

ATTACHMENT F: Beacon Report

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Recent Trends
Employment
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Industry
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Business Trends
Residential
Real Estate
Commercial
Long-Run
Considerations
Education
The Impact of
Education on
Employment
and Income
Health Insurance
and Social
Services Shifting
Demographics
Recession Effects

East Bay ECONOMIC OUTLOOK



2015-16



ABOUT THIS REPORT

East Bay Economic Development Alliance (East Bay EDA) is a public/private partnership serving the San Francisco Bay Area's East Bay (Alameda and Contra Costa Counties).

East Bay EDA's mission is to be the regional voice and networking resource for strengthening the economy, building the workforce and enhancing the quality of life in the East Bay.

One of East Bay EDA's core strategies is to provide valuable information about the trends impacting the East Bay economy. Each year we produce an annual East Bay Economic Outlook report, which is both a forecast and a summary of key economic indicators for the East Bay as it compares to the Bay Area region, the state of California, and the nation as a whole.

To access East Bay EDA's reports, economic forecasts and business resources data, please visit:
www.EastBayEDA.org

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EAST BAY ECONOMIC OUTLOOK 2015-16

CONTENTS

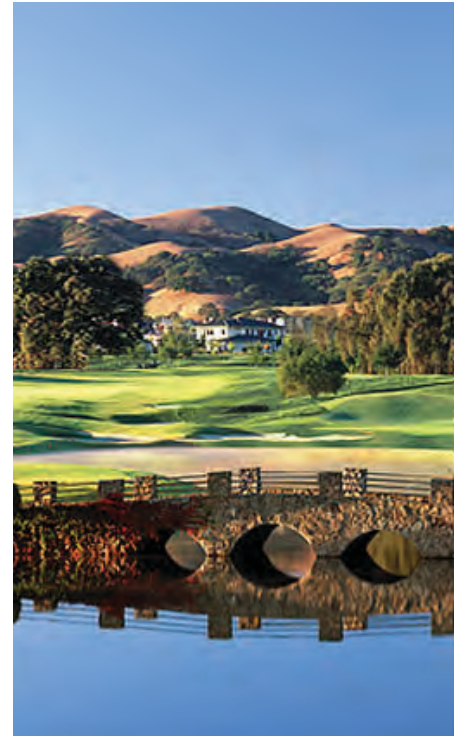
<u>EXECUTIVE SUMMARY</u>	<u>3</u>
<u>EAST BAY EMPLOYMENT</u>	<u>4</u>
<u>EAST BAY BUSINESS ACTIVITY</u>	<u>10</u>
<u>EAST BAY COMMERCIAL REAL ESTATE</u>	<u>21</u>
<u>EAST BAY RESIDENTIAL REAL ESTATE</u>	<u>27</u>
<u>DEMOGRAPHICS / QUALITY OF LIFE</u>	<u>34</u>
<u>CONCLUSION</u>	<u>40</u>

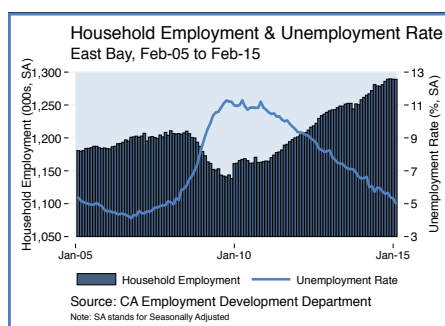
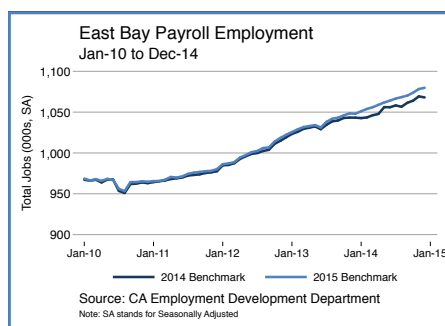
The East Bay Economy continues to move forward and build on the economic expansion that has taken place in the post-recession era these last few years. With virtually every major economic indicator trending in the right direction, the region is poised for steady growth in 2015 as the local economic engine continues firing on all cylinders. From the job market to spending and real estate, the East Bay remains one of the bright spots in the state of California.

Nonfarm Employment in the Alameda and Contra Costa County metropolitan area has grown steadily over this last year and the unemployment rate in the region continues to be lower than the statewide and national averages. The Leisure and Hospitality industry has been one of the main drivers of job growth for local businesses and highlights the strong growth mainly in business travel. The East Bay also continues to be home to many outbound commuters, who tend to find high paying jobs in the West and South Bay job centers, which ultimately boosts local incomes and spending.

Just as trends in the local labor market have been moving in the right direction, business activity indicators have trended favorably as well. The gains in the job market have resulted in higher spending levels in the region, measured by taxable sales, which have risen across the region. Higher employment levels in the Leisure and Hospitality industry have also coincided with rising hotel occupancy, which is at historically high levels. What's more, venture capital funding surged in 2014 with solar tech companies being the major driver of the increased investment. These gains have carried over to property owners, where vacancy rates for office, retail, and industrial properties continued to decline and rents improved.

Residential real estate continues to appreciate at a rapid pace, driven by strong demand from buyers who are more confident with their employment situation and are eager to take advantage of historically low interest rates. The East Bay continues to have one of the fastest growing population bases in Northern California as home prices are relatively affordable compared to the South Bay and San Francisco. The amount of available housing currently on the market in the East Bay remains limited, but more units will become available in the near future as residential construction activity picked up considerably in 2014.





OVERVIEW

The East Bay's labor market has finally hit its stride, and is poised for further growth in 2015 and 2016. Recently revised estimates show that East Bay employment growth in 2014 was much better than previously reported. Nonfarm jobs from December 2013 to December 2014 grew by 3.0%, rather than the 2.4% originally estimated by the State. And, while this is slightly behind its neighbors in San Francisco and San Jose, the East Bay was on par with the state as a whole and well above the national average of just 2.3%.

The East Bay's unemployment rate fell to 5.1% in February 2015, compared to 6.7% in the state of California. Employment in the East Bay's Leisure and Hospitality sector has led the pack – outgrowing every other major industry over the last two years (10.4%), which signals the strength of business travel, tourism, and increased consumer spending in the region.

Outbound commuting among East Bay residents remains most common in high-skilled industries – which means that these workers bring home relatively higher-wages. While many of these workers migrated to the East Bay in search of more affordable housing and increased quality of life while maintaining jobs in San Francisco or the South Bay, they represent a local asset that can be leveraged to attract businesses to the East Bay and to foster further growth at existing firms.

Overall, the future of the East Bay is looking bright, and Beacon Economics forecasts that payroll employment will continue to grow at more than 2% during 2015.

LABOR MARKETS

Employment levels in the East Bay increased at a faster pace than previously estimated over the past year, now outpacing the nation and many other notable economies. The East Bay outpaced Miami, Austin, Las Vegas, Boulder, San Diego, Indianapolis and Boston, amongst others. With the new revisions, growth in the East Bay for December 2013 to December 2014 went from an estimated 2.4% to 3.0%. That translates into an additional 11,800 new jobs created over the past year, and puts the East Bay well ahead of the 2.3% growth in the nation during the same period.

In 2013, the East Bay finally surpassed its all-time high for nonfarm employment levels, joining the state and nation in recovering jobs lost during the downturn. From February 2014 to February 2015, nonfarm employment in the East Bay grew by 2.4% (25,500 jobs), matching the pace set in the nation (2.4%) over the period. However, job growth in the East Bay was overshadowed by the State (3.1%), San Jose (5.3%), and San Francisco (4.4%) over the same period.

The unemployment rate in the East Bay is continuing to fall, coming in at 5.1% in February 2015. While well below the unemployment rate in the state overall (6.7%), the unemployment rate remains elevated compared to San Francisco (3.7%) and San Jose (4.4%). As unemployment has fallen, the labor force has expanded by 6,800 over the past year.

The average hours worked in the East Bay has steadily increased since the end of the recession. While the average hours worked has dipped slightly in recent months, the average work week in the East Bay was 35.3 hours in January 2015 on a seasonally adjusted basis. This is up from 33.2 hours in

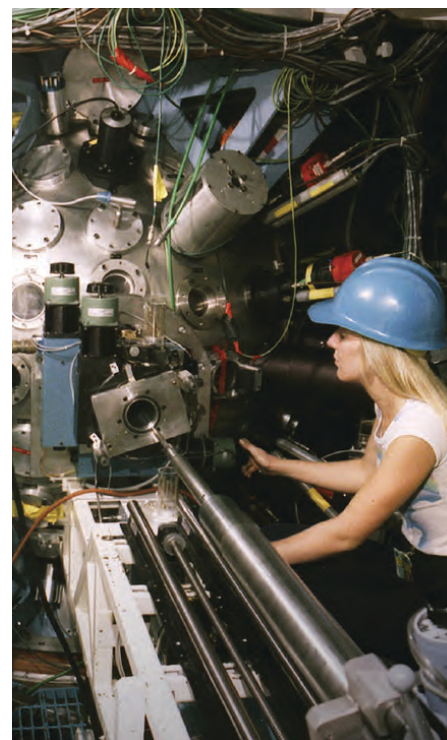
January 2010. Importantly, the number of those who are employed part-time for economic reasons has steadily declined across the state, falling by 5.4% from 1,258,000 workers in February 2014 to 1,190,000 workers in February 2015.

Employment gains have been seen across a broad range of sectors in the East Bay in recent years, and the region is creating jobs on both ends of the wage spectrum. Some of the fastest growing sectors over the past year have been Construction (7.3%), Administrative Support (7.5%), and Leisure & Hospitality (3.7%). However, high-skilled sectors like Professional Scientific, and Technical Services (3.5%) also posted significant growth over the year. In addition,

manufacturing jobs expanded in 2014, growing by 2.2% in the East Bay.

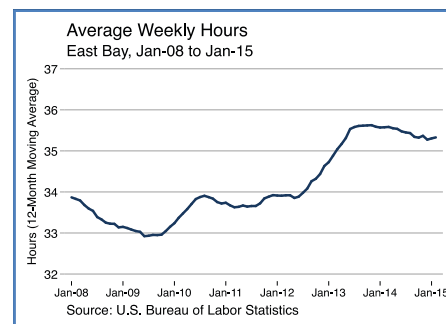
Only two major sectors saw employment levels decline over the last year: Finance Activities (contracted by -2.1%) and Natural Resource and Mining (contracted by -12.7%).

Clearly, high-tech jobs are a strong presence in the East Bay. Computer Systems Design and Related Services was the single-largest source of new jobs at the 4-digit industry level in 2014, generating 2,199 new positions. However, the demand for skilled workers extends well beyond “tech” jobs: Management of Companies, Architectural/Engineering Services, Information Services, and Doctor’s Offices combined to create 2,600 new jobs in the East Bay last year as well.



East Bay Payroll Employment Growth by Industry

	Feb-15	1-Year Change (%)	2-Year Change (%)
Total Nonfarm	1,079.4	2.4	4.9
Total Private	912.1	2.6	5.2
Admin Support	61.7	7.5	10.3
Construction	61.6	7.3	9.7
Educational Services	24.5	5.2	8.6
Leisure and Hospitality	106.0	3.7	10.4
Prof Sci and Tech	93.4	3.5	6.2
Transport, Warehouse, Util.	35.6	2.5	7.7
Management	30.4	2.3	7.1
Manufacturing	82.9	2.2	4.2
Wholesale Trade	46.7	1.5	3.9
Other Services	38.0	1.4	3.0
Information	21.4	1.4	-0.8
Government	167.3	1.3	3.2
Retail Trade	109.6	1.3	2.9
Health Care	151.1	1.0	3.0
Financial Activities	48.5	-2.1	-2.1
NR/Mining	0.7	-12.7	-22.3



Employment gains have been seen across a broad range of sectors in the East Bay in recent years, and the region is creating jobs on both ends of the wage spectrum.

EAST BAY EMPLOYMENT



INDUSTRY CONCENTRATION AND FIRM SIZE

The industrial composition of the economy in the East Bay is noticeably different from San Jose and San Francisco. San Francisco has a higher share of payroll jobs in Professional, Scientific, and Technical Services and Tourism/Leisure and Hospitality, while San Jose is more concentrated in Professional, Scientific, and Technical Services and Manufacturing. The East Bay is more concentrated in Retail

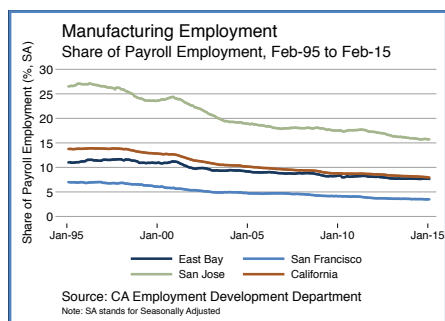
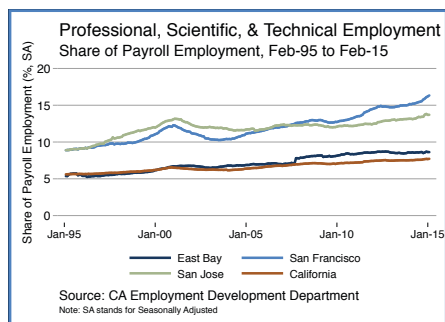
Trade, Healthcare, Government, and Construction—largely inward-facing industries serving the local population.

Over the past 20 years, the East Bay region has become more concentrated in Professional Scientific, and Technical Services, which represents 3.3 percentage points more of the jobs in the East Bay today than it did in the past. This outpaces California, which saw shares rise by just 2.1 percentage points over the same period.

The East Bay's Manufacturing sector has also been more resilient over the

Share of Total Payroll Employment by Industry

	East Bay		San Francisco		San Jose		California	
	2015	1995	2015	1995	2015	1995	2015	1995
Government	15.5	19.0	11.8	13.7	9.1	10.9	15.2	17.0
Health Care	14.0	10.1	9.8	8.1	10.6	7.0	13.1	8.9
Retail Trade	10.2	11.5	7.8	8.7	8.4	9.3	10.3	11.2
Leisure & Hospitality	9.8	7.5	13.1	11.1	9.1	7.4	11.3	9.4
Prof Sci and Tech	8.7	5.4	16.4	8.9	13.7	8.9	7.7	5.6
Manufacturing	7.7	11.0	3.5	7.0	15.7	26.5	8.0	13.8
Construction	5.7	4.8	3.5	2.9	3.9	3.4	4.4	4.0
Admin Support	5.7	5.8	6.2	5.6	5.8	6.6	6.5	5.7
Financial Activities	4.5	5.4	7.0	10.2	3.5	3.7	5.0	5.9
Wholesale Trade	4.3	4.7	2.6	3.9	3.6	4.4	4.6	4.5
Other Services	3.5	3.2	4.0	4.0	2.6	3.0	3.4	3.5
Trans., Warehouse, Util.	3.3	4.1	3.8	6.6	1.5	1.8	3.4	3.7
Management	2.8	2.5	2.6	4.1	1.1	1.3	1.4	1.8
Educational Services	2.3	1.5	2.6	1.7	4.2	2.7	2.3	1.5
Information	2.0	3.3	5.4	3.5	7.0	3.0	2.9	3.4
NR/Mining	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.2



Employment Shares by Size of Business, 2013

	0-49 Employees	50-99 Employees	100-499 Employees	500 + Employees
East Bay	45.7	14.6	26.1	13.6
San Francisco	44.1	13.0	24.2	18.8
South Bay	35.8	12.4	22.3	29.5
California	40.8	14.2	24.3	20.7

Place of Work for East Bay Residents by Industry (%)

	East Bay		San Francisco		San Mateo		Santa Clara		Other	
	Share (%)	Number	Share (%)	Number	Share (%)	Number	Share (%)	Number	Share (%)	Number
Information	49.0	19,421	16.7	6,619	5.0	1,981	10.8	4,283	18.5	7,357
Prof Sci and Tech	53.0	82,494	16.5	25,693	4.9	7,552	9.8	15,299	15.7	24,467
Construction	53.5	44,584	11.6	9,663	4.8	3,973	5.9	4,909	24.2	20,149
Manufacturing	55.1	67,465	4.3	5,325	3.2	3,938	20.2	24,764	17.2	21,043
Utilities	58.1	6,923	28.1	3,351	0.9	113	4.6	545	8.2	982
Finance & Insurance	61.7	44,213	18.6	13,334	2.7	1,946	3.3	2,359	13.6	9,752
Admin Support	64.4	47,039	8.3	6,036	2.6	1,906	2.9	2,086	21.8	15,929
NR/Mining	65.2	4,309	8.4	556	1.0	66	5.7	376	19.7	1,303
Transport/Warehousing	66.1	34,477	9.3	4,833	9.1	4,731	2.5	1,317	13.0	6,803
Accommodations	66.3	61,279	11.9	11,041	3.0	2,745	2.0	1,846	16.8	15,490
Government	66.7	80,288	12.1	14,591	2.4	2,896	4.6	5,493	14.2	17,052
Retail Trade	66.7	97,772	9.1	13,379	2.8	4,156	3.9	5,715	17.5	25,662
Other Services	68.4	48,541	10.4	7,347	3.3	2,306	1.6	1,163	16.3	11,567
Wholesale Trade	68.4	24,884	6.1	2,222	4.6	1,686	5.8	2,091	15.1	5,481
Educational Services	69.1	30,808	8.3	3,703	1.4	620	5.7	2,550	15.5	6,890
Art & Entertainment	69.9	21,960	8.5	2,662	2.1	658	2.1	662	17.4	5,474
Health Care	70.5	129,621	6.8	12,572	2.1	3,903	5.7	10,393	14.8	27,256
Real Estate	72.4	22,104	11.8	3,611	1.5	452	4.3	1,315	10.0	3,062
Management	75.7	720	0.0	0	0.0	0	7.3	69	17.0	162
Total	62.2	868,902	10.5	146,538	3.3	45,628	6.2	87,235	17.8	249,200

past 20 years, with its share of total employment falling by 3.3 percentage points, relative to California (-5.8 percentage points), San Francisco (-3.5 percentage points), and San Jose (-10.8 percentage points). As a result, the region has transformed into a higher-skilled labor market more quickly than the rest of the state, while losing fewer of its mid-skilled jobs at the same time.

The East Bay is particularly friendly to small businesses and has a higher concentration of small firms compared to San Francisco and San Jose. Small businesses account for 45.7% of employment in the area, compared to 44.1% in San Francisco and 35.9% in the South Bay. These small businesses have

been a huge asset to the region during the recovery, and accounted for over half of the new jobs added in the East Bay from 2012 to 2013. The distribution of employment in the East Bay indicates that the region is well equipped to support small businesses, though it is home to fewer large businesses compared to its neighbors.

COMMUTING

The gap between the number of residents employed in the East Bay and the number of workers employed by East Bay businesses reveals the region has a large share of outbound commuters. However, that gap has fallen in recent years as the East Bay begins to create local jobs at a faster

Place of Work for East Bay Residents

County of Work	Employed Residents (2013)	2013 Share (%)
East Bay	868,902	62.2
Other	249,200	17.8
San Francisco	146,538	10.5
San Mateo	45,628	3.3
Santa Clara	87,235	6.2
Total	1,397,503	100.0

EAST BAY EMPLOYMENT



The East Bay is creating more job opportunities for both higher-skilled and lower-skilled workers in the region relative to other parts of the state.

pace. Over 37.8% of the workers in the East Bay commute out of the area each day, with San Francisco County and Santa Clara County being the most popular destinations.

Outbound commuters tend to be some of the highest-skilled residents of the East Bay. Top industries for outbound commuters include Information (51%), Professional, Scientific, and Technical Services (47%), and Manufacturing (45%). Clearly, many Bay Area residents are taking advantage of housing that is more affordable in the East Bay and choosing to commute to nearby counties for employment opportunities. While this has implications for the region's infrastructure needs, the East Bay benefits from these commuters over the short run through increased demand for housing and more spending in the local economy. Over the longer term, these commuters represent a significant local asset that can be leveraged for a variety of economic development efforts.

Contra Costa County and Alameda County both saw significant inflows of domestic migrants from 2013 to 2014. In fact, Contra Costa received the second most domestic migrants in the state over the same period. This indicates that the region continues to entice new residents to the area, thereby capturing the benefits of more residents.

While the East Bay sees a large share of residents commute each day, a closer look shows the region has many home-grown industries as well. For example, East Bay residents employed in Management (75.7%), Real Estate (72.4%), and Health Care (70.5%) sectors work primarily in the East

Bay. East Bay residents account for most of the jobs in the Petroleum and Coal Manufacturing Products locally.

AGE AND EDUCATIONAL ATTAINMENT

The unemployment rate for East Bay residents with a bachelor's degree was just 5.0% in 2013, compared to 10.4% for residents with only a high school diploma.¹ These unemployment rates are lower than the statewide average across the board. Thus, the East Bay is creating more job opportunities for both higher-skilled and lower-skilled workers in the region relative to other parts of the state. In addition, millions of dollars have been invested in the East Bay for workforce development through the local community colleges, curricular practical training grants, and trade adjustment assistance career training programs have made a difference.

In 2013, the unemployment rate for East Bay residents under 25 remains

¹ U.S. Census Bureau, American Community Survey

East Bay Residents 25 to 64 (2013)

Age	Unemployment Rate
Under 25	18.4%
25 to 34	8.8%
35 to 44	7.6%
45 to 54	7.3%
55 to 64	6.6%
Over 65	7.3%
Educational Attainment	
Less Than High School	10.5%
High School Graduate	10.4%
Some College	9.4%
Bachelors Degree +	5.0%

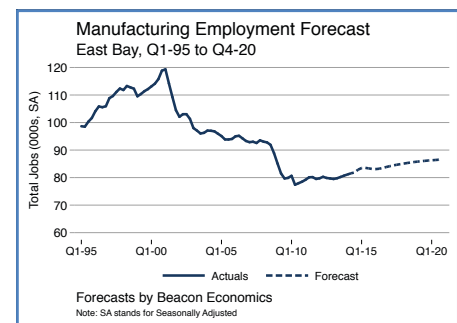
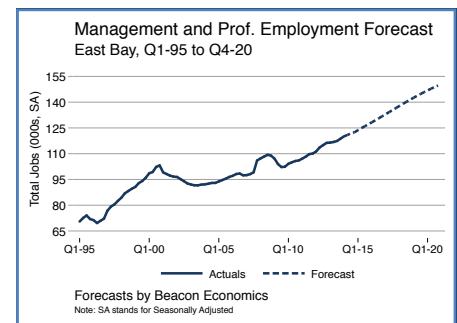
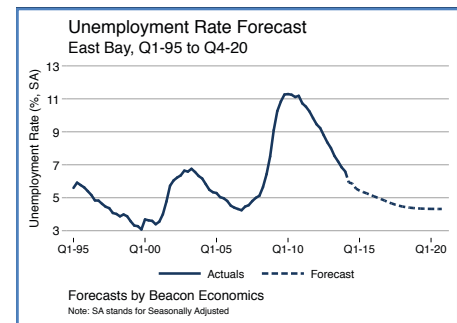
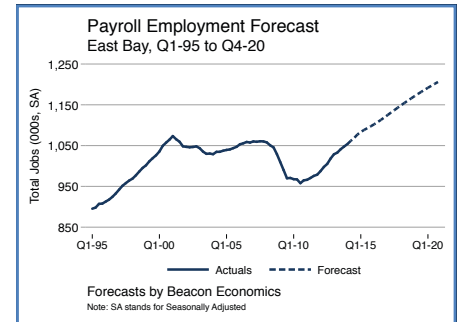
elevated (18.4%); however it is lower than the unemployment rate for the same age range in the state overall (20.2%). Young professionals in the East Bay are also faring better than in other parts of the state, with the unemployment rate for residents 25 to 34 at 8.8% in the East Bay, compared to 10.0% in the state overall.

LABOR MARKET FORECAST

Beacon Economics forecasts East Bay payroll employment will continue to grow at a rate above 2% over the course of 2015. With these gains, the unemployment rate in the East Bay is expected to fall to 5.1% by the end of 2015.

These gains over the next year are also forecasted to continue in the long run. The region continues to attract people from all over the United States, and indeed all over the world. Further, the region is one of the major regions in the United States for Biotechnology and clean energy.

Payroll employment levels are forecasted to grow by 11.3% (122,500 jobs) from current levels to 2020. Perhaps more importantly, high-wage sectors are expected to be at the forefront of this growth, with Management and Professional Services expected to grow by 21% (26,000 jobs) over current levels for the same period.



East Bay Employment Forecast, Q1-15 to Q4-20 by Industry

	Q1-15	Q1-16	Q1-17	Q4-20
Total Nonfarm	1083.4	1102.4	1125.0	1206.0
Unemployment Rate	5.4	5.1	4.7	4.3
Government	167.9	169.9	171.5	177.5
Education/Health	177.1	179.4	181.7	195.1
Management/Professional	123.7	128.3	133.0	149.7
Retail Trade	111.4	112.6	113.8	116.9
Leisure/Hospitality	104.8	105.4	107.0	115.9
Manufacturing	83.5	83.1	84.1	86.6
Construction	60.9	64.5	68.3	81.7
Admin Support	60.6	61.5	63.9	70.9
Financial Activities	49.5	50.8	52.3	55.4
Wholesale Trade	46.7	47.5	48.3	50.1
Other Services	38.2	38.8	39.5	41.9
Trans/Warehouse/Util	36.9	38.1	38.7	39.5
Information	21.3	21.5	21.9	23.7
Natural Resources/Mining	0.8	0.9	0.9	1.0

EAST BAY BUSINESS ACTIVITY



BUSINESS ACTIVITY OVERVIEW

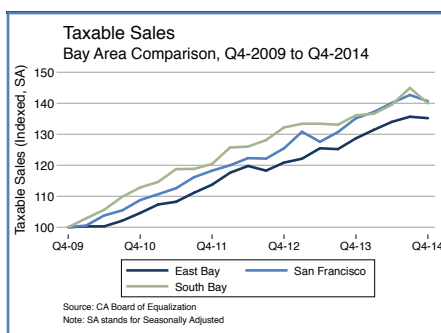
Business activity is booming in the East Bay with local spending on the rise across the whole region. Economic growth in the East Bay

has helped bring increased levels of business and tourist related travel trips. Local hotels have benefited from the activity. Hotel occupancy in the East Bay is now roughly even with occupancy in the South Bay at 80%. Personal income growth in the East

East Bay Taxable Sales by Area, Q4-2013 to Q4-2014

City	Q4-2013 (\$)	Q4-2014 (\$)	Chg (%)
Hercules	37,682	45,511	20.8
Piedmont	4,795	5,494	14.6
San Leandro	548,575	604,898	10.3
Fremont	867,911	951,275	9.6
Alameda	187,957	205,974	9.6
Concord	660,709	714,138	8.1
Dublin	407,052	434,088	6.6
Antioch	263,327	279,416	6.1
Livermore	561,097	594,951	6.0
Oakley	32,027	33,943	6.0
Berkeley	390,112	412,672	5.8
Pleasanton	523,301	552,973	5.7
Newark	225,697	237,614	5.3
Richmond	340,510	357,419	5.0
Brentwood	150,796	157,278	4.3
Pittsburg	157,024	163,464	4.1
Albany	54,171	55,980	3.3
Oakland	1,087,853	1,120,367	3.0
Pinole	81,426	83,759	2.9
Union City	211,936	217,218	2.5
Pleasant Hill	187,245	191,227	2.1
Walnut Creek	509,525	519,404	1.9
Emeryville	192,233	195,695	1.8
Clayton	9,950	10,066	1.2
Hayward	717,363	724,947	1.1
Danville	130,727	131,644	0.7
Orinda	22,942	22,829	-0.5
San Pablo	45,305	44,692	-1.4
Moraga	24,713	24,363	-1.4
San Ramon	204,409	199,393	-2.5
Lafayette	67,580	65,742	-2.7
Martinez	137,074	120,766	-11.9
El Cerrito	70,594	54,522	-22.8

Source: CA Board of Equalization



East Bay Taxable Receipts, Q3-2013 to Q3-2014

Category	Q3-2013 (\$)	Q3-2014 (\$)	Chg (%)
Autos and Transportation	16,234,454	18,147,004	11.8
Restaurants and Hotels	10,364,294	11,182,936	7.9
Business and Industry	16,660,562	17,854,548	7.2
Building and Construction	8,832,776	9,279,357	5.1
Consumer Goods	21,195,790	22,048,880	4.0
Fuel and Service Stations	10,870,755	11,218,518	3.2
Food and Drugs	5,705,557	5,862,352	2.7
Total	103,873,808	110,884,888	6.7

Source: HdL Companies

Bay has closely tracked that of the state overall, though it is somewhat slower than in San Francisco and the South Bay. There were concerns that the labor dispute at West Coast ports might slow economic activity in the region, but trade activity in 2014 was actually higher than in 2013.

East Bay venture capital funding in 2014 was substantially higher than in 2013 with solar tech firms receiving much of that funding. With the economy growing stronger and venture capital funding at very high levels, it is important to remember that the current economic expansion is not like the Bay Area boom of the late 1990s that resulted in the crash of the early 2000s. In that period, new and unstable firms were receiving very high levels of venture capital funding that they were unprepared to invest. In today's economic climate, firms receiving most of the venture capital dollars are older stable firms using those dollars for further expansion or research and development.

LOCAL SPENDING

Post-recession taxable sales growth in the East Bay lagged that of San Francisco and the South Bay, but 2014 proved a very strong year for local

spending. In the preceding five years, taxable sales increased slightly less in the East Bay than in neighboring regions, but from the fourth quarter of 2013 to the fourth quarter of 2014, taxable sales in the East Bay increased 5.1%, outpacing San Francisco (4.1%) and the South Bay (2.9%).

Taxable sales growth last year was spread across the region. Strong growth occurred in some of the East Bay's local economies. Taxable sales declined by double-digits in a few East Bay cities, though smaller communities experienced greater volatility in spending throughout the year. Clearly, the 2014 holiday season was a brighter one for local economic activity than a year prior in both Alameda County and Contra Costa County.

Taxable receipts data show that consumer-to-business and business-to-business spending increased in the East Bay from 2013 to 2014. Business and Industry taxable receipts increased 7.2% over the past 12 months as East Bay businesses had more revenue for capital expenditures to help grow, and much of that spending occurred locally. Low gasoline prices helped boost Auto and Transportation spending (11.8%) but Fuel and Service Stations spending remained up (3.2%). The growth in local housing prices encouraged new



East Bay venture capital funding in 2014 was substantially higher than in 2013 with solar tech firms receiving much of that funding.

EAST BAY BUSINESS ACTIVITY



Minimum wage increases may lead to higher consumer spending among some low-income workers affected by the policies, but they may also lead to job losses or reduction in hours.

residential construction, while the growth of the East Bay renewable energy sector encouraged new commercial construction. This led to a significant increase in Building and Construction taxable receipts from the fourth quarter of 2013 to the fourth quarter of 2014.

The full effects of the minimum wage ordinances recently passed in the East Bay are yet unclear, but already some businesses are feeling a squeeze on profits. In March 2015, the citywide minimum wage in Oakland was increased to \$12.25 per hour, 36% higher than the \$9-per-hour statewide minimum wage. In turn, some Oakland restaurants claim to be raising prices by as much as 20%. Other Oakland restaurants have reported charging a 20% service fee in lieu of a tip.¹

Some restaurants have altered their pay schedules to meet the new wage floor. For example, at an Oakland restaurant, Homestead, servers are now earning a flat wage of \$18 to \$24 per hour with no tips, compared to \$35 to \$55 per hour that they were earning before the new minimum wage ordinance was implemented. Servers were largely making more through tip income. In Emeryville,

restaurant owners have expressed concerns that citywide minimum wages are a risk to businesses where consumers could go to restaurants in neighboring cities just blocks away. Emeryville's City Council has drafted an ordinance to raise the citywide minimum wage to \$12.25 per hour for businesses with 55 or fewer employees and \$14.42 per hour for businesses with 56 or more employees. These minimum wage increases may lead to higher consumer spending among some low-income workers affected by the policies, but they may also lead to job losses or reductions in hours. Business and industry non-labor spending will likely decrease in the face of the wage increase. Meanwhile, sales taxes in Alameda County, as well as cities like El Cerrito, Pinole, and Richmond in Contra Costa County, have grown to 9.5% or in some cases 10% in 2015. These policies will likely have a significant impact on local spending over the long run, and at least in the case of some East Bay businesses, they have already had some substantial negative consequences.

¹ "Oakland's Minimum Wage Gets a Big Hike Starting Monday." ABC7. Mar. 1, 2015.

Bay Area Hotel Data, January-November 2013 to January-November 2014

Region	Occupancy Rate (%)			Average Daily Room Rate (\$)			Revenue Per Available Room (\$)		
	2013	2014	Chg (pp)	2013	2014	Chg (%)	2013	2014	Chg (%)
East Bay	76.4	79.8	3.4	113.69	125.16	10.1	86.82	99.91	15.1
San Francisco	86.3	87.1	0.8	232.05	255.35	10.0	200.25	222.33	11.0
South Bay	78.9	80.7	1.8	155.99	174.39	11.8	123.01	140.71	14.4

Source: PKF Consulting

TOURISM AND BUSINESS TRAVEL

The strength of the economy, not only in the East Bay but throughout the country, combined with growth in international tourism and business related travel to the Bay Area led to a 9.3% increase in tourist and business related travel at Oakland International Airport. That was much faster growth than at San Francisco International Airport (+4.3%), at San Jose International Airport (+7.2%) and at California airports overall (+3.0%). The warm winter of 2014 provided an especially great venue for East Bay conferences, compared to the unusually cold winter in eastern states that had played host to conferences in past years. The great weather also helped to encourage tourist travel to the region. Meanwhile, Norwegian Air offers extremely low-cost flights for tourists from Stockholm and Oslo, while providing connections for tourists from Africa, the Middle East, and other parts of Europe.² In the coming year, passenger traffic at Oakland International Airport will be bolstered by a new Allegiant Air route to Omaha, Nebraska in May, while the continued growth of the economy should increase passenger traffic even further.³

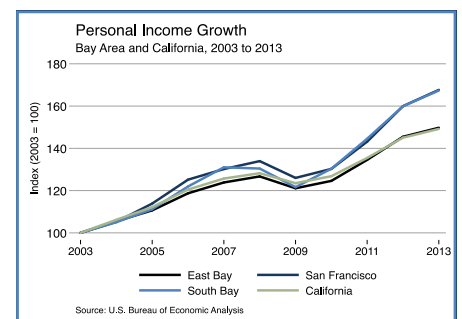
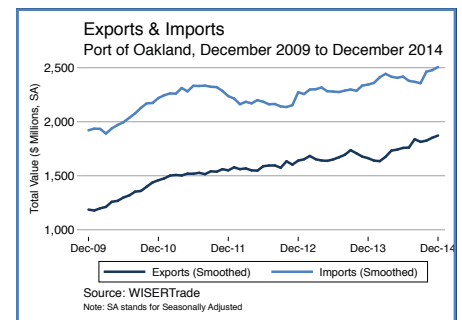
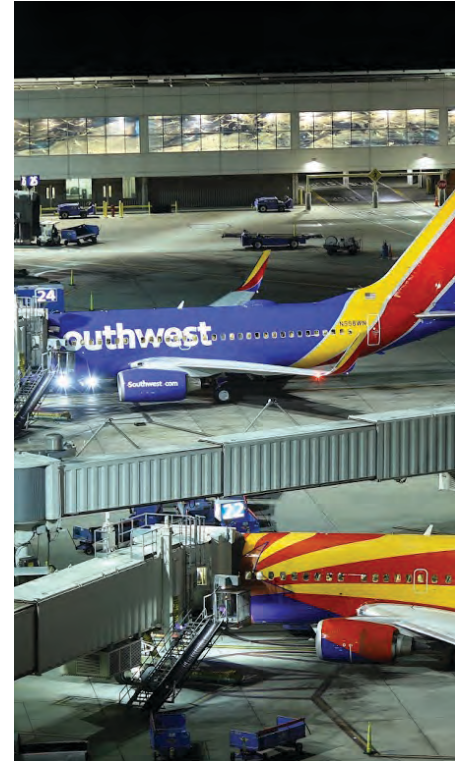
² Linda Zavoral, "Free Parking at Oakland Airport." *San Jose Mercury News*. Jan. 13, 2015.

³ Linda Zavoral, "Bay Area's New Nonstop Flights to Omaha." *Eureka Times-Standard*. Feb. 26, 2015.

The East Bay proved to be the hottest hotel market in the Bay Area in 2014. Hotel occupancy in the East Bay caught up to the South Bay in 2014, and the growth in occupancy led to a faster increase in revenues per hotel room in the East Bay than in any other part of the Bay Area. Hotel room nights in the East Bay were roughly 10% more expensive in 2013 than in 2014, but were still much more affordable for travelers than hotel room nights in the rest of the Bay Area.

PERSONAL INCOME

Personal income growth in the East Bay has paralleled that of the state overall for several years. From 2003 to 2013 (the most recent year of available data), personal income in the East Bay increased by 49.5%, virtually equal to the state overall at 49.2%. However, both San Francisco and the South Bay gained ground on the East Bay in recent years, such that personal income grew by roughly two-thirds in those 10 years. Although growth in economic activity in the East Bay has translated into more income for East Bay workers, this economic activity has not boosted earnings as much as it has for workers in the rest of the Bay Area.





The West Coast exports significantly more petroleum products than in the recent past, due to the large-scale emergence of advanced production techniques.

INTERNATIONAL TRADE

In spite of concerns about the tenuous West Coast port labor negotiations over the past several months, traffic at the Port of Oakland seaport was markedly higher in 2014 than in 2013. The total value of maritime exports for 2014 was 4.6% higher than for 2013, while the total value of imports was 5.8% higher than for 2013. The resolution to the labor dispute was an important step, however, in ensuring that the Port of Oakland builds on the growth it has made amid the economic recovery. In December 2014, the total value of maritime imports was roughly 35% higher than in December 2009, while the total value of exports was over 40% higher than five years prior.

Although the scale of maritime exports at the Port of Richmond is smaller than at the Port of Oakland, growth was higher at the Port of Richmond than at the Port of Oakland in 2014. The total dollar value of exports for 2014 was 63.9% higher than for 2013. The growth in exports was driven primarily by a substantial increase in the Port of Richmond's top export, mineral fuels and oils, which increased by 71.2% from 2013 to 2014. The increase in local petroleum production may be playing a role in this increase

in exports. Indeed, the West Coast exports significantly more petroleum products than in the recent past, due to the large-scale emergence of advanced production techniques. However, despite the increase in production, the West Coast remains a substantial importer of petroleum products. In fact, the Port of Richmond is the only port in the Bay Area that imports crude oil from foreign sources. That crude oil is then refined in Contra Costa County and then exported. The Port of Richmond imports more mineral fuels and oils than any other category of goods, and the total value of imports of mineral fuels and oils at the Port of Richmond increased by 30.8% from 2013 to 2014.

Exports of agricultural products, in which the Port of Oakland specializes relative to other California ports, grew steadily over the course of 2014. At the same time, although durable manufactured goods represents a smaller proportion of total exports at the Port of Oakland as compared to the state overall, the total value of exports of those types of goods grew faster from 2013 to 2014 than for most other categories of exports. For instance, vehicles and parts exports nearly doubled in value at the Port of Oakland during that period. Exports of these goods may continue to increase into 2015, with consumer

Maritime Trade Activity, East Bay Ports, 2013-2014

Category	Port of Richmond	Port of Oakland
Total Value of Exports, 2013 (\$ 000s)	1,485.6	20,143.8
Total Value of Exports, 2014 (\$ 000s)	2,434.9	21,062.9
Change, 2013 to 2014 (%)	63.9	4.6
Total Value of Imports, 2013 (\$ 000s)	8,415.1	27,535.8
Total Value of Imports, 2014 (\$ 000s)	10,515.8	29,120.2
Change, 2013 to 2014 (%)	25.0	5.8

Source: WISERTrade

Port of Oakland Top Exports by Commodity

Commodity	2013 (\$000s)	2014 (\$000s)	Chg (%)	% of All Oakland Exports	% of All CA Exports	Difference, Oak vs. CA (pp)
Edible Fruit/Nuts/Citrus Fruit/Melon Peel	5,384,272	5,625,531	4.5	13.4	3.1	10.3
Meat/Edible Meat Offal	2,555,575	2,722,003	6.5	6.5	0.2	6.3
Industrial Machinery, Incl Computers	1,072,432	1,236,664	15.3	2.9	6.9	-4.0
Beverages/Spirits/Vinegar	1,080,122	964,936	-10.7	2.3	0.5	1.8
Vehicles/Parts	498,202	945,600	89.8	2.2	2.6	-0.4
Dairy, Eggs, Honey, Animal Products	724,795	851,915	17.5	2.0	0.6	1.4
Electrical Machinery/ Sound Equip/TV Equip	573,474	612,259	6.8	1.5	8.6	-7.1
Iron/Steel	552,713	542,185	-1.9	1.3	0.7	0.6
Medic or Surgical Instruments/Parts	529,848	530,378	0.1	1.3	4.9	-3.6
Prep Veg/Fruit/Nuts/Other Plant Parts	421,601	487,152	15.5	1.2	0.4	0.8

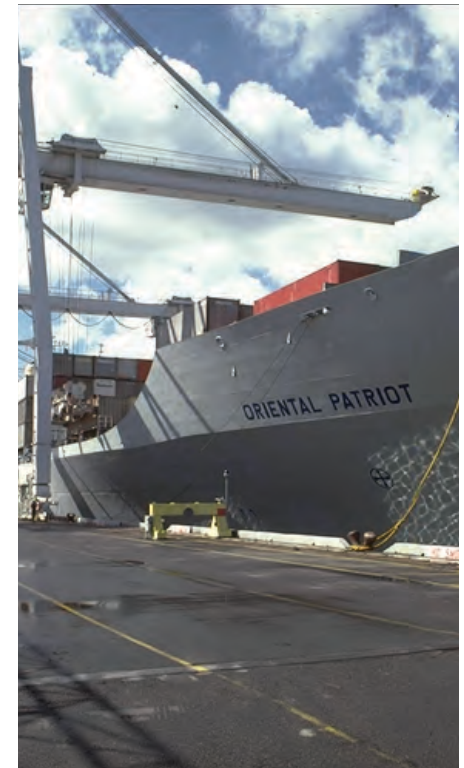
Source: WISERTrade

spending continuing to rise. In November 2014, Tesla Motors urged the Port of Oakland to prepare for an increase in cargo, even as the Port already had to take on cargo originally intended for the Ports of Los Angeles and Long Beach in recent months.⁴

Looking at some of these advanced manufacturing goods, it is clear that the Port of Oakland is an especially strong maritime exporter of vehicles and parts. This represents over

10% of California's exports of these goods. On the other hand, though exports such as industrial machinery or medical and surgical instruments are some of the Port of Oakland's top exports, the Port accounts for a relatively small proportion of the state's total exports of those goods at roughly 5% or less. Though the Port of Oakland is one of the state's largest ports of trade and is growing, the scale of advanced manufacturing exporting in California overall is massive.

⁴ "Port of Oakland Outlook: More Cargo Coming; It's Time to Prepare." Port of Oakland. Press Release. Nov. 5, 2014.



The Port of Oakland is an especially strong maritime exporter of vehicles and parts. This represents 10% of California's exports of these goods.

Port of Oakland Maritime Exports, Advanced Manufactured Goods

Commodity	2014 (\$000s)	Port Export Rank	% of All Oakland Exports	% of CA's Export of Commodity
Industrial Machinery, Incl Computers	1,236,664	3	2.9	5.1
Vehicles/Parts	945,600	9	2.2	10.3
Electrical Machinery/ Sound Equip/TV Equip	612,259	8	1.5	2.1
Medic or Surgical Instruments/Parts	530,378	6	1.3	3.1

Source: WISERTrade

EAST BAY BUSINESS ACTIVITY



2014 was a phenomenal year for venture capital funding in the East Bay with the total amount of funding for the year-to-date (Q1-Q3) up nearly 60% from 2013 to 2014.

Oakland International Airport Cargo, 2013 to 2014

Freight Cargo	2013 (000 lb)	2014 (000 lb)	Change (%)
Inbound	539,861	579,083	7.3
Outbound	558,432	588,872	5.5
Total	1,098,293	1,167,955	6.3

Source: Port of Oakland

Freight cargo out of Oakland International Airport is up as well. Inbound cargo weight is roughly equal to outbound cargo weight, though that may soon change, as growth in inbound cargo has been very strong of late. The airport serves as a major

hub for FedEx Express and has begun to transport goods through its new Norwegian Cargo routes. The airport has not yet reached pre-recession levels of freight cargo, though the growth over the course of 2014 is reason to be optimistic going forward,

Solar Energy Capacity by Sector, Selected Counties in California

Residential	Megawatts	Commercial	Megawatts	Non-Profit	Megawatts	Government	Megawatts
Los Angeles	92.8	Los Angeles	80.7	San Diego	13.4	Los Angeles	70.3
San Diego	88.6	San Diego	60.2	Los Angeles	11.4	Riverside	58.7
Riverside	87.2	San Bernardino	50.2	Riverside	8.7	Santa Clara	47.9
Orange	52.9	Tulare	50.0	San Joaquin	5.7	San Bernardino	38.3
San Bernardino	50.7	Orange	38.6	Orange	5.6	Contra Costa	36.6
Santa Clara	38.0	Fresno	34.6	Santa Clara	3.7	San Diego	35.3
Fresno	28.5	Riverside	34.4	San Bernardino	3.3	Kern	33.0
Contra Costa	24.7	Kern	29.0	Butte	2.4	Orange	23.2
Kern	23.6	Santa Clara	21.3	Alameda	1.9	Alameda	22.7
Ventura	23.3	Ventura	18.5	Madera	1.8	Fresno	19.2
Alameda	19.8	Alameda	17.9	San Francisco	1.8	Tulare	16.5
Sonoma	17.7	Sonoma	16.1	Sonoma	1.6	Kings	14.5
Placer	14.8	Kings	13.2	Ventura	1.4	Ventura	13.2
Tulare	14.2	Napa	11.1	Contra Costa	1.1	San Mateo	13.0
San Mateo	11.3	San Joaquin	10.9	Shasta	1.0	Monterey	9.6
San Joaquin	8.3	Contra Costa	10.1	Yuba	1.0	Sonoma	8.8
El Dorado	8.1	Yolo	8.8	Merced	1.0	San Joaquin	8.5
San Luis Obispo	7.5	Butte	8.7	Marin	0.9	Solano	8.2
Marin	7.2	San Luis Obispo	6.9	Fresno	0.8	Yolo	5.3
San Francisco	7.1	Merced	6.8	Monterey	0.8	Madera	5.3

Source: Go Solar California

especially as trade activity is expected to swell at the Port of Oakland and the Port of Richmond in the coming year.

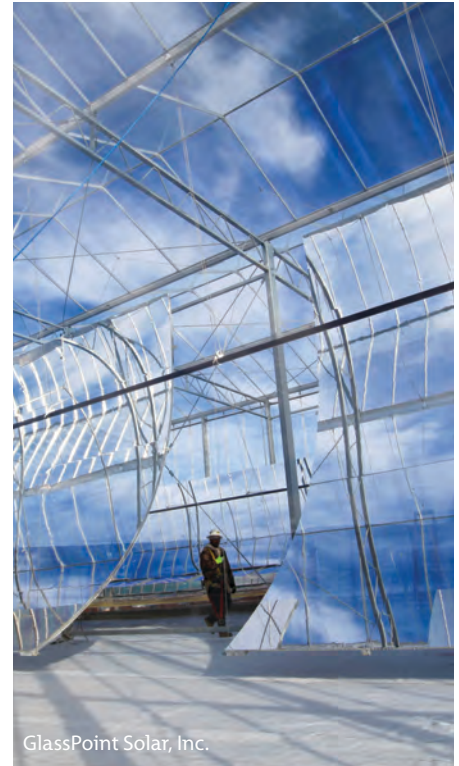
VENTURE CAPITAL

2014 was a phenomenal year for venture capital funding in the East Bay with the total amount of funding for the year-to-date (Q1-Q3) up nearly 60% from 2013 to 2014. Roughly 0.8% of all U.S. jobs are located in the East Bay, but in 2014 roughly 3% of all U.S. venture capital funding was located there. In keeping with the region's highly skilled workforce, Software and Industrial/Energy firms were the biggest recipients of venture capital funds in 2014 with solar energy firms generating some of the largest amounts. For example, Sungevity, Inc. in Oakland received \$72.5 million in expansion stage funding in the second

quarter of 2014, while GlassPoint Solar, Inc. in Fremont received \$53.0 million in expansion stage funding in the third quarter of 2014.

East Bay solar energy firms are also being recognized for their advanced research and development through incubator awards. Mosaic, a solar energy financing firm based in Oakland, received a \$650,000 award from the U.S. Department of Energy's SunShot Initiative incubator program in late 2014. It was the firm's second award through the SunShot Initiative, having already earned a \$2 million award in 2012.⁵ Smash Solar, Inc., based in Richmond, received \$1 million from the SunShot Initiative to help develop a snap-together

⁵ "Mosaic Receives Second Award from the U.S. Department of Energy SunShot Initiative to Grow its Home Solar Loan Program." PR Newswire. Oct. 22, 2014.



GlassPoint Solar, Inc.

Software and Industrial/Energy firms were the biggest recipients of venture capital funds in 2014 with solar energy firms generating some of the largest amounts.

East Bay Venture Capital Funding by Industry

Industry	Q1-Q3, 2013 (\$ millions)	Q1-Q3, 2014 (\$ millions)	Chg (%)	Share of Total VC Funding, 2013 (%)	Share of Total VC Funding, 2014 (%)
Software	104.9	385.0	266.9	18.7	43.3
Industrial/Energy	46.2	171.9	272.3	8.2	19.3
Biotechnology	195.1	93.9	-51.8	34.8	10.6
Consumer Products and Services	65.9	69.4	5.3	11.8	7.8
Medical Devices and Equipment	37.1	58.2	56.7	6.6	6.5
Semiconductors	41.0	54.7	33.3	7.3	6.2
IT Services	24.9	26.2	5.3	4.4	2.9
Financial Services		22.0		0.0	2.5
Electronics Instrumentation	10.0	6.0	-40.0	1.8	0.7
Business Products and Services		1.7		0.0	0.2
Networking and Equipment	1.4			0.2	
Telecommunications	0.5			0.1	
Media and Entertainment	0.5			0.1	
Total	560.1	889.0	58.7	100.0	100.0

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: Thomson Reuters.

EAST BAY BUSINESS ACTIVITY



What differentiates the current technological boom from the boom-and-bust period of the late 1990s is that in the current case, firms receiving substantial amounts of venture capital funding are older, more stable firms.

photovoltaic mounting system to quickly and easily install rooftop solar panels.⁶

The East Bay is one of the key producers of solar energy in California. Many of the state's largest renewable energy firms are located there. It is also one of the largest consumers of renewable energy in the state. Together, Alameda and Contra Costa Counties have a total residential solar energy capacity of 44.5 megawatts, which is behind only five counties, all of which are located in Southern California. With regard to commercial solar energy capacity, the East Bay has a smaller presence. Solar intensity in the East Bay is much weaker than in counties like Tulare or San Bernardino, where commercial capacity is high. Within the East Bay public sector, however, solar energy capacity is very high relative to the rest of California. Alameda and Contra Costa combined have a total government sector solar energy capacity of 59.3 megawatts, which trails only Los Angeles at 70.3 megawatts.

Biomedical manufacturing, one of the East Bay's brightest industries, did not have as strong a year as Software or Industrial/Energy in terms of attracting venture capital funding. Several biomedical manufacturing firms nonetheless received millions of dollars to help them grow. Firms in the Biotechnology sector received \$93.9 million in venture capital funding from the first quarter of 2014 to the third quarter of 2014, while medical devices and equipment firms received \$58.2 million in funding in that time. Aduro Biotech, Inc., based in Berkeley, received \$40.6 million in later stage funding in the second quarter of 2014,

while Eureka Therapeutics, Inc., in Emeryville received \$21.0 million in early stage funding in the third quarter of 2014. Neotract, Inc., a medical technology development firm in Pleasanton, received \$18.2 million in later stage funding in the first quarter of 2014.

The East Bay, like the rest of the Bay Area, is undergoing another boom in venture capital funding, similar to that of the late 1990s, but in this case, the boom is much less volatile and unlikely to crash. What differentiates the current technological boom from the boom-and-bust period of the late 1990s is that in the current case, firms receiving substantial amounts of venture capital funding are older, more stable firms. Data for East Bay venture capital funding clearly demonstrates that most venture capital funding is going to firms in later stages of their development. From the first quarter of 2014 to the third quarter of 2014, just 2.4% of all venture capital funding went to firms in the seed stage. Over three-fourths of venture capital funds were expansion-stage or later-stage funds.

Oakland, Pleasanton, Fremont and Berkeley led all East Bay cities in venture capital funding, primarily due to substantial investment in the industries heavily concentrated in those cities: Industrial/Energy, Biotechnology, Consumer Products and Services, and Software. Within the category of Consumer Products and Services, for instance, Revolution Foods, Inc., an Oakland firm that provides healthy, affordable meals to schools, received \$31.5 million in venture capital funding in the second quarter of 2014. Blue Bottle Coffee, Inc., a coffee roaster and retailer also based in Oakland, received \$25.8 million in venture capital

⁶ "Current SunShot Incubator Projects." U.S. Department of Energy, Office of Energy Efficiency & Renewable Energy. <http://energy.gov/eere/sunshot/current-sunshot-incubator-projects>.

funding in the first quarter of 2014. However, venture capital funding also spread to relatively smaller cities like Lafayette, where Providence Medical Technology, Inc., received \$6.8 million in funding in the first quarter of 2014, and Union City, where Vicarious FPC, Inc., received \$40.0 million in funding in the first quarter of 2014. Although venture capital funding remains concentrated primarily in the largest economic centers in the East Bay, businesses in all parts of the East Bay are earning substantial amounts of money to help them grow.

In the East Bay, funding to help further research and development and advanced manufacturing generates significant positive effects on economic output and

employment. Using multiplier effects provided by IMPLAN, Beacon Economics estimates that \$1 million in investment in scientific research and development in the East Bay yields nearly \$1.9 million in local economic output, \$850,000 in total labor income and 10 full-time equivalent jobs. Similarly, \$1 million in investment in biomedical manufacturing generates an estimated \$1.6 million in local economic output, \$536,000 in total labor income and six full-time equivalent jobs. Investments in research and development and advanced manufacturing support growth at specialized firms in the East Bay. They are also supporting the economic growth of the entire region, generating revenues for businesses in



East Bay Venture Capital Funding by Stage, Q1-Q3 2014

Industry	Seed Stage (\$ millions)	Early Stage (\$ millions)	Expansion Stage (\$ millions)	Later Stage (\$ millions)
Biotechnology		32.4	81.8	108.1
Business Products and Services				
Computers and Peripherals		35.0		
Consumer Products and Services			5.0	60.9
Electronics Instrumentation			10.0	
Financial Services				
IT Services		0.4	24.5	
Industrial Energy		6.5	24.7	18.2
Media and Entertainment		9.8		
Medical Devices and Equipment		5.2		37.4
Networking and Equipment				1.4
Semiconductors		22.7	19.0	1.0
Software	14.8	15.6	50.1	38.5
Telecommunications		0.5		1.5
Total	14.8	128.1	215.0	267.1

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report,
Data: Thomson Reuters

\$1 million in investment in scientific research and development in the East Bay yields a total of nearly \$1.9 million in local economic output, \$850,000 in total labor income and 10 full-time equivalent jobs.

EAST BAY BUSINESS ACTIVITY



a wide range of industries, including professional services, retail and wholesale trade, real estate, and leisure and hospitality.

Foreign investments are playing a larger role in helping firms in the East Bay to grow. The EB-5 visa program has helped to bring substantial amounts of investment to support new development in the area. This program was developed by the U.S. Congress in 1990 and is administered by U.S. Citizenship and Immigration Services. It provides permanent worker visas to foreign nationals that invest \$1 million (or \$500,000, if the investment is in a high-unemployment or rural area) in new commercial enterprises that generate at least 10 full-time jobs for U.S. workers. The program is set to expire in September, after being extended in 2012, but the American Entrepreneurship and Investment Act of 2015, a bill currently in Congressional subcommittee, would

make the program permanent.⁷ The bill holds bipartisan support in the U.S. House and is likely to pass by fall.

Many of these new commercial enterprises have been located in the East Bay. For instance, Comprehensive Care of Oakland has already hired over 100 employees to provide skilled nursing care with plans to use EB-5 investments to hire 75 additional workers over the next few years. A 20,000-square-foot independent grocery store planned for West Oakland is seeking \$10 million in EB-5 funding for development with plans to employ 300 full-time workers. The growth of the EB-5 program could generate millions of dollars in foreign investments in the East Bay. The program promises to help create and retain local jobs and businesses.

⁷ Allissa Wickham, "Reps. Introduce Bill to Make EB-5 Visa Program Permanent." *Law360*. Jan. 29, 2015.

East Bay Venture Capital Funding by City, Q1-Q3 2014, (\$ millions)

Industry	Alameda	Berkeley	Dublin	Emeryville	Fremont	Hayward	Lafayette	Livermore	Newark	Oakland	Pleasanton	Union City
Biotechnology		42.1		21.0	7.9						19.9	
Consumer Products and Services		11.0	1.1							57.3		
Electronics Instrumentation	6.0											
Financial Services										22.0		
IT Services				21.2								
Industrial Energy					62.5			0.04		105.0		4.4
Medical Devices and Equipment						1.1	6.8		27.6		20.2	
Semiconductors		2.5		1.0	16.2				35.0			
Software	4.2	131.0		41.1	24.2				12.7	32.4	99.4	40.0
Total	10.2	186.6	1.1	84.3	110.8	1.1	6.8	0.04	75.3	216.6	139.4	44.4

Source: PricewaterhouseCoopers/National Venture Capital Association MoneyTree™ Report, Data: Thomson Reuters.

COMMERCIAL REAL ESTATE OVERVIEW

Commercial real estate in the East Bay continues to improve. Vacancy rates have fallen across all major property types over the past year as rents have grown. The improved local economy has spurred demand for new commercial space. Strategically, the East Bay is well positioned within the broader Bay Area. The region offers lower rents relative to the cost of space in San Francisco and San Jose while remaining in close proximity to many of the high-skilled residents who work in these markets. Migration to the East Bay is a potentially attractive option for many firms.

As a result of these trends, nonresidential construction permits in the East Bay have increased 106% over the past two years. Although not quite as strong as in 2013, nonresidential permits increased 46% in the East Bay last year.

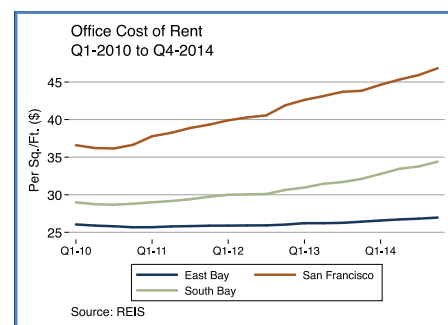
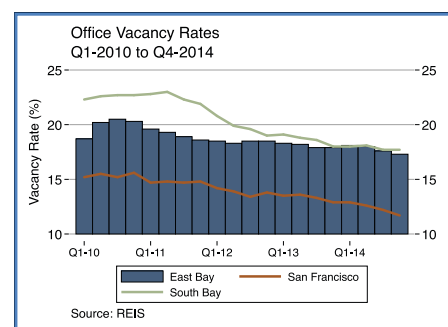
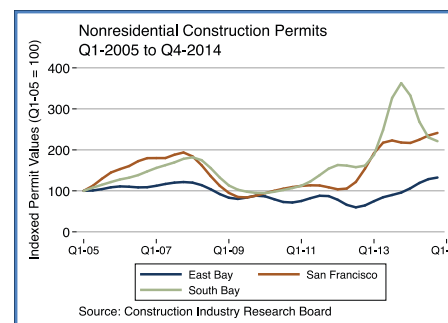
Retail permits accounted for the largest amount of activity in the East Bay in 2014 with \$115.5 million in permits issued during the year. Office permits grew the fastest, expanding by

847% to reach a 6-year high. Overall, the 46.2% increase in permits in the East Bay easily surpasses the 14.7% growth in San Francisco, and the 39% decline in the South Bay.

OFFICE RENTAL MARKET

From the fourth quarter of 2013 to the fourth quarter of 2014, office vacancy rates in the East Bay fell 60 basis points from 17.9% to 17.3%. This marks the largest year-over-year decline since the end of 2013 and is a sign that the office market is starting to heat up. Over the same time period, San Francisco vacancy rates fell from 12.9% to 11.7%, and South Bay rates fell from 18.0% to 17.7%.

The cost of rent for office space in the East Bay continues to edge up slowly, but rent for office space in San Francisco and the South Bay have accelerated more rapidly, making the East Bay more affordable by comparison. However, it remains a good time for local property owners as the \$0.55 year-over-year increase in local office rents has been the fastest rate of growth since 2011.



Nonresidential Building Permit Values, in Millions (\$)

Type of Property	2009	2010	2011	2012	2013	2014	East Bay 2013 - 2014 Change (%)	San Francisco 2013 - 2014 Change (%)	South Bay 2013 - 2014 Change (%)
Office	21.5	3.5	67.5	13.5	8.1	76.4	847.4	19.4	60.0
Retail	57.5	43.0	102.8	33.3	66.9	155.5	132.4	-0.4	-60.6
Industrial	101.1	112.1	24.7	35.0	149.0	116.3	-22.0	-15.0	-84.6
Renovations/Alter.	604.2	568.6	606.7	477.1	695.2	958.9	37.9	28.1	9.5
Total	912.3	850.1	1029.8	622.9	1025.3	1499.1	46.2	14.7	-39.1

Source: Construction Industry Research Board



Office Construction by Submarket

City/Submarket	2014	Change (%)
Fremont	40,719,379	4,710.90
Berkeley	15,073,000	N/A
Tri-Valley	7,000,338	880.0
I-80/I-880	6374689	44.7
East Contra Costa	3,773,027	N/A
Alameda	990,000	N/A
Other	328,000	-38.9
East Bay Total	76,367,316	847.4

Source: CIRB

OFFICE SUBMARKETS

Other than the flex market, the office market in the East Bay is the most polarized commercial market. North Alameda and the Central Business District submarkets (which include Oakland primarily, but also parts of Alameda) are drawing more tenants than other East Bay submarkets. This is evident in their lower vacancy rates and premium rents. Markets that are in the South I-680 corridor have the highest vacancy rates and the most vacant square footage, yet the cost of rent is currently at a premium compared to other submarkets with comparable vacancy rates.

DEVELOPMENT OPPORTUNITIES: OFFICE RENT DISCOUNTS

Recent growth in the East Bay office markets stems partly from the fact that local offices enjoy the steepest discount of any property type when compared to San Francisco and the South Bay. Class A space has the greatest discount, which is another advantage for the East Bay because Class A space has been in higher demand over the past several years relative to demand for Class B/C office buildings. The substantial cost savings for tenants who move to the East Bay from San Francisco or the South Bay should increase local absorption and stimulate new construction projects in the coming years.

DEVELOPMENT CHALLENGES: OFFICE RELATED EMPLOYMENT

The post-recession breakdown between growth in employment and absorption of office space has continued over the past couple of years: office-related employment in the East Bay grew by 4% in 2014 while occupied stock in office buildings only grew by 1.5%. Compared to the past, there will be less demand for new office space relative to each new office job. Firms are continuing to enable workers to telecommute and are moving towards more modern, hotel-style spaces.

NEW OFFICE CONSTRUCTION

New office construction in the East Bay has been robust over the past year – expanding to a 6-year high. The growth continues despite challenges associated with the changing face for office space as related to demand. Office space construction activity has been heavily concentrated: 90% of all new office permits were issued in Fremont, Berkeley, the Tri-Valley, or other parts of the I-80/I-880 corridor, which contains parts of Fremont, Berkeley, and Alameda, as well as Hayward, San Leandro, Union City, and San Pablo.

RETAIL RENTAL MARKET

After reaching a high of 7.1% in the third quarter of 2010, retail vacancy

rates in the East Bay have gradually dropped to a post-recession low of 6%. That is below the 10% threshold that is typically associated with the development of new property. The pace of decline in the East Bay's vacancy rate has been faster than in the highly saturated San Francisco market, but slower than in the South Bay where vacancy rates fell to 4.3% at the end of 2014.

Retail rent growth in the East Bay has increased for the past seven quarters and growth that had been sluggish has picked up slightly over the past year. The slower growth in retail rents in the East Bay has widened the discount that the region enjoys compared to San Francisco and the South Bay. The demand for new retail space will continue to expand with increased robust growth in the local population.



Office Submarket Snapshot: 2014-Q4

Submarket	Rent (\$ per sq. ft. per year)	Vacancy Rate (%)	Vacant Square Feet (000s)
North Alameda	28.39	9.9	533
Central Business District	29.52	11.7	1,235
North I-680	27.59	13.4	1,008
West Contra Costa	23.29	16.2	316
North Contra Costa	28.25	17.0	1,906
Airport/San Leandro/Hayward	21.57	22.9	946
Fremont/Newark	20.85	24.2	768
South I-680	25.47	29.3	2,520
S. Clara/Sunnyvale	35.21	20.6	4,227
San Francisco (MD)	46.83	11.7	10,700

Source: REIS

Rent Discounts in the East Bay relative to San Francisco and the South Bay

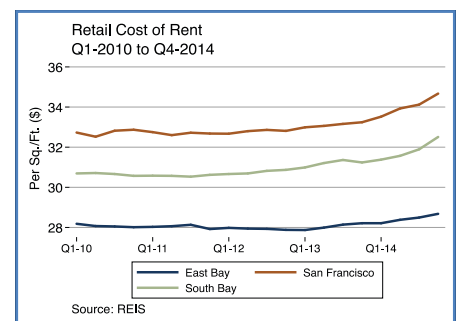
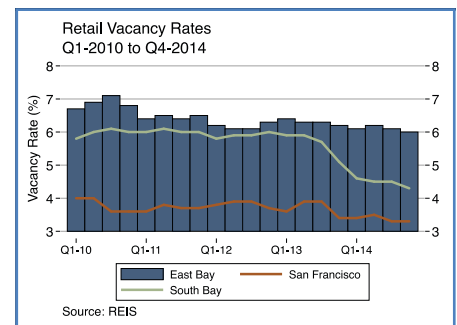
Property Type	Property Class	East Bay Avg. Rent in Q4-2014 (\$ per sq. ft. per year)	Discount from San Francisco (%)	Discount from the South Bay (%)
Office	Total	26.96	42.4	21.6
Office	A	30.41	42.4	23.8
Office	BC	23.36	38.0	22.3
Retail	Total	28.68	17.3	11.8
Warehouse/Distribution	Total	5.24	39.5	25.2
Flex/R&D	Total	9.07	36.8	36.2

Source: REIS

Office Related Employment and Occupied Square Feet of Office Space

Location	Office-Related Employment Growth from December 2012 to December 2014 (%)	Occupied Square Feet Growth from Q4-2012 to Q4-2014 (%)
East Bay	4.0	1.5
San Francisco	9.1	3.8
South Bay	12.6	9.0

Source: REIS and the California Employment Development Department





RETAIL SUBMARKETS

The West Contra Costa and Central Contra Costa retail submarkets, along with the Central/North Alameda submarkets, are showing the most absorption and healthiest rent growth among the retail submarkets. Collectively, the markets have vacancy rates that are 1.6% to 1.7% lower than the next closest market and the cost of rent is anywhere between a 15.4% and 41.8% premium compared to other markets. East Contra Costa has struggled the most with a vacancy rate in the high single-digits and a significant rent discount.

RETAIL CONSTRUCTION TRENDS

Growth in retail permits has been strong in most submarkets, with double-digit increases across the board. The fastest growing submarkets with the most activity are those where the most populous cities and large residential communities are located. For example, the North I-680 submarket contains Concord, which is the most populous city in Contra Costa County. The I-80/I-880 submarket includes Hayward, the sixth largest city in the Bay Area, and third largest

in Alameda County. Looking ahead, the more populous East Bay submarkets should continue to attract the majority of retail growth.

WAREHOUSE RENTAL MARKET

Over the past two years, warehouse space in the East Bay has attracted tenants at an increasing rate, with vacancies falling from 11.4% to 10.3%. The East Bay has had more success in filling unoccupied warehouse space than the South Bay (which has increasing year-over-year vacancy rates)—likely owing to export growth and the presence of the Port of Oakland. Unoccupied space is still being filled faster in San Francisco where the warehouse vacancy rate has fallen from 10% to 7.7% over the past two years.

The cost of rent for warehouse space in the East Bay has grown at a slow but steady pace over the past three years, increasing from \$4.98 to \$5.24 from the fourth quarter of 2011 to the fourth quarter of 2014. Growth in rents has been slightly faster over the past few years in the East Bay compared to San Francisco or the South Bay. Warehouse rents in the East Bay are still 40% cheaper than they are in San Francisco and 25% cheaper than in the South Bay, which will keep local demand robust.

Retail Construction by Submarket

City/ Submarket	2014	Change (%)
North I-680	46,508,640	465.8
I-80/I-880	31,334,647	72.3
Alameda	22,590,688	1,053.00
Tri-Valley	12,856,821	16.5
Berkeley	11,159,125	5,773.20
Richmond	9,686,520	4,458.40
Fremont	9,564,828	21.3
East Contra Costa	4,987,251	N/A
Other	3,604,811	-8.2
East Bay Total	155,539,602	132.4

Source: CIRB

Retail Submarket Snapshot: 2014-Q4

Submarket	Rent (\$ per sq. ft. per year)	Vacancy Rate (%)	Vacant Square Feet (000s)
West Contra Costa	33.68	4.9	114
Central Contra Costa	28.60	5.0	293
Central/North Alameda	31.55	5.0	377
South Alameda	24.78	6.6	307
East Alameda	27.58	7.5	332
East Contra Costa	23.75	9.5	291
N. San Jose County	32.45	7.2	231
San Francisco (MD)	34.67	3.3	324

Source: REIS

One caveat here is that demand may be high, but many facilities in the East Bay are also outdated. Tenants have many new requirements for warehouse space due to advanced manufacturing, broadband, higher ceilings and other physical requirements. It can be cheaper for companies to demolish a structure and build new ones than make accommodations. If this is the case, then we can expect the downward path of vacancy rates to slow somewhat while permit activity should continue to rise.

WAREHOUSE AND DISTRIBUTION CENTER SUBMARKETS

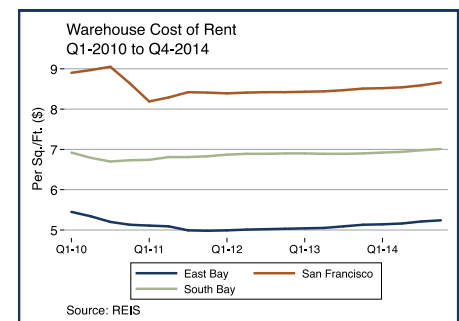
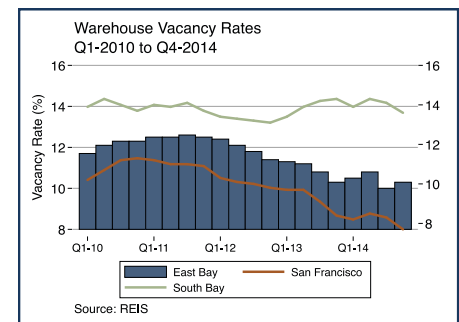
The warehouse and distribution market has the greatest amount of parity between commercial submarkets. The Newark/Fremont submarket is clearly the healthiest with the lowest vacancy rate by a solid 70 basis point margin and higher, yet still maintains competitive rental costs. Interestingly, the two submarkets where vacancy rates are the highest are the same two where it is most expensive to rent warehouse space. This suggests that lowering rents could improve vacancy rates in those submarkets. In fact, Amazon just recently opened a 575 – thousand square foot distribution center in Newark.

The cost advantages of operating in the East Bay in addition to the proximity to the port and the freeway system make the area a strategic fit for the ecommerce giant.

FLEX/R&D RENTAL MARKET

The East Bay is also a rising hub for innovation. The region houses the University of California, Berkeley and is the only region with three National Laboratories (Lawrence Livermore National Laboratory, Lawrence Berkeley National Laboratory, Sandia National Laboratories) and the soon to be developed Berkeley Global Campus at Richmond Bay. Additionally, there has been an increase in incubators and accelerators in the East Bay around these entities – examples include TopLine in Richmond, and iGate in Livermore. The type of commercial space that is suitable for laboratories is known as Flex space, which is a term used for research and development compatible with office space.

After rising at the beginning of 2014, vacancy rates for East Bay flex/R&D properties decreased 1.3% over the past 9 months to hit a post-recession low of 15.1%. Flex vacancy rates have come down fairly quickly in all Bay

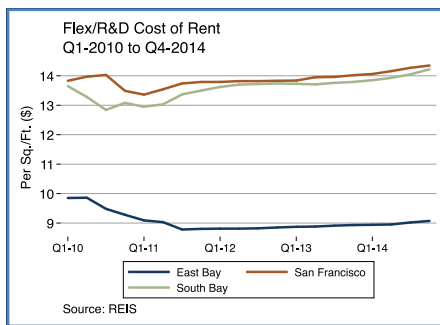
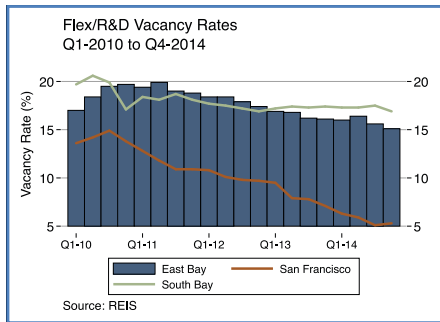


Warehouse and Distribution Center Submarket Snapshot: 2014-Q4

Submarket	Rent (\$ per sq. ft. per year)	Vacancy Rate (%)	Vacant Square Feet (000s)
Newark/Fremont	5.38	8.9	1,873
Union City	5.31	9.6	1,399
Berkeley/Richmond/Martinez	5.02	9.7	984
Concord/Pittsburg	4.64	9.8	2,709
Oakland/San Leandro	5.24	10.1	1,704
Pleasanton/Livermore	5.63	10.5	2,110
Hayward	5.50	12.2	1,539
Santa Clara	6.73	14.0	830
San Francisco County	8.73	6.7	690

Source: REIS

EAST BAY COMMERCIAL REAL ESTATE



Industrial Construction by Submarket

City/Submarket	2014	Change (%)
Fremont	54,308,271	-59.9
I-80/I-880	33,182,000	643.2
Richmond	20,488,175	180.8
Other	30,628	N/A
East Bay Total	116,259,074	-22.0

Source: CIRB

Certain flex submarkets have had great success rapidly filling space over the past several years thanks to attractive rent prices relative to San Francisco and the South Bay.

Area markets, falling by 1.8% in San Francisco and by a more modest 0.5% in the South Bay.

The cost of flex rent in the East Bay has grown slowly but consistently, increasing every single quarter over the past year, and totaling 3.3% growth. Over the last year, rent growth has picked up slightly, but it is important to note that flex properties in the East Bay are even more discounted than their warehouse counterparts, boasting roughly a 36% discount compared to both the South Bay and San Francisco. This will continue to attract research-based firms to the area.

FLEX/R&D SUBMARKETS

Certain flex submarkets have had great success rapidly filling space over the past several years thanks to attractive rent prices relative to San Francisco and the South Bay. The Oakland/San Leandro submarket has a mere 4.7% vacancy rate. This is less than half compared to the next closest submarket. Likewise, the high cost of rent in the Berkeley/Richmond/Martinez submarket – a commercial submarket pre-defined by REIS, Inc. - is being driven by newer facilities being built in the area, properties that command a premium.

INDUSTRIAL CONSTRUCTION TRENDS

Construction of industrial properties in the East Bay slowed somewhat over the past year, but the general level of activity remained strong with almost all construction occurring in just three submarkets. Areas such as Fremont are seeing significant construction because although they already house a significant amount of industrial space, much of it is older. There is demand for newer class A industrial space as well as Flex space in the area.

Given the relative affordability of Flex space in the Union City submarket, it may come as a surprise to some that vacancy rates are 220 basis points higher in Union City than in the much more expensive Santa Clara submarket where rents are \$13.30 versus \$5.29 in Union City. While this is certainly a peculiar case, Union City is by no means an outlier as the neighboring Newark/Fremont and Hayward submarkets both have higher vacancy rates than Santa Clara. This indicates that there is an inherent advantage to renting flex property in Santa Clara for now.

Flex and Research and Development Submarket Snapshot: 2014-Q4

Submarket	Rent (\$ per sq. ft. per year)	Vacancy Rate (%)	Vacant Square Feet (000s)
Oakland/San Leandro	9.00	4.7	104
Berkeley/Richmond/Martinez	18.52	10.9	127
Pleasanton/Livermore	9.78	12.6	486
Hayward	8.33	15.2	622
Concord/Pittsburg	9.75	16.0	351
Newark/Fremont	5.29	17.9	174
Union City	8.15	19.3	2,048
Santa Clara	13.30	14.7	2,031
San Francisco County	16.25	6.3	108

Source: REIS

OVERVIEW

The direction of the East Bay housing market has been primarily dictated by lingering supply constraints. Demand for housing in the region remains strong, bolstered by rising incomes and rapid population growth. Meanwhile, a significant gap has developed between the rate of household formation in the region and the supply of available housing. As a result, prices continue to grow at a rapid clip while the volume of sales has consistently underwhelmed. However, residential construction activity picked up considerably in 2014, although the gap between population demand and available units remains wide. Going forward, we see further improvement in the East Bay housing market despite the persistence of supply issues in the region.

HOME PRICES

Although the rate of price appreciation for existing single-family homes in Alameda and Contra Costa Counties remained strong in 2014, prices grew at a faster clip elsewhere in the Bay Area. This means that housing in the East Bay has increased

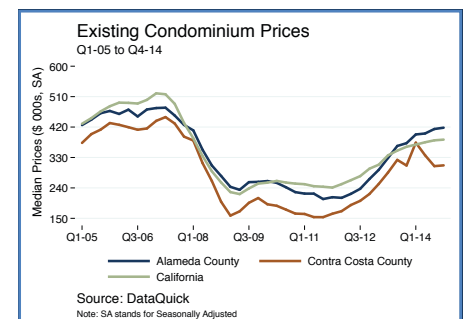
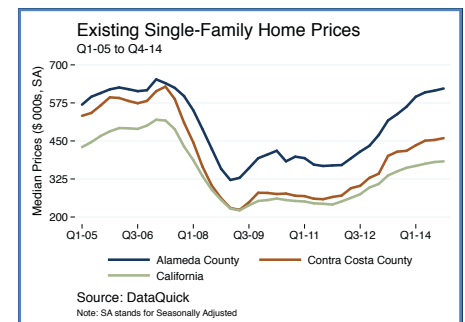
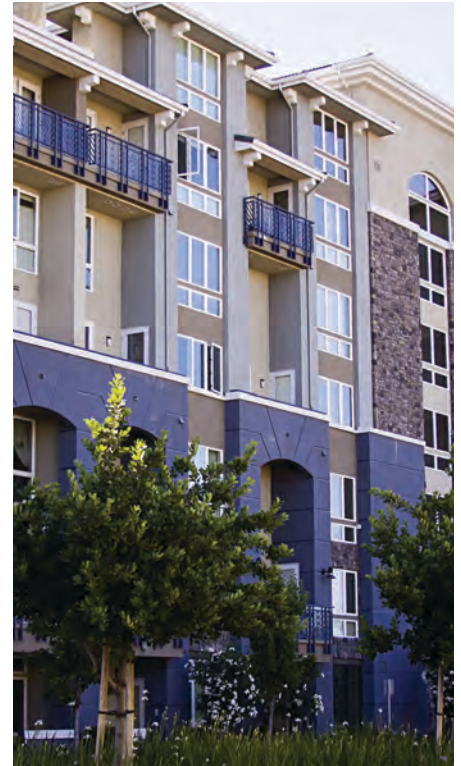
in affordability relative to San Francisco and the South Bay, which should entice more potential Bay Area homeowners to move into the region.

CONDOMINIUM PRICES

The market for condominiums in Alameda and Contra Costa Counties went in different directions in 2014. The market in Alameda County behaved as expected—price growth, while relatively high at 12.3% over the year, began to cool. Meanwhile, the median price for a condo in Contra Costa County surged in early 2014 only to fall back to where the market stood during the fourth quarter of 2013 by the end of the year.

HOUSING AFFORDABILITY

The absolute affordability of living in the East Bay, as opposed to elsewhere in the Bay Area, grew in 2014. As of the fourth quarter of 2014, a typical household in the East Bay would have to spend just under half (49.4%) of their income in order to afford the mortgage payment on a median-priced home in the region. By comparison,



Household Income and Housing Costs for Select East Bay Cities in 2014

City	Median Household Income (\$'000s)	Median Prices (\$'000s)	Home and Condo Sales	Annual Housing Costs as a % of Income
Berkeley	62	788	744	71.5
Oakland	54	442	3,918	45.7
Hayward	59	420	1,707	39.8
Pleasanton	122	828	998	38.3
San Leandro	64	430	885	37.9
San Ramon	131	800	1,353	34.3
Concord	66	400	1,585	34.0
Richmond	55	286	832	29.4
Antioch	59	307	1,654	29.1
Pittsburg	61	301	1,009	27.7

Source: DataQuick

EAST BAY RESIDENTIAL REAL ESTATE



households in San Francisco and San Jose are facing mortgage payments in excess of 60% of their income, which should encourage many potential homeowners to consider purchasing an East Bay home and commuting to work.

Potential homeowners may also be lured to the East Bay because of the relatively affordable housing in the region. A median-priced single-family home in Alameda County is nearly 40% less expensive than a home sold in San Francisco and 24.9% less expensive than a home sold in the South Bay. The affordability gap is even more pronounced in Contra Costa County, where a buyer could purchase two-and-a-quarter homes for the price of one in San Francisco.

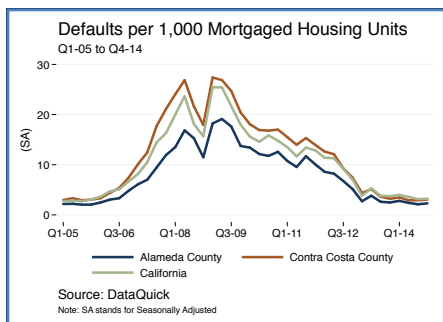
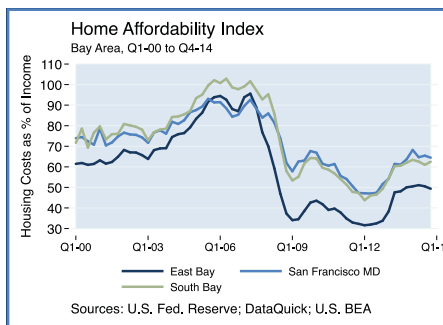
The northern and eastern sub-regions of the East Bay exhibit the highest levels of affordability. Households in the Cities of Antioch and Pittsburg would only have to pay 27.7% and 29.1%, respectively, of their annual household income to purchase the median priced home or condominium in these cities. Affordability issues in San Francisco, San Jose, and the western portion of the East Bay will continue to push potential

homebuyers further east. If supply issues in the East Bay persist, many potential homebuyers will be priced out of the region's housing market entirely and will be forced to consider moving further east to less-expensive areas in Solano, Sacramento, and San Joaquin Counties. In fact, this eastward transition has already begun as 27,000 people left the East Bay and moved out of the Bay Area between 2008 and 2013.

DEFAULTS AND FORECLOSURES

Notices of default in Alameda and Contra Costa Counties have nearly returned to pre-recession levels. Furthermore, continued improvement of household finances in the East Bay means fewer homes will default on their mortgages. Defaulting is the first component of the foreclosure process. Defaults and foreclosures alike should continue their downward trend towards long-term historical averages.

Foreclosures are becoming an increasingly smaller share of the overall housing market in the East Bay. Only 0.76 per thousand homes in Alameda County with a mortgage



Foreclosures in Select Cities in the East Bay

City	1998-2006 Average	Q4-2013	Q4-2014	Q4-2013 to Q4-2014 Change (%)	1998-2006 Average to Q4-2014 Change (%)
Berkeley	3	5	0	-100	-100
Oakland	37	91	49	-47	30
Fremont	6	12	8	-32	34
Concord	9	31	15	-53	63
Richmond	12	23	22	-8	85
Hayward	10	28	20	-30	107
Antioch	15	47	36	-24	132
Brentwood	3	23	7	-68	139
Alameda	1	6	5	-18	391

Source: DataQuick

went into foreclosure in the fourth quarter of 2014. A little less than 1 in every thousand mortgaged homes in Contra Costa County went into foreclosure during this time.

Foreclosures in the East Bay continued their widespread decline in 2014. Although the number of foreclosures in most cities remains elevated relative to pre-recession averages, the continued improvement of household finances, coupled with a downward trend in the number of defaults, indicates that foreclosures will continue their move towards their long-run average.

SUPPLY

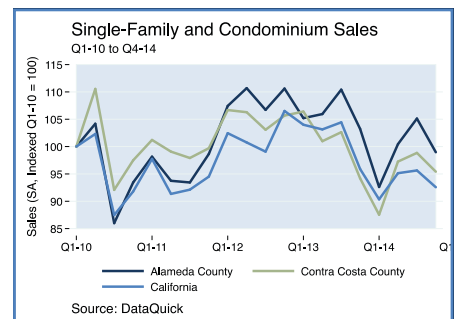
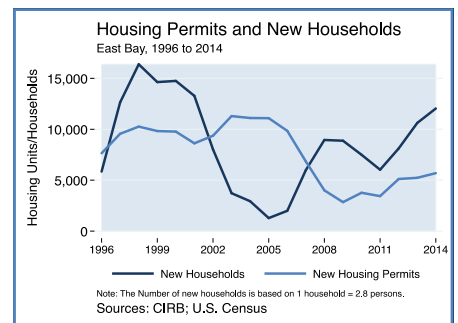
As distressed properties continue to dwindle, the supply of existing homes in the East Bay remains tight. Only 5.4% of all housing units in the region were vacant as of 2013 compared to 8.3% of all housing units statewide. This downward trend has persisted since 2009. Construction activity has been slow to respond to the rapid rate of price appreciation seen during this period.

Construction activity in the East Bay has been unable to keep up with

the rate of household formation. This gap grew even bigger in 2014. The number of households moving into the East Bay outnumbered the number of housing units permitted for construction by 6,351 households. Overall, more than 21,000 units would need to be constructed in addition to the 23,200 units that were built over the past five years in order to keep up with the number of new households that have entered the region during this time period.

HOME AND CONDOMINIUM SALES

A persistent shortage in the supply of available housing in the East Bay continues to limit the volume of home and condominium sales in the region. The decline in sales is not limited to the East Bay; existing home and condominium sales fell 8.3% statewide during this period. Sales were also down in San Francisco (-4.4%) and the South Bay (-5.3%) in 2014, a clear indication of the extent of the region's supply shortage.

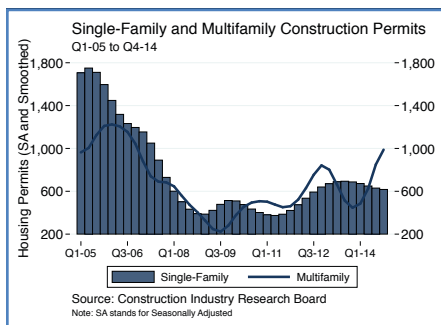
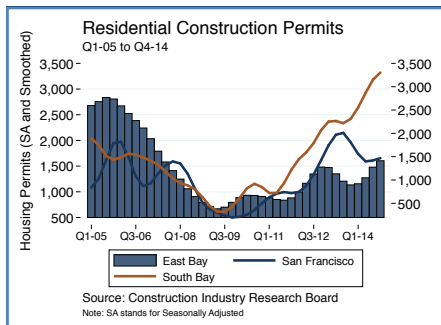
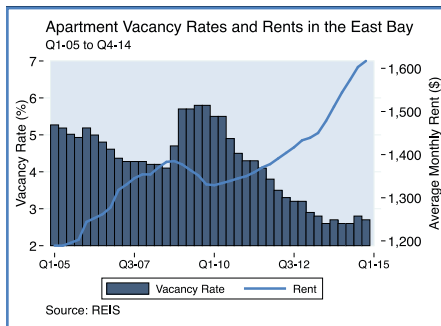


Housing Vacancy %

Year	Alameda	Contra Costa	East Bay	California
2007	8.0	6.7	7.4	8.3
2008	8.6	7.0	7.9	9.1
2009	8.7	8.1	8.5	9.1
2010	7.8	8.1	7.9	9.3
2011	6.7	6.2	6.5	9.1
2012	6.1	5.2	5.7	8.4
2013	5.4	5.4	5.4	8.3

Source: U.S. Census American Community Survey

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Overall, more than 21,000 units would need to be constructed in addition to the 23,200 units that were built over the past five years in order to keep up with the number of new households that have entered the region during this time period.

HOME AND CONDOMINIUM PRICES AND SALES

Home price appreciation was highest in some of the East Bay's more affordable cities during 2014. In the City of Emeryville, where the median home price was 27.3% less expensive than the median price in Alameda County, home prices grew by 16.7%.

Price appreciation was considerably stronger throughout Contra Costa County, as five cities saw prices grow in excess of 20% year-over-year.

Home price appreciation was slowest in many of the East Bay's most expensive cities. The "slowest" growing city, Albany, in Alameda County, only grew by 5.8% from 2013 to 2014, while the median price in the only town with negative growth in Contra Costa County, Moraga, was exactly twice the county average.

Overall, high-cost areas in the East Bay saw home prices appreciate by 8.3% from 2013 to 2014. The number of home and condominium sales in

these areas, however, was dragged down by a 6.2% decline in Danville and a 1% drop in San Ramon.

Home prices continue to rise sharply in many of the East Bay's more affordable locales as a result of a persistent shortage in the supply of available housing. In fact, the number of home and condominium sales fell in cities with relatively affordable housing. A greater share of local residents have now been priced out of these markets due to both the declining number of foreclosures and persistent supply constraints throughout the East Bay.

APARTMENT VACANCIES AND RENTS

Rising rents and an unchanged vacancy rate indicate that demand for apartments in the East Bay continued to grow during 2014. Meanwhile, rents grew at a faster clip in San Francisco (5.1%) and the South Bay (6.2%), which has made

Home and Condominium Sales and Median Prices in East Bay Areas with the Fastest Growing Prices in 2014

Area	Annual Sales	Median Prices (\$000s)	Year-Over-Year Change in Price (%)
Newark	513	540	24.4
Emeryville	500	410	17.0
Hayward	1,707	420	16.7
Dublin	1,245	790	16.5
San Lorenzo	290	430	16.2
Alameda County	17,011	564	16.2
Rodeo	81	366	36.3
Richmond	832	286	36.2
San Pablo	504	275	22.1
Pinole	218	384	21.7
Pittsburg	1,009	301	20.4
Contra Costa County	16,097	450	14.6

Source: DataQuick

renting in the East Bay relatively more affordable than other markets in the Bay Area. Given that many potential homeowners are now renting, demand for rental properties in the East Bay is expected to remain strong.

RESIDENTIAL CONSTRUCTION

Developers have started to respond to rapidly rising home prices in the East Bay with increased construction activity. In fact, the number of permits issued in the region grew by 8.0% to just under 5,700 in 2014—the most permits issued in any year since the start of the recovery. Meanwhile, over 12,000 permits were issued in the South Bay in 2014, while construction activity plummeted in San Francisco during this same period.

Multi-family construction was the primary driver of increased construction activity in the East Bay. Activity in multi-family construction increased significantly while activity in the single-family sector declined.

In fact, 55% of all residential permits issued in the East Bay were for multi-family units in 2014. Developers facing a shortage of developable land are focusing on increase density by building more units on less ground.

Dublin, Brentwood, Oakley, and Pittsburg led the way in single-family construction in the East Bay, relative to their respective stock of single-family homes. This is positive news for the region overall, as it demonstrates that construction activity is picking up in both expensive (Orinda) and inexpensive (Oakley) locales.

Five cities are expected to see their stock of multi-family housing increase by over 10% as units currently under construction enter the market. Beacon Economics expects this trend to persist as developers turn increasingly to multi-family developments due to a shortage of developable land in the region's urban cores.

Cities in the East Bay Developing the Most Single-Family Units Relative to their Current Single-Family Housing Stock

City	Permits 2012 to 2014	Permits as a Share of Housing Stock (%)
Dublin	1,701	16.3
Brentwood	1,146	7.1
Oakley	429	4.2
Pittsburg	569	3.6
Hayward	561	2.0
Orinda	113	1.8
Antioch	480	1.7

Source: Construction Industry Research Board

Cities in the East Bay Developing the Most Multifamily Units Relative to their Current Multifamily Housing Stock

City	Permits 2012 to 2014	Permits as a Share of Housing Stock (%)
Orinda	66	25.3
Emeryville	1,069	18.5
Dublin	1,074	17.9
Lafayette	194	12.1
Oakley	74	11.6
Pleasanton	528	8.5
Brentwood	54	4.9
Walnut Creek	639	4.3
Livermore	199	3.3

Source: Construction Industry Research Board

Home and Condominium Sales and Median Prices in East Bay Areas with the Slowest Growing Prices in 2014

Area	Annual Sales	Median Prices (\$000s)	Year-Over-Year Change in Price (%)
Albany	172	638	5.8
Castro Valley	671	575	7.6
Berkeley	744	788	9.4
Pleasanton	998	828	10.4
San Leandro	885	430	13.2
Alameda County	17,011	564	16.2
Moraga	268	900	-1.4
Lafayette	391	1,103	3.0
San Ramon	1,353	800	3.9
Hercules	308	369	5.4
Clayton	191	640	7.6
Contra Costa County	16,097	450	14.6

Source: DataQuick

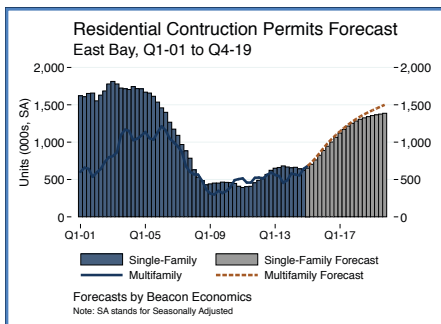
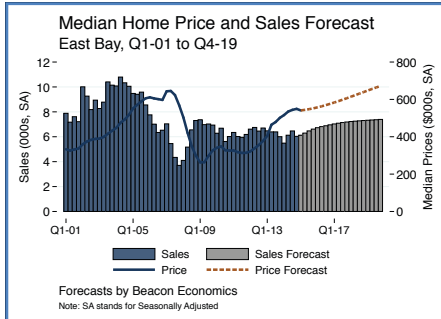


FORECAST OF EXISTING SINGLE-FAMILY HOME PRICES AND SALES

As persistent supply concerns are alleviated, Beacon Economics expects home appreciation in the East Bay to return to a more sustainable pattern of growth. Driven by an expanding population and improved household finances, demand for housing in the region will remain strong. The recent uptick in construction activity throughout the East Bay should also help address the shortage of housing. As price growth continues to cool in the upcoming quarters, sales activity will begin to pick up and is expected to grow for the duration of this forecast.

FORECAST OF CONSTRUCTION ACTIVITY

Beacon Economics expects home appreciation in the East Bay to return to a more sustainable pattern of growth. Beacon Economics is forecasting that the number of permits issued for single-family construction will grow considerably through 2018, while recent momentum in the multi-family sector will carry over into 2015 with growth in excess of 30.0%.



Home and Condominium Median Prices and Sales in Higher Cost East Bay Areas in 2014

City/County	Median Prices (\$000s)	Year-Over-Year Change in Price (%)	Annual Sales	Year-Over-Year Change in Sales (%)
Orinda	1,175	15.5	326	10.9
Danville	1,000	11.2	1,087	-6.2
Alamo	1,410	10.6	275	10.9
Pleasanton	828	10.4	998	-1.4
Berkeley	788	9.4	744	4.3
San Ramon	800	3.9	1,353	-1.0
Lafayette	1,103	3.0	391	1.6
Moraga	900	-1.4	268	18.6
Diablo	1,500		22	
Total	925	8.3	5,477	0.8

Source: DataQuick

Home and Condominium Median Prices and Sales in Affordable East Bay Areas in 2014

City/County	Median Prices (\$000s)	Year-Over-Year Change in Price (%)	Annual Sales	Year-Over-Year Change in Sales (%)
Rodeo	366	36.3	81	-12.9
Richmond	286	36.2	832	-7.5
San Pablo	275	22.1	504	-10.0
Pinole	384	21.7	218	-3.1
Pittsburg	301	20.4	1,009	-9.9
Discovery Bay	450	18.7	440	6.3
Martinez	415	18.2	689	-5.5
Emeryville	410	17.0	500	-0.2
Hayward	420	16.7	1,707	-8.1
San Lorenzo	430	16.2	290	-17.4
El Sobrante	388	15.5	310	-1.3
Antioch	307	14.6	1,654	-11.0
Concord	400	14.3	1,585	-11.7
Oakley	342	14.0	727	-8.1
Oakland	442	13.5	3,918	-5.6
San Leandro	430	13.2	885	-10.8
Hercules	369	5.4	308	-15.2
Bethel Island	187		30	
Crockett	330		40	
Total	387	16.2	15,727	-8.0



With comparatively lower costs of living, the East Bay has become an attractive destination for households squeezed out of pricier locales in San Francisco County and the South Bay.



POPULATION GROWTH

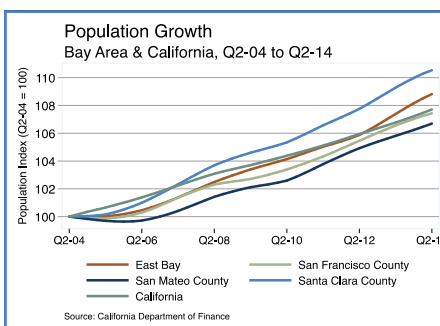
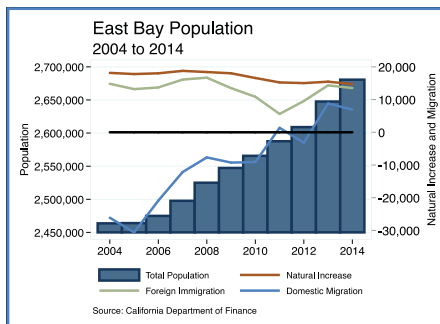
The East Bay continues to be a leader in overall population growth in the Bay Area. From July 2013 to July 2014, the East Bay experienced a population increase of 1.3%, with total population reaching close to 2.7 million residents. Looking over a much wider horizon, the East Bay has increased its population base by nearly 9% over the last ten years. With comparatively lower costs of living, the East Bay has become an attractive destination for households squeezed out of pricier locales in San Francisco County and the South Bay. The East Bay is also attracting higher income households.

Since 2013, domestic migration has indicated that the East Bay is becoming more of a destination for those living in the Bay Area. However, growth in the East Bay's population continues to be dominated by natural increases—the difference between births and deaths—which average 17,000 per year. Immigration has also been a source of population growth, with the East Bay averaging close to 13,000 foreign immigrants per year over the last decade.

Overall net migration was negative in the East Bay over the last five years. This is primarily due to many lower income households relocating outside the area in search of more affordable living arrangements. There has been positive net migration to the East Bay from neighboring counties. Inbound migration from San Francisco, San Mateo, and Santa Clara Counties has accounted for nearly half of all inbound migration into the East Bay over the last five years. This has been the result of greater affordability, ongoing modernization, and development in the region.

The East Bay is not only a relatively more affordable place to live, it is also in the midst of a transformation that will allow its residents to enjoy more food and entertainment venues locally. In addition, as will be discussed in greater detail below, the East Bay is becoming increasingly diverse, with Alameda County having the highest racial diversity index in the Bay Area. According to the 2014 East Bay EDA Quality of Life report, "... productivity flourishes in culturally diverse cities and people are willing to pay to live and work in such fertile environments."¹

¹ "East Bay Economic Development Alliance, "East Bay Quality of Life Report", Page 26, September 2014.



East Bay In-State Migration (2008-2013)

Inbound Migration			Outbound Migration			Net Migration	
Origin County	Amount	Share	Migration County	Amount	Share	County	Amount
Marin	4,608	2.5%	Marin	7,130	3.6%	Marin	-2,522
Non Bay Area Counties	90,500	48.5%	Non Bay Area Counties	117,515	59.6%	Non Bay Area Counties	-27,015
San Francisco	37,764	20.2%	San Francisco	29,738	15.1%	San Francisco	8,026
San Mateo	19,547	10.5%	San Mateo	14,336	7.3%	San Mateo	5,211
Santa Clara	34,223	18.3%	Santa Clara	28,417	14.4%	Santa Clara	5,806
Total	186,642	100.0%	Total	197,136	100.0%	Total	-10,494

Source: 2008-2013 American Community Survey

This bodes well for local businesses, as increased levels of diversity will certainly create an economic environment conducive to increased levels of spending, especially in the entertainment and specialty retail sectors.

As more and more Bay Area residents have moved into the East Bay, there has also been an increase in the number of residents who commute to locations outside the East Bay for work.

The growing pattern of commuting from the East Bay to the Bay Area's tech hubs has become troublesome for many commuters, who face long commutes to and from Silicon Valley and San Francisco. However, the San Francisco Bay Area Rapid Transit system (BART) is undergoing major transformations in the form of increased capital expenditures on new train cars, improvements to existing tracks and the modernization of the BART Maintenance Complex in Hayward². The planned transformations will be able to accommodate the increased ridership from the East Bay into San Francisco and Silicon Valley. Nevertheless, the increased volume of commuters will benefit the East Bay from increased spending by these commuters. As more high-skilled workers move to the East Bay from San Francisco, some

firms should consider relocating to the East Bay. An analytics firm recently relocated to Oakland, where office rents are lower than San Francisco and the commute is more favorable to East Bay located tech workers.³

POPULATION COMPOSITION (AGE AND RACE)

The continued outflow of many young professionals from more expensive Bay Area communities into the East Bay is becoming increasingly noticeable. From 2012 to 2013, the population age 25 to 34 increased in the East Bay by 3.3%. Over the last five years, however, the population in this age group increased by nearly 19%.

Of the four major ethnic groups, the population of Asians and Hispanics continues to grow the most in the East Bay. Asians now comprise over 22% and Hispanics comprise nearly 24% of the East Bay's population.

Over the last five years, the two highest income groups have experienced the largest increase in their share of the East Bay population, reflecting the inbound migration of higher skilled workers from professional and tech industries.



Increased levels of diversity will certainly create an economic environment conducive to increased levels of spending, especially in the entertainment and specialty retail sectors.

² San Francisco Bay Area Rapid Transit, 2015 Report to Congress.

³ Joe Garofoli, "Horrible commute is a boon to East Bay tech firms", SF Gate, January 18, 2015.

East Bay Residents Commute Pattern Shares (2008-2013)

County of Work	2008 (%)	2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 (%)
East Bay	68.6	65.0	64.1	62.8	62.9	62.2
Other	10.4	14.5	16.4	17.4	17.4	17.8
San Francisco	9.9	9.3	8.6	9.3	10.0	10.5
San Mateo	3.5	3.5	3.4	2.9	3.2	3.3
Santa Clara	5.8	6.0	5.8	5.7	6.5	6.2

Source: 2008-2013 American Community Survey



INCOME AND EDUCATION

Annual earnings have grown throughout the Bay Area and California over the last year. The East Bay experienced annual earnings growth of 2.4% for those with a Bachelor's Degree. Annual earnings for those with less than a high school diploma grew at a faster rate (3.3%) over the last year, however, there is still a 210% earnings gap between those with less than a high school degree and those with a Bachelor's Degree. Higher educational attainment remains imperative in achieving higher earning potential.

Still, earning any bachelor's degree is no longer sufficient in guaranteeing a decent paying occupation. The Bay Area is a hub that is concentrated on STEM related fields.⁴ Current and future college students should be considering degrees and certificated programs closely tied to the fields now

thriving in the Bay Area. Universities and community colleges are working more closely with industry to ensure that their curriculum is aligned to needed skill sets and knowledge bases that make their students more employable. The East Bay has benefited from multi-year, multi-million dollar grants from state and federal sources supporting this alignment through community college districts. Community colleges have fast become a more viable alternative to the pricier four-year colleges in the East Bay. With the help of California Career Pathways Trust grants, the Oakland-based Peralta Community College District, in 2014, received \$15 million to bolster programs in engineering, public service, digital media, and other fields.⁵ This should help local community college students transition into more rigorous curricula found at four-year institutions and develop skillsets that are paramount in today's work place.

⁵ Michelle, Maitre, "Winners of Career Pathways grants lay out ambitious goals", EdSource, June 11, 2014.

⁴ STEM stands for Science, Technology, Engineering, and Mathematics

East Bay Population by Household Income

Income Category	Share 2008	Share 2013
Less than \$10,000	5.0%	5.2%
\$10,000 to \$14,999	4.4%	4.1%
\$15,000 to \$24,999	7.5%	7.7%
\$25,000 to \$34,999	6.9%	6.9%
\$35,000 to \$49,999	10.9%	10.7%
\$50,000 to \$74,999	16.1%	15.2%
\$75,000 to \$99,999	13.0%	12.5%
\$100,000 to \$149,999	18.2%	16.6%
\$150,000 to \$199,999	8.7%	9.1%
\$200,000 or more	9.3%	11.9%

Source: 2013 American Community Survey

East Bay Population Distribution by Age

Age	2008	2013	2008-2013 % Change
Under 5 years	167,632	161,488	-3.7%
5 to 9 years	168,217	176,547	5.0%
10 to 14 years	158,482	164,146	3.6%
15 to 19 years	171,892	168,660	-1.9%
20 to 24 years	168,217	176,097	4.7%
25 to 34 years	322,300	382,428	18.7%
35 to 44 years	379,613	383,660	1.1%
45 to 54 years	388,716	387,387	-0.3%
55 to 59 years	166,883	177,492	6.4%
60 to 64 years	126,818	151,867	19.8%
65 to 74 years	152,444	196,815	29.1%
75 to 84 years	92,651	98,151	5.9%
85 years and over	39,176	48,358	23.4%
Total	2,504,071	2,673,096	6.8%

Source: 2013 American Community Survey

Local school districts are also collaborating with various businesses that will help support STEM coursework. Some of these include Bayer HealthCare, Kaiser Permanente, Wareham Development and Chevron. According to a study conducted by Bayer Corporation, approximately 90% of talent recruiters say that today's four-year STEM degree holders are as, or more, in demand than their counterparts without STEM degrees.⁶ Thus, the East Bay is responding to the increased demand for a higher-skilled workforce proactively, and is taking steps

⁶ Bayer Corporation, "The Bayer Facts of Science Education XVI: U.S. STEM Workforce Shortage – Myth or Reality? Fortune 1,000 Talent Recruiters on the Debate", October 2015.

towards ensuring students will be adequately prepared for the rigors of STEM education. This will lead to higher workforce productivity, wage growth, and increased spending throughout the region.

The portion of the East Bay population with a post-secondary education grew last year, while in San Francisco County there was a slight decline. The growing talent pool migrating to the East Bay should incentivize firms (either existing or start-ups) to establish operations in the region, taking into consideration both the long commute times from the East Bay to Silicon Valley or San Francisco, and the sizeable discount on the cost of commercial space.



The growing talent pool migrating to the East Bay, should incentivize firms (either existing or start-ups) to establish operations in the region.

East Bay Annual Earnings by Educational Attainment, 2013 (\$)

Educational Attainment	California	East Bay	San Francisco	San Mateo	Santa Clara
Less than high school graduate	18,945	20,834	19,277	22,047	21,225
High school graduate (includes equivalency)	27,354	31,167	25,438	31,066	29,674
Some college or associate's degree	35,911	40,787	35,635	41,386	41,291
Bachelor's degree	54,680	63,186	62,833	62,156	73,642
Graduate or professional degree	77,805	87,455	85,353	100,906	103,236

Source: 2013 American Community Survey

East Bay Educational Attainment, 2013 (Share of Population Age 25 and Older)

Education Level	California	East Bay	San Francisco	San Mateo	Santa Clara
Less than 9th Grade	10.1%	6.7%	8.2%	6.2%	7.0%
9th to 12th Grade, no Diploma	8.4%	5.8%	5.3%	5.0%	6.3%
High School Graduate (includes equivalency)	20.8%	19.0%	13.1%	17.4%	15.5%
Some College, no Degree	22.0%	20.3%	15.2%	19.4%	17.1%
Associate's Degree	7.8%	7.3%	5.3%	7.4%	7.1%
Bachelor's Degree	19.5%	24.8%	32.1%	26.8%	25.9%
Graduate or Professional Degree	11.3%	16.1%	20.8%	17.7%	21.1%
Total Post Secondary Education	30.8%	40.9%	52.9%	44.5%	47.0%

Source: 2013 American Community Survey



College students should consider pursuing degrees and certificates that are likely to lead to well-paying jobs, most notably in STEM-related fields.

INCOME INEQUALITY AND POVERTY

While incomes throughout the Bay Area have increased for the most part over the last year, the distribution of income remains an issue. In the East Bay, the Gini Coefficient of Inequality—where 1, or 100%, represents perfect inequality and 0 represents perfect equality—has increased by 3.5%, which is second only to Santa Clara County. The growing inequality is tied to a rising poverty rate: 12.1% of the East Bay's population is living below the poverty threshold (up from 10% in 2008).

Poverty and income inequality have become a significant issue throughout the East Bay. Increasing educational attainment is a key component in alleviating these ills. It is well understood that higher educational attainment can lead to higher wages and a lower likelihood of living below the poverty threshold. However, it

is important to also emphasize the pursuit of degrees and certificates recognized by industry that are applicable to current occupational needs in the Bay Area. College students should consider pursuing degrees and certificates that are likely to lead to well-paying jobs, most notably in STEM-related fields. Job seekers who are not in the four-year college system should also seek training programs and opportunities that are aligned with employment in STEM-related fields prevalent in the region. The Bayer study mentioned earlier reports that nearly 80% of talent recruiters said that today, two-year STEM degree holders are as, or more, in demand than their counterparts without STEM degrees.⁷ Thus, even two-year STEM degrees are in adequate demand and are a more viable educational option, compared to even four-year, non-STEM degrees.

7 Bayer Corporation, "The Bayer Facts of Science Education XVI: U.S. STEM Workforce Shortage – Myth or Reality? Fortune 1,000 Talent Recruiters on the Debate", October 2013.

Poverty by Educational Attainment, 2013 (Share of Population Age 25 and Older)

Education Level	California	East Bay	San Francisco	San Mateo	Santa Clara
Less Than High School Graduate	26.3%	22.8%	26.9%	15.9%	22.3%
High School Graduate (Includes Equivalency)	15.8%	13.6%	17.0%	9.2%	13.3%
Some college, no degree	11.3%	9.8%	14.7%	6.4%	8.5%
Bachelor's Degree or Above	5.4%	4.5%	6.5%	3.8%	3.6%

Source: 2013 American Community Survey

OCCUPATIONS AND WORKFORCE READINESS

The East Bay's occupational composition is centered around the professional services industry, primarily in finance and technology. Overall, 44.1% of the population age 16 and over work in management, business, science, and art related occupations—an improvement of nearly two percentage points over 2008. This is consistent with the East Bay's transition to becoming a

center for technology, innovation, and advanced manufacturing. In order to maintain this positive trend, local leaders need to focus on creating an educational environment that fosters growth in STEM-related programs. The East Bay is home to the University of California at Berkeley, one of the top research universities in the world and a magnet for top tech firms. The promotion of STEM education, especially early on, is a win-win proposition for all East Bay residents and businesses.



The East Bay is clearly transitioning, becoming more of a center for technology, innovation, and advanced manufacturing.

East Bay Occupation Composition of Civilian Employed Population Age 16 and Over

Occupation Type	East Bay 2008	East Bay 2013
Management, Business, Science, and Arts	42.2%	44.1%
Service	16.0%	17.2%
Sales and Office	24.2%	22.6%
Natural Resources, Construction, and Maintenance	8.3%	7.5%
Production, Transportation, and Material Moving	9.3%	8.6%

Source: 2008 and 2013 American Community Survey

CONCLUSION



The East Bay's economy continued to show strong growth in 2014. Numerous economic indicators have been trending in the right direction and the fundamentals indicate that the economy will continue to expand over the next five years. Jobs are being added to industries that serve the local economy, such as Administrative Support Services, Construction, and Educational Services, indicative of higher incomes and higher spending among local residents. Indeed, taxable sales have also been growing throughout the East Bay's cities. Home prices, which have been growing at a double-digit pace, should moderate to single-digit growth in the coming years. The East Bay will continue to attract migrants from the surrounding San Francisco Bay Area due to its relative affordability.

For the long term, economic growth throughout the East Bay can be bolstered by more adequately preparing the local workforce to better meet employers' growing demand for skilled labor and workers with technical experience, spurred by innovation throughout the Bay Area.

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