	2,475	2.3	3.1	4.0	-0.2	0.0
Fremont	2,460	2.8	2.2	3.0	-0.4	0.0
Hayward/San Leandro/Union City	2,088	2.9	1.8	2.8	-0.4	-0.1
Contra Costa County						
Walnut Creek/Lafayette	2,494	4.4	0.4	3.8	0.1	-0.4
Northwest Contra Costa County	2,132	4.3	3.3	3.8	-0.8	1.1
Concord/Martinez	2,053	2.5	4.7	3.1	-0.7	0.3
Northeast Contra Costa County	1,826	4.9	6.2	2.6	-1.6	-0.6

Note: Second quarter values for each year are shown

Source: Axiometrics; Analysis by Beacon Economics

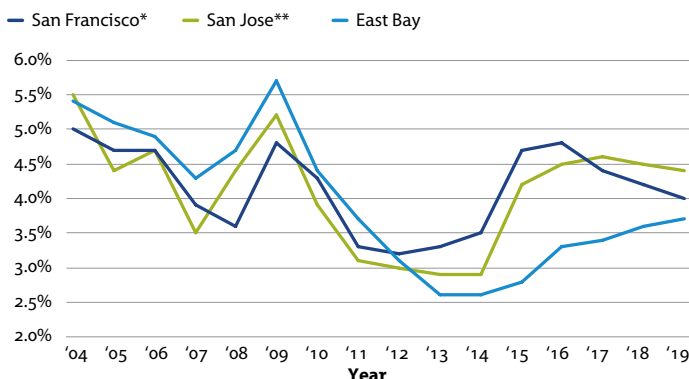
overall economy remains uncertain, they project renters opting to stay in place and landlords pushing for renewals. Expanded renter protections are also expected to keep residents in place.

Although overall apartment vacancy rates in the East Bay remained consistently low, certain submarkets experienced substantial changes, such as the Oakland/Berkeley, San Ramon/Dublin, Livermore/Pleasanton submarkets in Alameda County, and the Walnut Creek/Lafayette and Northeast Contra Costa County submarkets in Contra Costa County. The most expensive submarkets in each county experienced the highest vacancy rates. The Oakland/Berkeley submarket in Alameda County, where effective rents are \$2,922, had a vacancy rate of 4.8%, compared with Hayward/San Leandro/Union City, which had an effective rent of \$2,088 and a 2.9% vacancy rate. In Contra Costa County, the Walnut Creek/Lafayette submarket had an effective rent of \$2,494 and a 3.8% vacancy rate while Northwest Contra Costa County had an effective rent of \$1,826 and a 2.6% vacancy rate.

When vacancy rates increased due to high rental costs, the supply began to slow. The number of new apartment units declined significantly from 2,774 in 2018 to 1,398 in 2019, according to REIS. Between the second quarters of 2018 and 2019, the number of housing permits fell in the Oakland/Berkeley, San Ramon/Dublin and Walnut Creek/Lafayette submarkets. Where vacancy rates decreased, mainly in lower cost cities, housing permits increased such as in the Hayward/San Leandro/Union City, Livermore/Pleasanton and Northeast Contra Costa County submarkets.

Figure 6.7: Apartment Vacancy Rates

2004 to 2019



*San Francisco includes San Francisco, San Mateo and Marin counties

**San Jose includes regions of Santa Clara County north of CA-85

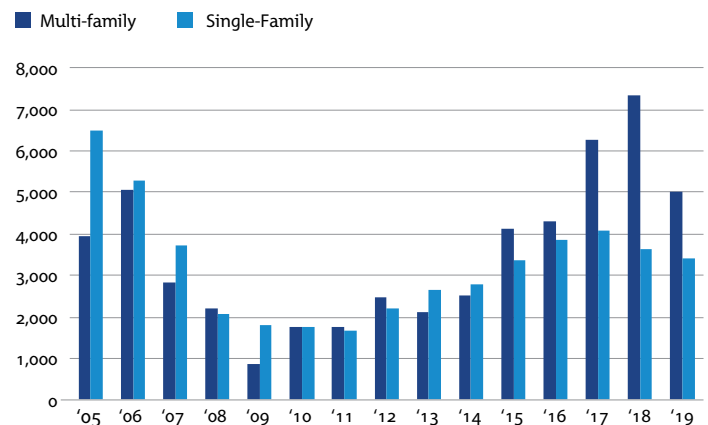
Source: REIS; Analysis by Beacon Economics

RESIDENTIAL PERMITTING

Consecutive yearly increases in residential permits that began in 2011 ended in 2019 (Figure 6.8). According to data from the Construction Industry Research Board (CIRB), 8,429 residential permits were issued by cities and counties in the East Bay in 2019, which was about 23% fewer than in the previous year. The most substantial change was for multifamily units—a 31% decline compared to a 7% decline for single-family units.

Figure 6.8: Residential Permitting by Type

East Bay, 2005 to 2019



Source: CIRB; Analysis by Beacon Economics

In 2019, Alameda County continued to issue the greatest number of permitted units of any county in the nine-county Bay Area with 6,006 units—over one-quarter of all permits. However, that represented a 23.2% decline from the previous year. Contra Costa County issued 2,778 permits, or approximately 12% of the region's total, and experienced a decline of 32.6% from the previous year.

Over a 5-year period between 2014 and 2019, total residential permitting increased by 150% in Alameda County and 714% in Contra Costa County, in response to new housing demand created by new residents—232,525 in Alameda County and 162,468 in Contra Costa County. The recent decline in permitting is concerning, particularly for new multi-family units.

Within the East Bay, the top five cities issuing the most 2019 residential permits were Oakland (1,939 permits), Fremont (1,172), Hayward (938), Alameda (672), and Walnut Creek (377).

Figure 6.9: Residential Permitting by County

2019

County	Total Permitted Units	Share of Bay Area (%)	Change (%)	
			2018-19	2014-19
Alameda	6,006	25.8	-23.2	150.3
Santa Clara	5,178	22.2	-32.5	-22.6
San Francisco	3,343	14.4	-36.5	71.5
Sonoma	2,844	11.9	-9.1	54.3
Contra Costa	2,778	12.2	-32.6	71.4
San Mateo	1,566	6.7	1.7	-4.8
Solano	1,135	4.9	12.4	54.2
Marin	222	1.0	-79.3	605.9
Napa	215	0.9	-3.2	18.1
Total	23,287	100.0	-26.9	49.8

Note: Fourth quarter values for each year are shown

Source: CIRB; Analysis by Beacon Economics

The Bay Area and California as a whole have been in a housing crisis characterized by severe shortages leading to skyrocketing housing costs. The decline in residential permitting indicated falling profitability in housing development which could be a serious concern if the economy bounces back as projected. Additional expenses associated with long project approval timelines, high construction costs, burdensome regulations, and neighborhood pushback have been the main factors contributing to the diminishing incentive to build. The economic uncertainty caused by the coronavirus will certainly make homebuilding challenging as well. Nonetheless, ensuring a sustained housing pipeline remains key to building an equitable and sustainable economy.

HOUSING BILLS

Even before the various temporary emergency housing measures enacted in response to the coronavirus pandemic, the State addressed persistent long-term issues in California's residential markets. Housing laws took effect this year addressing tenant protection, housing density and barriers to production, uses of surplus public property, and funding.

Assembly Bill 1482, perhaps the most recognized bill regarding tenant protection, caps rent increases at 5% plus the rate of inflation and limited to 10% overall.

Other bills relating to tenant protection are AB 1110, which increases the length of time before a landlord can raise rent, and Senate Bill 329, which prohibits landlords from discriminating against tenants who rely on housing assistance. Unsurprisingly, these types of tenant protections have raised contention among property owners.

State laws targeting housing density issues and barriers to production were also enacted this year. SB 330, the Housing Crisis Act, expedites development approval by limiting local land use control. Improved laws regarding Accessory Dwelling Units (ADUs), also known as granny units, aim to increase housing supply. For example, AB 68 facilitates the production of ADUs by limiting project requirements while AB 587 allows ADUs to be sold separately from a primary residence under certain conditions.

Legislation expanding the existing Surplus Lands Act for affordable housing production also came into law (SB 6, AB 1486, and AB 1255).⁵

Other laws address funding. In the Bay Area, AB 1487 authorizes the creation of the Housing Alliance for the Bay Area, which supports low-cost residential development and protects long-term residents.⁶ SB 113 gives borrower relief and support to low-income homeowners and renters through the National Mortgage Special Deposit Fund⁷ in California.

Clashes over state and local land use control are likely to persist. The most recent example of this controversy was SB 50, which aimed to build more high-density housing near major transit hubs and job-rich areas. This was the third attempt to pass this type of upzoning bill, something many elected officials and housing advocates agree is essential for the state to solve its housing shortage. The highly publicized debate was as much about the uncertainty of how to address the housing crisis as it was a test of local and state collaboration.

5 "California's 2020 Housing Laws: What You Need to Know." Holland & Knight. <https://www.jdsupra.com/legalnews/california-s-2020-housing-laws-what-you-26159/>

6 "AB-1487 San Francisco Bay area: housing development: financing." California Legislative Information. http://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB1487

7 "California's 2020 Housing Laws: What You Need to Know." Holland & Knight. <https://www.jdsupra.com/legalnews/california-s-2020-housing-laws-what-you-26159/>



This report was supported and prepared in partnership with



1221 Oak Street, Suite 555, Oakland, CA 94612

www.EastBayEDA.org