

2017-2018



ECONOMIC FORECAST — & — INDUSTRY OUTLOOK

LAEDC

INSTITUTE FOR APPLIED ECONOMICS
Los Angeles County Economic Development Corporation



ECONOMIC FORECAST AND INDUSTRY OUTLOOK

CALIFORNIA AND SOUTHERN CALIFORNIA 2017-2018

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2017-2018 Forecast At-A-Glance

- The U.S. economy remains on a fairly steady though uninspiring growth path over the next few years
- With growing confidence in their financial situation and continued job growth, consumer spending will stay on an upward trajectory
- Likely to increase, government spending is again a positive contributor to GDP growth in the U.S.

Exhibit ES-1

United States Indicators

	Historical		Forecast	
	2015	2016	2017f	2018f
Real GDP (annual percent change)	2.6	1.6	2.2	2.4
CPI (annual percent change)	0.1	1.3	2.2	2.4
Unemployment rate (percent)	5.3	4.9	4.6	4.6
Annual percent change in employment	2.1	1.7	1.4	1.4
Change in total nonfarm jobs	2,885,000	2,464,000	2,033,100	2,005,900

Exhibit ES-2

California Indicators

	Historical		Forecast	
	2015	2016	2017f	2018f
Real GDP (annual percent change)	3.8	2.5	2.4	2.6
Population growth rate	0.9	0.9	0.9	0.9
Unemployment rate (percent)	6.2	5.4	5.1	5.0
Annual percent change in employment	3.0	2.6	1.7	1.7
Change in total nonfarm jobs	465,900	411,100	276,900	288,600

- California continues to outpace the nation in economic growth, now accounting for 13.6 percent of U.S. GDP
- Unemployment continues to decline, now reaching full employment
- Job growth continues across most industry sectors, but is now likely to slow as the labor market tightens

Exhibit ES-3

Los Angeles County Indicators

	Historical		Forecast	
	2015	2016	2017f	2018f
Annual percent change in real GDP	3.6	2.2	2.5	2.6
Population (thousands)	10,170	10,240	10,300	10,370
Population growth rate	0.6	0.7	0.6	0.6
Unemployment rate (percent)	6.7	5.1	5.0	4.9
Annual percent change in employment	2.0	2.1	1.5	1.5
Change in total nonfarm jobs	85,200	88,000	64,400	68,600
Residential permits	22,652	20,213	23,439	25,037
Median home price	490,083	519,300	557,944	593,036

- Southern California continues to expand, with some regional differences—several counties will outpace the nation
- Unemployment rates across Southern California counties have fallen and will moderate over the next few years as job growth absorbs new labor market entrants
- Personal income has grown, and inflation-adjusted per capita incomes have been on the rise as well

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1 U.S. Economy

Eight years into its recovery from the Great Recession, the U.S. economy remains on track to continue its lackluster growth for the next few years, with few real risks on the horizon to derail it. In spite of a spirited domestic political campaign, potential changes in the political structure of Europe and continued conflicts in the Middle East, the U.S. economy is limping forward on a momentum driven by fairly stable fundamentals. Moving in what seems to be a frustrating pattern of fits and starts through each subsequent quarter, overall annual economic growth has been positive but less than spectacular.

In 2016, real GDP grew at a mediocre 1.6 percent over the previous year, the slowest annual growth rate since 2011, and below the annual average for all recoveries since the 1980s—including the current recovery period. Growth of 2.6 percent in 2015 following a prior year of 2.4 percent promised a return to a trajectory of higher rates of growth, only to be dashed by the results of 2016. Analysts are now left to speculate on the underlying causes of slower economic growth and whether (and how) the nation will return to higher growth rates.

There are, of course, other matters that analysts are left to speculate about. Economic forecasts are based on a set of underlying assumptions about expected conditions in sectors and markets. However, the installation of a new administration at the beginning of this year portends a potential shift along a number of policies. The early days of this administration have been a kind of proving ground for ideas and policy positions formed during the campaign, many of which will not move towards implementation. Others, however, seem quite likely to see the light of day, and as such these are built into the assumptions of this forecast.

Immediate efforts appear to be related to the highest priorities of the administration: reform of the Affordable Care Act, restrictive immigration policies, and more protectionist trade initiatives.

At first blush, these will be contractionary policies that can weigh on economic growth and consumer confidence, and may face challenges in the court of public opinion, possibly limiting their implementation and effectiveness.

However, any measures that threaten to suppress international trade—whether they be tariffs, procedural barriers to trade or heated rhetoric—have the potential

to disrupt existing supply chains, increasing costs and causing firms to postpone investment into new facilities until the policies become clear.

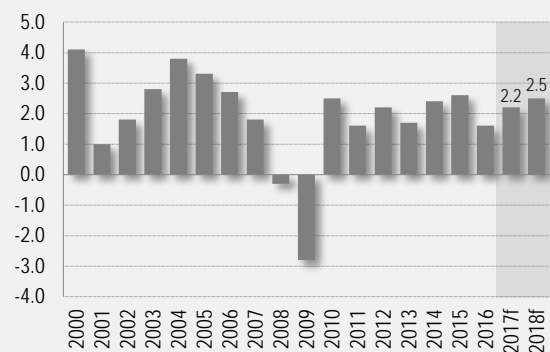
In terms of expansionary policies, we can assume some action will be taken on personal and corporate tax reform perhaps later in 2017 and into 2018, resulting in increased personal consumption expenditures and business spending in 2018. We might also expect an infrastructure spending program to make its way through Congress in 2017 and into budget talks for the 2018 fiscal year.

Budget negotiations are likely to be contentious as spending on infrastructure and tax cuts can be costly, and Congress has been reluctant under the prior administration to engage in fiscal stimulus even in the slow-growth environment of the past decade. The House of Representatives has already stated that fiscal measures will occur only after health care policy has been tackled, so any positive impacts of fiscal stimulus are likely to be felt through expectations of increased incomes that can spur spending in 2017.

This fiscal stimulus will lead to higher wages and prices, which will in turn foster action by the Federal Reserve. Higher interest rates will depress business investment and attract foreign investment, strengthening the dollar and increasing the trade deficit.

The overall result of these assumptions is continuing growth in real GDP of 2.2 percent in 2017 and 2.5 percent in 2018.

Exhibit 1-1
Growth in Real GDP
(Annual % change)



Source: BEA; forecast by LAEDC

There remains some downside risk. This forecast is fairly optimistic and assumes that even with restrictions on trade and inflationary pressures, growth will continue, but one can envision conditions that would skew this path. Among these:

Political gridlock governs in Congress, delaying approval of an infrastructure program and tax cuts. In the meantime, restrictions on trade and immigration have been implemented. Without the growth effect of the fiscal stimulus to offset the drag of decreased exports, overall economic growth will falter.

An overly *nationalistic posture* can lead to global and domestic uncertainty amid a weakening of international alliances. Consumer and business confidence would slip, reducing investments and increasing business costs through either higher input costs or labor supply disruptions—or both. This can easily lead to a reduction in GDP and political destabilization, both domestically and abroad.

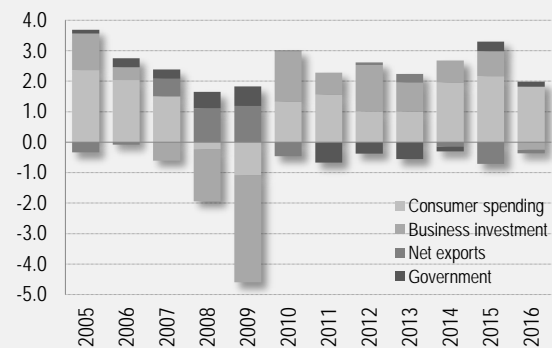
In this forecast, we believe that these outcomes carry a low probability of occurring.

Contributions to GDP Growth

Before turning to the sectors that drive the economy, it is useful to understand the contributions that each makes to GDP growth.

The largest contributor is the consumer, as household spending continues to shoulder approximately two-thirds of the economic activity of the nation. The business sector typically contributes between 15 and 20 percent of GDP. Government spending is small and often used to make up for a decline in the consumer sector, such as during a recession. Net exports contribute to or detract very little from GDP growth. ❖

Exhibit 1-2
Contribution to Percent Change in Real GDP



Source: BEA

Consumer Sector

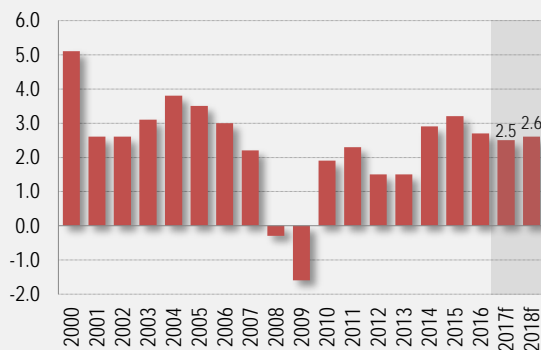
The consumer sector represents about two-thirds of the U.S. economy. Its size and continued growth since the recession has helped the U.S. economy recover from the recession.

In 2015, real personal consumption expenditures grew by 3.2 percent, the fastest growth since 2005.

Expectations for continuing growth at that rate (or better) were dashed when the final number came in at 2.7 percent growth in 2016. Still, this growth exceeded real GDP growth and so was able to overcome negative growth of business investment and net foreign trade.

With growing confidence in their financial situation, and continued job and income growth, consumer spending should stay on an upward trajectory. Expectations of a fiscal stimulus will keep consumers confident about household spending into 2018.

Exhibit 1-3
Growth in Real Consumer Spending
(Annual % change)



Source: BEA; forecast by LAEDC

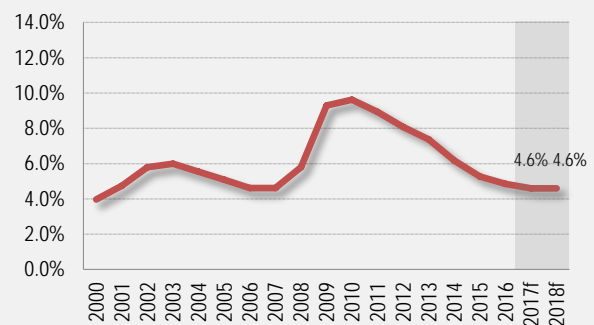
Labor Markets

Labor market indicators continued to show improvement in 2016. The unemployment rate averaged 4.9 percent over the year, a drop of 0.4 percentage points over 2015. Unemployment has not been this low since 2007 and is now less than half the rate of 10.0 percent reached in October of 2009.

While some indicators show that there may still be some slack in the labor market, the unemployment rate will not decline much further, averaging 4.6 percent in 2017 and remaining there through 2018.

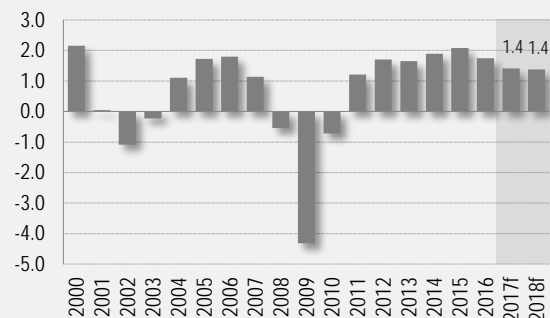
Job growth has been relatively steady for years, growing between one and two percent per year since the end of the recession, adding an average of 2.3 million jobs per year since 2011. Nonfarm jobs will continue to grow at a moderate rate of growth of 1.4 percent per year over the forecast period, which will add approximately 2 million new jobs per year. ❖

Exhibit 1-4
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 1-5
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

Business Investment

Investment spending accounts for one-sixth of GDP and has made regular contributions to the economic expansion since 2010, but this fell by 1.5 percent in 2016. A large cause of this was the decline of 3.4 percent in investment in structures and 2.8 percent decline in investment in equipment, both largely the result of a continuing pullback in investment in the energy sectors as oil prices remain low. An increase in investment in intellectual property of five percent over the year offset a large portion of the declines in structures and equipment, but overall nonresidential investment fell by 0.4 percent over 2015.

While this is a volatile component of business investment, it may also be responsive to policy shifts proposed by the new administration so we expect to see increases of 2.9 percent and 3.4 percent in 2017 and 2018.

Investment in Residential Housing

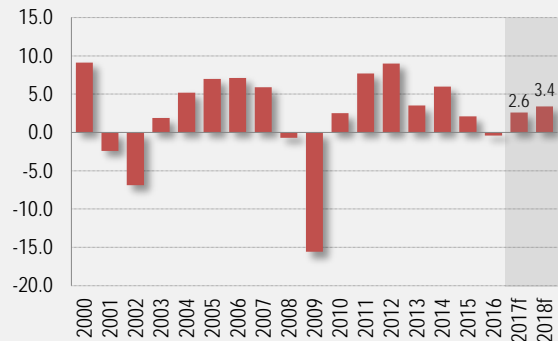
For analysts who have been waiting for a consistent growth path in residential construction, these past few years have been a frustrating experience. Demographics indicate that there exists a significant incipient demand for housing, which must eventually be met by increased supply. However, promises of adult children finally vacating their childhood homes to form their own households have been dashed. This generation may well be different—the consequence of a lengthy recession impacting their earnings trajectory and even perhaps engendering different world views on household formation and family planning.

After robust increases in residential investment in 2012 and 2013 of 13.5 percent and 11.9 percent, 2014 saw a pullback to 3.5 percent. This bounced back to 11.7 percent growth in 2015, only to disappoint yet once more in 2016 to 4.9 percent growth.

Still, signs continue to point to increased confidence in this market, so we anticipate moderate growth similar to 2016 which will add units to the residential supply but reflect the difficulty of bringing new housing supply to market.

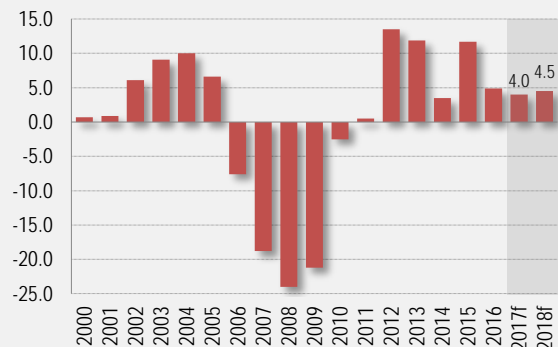
However, in spite of increased demand, supply continues to be constrained by investment uncertainty and local resistance to development, leaving the equilibrium response to be increased housing prices. ❖

Exhibit 1-6
Growth in Real Non-Residential Investment
(Annual % change)



Source: BEA; forecast by LAEDC

Exhibit 1-7
Growth in Real Residential Construction
(Annual % change)



Source: BEA; forecast by LAEDC

Government

After several years of spending cuts related to sequestration, we have begun to see government spending as a net contributor to GDP growth. In 2015, government spending grew by 1.8 percent, followed by a mere 0.9 percent in 2016. This growth was sufficient to add to real GDP growth in those two years, after four years of being a drag.

With fiscal policy again on the agenda, federal spending is likely to increase again this year—on both defense-related spending and non-defense spending.

On the state and local front, governments have been engaged in cost-cutting and may now be in better shape, although accelerating pension obligations will continue to be a challenge. A federal infrastructure program will likely filter through to local budgets to be allocated to identified projects that have the most likelihood of being “shovel ready.”

At the same time, promises of personal and corporate tax reductions will also add to government spending, again likely to be implemented in 2018.

Together, government spending is expected to grow by 0.9 percent in 2017, as any potential fiscal policy will not be implemented prior to 2018, when government spending and investment will increase by 1.8 percent over the year. ❖

Foreign Trade

While trade has an important function to play in the economy through, for example, reducing prices of consumer goods, developing efficient supply chains for domestic manufacturing firms and encouraging competition, it plays only a small part in economic growth in the U.S. Indeed, as the value of imports generally outweighs the value of exports, the contribution of net foreign trade to economic growth is generally negative.

Annual percent changes in the value of imports and exports are rather volatile and highly dependent on relative currency valuations and economic conditions of our trading partners.

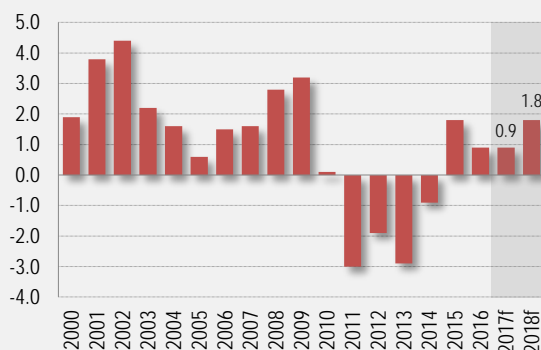
In 2016, exports grew by 0.4 percent compared to only 0.1 percent in 2015, while imports grew by 1.1 percent compared to a 4.6 percent growth rate in 2015.

During the past year, the U.S. dollar has appreciated and is likely to continue appreciating given our expected fiscal and monetary policy mix. The stronger dollar will make our exports less competitive to other nations, and will increase our appetite for imports.

Given these factors, the next two years will see exports increase at a relatively moderate rate of less than two percent per year. Imports are expected to grow at a 3.0 percent rate in 2017 and 2.5 percent in 2018. As growth in imports is expected to exceed growth in exports, the contribution of foreign trade to economic growth will continue to be negative. ❖

Exhibit 1-8

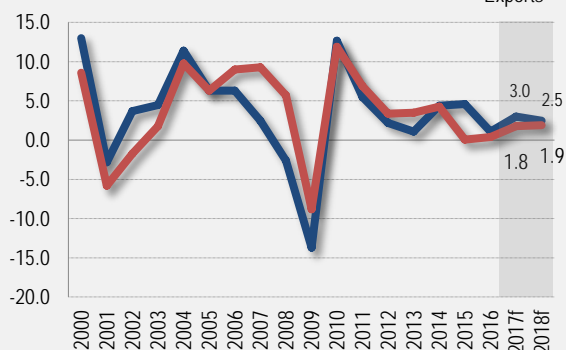
Growth in Real Government Spending / Investment
(Annual % change)



Source: BEA; forecast by LAEDC

Exhibit 1-9

Growth in International Trade
(Annual % change)



Source: BEA; forecast by LAEDC

Prices

Prices, interest rates and financial returns can be among the most difficult indicators to predict as they can pivot unexpectedly on “animal spirits” and whatever appears on the daily news feed.

Despite continued hopes for higher wages as the unemployment rate continues to fall, this has not happened with any regularity. Although hourly wages have seen an uptick from time to time during this year, they have not been able to sustain consistent growth. Consumer prices have also not moved very convincingly either, with an increase in 2016 of 1.3 percent—better than last year’s increase of 0.1 percent but still below the Federal Reserve Bank’s target range of 2.0 percent.

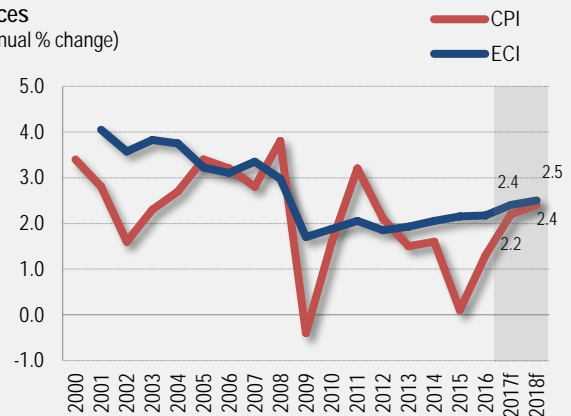
While wages have not performed as expected, the overall employment cost index (ECI) across all workers has been on a generally upward trajectory, increasing by 2.2 percent in 2016 followed by two years of 2.1 percent growth. This index measures all employment costs, including wages and benefits, and may be a better measure of employee compensation than wages as employers attempt to reallocate compensation from wage gains to increasingly costly benefits.

Both consumer prices and employment costs will see gains over the next few years as the labor market continues to tighten and fiscal stimulus takes hold. We see increases in both of between 2.2 and 2.5 percent annually. ❖

Exhibit 1-10

Prices

(Annual % change)



Source: BLS; forecast by LAEDC

Exhibit 1-11

United States Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP (annual percent change)								
Real GDP	1.6	2.2	1.7	2.4	2.6	1.6	2.2	2.4
Real personal consumption expenditures	2.3	1.5	1.5	2.9	3.2	2.7	2.5	2.6
Real business investment (nonresidential)	7.7	9.0	3.5	6.0	2.1	-0.4	2.6	3.4
Real residential investment	0.5	13.5	11.9	3.5	11.7	4.9	4.0	4.5
Real government expenditures	-3.0	-1.9	-2.9	-0.9	1.8	0.9	0.9	1.8
Real imports	5.5	2.2	1.1	4.4	4.6	1.1	3.0	2.5
Real exports	6.9	3.4	3.5	4.3	0.1	0.4	1.8	1.9
Prices								
Consumer price index	3.1	2.1	1.5	1.6	0.1	1.3	2.2	2.4
Employment cost index	2.0	1.9	1.9	2.1	2.1	2.2	2.4	2.5
Labor market								
Unemployment rate (percent)	8.9	8.1	7.4	6.2	5.3	4.9	4.6	4.6
Average annual nonfarm employment (thousands)	131,930	134,180	136,380	138,960	141,8430	144,310	146,340	148,350
Annual percent change in employment	1.2	1.7	1.6	1.9	2.1	1.7	1.4	1.4
Jobs (change over previous year)								
Total Nonfarm	1,571,000	2,243,000	2,206,000	2,577,000	2,885,000	2,464,000	2,033,100	2,005,900
Natural Resources	83,000	60,000	15,000	28,000	(78,000)	(136,000)	6,800	13,700
Construction	15,000	113,000	210,000	295,000	310,000	250,000	13,220	191,700
Manufacturing	198,000	201,000	93,000	165,000	151,000	12,000	(4,400)	(5,300)
Wholesale Trade	91,000	123,500	66,300	80,500	41,400	12,300	41,100	94,500
Retail Trade	227,400	173,000	238,000	278,500	247,400	216,000	142,400	159,600
Transport / Warehousing / Utils	110,700	114,400	81,300	162,500	214,900	118,400	61,000	44,900
Information	(33,000)	2,000	30,000	20,000	24,000	22,000	19,400	22,300
Finance & Insurance	8,000	59,400	57,700	44,800	104,000	107,000	98,300	87,400
Real Estate / Rental & Leasing	(6,400)	27,800	45,000	45,500	42,700	54,100	27,900	17,400
Prof / Scientific / Tech Services	224,900	226,100	228,600	214,700	272,600	268,400	133,100	126,100
Management of Companies	61,300	89,700	79,600	65,500	39,000	33,400	17,900	6,800
Administrative & Support	317,900	284,300	274,600	267,300	259,400	200,300	315,600	298,700
Educational Services	94,500	91,500	13,300	62,200	55,300	87,800	17,800	35,800
Health Care / Social Assistance	248,600	359,500	303,000	291,100	535,200	499,100	457,400	429,300
Leisure & Hospitality	304,000	415,000	486,000	442,000	464,000	461,000	281,200	302,100
Other Services	29,000	70,000	53,000	84,000	55,000	63,000	62,500	63,200
Government	(404,000)	(166,000)	(67,000)	29,000	147,000	194,000	266,700	112,400

2 California Economy

California enjoys a remarkably diverse economy and is a global leader in a number of innovative industries, including information technology, aerospace, entertainment and the biosciences. California hosts millions of visitors each year who support the state's tourism industry, while farmers and ranchers across the state provide food for nations around the world.

In 2016, California's economy grew at an estimated rate of 2.5 percent, faster than the nation as a whole which grew at 1.6 percent, but a slowdown from two prior years when growth raced along at 3.8 percent. California currently accounts for 13.6 percent of the nation's GDP, far more than any other state, and is expected to expand by 2.4 percent in 2017 and 2.6 percent in 2018, again outpacing the nation.

Employment

In 2016, California's unemployment rate averaged 5.4 percent, the lowest in nine years. It is expected to decline slowly over the next two years, reaching 5.0 percent in 2018 as we reach full employment.

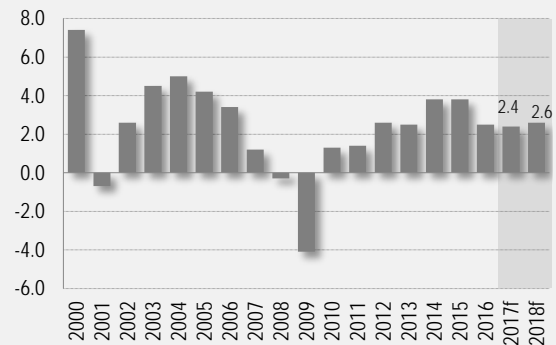
Nonfarm employment was up over the year by 411,100 wage and salary jobs, reaching a total of 16.5 million jobs, an increase of 2.6 percent over 2015.

Over the course of 2016, nearly all major industry sectors in California added jobs. The largest private sector gains occurred in health care and social assistance (71,600 jobs added); leisure and hospitality (67,400 jobs); and professional, scientific and technical services (51,000 jobs). The public sector added 53,700 new jobs last year.

Two sectors suffered a decline in employment, however. Manufacturing continued its decline in jobs by shedding 7,800 jobs last year, and natural resources shrank by 3,700 jobs. The decline in natural resources is primarily due to a pullback in the energy sector as a result of low oil prices.

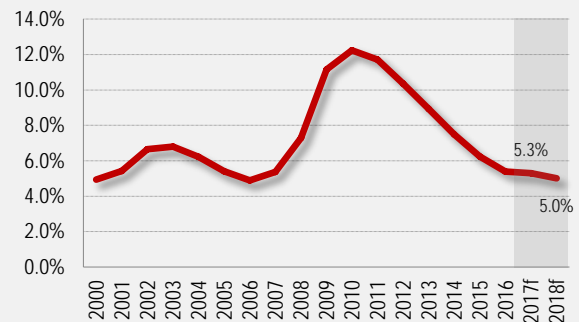
Looking ahead, the rate of job creation will slow to 1.7 percent annually in 2017 and 2018. This equates to 276,900 new jobs this year and 288,600 jobs in 2018.

Exhibit 2-1
Growth in Real GDP
(Annual % change)



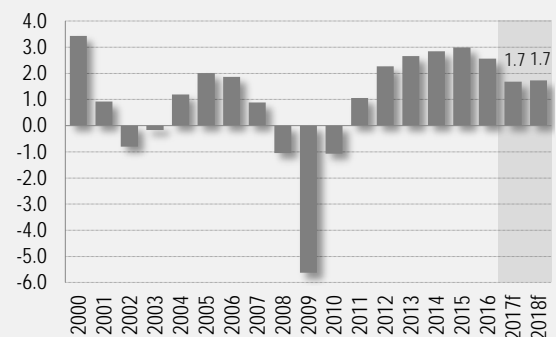
Source: BEA; forecast by LAEDC

Exhibit 2-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 2-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

The sectors expected to add the largest number of jobs over the two years are health care and social assistance (121,600 new jobs), and administrative and support services (120,900 jobs). After two years of falling job numbers, natural resources will stabilize and add 400 jobs. Manufacturing is also expected to grow in 2018 for a net gain over the two years of 14,100 jobs. This sector shed 181,400 jobs between 2007 and 2016, so while higher jobs counts over the next two years are welcome, it is unlikely they foretell a return to pre-recession employment levels.

At 3.6 percent job growth in 2016, Santa Clara County, home to Silicon Valley, generated jobs at the fastest pace among most metro regions in the state. This was followed by San Francisco County (3.1 percent), also a growing tech hub.

In Southern California, employment in the Inland Empire grew by 2.9 percent, Orange County employment increased by 2.7 percent over the year; San Diego County followed with a rate of 2.4 percent, while in Ventura County, nonfarm employment grew by 1.2 percent. ❖

Personal Income

Along with employment growth, California's residents have also experienced gains in personal income. Total real personal income in the state increased by 3.1 percent in 2016 to almost \$1.8 trillion due to higher levels of employment and rising wages. Real per capita income was \$44,970 in 2016, up from \$43,900 in 2015. Over the next two years, additional gains of 3.0 percent and 3.6 percent are expected.

Still, there are regions within the state where the labor markets continue to struggle with high unemployment and low growth. As of December 2016, six of California's 58 counties still had unemployment rates of more than ten percent, and six more with rates higher than nine percent. The highest recorded unemployment rates were Colusa County at 19.5 percent and Imperial County at 18.8 percent.

At the opposite end of the scale, the lowest unemployment rate was 2.7 percent in San Mateo County, followed by Marin County at 2.9 percent and San Francisco at 3.0 percent.

Employment and wage growth continues to be strongest in Silicon Valley. Outside of the Bay area, the majority of

Exhibit 2-4

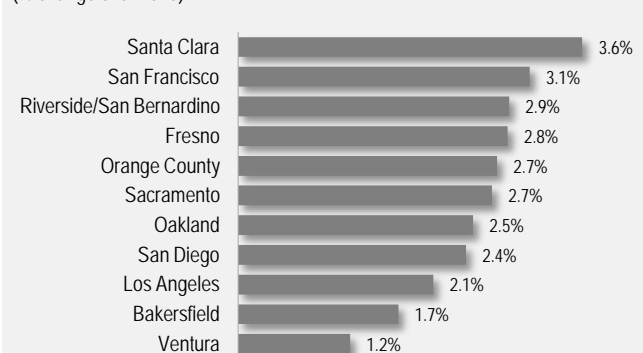
Job Forecast 2017 and 2018 by Industry Sector (thousands of jobs)



Source: CA EDD; forecast by LAEDC

Exhibit 2-5

Job Growth by Metros (% change over 2015)



Source: CA EDD

the job gains over the past few years have been in low-paying retail, hospitality and social assistance. ❖

Major Industries

High Technology: California's technology sector includes firms in the computer and electronic product, aerospace and pharmaceutical manufacturing industries as well as software publishers, data processing, computer systems design, management, scientific and technical consulting, and scientific research and development services. Approximately two-thirds of California's technology workers are employed by service-providing firms as opposed to manufacturing firms.

Technology employment in California reached nearly 1.15 million workers in 2016, growing past the previous peak of 1.11 million reached in 2015 by 3.5 percent (38,500 jobs). While overall employment was up last year, job growth was concentrated almost entirely in technology service-providing industries. Almost half of the new technology jobs created in 2016 were in computer systems design (18,100 jobs). Employment also rose in management, scientific and technical consulting (11,300 jobs), and in scientific R&D services (6,200 jobs). Electronic product manufacturing employment fell by 1,000 jobs, while aerospace product and parts manufacturing jobs declined by 1,400 workers. Pharmaceutical and medicine manufacturing employment rose slightly higher with a gain of 200 jobs.

Agriculture: California is the nation's leading producer of fruits, vegetables, nuts and dairy products, and a major exporter of agricultural products. The state's highest value commodities are milk, grapes, almonds and nursery plants. The value of agricultural real gross product in California increased by an estimated 2.1 percent in 2016 and accounted for about 1.2 percent of the state's \$2.6 trillion gross product. The number of farm workers in California rose to 427,800 in 2016 (an increase of 1.1 percent compared with 2015), and accounted for 2.4 percent of civilian employment in the state.

In 2015, the latest year for which data is available, California's farms and ranches generated cash receipts of \$42.7 billion (inflation-adjusted), more than any other state in the nation, accounting for 12 percent of the national total. Still, this was a decline of 18 percent compared with 2014. Crop receipts in California fell by 15.8 percent to \$31.9 billion, while livestock receipts declined by 22.7 percent to \$10.9 billion. In 2015, California entered its fourth year of drought, and although the state's agricultural sector has shown some resiliency, it has been estimated that in 2015 five percent of irrigated cropland was taken out of production in the Central Valley, Central Coast and Southern California due to the drought.

Health Care: The health care and social assistance industry is California's largest industry sector and one of the fastest growing, providing jobs across a wide range of skill and income levels. Jobs in health care are found in doctors' and dentists' offices, hospitals, outpatient centers, laboratories, nursing facilities, and organizations that provide social services like child daycare, vocational rehabilitation and family services.

With almost 2.2 million workers, health care accounts for slightly more than 13 percent of the state's 16.5

million nonfarm wage and salary jobs. Over the course of 2016, the health care sector added 71,600 jobs, an annual growth rate of 3.4 percent. Over the next two years, health care employment will continue to increase, but the rate is expected to slow to 3.0 percent this year and to 2.5 percent in 2018.

Leisure and Hospitality: Total visitor counts in California were up by an estimated 2.2 percent on an annual basis in 2016, slowing from a stronger growth rate of 4.8 percent in 2015. The industry projects an increase of 2.5 percent in total visits in 2017, with domestic travel projected to increase by 2.5 percent and international travel by 3.6 percent. The slower pace of visitor growth last year was attributed to the relatively strong dollar and weakness in several of California's international markets. Expenditures by business and leisure travelers to the state totaled \$126.9 billion in 2016, an increase of 3.6 percent compared with 2015. Domestic travelers accounted for \$101.4 billion, while international visitors spent \$25.6 billion.

In 2016, leisure and hospitality jobs accounted for about 11.5 percent of nonfarm wage and salary jobs in California. While some of leisure and hospitality activity is associated with tourism, many of these jobs serve the local population more so than the region's tourists and business travelers. Jobs in this industry include lodging, food services, the performing arts, museums, amusement parks and gambling establishments. Leisure and hospitality employment grew by 3.7 percent in 2016 to 1.9 million jobs, with an additional expected gain of 1.8 percent in 2017 and 1.5 percent the following year.

Construction: Construction activity and employment in 2016 posted another increase after struggling in the years during and immediately following the recession. The value of nonresidential construction permits in 2016 rose by 1.6 percent to \$26.7 billion. The strongest gains by sector were hotels and motels, retail and office, while new industrial and public works construction declined over the year. New residential construction also showed a moderate gain, rising by 1.5 percent in 2016 but remains at historically low levels.

Construction employment saw substantial growth in 2016, rising by 5.0 percent to 764,100 jobs. Employment gains in recent years have partially offset the jobs lost during the recession, but construction job counts were still down by almost 170,000. Construction employment is expected to grow by an additional 2.2 percent this year with an additional 3.1 percent gain projected for 2017, bringing California construction employment to within 14 percent of the pre-recession peak. ❖

Exhibit 2-6
California Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	1,962,926	2,013,611	2,064,596	2,143,167	2,225,413	2,281,048	2,335,793	2,396,524
Annual percent change in real GDP	1.4	2.6	2.5	3.8	3.8	2.5	2.4	2.6
Per capita real GDP (\$2009 chained)	52,067	52,912	53,746	55,247	56,851	58,019	59,571	60,957
Annual percent change in p.c. real GDP	0.4	1.6	1.6	2.8	2.9	2.1	2.7	2.3
Total personal income (millions)	1,727,434	1,838,567	1,861,957	1,977,924	2,103,669	2,169,459	2,261,364	2,371,979
Per capita personal income (nominal)	45,820	48,312	48,471	50,988	53,741	54,910	56,712	58,948
Population								
Population (thousands)	37,700	38,056	38,414	38,792	39,144	39,509	39,874	40,238
Population growth rate	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9
Labor market								
Unemployment rate (percent)	11.7	10.4	8.9	7.5	6.2	5.4	5.1	5.0
Average annual nonfarm employment	14,433,800	14,761,400	15,154,300	15,585,600	16,051,500	16,462,600	16,739,600	17,028,200
Annual percent change in employment	1.1	2.3	2.7	2.8	3.0	2.6	1.7	1.7
Jobs (change over previous year)								
Total Nonfarm	151,300	327,600	392,900	431,300	465,900	411,100	276,900	288,600
Natural Resources	2,000	1,700	100	1,000	-2,500	-3,700	-100	500
Construction	1,500	28,600	47,400	36,800	53,300	36,600	16,800	24,200
Manufacturing	6,100	4,600	1,600	17,900	17,700	-7,900	1,300	12,900
Wholesale Trade	13,900	17,600	18,300	16,200	11,200	16,200	5,200	11,900
Retail Trade	28,800	24,400	25,200	33,200	33,800	28,200	18,600	27,400
Transport / Warehousing / Utils	8,000	13,000	15,500	20,700	30,500	15,100	5,700	4,300
Information	1,600	4,500	14,000	13,900	20,000	13,200	5,500	4,500
Finance & Insurance	2,800	7,800	1,200	-6,900	9,500	4,100	5,300	0
Real Estate / Rental & Leasing	-1,200	3,700	7,900	6,500	6,300	8,900	7,000	2,300
Prof / Scientific / Tech Services	33,800	51,400	38,600	34,400	33,600	51,000	31,500	25,800
Management of Companies	4,400	6,300	11,900	4,400	4,500	3,900	0	0
Administrative & Support	19,500	50,100	48,400	44,000	31,600	24,500	47,600	73,400
Educational Services	15,100	9,500	10,200	11,800	8,700	21,500	1,800	3,700
Health Care / Social Assistance	15,600	59,100	64,800	56,100	81,900	71,600	65,400	56,200
Leisure & Hospitality	34,200	62,900	77,700	82,200	71,400	67,400	34,200	29,000
Other Services	8,800	11,000	11,900	19,600	9,500	6,700	1,100	0
Government	-43,500	-28,600	-2,000	39,700	44,800	53,700	30,200	12,700

3 Los Angeles County

A thriving and vibrant metropolis, Los Angeles County is home to more than 10 million residents and boasts a workforce of more than 4.8 million today. It has one of the largest manufacturing centers in the nation, is a global gateway for trade and tourism, and draws entrepreneurs and risk-takers from around the world.

In 2016, real GDP in Los Angeles County grew at 2.2 percent, a slowdown from the prior year when the economy grew by 3.6 percent. However, this year's growth was faster than the national rate of growth. Real GDP growth is expected to be 2.7 percent for the next two years, also outpacing the nation.

Employment

In 2016, the average unemployment rate in Los Angeles County reached 5.1 percent, the lowest unemployment rate since 2007 and less than half the peak rate of 12.5 percent reached in 2010. It is expected to decline slowly over the next two years, falling to 5.0 percent in 2017 reaching 4.9 percent in 2018 as the county reaches full employment.

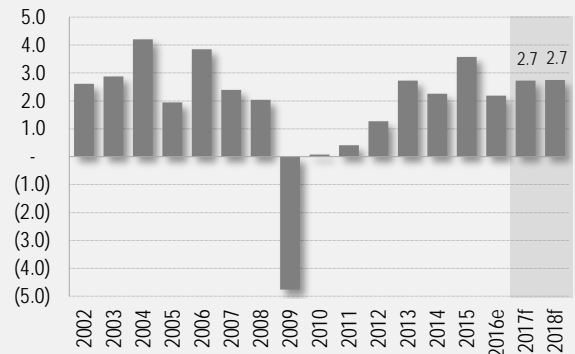
Job growth has been positive since 2011, averaging 2.0 percent annually since 2012. This is expected to slow to 1.5 percent for the next two years as there are fewer jobs needed to be added and as the labor market tightens.

Nonfarm employment was up over the year by 88,000 wage and salary jobs to reach almost 4.4 million jobs, an increase of 2.1 percent over 2015.

Almost all industry sectors added jobs in 2016. The largest private sector gains were in health care and social assistance (adding 24,100 jobs), leisure and hospitality (adding 17,400 jobs), and retail trade (9,000 jobs). Government payrolls grew by 8,100 jobs.

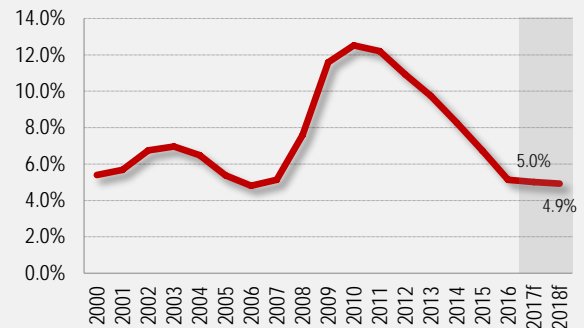
Three sectors shed jobs over the year. Manufacturing continued for the third year to shrink, losing 6,000 jobs in 2016, and wholesale trade contracted by 1,100 jobs. Natural resources, which in Los Angeles County are confined to oil and gas field operations, lost 400 jobs for the second year in a row.

Exhibit 3-1
Growth in Real GDP Los Angeles County
(Annual % change)



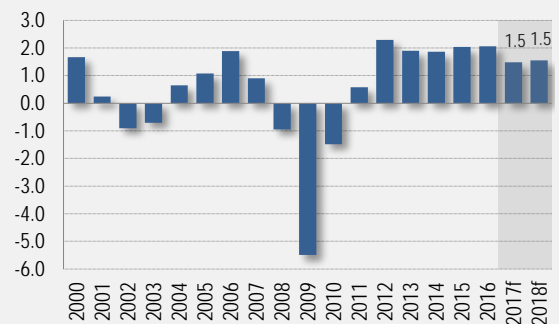
Source: BEA; estimates and forecast by LAEDC

Exhibit 3-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 3-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

As the rate of job creation slows, the number of jobs added will also decline, with 64,400 jobs expected to be added in 2017 and 68,600 in 2018.

The sectors expected to add the largest number of jobs over the two years are health care and social assistance (31,390 new jobs), and administrative and support services (22,810 jobs). Leisure and hospitality will add 18,880 jobs over the next two years, and retail trade is expected to gain 11,670 jobs. After three years of falling job numbers, natural resources will stabilize and add 60 jobs. Manufacturing is expected to continue its decline in employment, losing 1,420 jobs through 2018. ❖

Personal Income

Personal income in Los Angeles County has been rising, posting consecutive year-over-year increases since 2013. In 2015, personal income totaled \$544.3 billion, is predicted to reach \$557.4 billion in 2016, and is forecast to continue its growth pattern reaching \$610.0 billion in 2018.

In addition to total personal income, real per capita income has also been rising since 2013, reaching \$48,840 in 2015, predicted at \$48,790 in 2016, and forecast to increase to \$51,610 in 2018. ❖

Major Industries

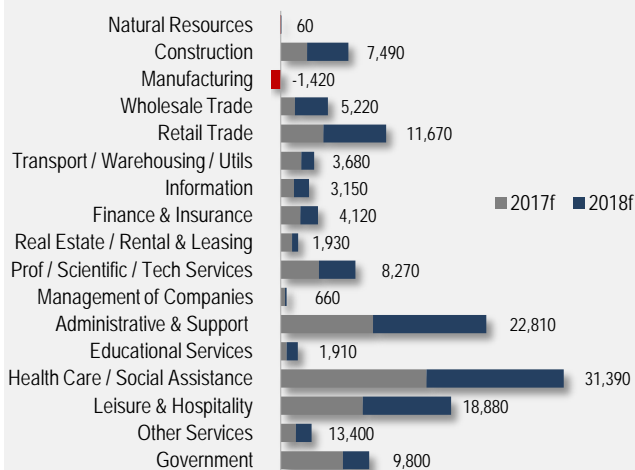
Almost all industry sectors will add jobs over the next two years but overall, the strongest job growth in terms of number of new jobs will be in the following industries:

Health Care and Social Assistance: Health care and social assistance is the county's largest industry sector by employment. Approximately 33 percent of jobs in this sector are in ambulatory health care, such as doctors' offices and clinics, 18 percent are in hospitals, and 36 percent are in social assistance, such as child day care and in home supportive services. As the population continues to grow and age, these industries will need to keep pace so as to provide needed health services. The number of health care and social assistance jobs is expected to expand by 16,160 in 2017 and add an additional 15,240 jobs in 2018, growth of 2.5 percent and 2.3 percent respectively.

Administrative and Support: Approximately 40 percent of the jobs in this sector are in employment services, such as temporary employment agencies. As more industries utilize staffing and employment agencies, this

Exhibit 3-4

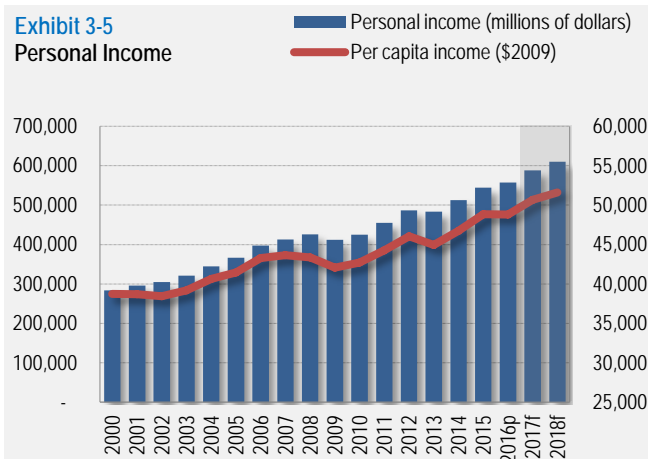
Job Forecast 2017 and 2018 by Industry Sector
(thousands of jobs)



Source: CA EDD; forecast by LAEDC

Exhibit 3-5

Personal Income



Source: BEA; forecast by LAEDC

sector will continue to grow. It is becoming more common for firms to add workers under contractual arrangements rather than adding them to the firm's payroll directly to allow more flexibility in terms of staffing needs. Employment in this sector overall is forecast to grow at an average annual rate of 4.2 percent, adding 22,810 new jobs between 2016 and 2018.

Leisure and Hospitality: Tourism has been a mainstay of the Los Angeles County economy, with almost 50 million visitors arriving into the region. Employment in leisure and hospitality industries has posted annual consecutive increases in employment since 2011. However, the lion's share of jobs in this sector is in food services, a relatively low-paying subsector. From 2016 to 2018, the sector is projected to add 18,880 new jobs,

growing by 1.8 percent annually on average. Most of the new jobs added will continue to be in food services.

Retail Trade: Retail employment in Los Angeles County has been improving since bottoming out in 2010, and the sector will continue to add jobs through 2018. However, this industry is also undergoing transition as more transactions are conducted online and fewer customers are visiting retail outlets. Growth will be relatively moderate, at 1.4 percent annually from 2016 through 2018, which due to the number of jobs in this sector translates to 11,670 jobs added over the period.

Government: The public sector is a large employer in Los Angeles County. Local, state and federal governments all have a strong presence here, accounting for roughly thirteen percent of all payroll jobs in the county. Unlike other private service industries, the public sector experienced employment declines well after the recession ended, reaching its lowest level in 2013 with 551,200 jobs. From 2013 through 2016, government added 23,280 jobs to their payroll, an increase of 4.2 percent. Growth will be mild at 0.8 percent per year, and the sector is forecasted to add 9,800 new jobs between 2016 and 2018. ❖

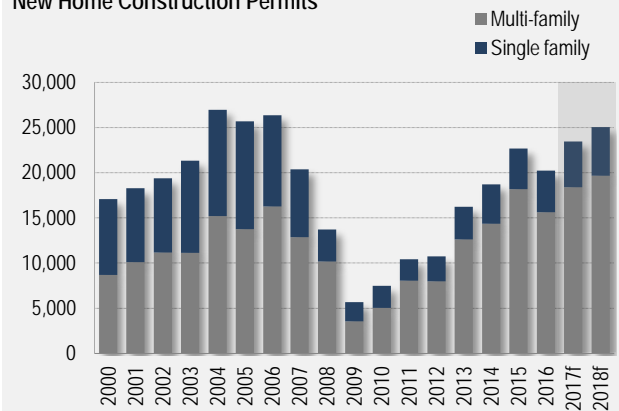
Housing

In 2016, the number of permits issued for new home construction in Los Angeles County declined over the year by 10.8 percent to 20,213 units permitted. New home construction peaked in Los Angeles County in 2004 at 26,935 units permitted before falling to a low of 5,653 units in 2009. Since then, new home construction has increased at a gradual pace, with the exception of 2016.

One notable change in new residential construction in Los Angeles County that has occurred in the aftermath of the recession is the rising share of permits for multi-family homes relative to new single-family construction. Between 2000 and 2005, the average share of single-family permits averaged 46 percent of total new home construction. Since then, the share has steadily declined, falling to just 23 percent in 2016.

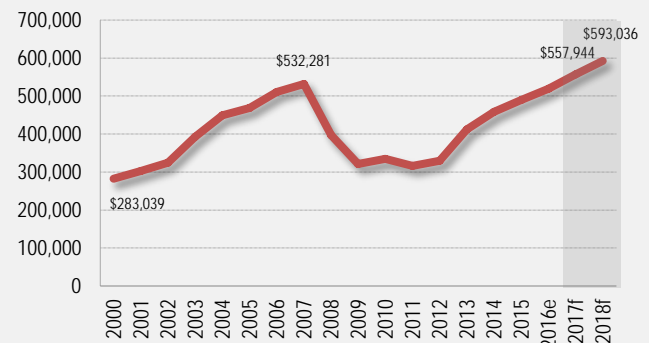
In 2016, the median home price in Los Angeles County increased over the year by 6.0 percent to an estimated \$519,300. The median price fell to a low of \$316,469 in this cycle after reaching a peak of \$532,281 in 2007. The median home price in Los Angeles County has increased by 64 percent since bottoming out in 2011, and ended last year just 2.4 percent below its former peak. ❖

Exhibit 3-6
New Home Construction Permits



Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 3-7
Los Angeles County Median Home Prices
(New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 3-8

Los Angeles County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	559,159	566,204	581,567	594,645	615,888	629,347	645,387	662,099
Annual percent change in real GDP	0.4	1.3	2.7	2.2	3.6	2.2	2.5	2.6
Total personal income (millions)	454,936	486,734	483,579	512,847	544,325	557,382	587,755	610,022
Per capita personal income (nominal)	45,969	48,818	48,140	50,730	53,521	54,577	57,168	59,041
Per capita personal income (\$2009)	44,243	46,048	44,922	46,709	48,836	48,788	50,647	51,609
Population								
Population (thousands)	9,897	9,970	10,045	10,109	10,170	10,240	10,300	10,370
Population growth rate	0.7	0.7	0.7	0.6	0.6	0.7	0.6	0.6
Labor market								
Unemployment rate (percent)	12.2	10.9	9.7	8.2	6.7	5.1	5.0	4.9
Average annual nonfarm employment	3,945,700	4,036,000	4,112,700	4,189,000	4,274,200	4,362,200	4,426,600	4,495,200
Annual percent change in employment	0.6	2.3	1.9	1.9	2.0	2.1	1.5	1.5
Jobs (change over previous year)								
Total Nonfarm	22,500	90,300	76,700	76,300	85,200	88,000	64,400	68,600
Natural Resources	0	200	200	-200	-400	-400	0	100
Construction	600	4,100	7,000	3,400	6,500	1,200	2,900	4,600
Manufacturing	-6,400	500	800	-4,100	-3,300	-6,000	-1,400	0
Wholesale Trade	2,400	6,100	6,800	3,800	4,500	-1,100	1,600	3,600
Retail Trade	6,500	7,900	4,700	7,400	7,500	9,000	4,700	6,900
Transport / Warehousing / Utils	1,200	2,700	3,000	5,900	7,000	3,400	2,300	1,400
Information	400	-500	4,900	1,600	4,700	6,400	1,500	1,700
Finance & Insurance	-900	1,700	-1,900	-3,800	-200	1,800	2,200	1,900
Real Estate / Rental & Leasing	-100	600	2,500	2,000	3,200	3,400	1,200	700
Prof / Scientific / Tech Services	10,000	13,200	9,100	-400	-700	6,100	4,200	4,000
Management of Companies	2,100	1,400	1,500	400	0	1,600	500	200
Administrative & Support	3,900	12,900	12,500	6,000	1,800	4,600	10,200	12,600
Educational Services	2,600	200	3,500	1,200	1,400	6,600	600	1,300
Health Care / Social Assistance	4,200	22,000	-900	17,400	20,100	24,100	16,200	15,200
Leisure & Hospitality	9,900	21,100	24,700	26,100	21,500	17,400	9,100	9,800
Other Services	300	4,700	4,000	4,800	1,200	2,000	1,700	1,700
Government	-14,100	-8,700	-5,600	5,000	10,200	8,100	6,900	2,900
Housing								
Residential permits	10,403	10,709	16,200	18,707	22,652	20,213	23,439	25,037
Median home price	316,469	330,463	412,795	458,677	490,083	519,300	557,944	593,036

4 Orange County

The Orange County economy is one of the strongest performing in California. During the post-World War II period, Orange County evolved from its agricultural roots, to an economy based on high-tech manufacturing, biotechnology, health care, tourism and professional business services. Facilitating the transformation of Orange County's economy has been its success in attracting a highly skilled workforce. Home to well-regarded colleges and universities, over 84 percent of the adult population in Orange County has a high school diploma and roughly 38 percent has a bachelor's degree or higher, both above the statewide average.

In 2016, Orange County's economy grew at an estimated rate of 3.0 percent compared with 2.5 percent for the state and accounted for 10.1 percent of California's gross state product while being home to just 8.1 percent of the state's population. Orange County's real gross state product is expected to accelerate to 3.2 percent this year and maintain that rate in 2018.

Employment

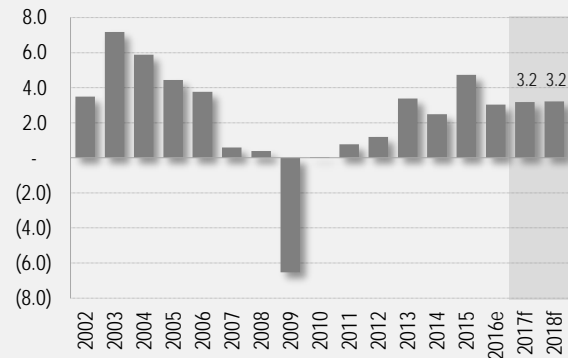
In 2016, Orange County's unemployment rate averaged 4.0 percent, the lowest since it was 3.9 percent in 2007. In 2017, the unemployment rate is expected to drop again below four percent to 3.9 and then to 3.8 percent in 2018.

Orange County added 42,200 wage and salary jobs last year, increasing the number of nonfarm jobs from 1.54 million in 2015 to 1.58 million in 2016. This corresponded to an annual growth rate 2.7 percent, compared with 2.6 percent for the rest of California.

The labor market in Orange County will experience additional improvements over the next two years with an anticipated annual increase in nonfarm jobs of 2.0 percent this year before slowing slightly to 1.9 percent in 2018.

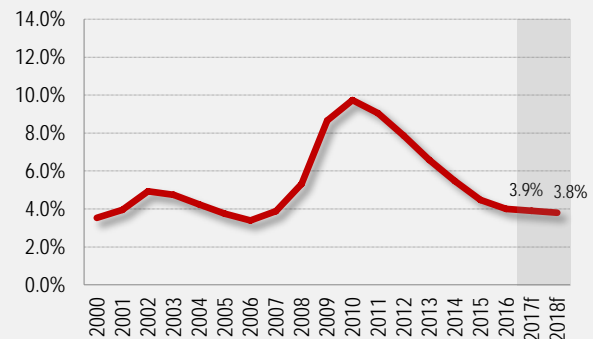
Most industries in the county added jobs last year and where job losses occurred, the numbers were fairly small. The largest percentage gains were in construction (11.6 percent), private educational services (4.9 percent) and professional, scientific and technical services (4.2 percent).

Exhibit 4-1
Growth in Real GDP Orange County
(Annual % change)



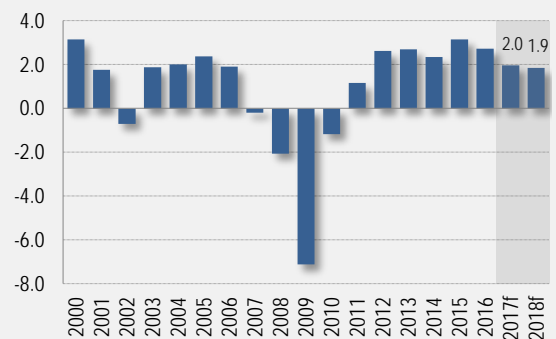
Source: BEA; estimates and forecast by LAEDC

Exhibit 4-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 4-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

In absolute terms, the construction industry added the largest number of jobs (10,500), followed by leisure and hospitality (7,100 jobs), and health care and social assistance (6,200 jobs).

The sectors that posted employment declines were manufacturing (660 jobs lost); natural resources (100 jobs); and real estate, rental and leasing (30 jobs).

Most industries are expected to add to their payrolls this year, with health care and social assistance adding 6,600 jobs, administrative and support services (5,400 jobs), and professional, scientific and support services (4,500 jobs) leading the way. Natural resources and manufacturing will hold steady at their current levels of employment. ❖

Personal Income

In addition to rising levels of employment, Orange County's residents have also experienced gains in personal income. Due to increases in both employment and wages, total personal income in the county edged up by 1.3 percent in 2016 to \$185 billion (nominal). Personal income has been rising in Orange County on a year-over-year basis since 2010 (with the exception of a 1.9 percent decline in 2013) and is expected to reach \$194 billion this year, rising yet again in 2018 to \$199 billion.

Real per capita personal income was \$51,977 last year, down from \$52,694 in 2015. A combination of population growth and rising inflation offset the increase in total personal income to produce a decline in per capita income. Over the next two years, however, modest gains in per capita income are expected: 2.7 percent in 2017 and 0.8 percent in 2018. Compared with the other counties in Southern California, Orange County had the second highest per capita income, just behind Ventura County. ❖

Major Industries

Health Care and Social Assistance: Health care plays a large role in Orange County's economy. Over 11 percent of the county's wage and salary jobs are in the health care sector. Employment in 2016 rose by 3.6 percent to 179,600 jobs, making it the second largest private sector employer (behind leisure and hospitality) in the county. In 2017, employment is expected to climb to 186,300

Exhibit 4-4
Job Growth 2017 and 2018 by Industry Sector
(thousands of jobs)

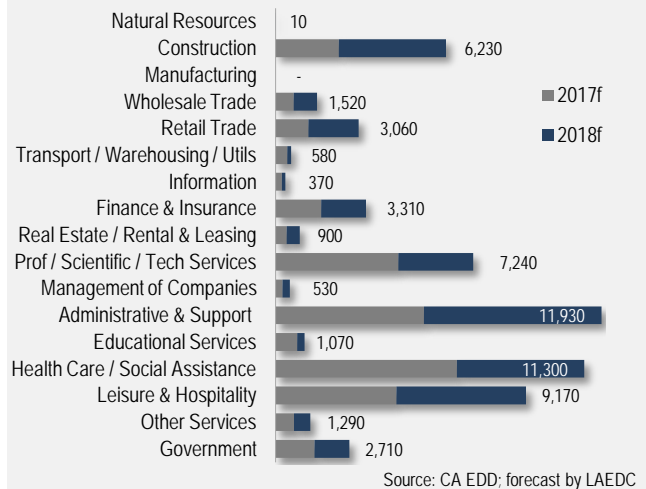
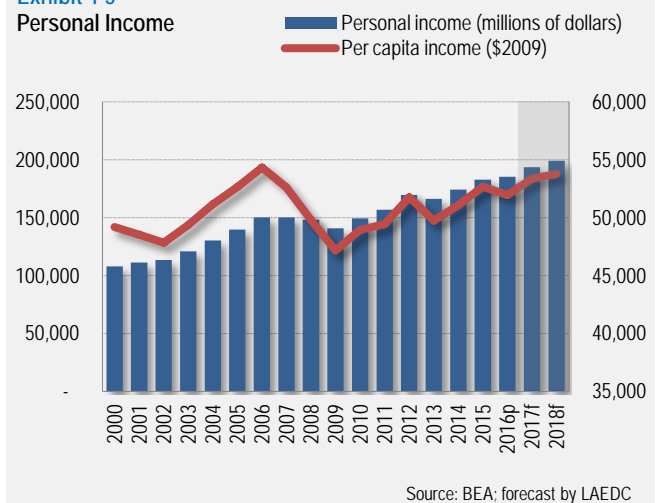


Exhibit 4-5
Personal Income



jobs, representing an annual gain of 3.7 percent before slowing to 2.5 percent in 2018.

Comprised of several inter-related industries including ambulatory health care services, hospitals, health care centers, laboratories, and nursing and residential care facilities, the industry provides a wide variety of employment opportunities at every skill and wage level. The health care industry generates significant tax dollars and revenues and has also had a major impact on commercial real estate in the county through the expansion of hospitals and other health care facilities.

Technology and Manufacturing: Orange County has a robust high-tech manufacturing sector that includes computer and related electronic products, aerospace parts and products, and medical devices. These capital-

intensive sectors rely on Orange County's highly skilled and productive workforce to remain competitive. Manufacturing employment accounts for 9.9 percent of total nonfarm jobs in Orange County and is the fourth largest industry based on employment.

About 74 percent of manufacturing jobs in Orange County are concentrated in durable goods (computers, machinery, aerospace parts and products, and medical devices). In 2016, total manufacturing jobs in Orange County slipped by 0.4 percent to 156,200 workers. In spite of the overall drop, some sectors posted gains: computer and electronic product manufacturing (600 jobs, up by 1.8 percent) and transportation equipment manufacturing, most of which are aerospace-related (200 jobs, 1.6 percent).

In 2017 and 2018, the LAEDC anticipates manufacturing jobs will hold steady at 2016 levels.

Leisure and Hospitality: Tourism is one of Orange County's most important industries and is its largest industry employer. After once again achieving record high employment levels in 2016, leisure and hospitality jobs in Orange County are projected to increase by 2.1 percent to 215,500 workers in 2017, with an additional 2.2 percent gain expected in 2018.

Orange County has a total of 507 hotels providing 58,723 rooms for business and leisure travelers. Attractions such as Disneyland, Fashion Island and scenic beaches are drawing increasing numbers of international visitors, particularly from China and the Middle East. At 78.3 percent the average hotel occupancy rate in 2016 was little changed over the year, while revenue per room increased from \$113.25 in 2015 to \$118.11 last year.

Orange County is also a major convention destination. The Anaheim Convention Center has gone through seven major expansions since it was first constructed in 1967. The recently unveiled 100,000 square foot Grand Plaza will be joined this year by an additional 200,000 square feet of outdoor meeting space. ❖

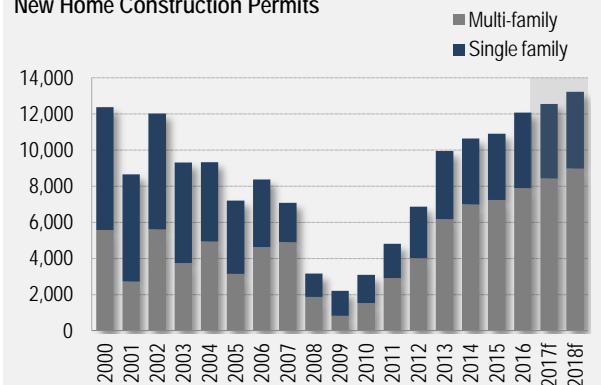
Housing

In 2016, the number of permits issued for new home construction in Orange County increased over the year by 10.8 percent to 12,073 units permitted. Orange County was one of only two counties in the five-county region to see an increase in new home building last year. It also came the nearest to achieving its prerecession peak.

New home construction in Orange County reached its highest point (12,367 units permitted) in 2000, much earlier than elsewhere in Southern California before falling to a low of 2,200 units in 2009. Since then, new home construction has steadily risen, increasing at an average annual rate of 28 percent. Historically, residential construction in Orange County tilted more heavily toward single-family homes. After the housing crisis, however, the share of new single-family construction relative to multi-family began to decline.

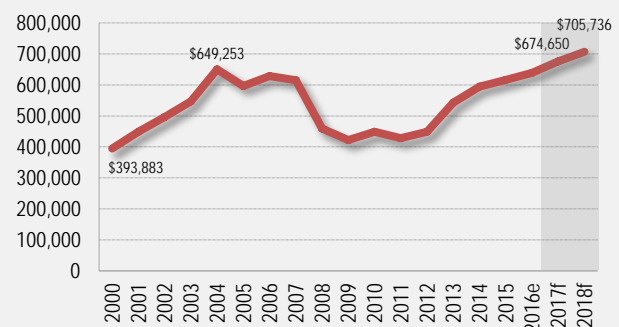
In 2016, the median home price in Orange County increased over the year by 3.8 percent to an estimated \$638,200. The median price fell to a low of \$420,834 in this cycle after reaching a peak of \$649,253 in 2004. The median home price in Orange County has increased by 52 percent since bottoming out in 2009, and is the nearest of any county in the region to reaching a new record high—the median price in 2016 was just 1.7 percent shy of the previous peak. ❖

Exhibit 4-6
New Home Construction Permits



Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 4-7
Orange County Median Home Prices
(New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 4-8
Orange County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	197,891	200,248	207,025	212,187	222,213	228,944	236,222	243,834
Annual percent change in real GDP	0.8	1.2	3.4	2.5	4.7	3.0	3.2	3.2
Total personal income (millions)	157,031	169,584	166,370	174,451	183,052	185,486	193,828	199,345
Per capita personal income (nominal)	51,383	54,893	53,321	55,470	57,749	58,038	60,252	61,535
Per capita personal income (\$2009)	49,454	51,778	49,757	51,074	52,694	51,977	53,379	53,789
Population								
Population (thousands)	3,056	3,089	3,120	3,145	3,170	3,200	3,220	3,250
Population growth rate	1.3	1.1	1.0	0.8	0.8	0.9	0.8	0.8
Labor market								
Unemployment rate (percent)	9.1	7.9	6.6	5.5	4.5	4.0	3.9	3.8
Average annual nonfarm employment	1,386,400	1,422,800	1,461,200	1,495,500	1,542,700	1,584,900	1,616,000	1,646,100
Annual percent change in employment	1.2	2.6	2.7	2.3	3.2	2.7	2.0	1.9
Jobs (change over previous year)								
Total Nonfarm	-31,400	-106,100	-16,200	16,100	36,400	38,400	34,300	47,200
Natural Resources	0	0	0	0	0	0	100	0
Construction	-11,900	-17,000	-6,200	1,200	2,100	5,500	5,200	8,400
Manufacturing	-6,300	-19,200	-4,400	3,800	4,000	-300	-600	-500
Wholesale Trade	-200	-7,300	-1,800	-500	-100	2,200	1,500	100
Retail Trade	-5,300	-12,900	-1,700	1,300	1,400	1,500	3,000	2,700
Transport / Warehousing / Utils	400	-1,500	-1,100	800	500	-500	-1,000	400
Information	-1,100	-2,800	-2,500	-1,000	500	700	-500	1,000
Finance & Insurance	-13,100	-5,500	-1,200	1,800	2,600	3,200	-700	3,300
Real Estate / Rental & Leasing	-1,600	-2,400	-500	-500	900	1,600	1,200	0
Prof / Scientific / Tech Services	2,500	-8,900	-1,100	2,600	4,500	3,200	6,100	4,400
Management of Companies	-1,600	-1,300	-1,100	800	1,700	1,300	1,200	400
Administrative & Support	-7,500	-15,800	5,900	-500	6,600	2,300	1,900	3,900
Educational Services	2,000	-200	200	800	300	500	0	200
Health Care / Social Assistance	8,200	4,100	4,400	2,200	4,700	8,400	4,800	7,800
Leisure & Hospitality	3,500	-7,200	-600	5,400	6,600	7,200	6,700	9,500
Other Services	-900	-3,900	-400	1,000	1,400	1,000	1,700	1,500
Government	1,400	-4,200	-4,300	-3,000	-1,400	800	3,500	4,000
Housing								
Residential permits	4,807	6,862	9,936	10,636	10,897	12,073	12,554	13,221
Median home price	426,850	447,628	541,742	593,152	614,641	638,200	674,650	705,736

5 Riverside County

One of two counties referred to as the Inland Empire, Riverside County is home to more than 2.3 million residents and boasts a workforce of more than 1.0 million today. Many industries were heavily hit during the recession in terms of employment, including construction, manufacturing and retail trade; however, the strong presence of health care and social assistance was a stabilizing factor, adding jobs annually since 2000. Wholesale trade and goods movement industries have also been strong performers in the county's economy.

In 2016, real GDP in Riverside County grew at 2.4 percent, a slowdown from the prior year when the economy grew by 4.0 percent. However, this year's growth exceeded the national rate of growth. Real GDP growth is expected to be 3.6 percent in 2017 and 3.2 percent in 2018, also outpacing the nation.

Employment

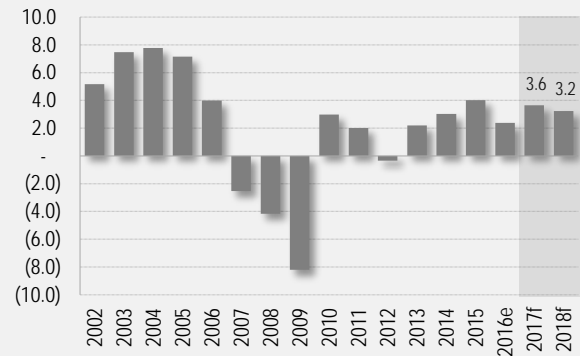
In 2016, the average unemployment rate in Riverside County reached 6.1 percent, the lowest rate since 2007 and less than half the peak rate of 13.8 percent reached in 2010; Riverside experienced the highest unemployment rate of all six counties in Southern California. The unemployment rate is expected to continue its decline becoming more moderate over the next two years, falling to 5.8 percent in 2017 and reaching 5.5 percent in 2018 as the county reaches closer to full employment.

Job growth has been positive since 2011, averaging growth of 3.6 percent annually from 2011 through 2016. This is expected to slow to 2.1 percent this year before slowing to 2.0 percent in 2018.

Nonfarm employment was up over the year by 18,400 wage and salary jobs to reach almost 662,100 jobs, an increase of 2.9 percent over 2015.

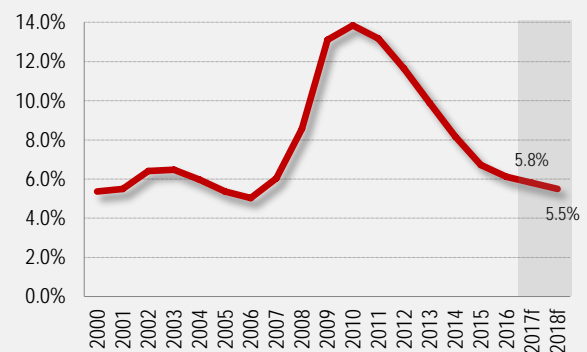
Almost all industry sectors added jobs in 2016. The largest private sector gains were in health care and social assistance and construction (each adding 2,800 jobs), followed by transportation, warehousing and utilities (adding 2,390 jobs), and retail trade (1,200 jobs). Public sector payrolls grew the most; local, state and federal government added 4,400 jobs over the year.

Exhibit 5-1
Growth in Real GDP Riverside County
(Annual % change)



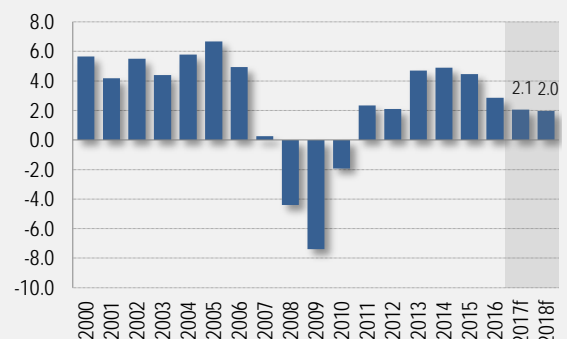
Source: BEA; estimates and forecast by LAEDC

Exhibit 5-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 5-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

Two sectors reported no change in employment, natural resources and finance and insurance neither lost nor added jobs over the year. Administrative and support and waste services shed 300 jobs over the year, a decline of 0.7 percent; this marks the first year to shrink, after five years of consecutive employment growth from 2011 through 2015.

As the rate of job creation slows, the number of jobs added will also decline, with 13,730 jobs expected to be added in 2017 and 13,390 in 2018.

The sectors expected to add the largest number of jobs over the two years are health care and social assistance (6,510 new jobs), construction (4,940 jobs) and leisure and hospitality (2,890 jobs). Government will add 2,820 jobs over the next two years, and administrative support is expected to gain 2,670 jobs. ❖

Personal Income

Personal income in Riverside County has been rising at a steady pace, posting consecutive year-over-year increases since 2010. In 2015, personal income totaled \$84.0 billion, is predicted to reach \$86.9 billion in 2016, and is forecast to continue its growth pattern reaching \$95.3 billion in 2018.

Real per capita income has not fared as well in the county, while overall it has been rising, between 2015 and 2016 it remained relatively flat at \$32,475 and \$32,590 respectively. Looking ahead, per capita income is predicted to rise slightly over the next two years reaching \$33,490 in 2017 and \$34,150 in 2018. ❖

Major Industries

All industry sectors will add jobs over the next two years but overall, the strongest job growth in terms of number of new jobs will be in the following industries:

Health Care and Social Assistance: Health care and social assistance is the county's largest industry sector by employment, and the only one to increase their payroll employment on a consecutive annual basis from 2000 through 2016, adding 46,000 jobs over the period at an average annual growth rate of 4.4 percent. Approximately 40 percent of jobs in this sector are in ambulatory health care, such as doctors' offices and clinics, 19 percent are in hospitals, and 30 percent are in social assistance, such as child day care and in home

Exhibit 5-4

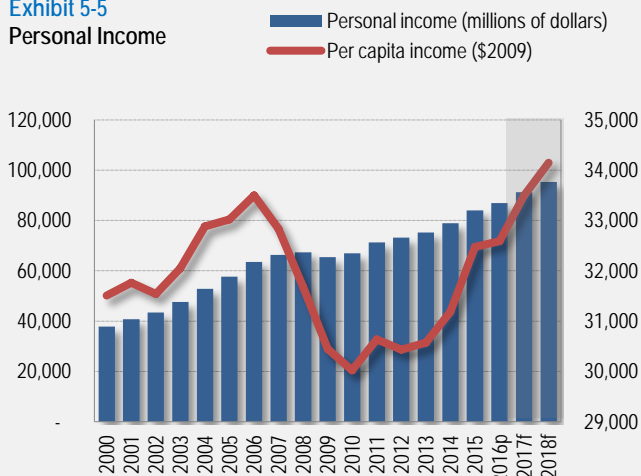
Job Forecast 2017 and 2018 by Industry Sector
(thousands of jobs)



Source: CA EDD; forecast by LAEDC

Exhibit 5-5

Personal Income



Source: BEA; forecast by LAEDC

supportive services. As the population continues to grow and age, these industries will need to keep pace to meet future needs in health services. The number of health care and social assistance jobs is expected to expand by 3,580 jobs in 2017 and add an additional 2,930 jobs in 2018, growth of 4.0 percent and 3.1 percent respectively.

Administrative and Support: Employment services, such as temporary employment agencies and services to buildings and dwellings make up approximately 60 percent of employment, contributing 30 percent each. As more industries utilize staffing and employment agencies, this sector will continue to grow. It is becoming

more common for firms to add workers under contractual arrangements rather than adding them to the firm's payroll directly to allow more flexibility in terms of staffing needs. Employment in this sector overall is forecast to grow at an average annual rate of 3.3 percent, adding 2,670 new jobs between 2016 and 2018.

Leisure and Hospitality: Leisure and hospitality in Riverside County includes several large casinos (Morongo, Fantasy Springs and Pechanga) and a large food services industry. Employment in this sector has posted annual consecutive increases in employment since 2012; however, the majority of jobs are in food services (over 80 percent), a relatively low-paying subsector. From 2016 to 2018, the sector is projected to add 2,890 new jobs, growing by 1.7 percent annually on average. Most of the new jobs added will continue to be in food services.

Construction: Construction employment in Riverside County has been improving since bottoming out in 2011. Between 2006 and 2011, this sector hemorrhaged 46,600 jobs. As the real estate market continues to rebound and the demand for housing units and commercial properties increase, this sector will continue to add jobs through 2018 at a rate of 4.4 percent annually, translating to 4,940 jobs added over the period.

Government: The public sector is the largest employer in Riverside County. Local, state and federal governments all have a strong presence here, accounting for roughly eighteen percent of all payroll jobs in the county. Government employment includes public hospitals, and schools, and public safety in addition to positions at city, county, state and federal offices. Riverside County is also home to March Air Reserve Base. From 2013 through 2016, government added 7,000 jobs to their payroll, an increase of 6.3 percent over the period. Growth between 2016 and 2018 is predicted at 1.2 percent per year, and the sector is forecasted to add 2,820 new jobs. ❖

Housing

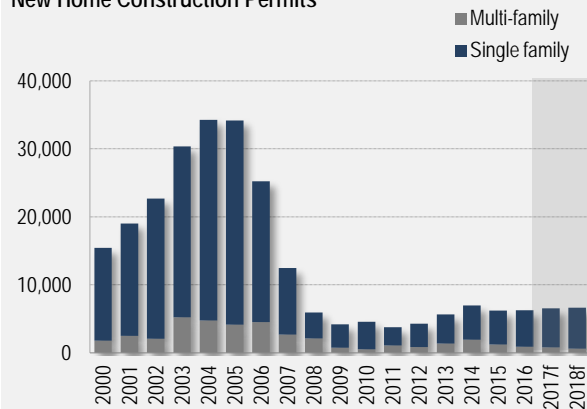
Levels of new home construction in Riverside County remain very low. In 2016, the number of permits issued for new home construction in Riverside County edged up over the year by 0.7 percent to 6,241 units permitted. Prior to the recession, Riverside County was the epicenter of Southern California's housing boom, reaching a high of 34,226 new units permitted in 2004. In the aftermath of the housing crash (2011), the

number of new residential construction permits issued in Riverside County plummeted to just 3,749.

Residential construction in Riverside County is slowly improving—permits are up by 66.5 percent since bottoming out in 2011—but in spite of rising employment and a stronger economy, the county's housing market has yet to gather any momentum. The majority of new construction that is taking place continues to be single-family homes.

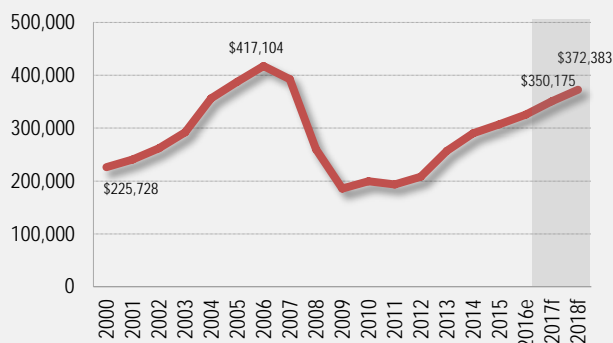
In 2016, the median home price in Riverside County increased over the year by 6.1 percent to an estimated \$325,300. The median price fell to a low of \$185,312 in this cycle after reaching a peak of \$417,104 in 2006. The median home price in Riverside County has increased by 75.5 percent since falling to its lowest point in 2009, but ended last year still 22 percent below its former peak. ❖

Exhibit 5-6
New Home Construction Permits



Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 5-7
Riverside County Median Home Prices
(New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 5-8
Riverside County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	55,430	55,234	56,449	58,147	60,484	61,915	64,164	66,240
Annual percent change in real GDP	2.0	-0.4	2.2	3.0	4.0	2.4	3.6	3.2
Total personal income (billions)	71,214	73,159	75,223	78,853	84,026	86,873	91,274	95,285
Per capita personal income (nominal)	31,828	32,263	32,765	33,867	35,589	36,391	37,803	39,065
Per capita personal income (\$2009)	30,633	30,432	30,575	31,183	32,474	32,591	33,491	34,147
Population								
Population (thousands)	2,237	2,268	2,296	2,328	2,361	2,390	2,420	2,460
Population growth rate	1.6	1.3	1.2	1.4	1.4	1.3	1.4	1.3
Labor market								
Unemployment rate (percent)	13.2	11.6	9.9	8.2	6.7	6.1	5.8	5.5
Average annual nonfarm employment	549,400	561,000	587,000	616,200	643,700	662,100	675,800	689,200
Annual percent change in employment	2.3	2.1	4.7	4.9	4.5	2.9	2.1	2.0
Jobs (change over previous year)								
Total Nonfarm	12,600	11,600	26,400	28,800	27,500	18,400	13,700	13,400
Natural Resources	0	0	-100	0	0	0	0	0
Construction	-1,300	1,800	6,700	4,900	5,300	2,800	2,200	2,800
Manufacturing	700	800	-400	1,100	1,200	1,100	300	300
Wholesale Trade	600	1,000	1,700	700	500	900	700	600
Retail Trade	3,100	-200	1,000	3,100	3,000	1,200	800	900
Transport / Warehousing / Utils	800	800	3,900	2,900	6,100	2,390	900	300
Information	-2,600	-1,300	-100	0	100	100	0	0
Finance & Insurance	-100	300	300	-100	0	0	200	200
Real Estate / Rental & Leasing	-600	400	400	500	400	200	200	100
Prof / Scientific / Tech Services	200	900	300	1,400	100	300	500	300
Management of Companies	-100	0	300	200	-300	100	0	0
Administrative & Support	1,800	800	2,900	1,900	1,300	-300	900	1,800
Educational Services	100	800	500	500	300	500	300	200
Health Care / Social Assistance	3,000	3,900	6,000	3,600	5,500	2,800	3,600	2,900
Leisure & Hospitality	1,200	3,400	2,700	5,500	2,800	900	1,300	1,600
Other Services	500	400	1,100	1,300	0	700	300	300
Government	5,000	-2,100	-900	1,500	1,100	4,400	1,800	1,000
Housing								
Residential permits	3,749	4,286	5,623	6,938	6,196	6,241	6,528	6,639
Median home price	193,227	207,431	256,895	289,772	306,644	325,300	350,175	372,383

6 San Bernardino County

San Bernardino County is unique in that it has a large number of growing industries, but also is home to a significant amount of poverty. San Bernardino County has more than 2.1 million residents and boasts a workforce of just under one million today. Numerous universities and large medical facilities call the county their home. Industry trends in goods movement have trade and logistics industries thriving, taking advantage of its numerous airports with cargo service (Ontario International and San Bernardino International Airports) and rail networks present there.

In 2016, real GDP in San Bernardino County grew at 1.6 percent, a slowdown from the prior year when the economy grew by 3.6 percent. However, this year's growth still outpaced the national rate of growth. Real GDP growth is expected to be 2.5 percent in 2017 and 2.2 percent in 2018, also outpacing the nation.

Employment

In 2016, the average unemployment rate in San Bernardino County reached 5.7 percent, the lowest unemployment rate since 2007 and less than half the peak rate of 13.5 percent reached in 2010. It is expected to continue its decline over the next two years, falling to 5.0 percent in 2017 and reaching 4.9 percent in 2018.

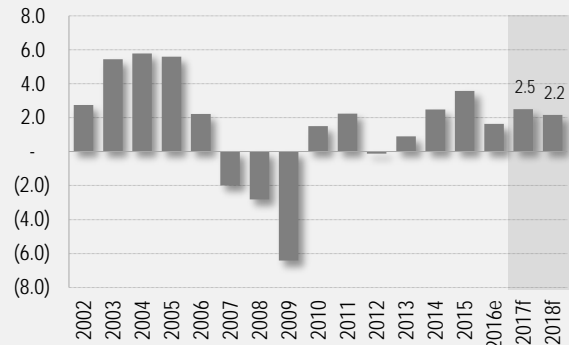
Job growth has been positive since 2012, averaging 3.6 percent annually from 2012 through 2016. This is expected to slow to 1.4 percent annually over the next two years as the labor market tightens.

Nonfarm employment was up over the year by 20,100 wage and salary jobs to reach 723,800 jobs, an increase of 2.9 percent over 2015.

The majority of industry sectors added jobs in 2016. The largest private sector gains were in transportation, warehousing and utilities (adding 4,400 jobs), health care and social assistance (adding 3,200 jobs), construction and wholesale trade followed (adding 1,600 jobs and 1,500 jobs respectively). Government payrolls grew the most, adding 4,700 jobs.

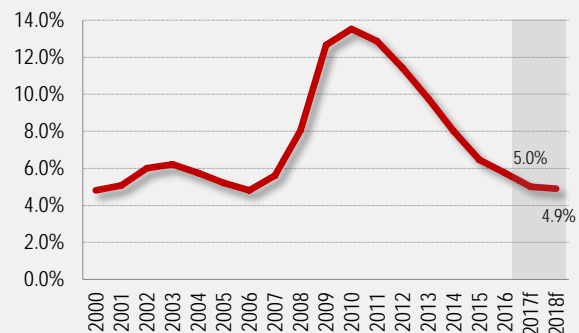
Four sectors shed jobs over the year. Management of companies and enterprises took a large hit, losing 2,700 jobs in 2016. Administrative and support and waste

Exhibit 6-1
Growth in Real GDP San Bernardino County
(Annual % change)



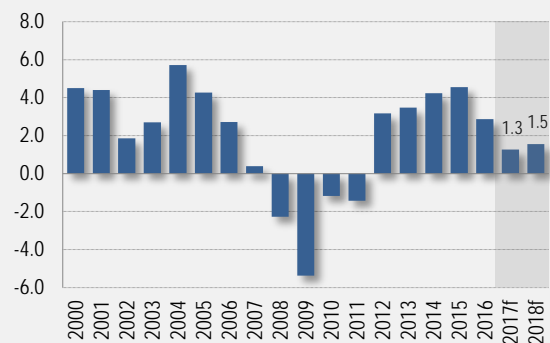
Source: BEA; estimates and forecast by LAEDC

Exhibit 6-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 6-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

services lost 600 jobs over the year after adding a cumulative 7,100 jobs across three years prior (2012 through 2015). Finance and insurance and natural resources (mining and logging) each lost roughly 100 jobs from 2015.

As the rate of job creation slows, the number of jobs added will also decline, with 9,110 jobs expected to be added in 2017 and an additional 11,303 jobs in 2018.

The sectors expected to add the largest number of jobs over the two years are health care and social assistance (6,360 new jobs), construction (3,270 jobs), and administrative and support services (2,770 jobs) and government (1,940 new jobs). Leisure and hospitality will add 1,450 jobs over the next two years, and wholesale trade is expected to gain 1,360 jobs. ❖

Personal Income

Personal income in San Bernardino County has been rising, posting consecutive year-over-year increases since 2010. In 2015, personal income totaled \$75.4 billion, is predicted to reach \$78.2 billion in 2016, and is forecast to continue its growth pattern reaching \$86.3 billion in 2018.

In addition to total personal income, real per capita income has also been rising since 2010, reaching \$35,430 in 2015, predicted at \$36,550 in 2016, and forecast to increase to \$39,800 in 2018. San Bernardino County has the second lowest per capita income of all six counties in Southern California, just slightly above that in Riverside County. ❖

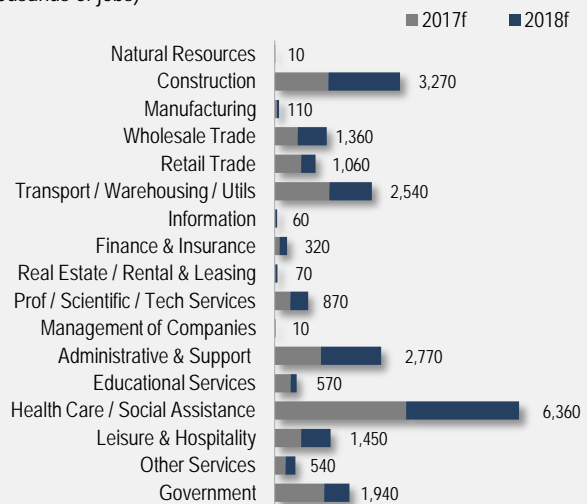
Major Industries

Almost all industry sectors will add jobs over the next two years but overall, the strongest job growth in terms of number of new jobs will be in the following industries:

Health Care and Social Assistance: Health care and social assistance is the county's largest private employer. Approximately 40 percent of jobs in this sector are in ambulatory health care, such as doctors' offices and clinics, nearly a quarter are in hospitals, and 30 percent are in social assistance, such as child day care and in home supportive services. As the population continues to grow and age, these industries will need to keep pace so as to provide needed health services. The number of health care and social assistance jobs is expected to

Exhibit 6-4

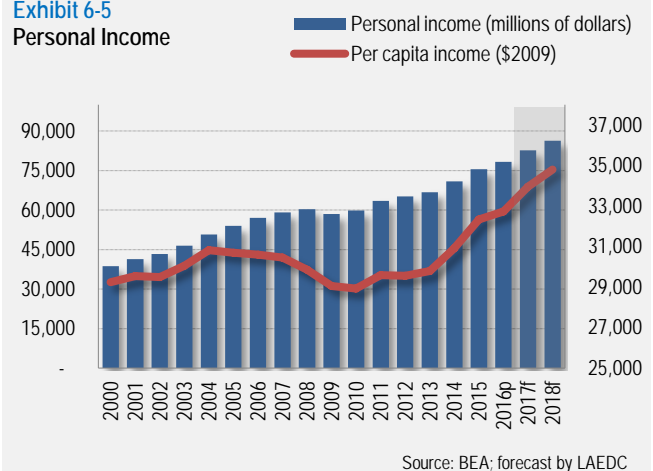
Job Forecast 2017 and 2018 by Industry Sector (thousands of jobs)



Source: CA EDD; forecast by LAEDC

Exhibit 6-5

Personal Income



Source: BEA; forecast by LAEDC

expand by 3,420 in 2017 and add an additional 2,940 jobs in 2018, growth of 3.3 percent and 2.8 percent respectively.

Administrative and Support: Approximately 64 percent of the jobs in this sector are in employment services, such as temporary employment agencies. As more industries utilize staffing and employment agencies, this sector will continue to grow. It is becoming more common for firms to add workers under contractual arrangements rather than adding them to the firm's payroll directly to allow more flexibility in terms of staffing needs. This is very commonplace in goods movement and distribution industries, which have a strong presence in the county. Employment in this sector overall is forecast to grow at an average annual rate of

2.5 percent, adding 2,770 new jobs between 2016 and 2018.

Wholesale Trade: With the trend in goods movement industries is the ever increasing demand for larger facilities. The Inland Empire has become their preferred location to site new facilities, taking advantage of the supply of suitable sites and relatively cheaper land values and labor. The presence of a number of cargo airports in close proximity, combined with the rail network, has made the county an attractive place for wholesale operations, including Amazon who has sited several of their large distribution centers here. Wholesale employment in San Bernardino County has been adding jobs on an annual basis since 2012, a trend that is expected to continue over the next couple of years. Employment growth from 2016 through 2018 will be relatively moderate, at 1.7 percent annually, adding 1,360 new jobs over the period.

Construction: Construction industry employment declined from 2007 through 2010, shedding more than 19,300 jobs. The sector has been experiencing consecutive annual job growth since 2011 at an annual average growth rate of 5.8 percent through 2016. A large amount of commercial and industrial construction has been taking place along the I10 corridor as the goods movement industries expand their footprint here. Construction is expected to continue this growth trend, adding 3,270 jobs between 2016 and 2018, an average annual growth rate of 4.1 percent and 5.3 percent in 2017 and 2018 respectively.

Government: The public sector is a large employer in San Bernardino County. Local, state and federal governments all have a strong presence here, accounting for roughly 17 percent of all payroll jobs in the county. The public sector reached its lowest employment level in 2012 with 112,500 jobs. From 2012 through 2016, government added 11,700 jobs to their payroll, an increase of 10.4 percent over the period. Growth will temper, mildly adding jobs at 0.8 percent per year, or 1,940 new jobs between 2016 and 2018. ❖

Housing

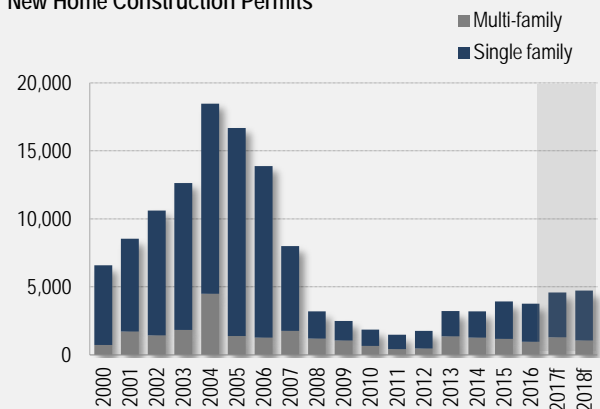
Levels of new home construction in San Bernardino County remain very low. In 2016, the number of permits issued for new home construction in San Bernardino County declined slightly over the year, falling by 3.8 percent to 3,765 units permitted. New home construction reached its highest point in 2004 when 18,470 permits for new homes were issued. After falling to a low of 1,465 units permitted in 2011, new home

building in San Bernardino has struggled to recover, improving slowly in fits and starts.

The number of permits issued in 2016 was up more than two-fold since bottoming out in 2011, but remained 80 percent below its previous peak. The majority of new construction that is taking place continues to be single-family homes although shares of multi-family homebuilding have increased slightly.

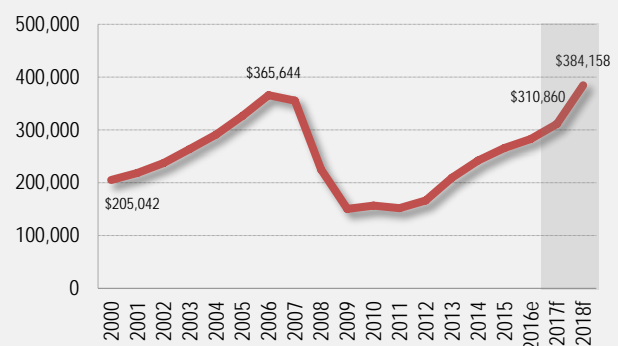
In 2016, the median home price in San Bernardino County increased over the year by 6.3 percent to an estimated \$282,500. The median price fell to a low of \$150,236 in this cycle after reaching a peak of \$365,644 in 2006. The median home price San Bernardino County has shot up by 88 percent since bottoming out in 2009, but ended last year still 32 percent below its former peak. ❖

Exhibit 6-6
New Home Construction Permits



Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 6-7
San Bernardino County Median Home Prices
(New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 6-8

San Bernardino County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	60,808	60,733	61,274	62,789	65,034	66,087	67,736	69,193
Annual percent change in real GDP	2.2	-0.1	0.9	2.5	3.6	1.6	2.5	2.2
Total personal income (billions)	63,449	65,154	66,755	70,829	75,403	78,240	82,564	86,270
Per capita personal income (nominal)	30,738	31,331	31,916	33,562	35,431	36,547	38,304	39,796
Per capita personal income (\$2009)	29,584	29,553	29,783	30,902	32,330	32,730	33,935	34,787
Population								
Population (thousands)	2,064	2,080	2,092	2,110	2,128	2,144	2,162	2,178
Population growth rate	1.1	0.7	0.6	0.9	0.8	0.7	0.9	0.8
Labor market								
Unemployment rate (percent)	12.9	11.4	9.8	8.0	6.5	5.7	5.0	4.9
Average annual nonfarm employment	605,100	624,200	645,800	673,100	703,700	723,800	732,900	744,200
Annual percent change in employment	(1.4)	3.2	3.5	4.2	4.5	2.9	1.3	1.5
Jobs (change over previous year)								
Total Nonfarm	-8,800	19,100	21,600	27,300	30,600	20,100	9,100	11,300
Natural Resources	0	200	100	100	0	-110	0	0
Construction	700	1,800	600	2,700	2,400	1,600	1,400	1,900
Manufacturing	-800	800	1,000	2,900	3,100	1,400	100	100
Wholesale Trade	-200	2,200	2,400	1,900	2,200	1,500	600	800
Retail Trade	-100	4,100	1,400	1,500	1,000	1,300	700	400
Transport / Warehousing / Utils	1,200	4,400	1,500	5,300	4,700	4,400	1,400	1,100
Information	700	800	0	-300	-100	0	0	0
Finance & Insurance	-100	200	0	300	200	-100	100	200
Real Estate / Rental & Leasing	-300	-100	300	100	500	100	0	100
Prof / Scientific / Tech Services	500	200	800	500	-600	500	400	500
Management of Companies	200	-100	0	100	800	-2,700	0	0
Administrative & Support	-300	-200	500	3,000	3,600	-600	1,200	1,600
Educational Services	100	-300	700	-800	-100	600	400	200
Health Care / Social Assistance	800	3,800	6,800	4,000	4,400	3,200	3,400	2,900
Leisure & Hospitality	0	2,000	3,800	3,400	3,900	700	700	800
Other Services	400	600	0	600	900	800	300	300
Government	-11,900	-800	1,500	2,100	3,400	4,700	1,300	700
Housing								
Residential permits	1,465	1,748	3,206	3,203	3,912	3,765	4,589	4,733
Median home price	151,604	166,352	208,995	241,904	265,715	282,500	310,860	384,158

7 San Diego County

With almost 3.3 million residents, San Diego County is the second largest in California in terms of population. The City of San Diego is the largest of the county's 18 cities, and is second in population in the state after the City of Los Angeles. San Diego County is best known for its life sciences/ biomedical and technology clusters as well as its tourism industry and the large military presence in the region. In addition to several respected institutes of higher learning (UC San Diego, The Scripps Research Institute), San Diego County has a highly educated workforce with elevated levels of educational attainment compared with the state as a whole.

In 2016, San Diego's economy grew at an estimated rate of 2.4 percent versus 2.6 percent for the state and accounted for 8.9 percent of California's gross state product with 8.4 percent of the state's population. San Diego's real gross product is expected to expand by 2.1 percent this year, accelerating to 2.3 percent in 2018.

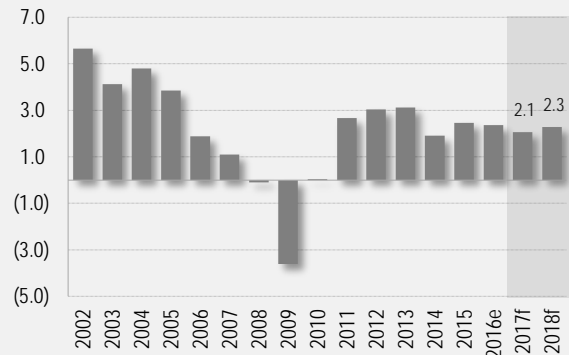
Employment

The county added 33,300 wage and salary (nonfarm) jobs last year, increasing its job base from 1.39 million in 2015 to 1.42 million in 2016. This corresponded to a 2.4 percent annual growth rate, compared with 2.6 percent for the rest of California. In tandem with rising employment, the county's unemployment rate fell from 5.2 percent a year ago to 4.7 percent in 2016, well below the average long-run rate for the county of 6.0 percent.

Every industry in the county added jobs last year with the exception of mining and logging, which was flat. The largest percentage gains were in administrative and support services (4.1 percent); health care and social assistance (3.7 percent); and leisure and hospitality and construction (both 3.3 percent).

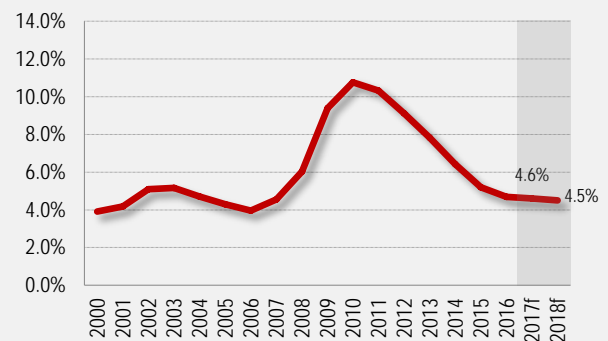
In absolute terms, health care and social assistance added the largest number of jobs, just over 6,000, followed by leisure and hospitality (6,000), and government (5,800 jobs). Over half the public sector increase was at the local level, while Department of Defense (federal) employment increased by 500 jobs. Most industries are expected to add jobs this year, led once again by health care and social services, leisure and hospitality and government.

Exhibit 7-1
Growth in Real GDP San Diego County
(Annual % change)



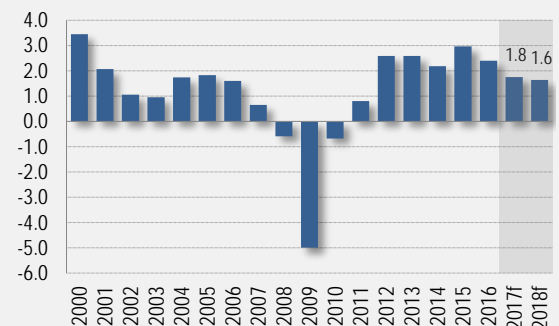
Source: BEA; estimates and forecast by LAEDC

Exhibit 7-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 7-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

The only expected decline is in the manufacturing sector with a loss of 425 jobs, while natural resources employment will remain unchanged over the year.

The labor market in San Diego County will continue to improve although anticipated job gains are expected to slow to 1.8 percent this year followed by a 1.6 percent increase in 2018. Rising employment will contribute to additional declines in the unemployment rate, pushing it down to of 4.6 percent this year and to 4.5 percent in 2018. ❖

Personal Income

Along with employment growth, San Diego's residents have also experienced gains in personal income. Total personal income in the county increased by 4.1 percent in 2016 to \$183 billion (nominal). This is the result of both higher levels of employment and rising wages. Personal income has been rising in San Diego County since 2010 and is expected to reach \$192 billion in 2017 before rising to \$200 billion in 2018.

Real per capita personal income was \$48,417 last year, up from \$47,924 in 2015. Over the next two years, additional but more modest gains in per capita income are expected: 2.3 percent in 2017 and 1.5 percent in 2018. ❖

Major Industries

Aerospace and Defense: According to the San Diego Military Advisory Council, the San Diego region has the largest concentration of military in the world and one-fifth of San Diego's economy relies on the presence of defense contractors, military bases and hospitals, and a large cohort of armed services retirees.

Although a sizable share of military and defense-related jobs are in the armed forces or other government sectors, there are a large number in the private sector as well. San Diego County's transportation equipment industry includes both aerospace and ship building. Transportation equipment manufacturing jobs edged up from 19,800 jobs in 2015 to 20,400 jobs in 2016. The gain of 600 jobs was about evenly divided between aerospace products and parts manufacturing and ship building.

Given that the new administration in Washington has signaled its intent to increase defense spending, the

Exhibit 7-4

Job Growth 2017 by Industry Sector (thousands of jobs)

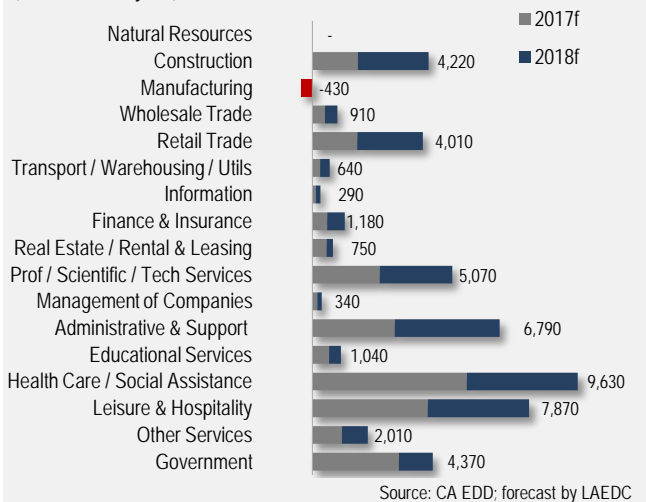
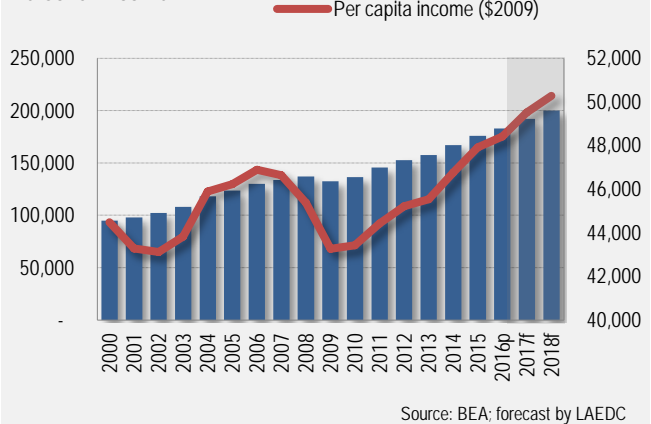


Exhibit 7-5

Personal Income



Pentagon budget is expected to grow in the coming years, which will likely benefit San Diego County. However, a large portion of work being done by local contractors is related to work on systems that should continue in the near future regardless of the overall budget picture, involving projects related to cyber security, intelligence surveillance, defense-related electronics and software and unmanned aerial systems.

Agriculture: San Diego County farm employment fell by 1.3 percent last year from 9,100 jobs in 2015 to 8,900 in 2016. The total value of agricultural production was \$1.7 billion in 2015 (the latest available), a decline of 6.4 percent compared with 2014. The largest commercial crops were nursery and cut flower products, fruit and nuts, and vegetables, shipments of which, were exported to 49 other countries.

San Diego growers do face challenges, the most significant being high land and water costs which have encouraged growers to concentrate on high value crops. Additionally, given the new administration's stance on immigration, the future availability of farm workers (many of whom are immigrants) may be limited.

Biotechnology and Health Care: The life sciences cluster is another major driver of San Diego's economy. San Diego's life sciences firms benefit from close ties to the area's research institutions and from the county's long-standing commitment to support the industry. The region is home to more than 1,100 life sciences firms and more than 80 independent and university-affiliated research institutes encompassing research in genetics, pharmaceuticals, medical device manufacturing and new diagnostic technologies.

The county's health care and social assistance industry is also expanding, similar to trends elsewhere in the state. The industry employed 169,700 workers in 2016, up 6,000 jobs (3.7 percent) from a year earlier. More than half the employment gains were concentrated in ambulatory health care services with smaller increases at hospitals, nursing and residential care facilities, and social assistance. With its advanced treatment and diagnostic facilities, San Diego is a center for both medical research and the delivery of medical services.

Tourism and Hospitality: Last year was another record year for San Diego's travel and tourism industry, with estimated visitor expenditures increasing by 4.2 percent to \$10.3 billion. The number of visitors to San Diego County reached 34.6 million in 2016 and is expected to hit record high levels again this year and next.

With anticipated growth in tourism and in the local economy as a whole, leisure and hospitality employment is expected to increase by 2.2 percent from 190,000 jobs in 2016 to 194,200 jobs this year, followed by an additional 1.9 percent increase in 2018. ❖

Housing

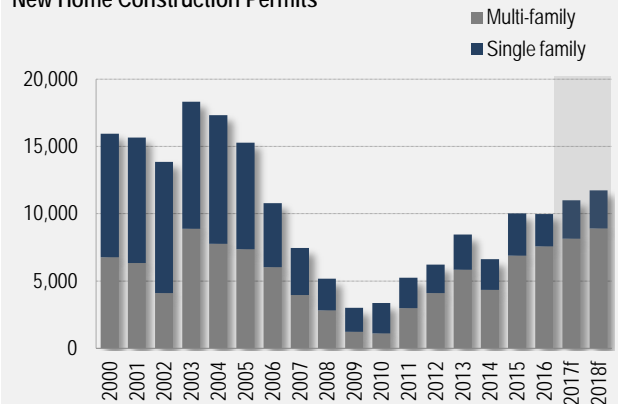
In what has turned out to be a very protracted recovery, 2016 marked another year of progress for San Diego's housing market. The median price for all homes (attached and detached homes, new and existing) was \$495,000 in December, up by 4.2 percent from a year earlier. Although median home prices have been rising since the second quarter of 2012, the median price at the end of 2016 was still shy of the January 2006 peak of \$510,000.

New home construction faltered somewhat in 2016. Building permits fell by 0.3 percent from 10,005 units permitted in 2015 to 9,970 units last year. New home construction is expected show modest improvement this year supported by increases in employment, income and population growth.

Similar to trends in other metro areas of California, since the onset of the housing market recovery, new home construction in San Diego has tilted heavily to multi-family residences. From 2012 to 2016, the share of new single-family construction fell to just 31 percent in favor of apartments and condominiums. ❖

Exhibit 7-6

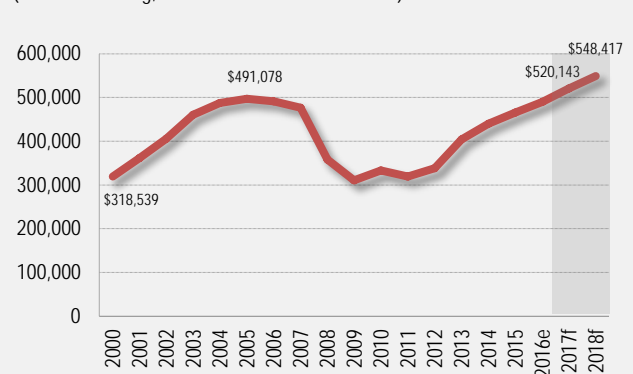
New Home Construction Permits



Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 7-7

San Diego County Median Home Prices (New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 7-8
San Diego County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	178,956	184,403	190,153	193,774	198,550	203,236	207,434	212,165
Annual percent change in real GDP	2.7	3.0	3.1	1.9	2.5	2.4	2.1	2.3
Total personal income (millions)	145,719	152,724	157,758	167,119	175,859	183,056	192,107	200,075
Per capita personal income (nominal)	46,374	47,961	48,938	51,174	53,298	54,905	57,085	58,950
Per capita personal income (\$2009)	44,423	45,219	45,545	46,759	47,924	48,417	49,518	50,273
Population								
Population (thousands)	3,142	3,184	3,224	3,266	3,300	3,340	3,378	3,415
Population growth rate	1.2	1.3	1.2	1.3	1.0	1.2	1.1	1.1
Labor market								
Unemployment rate (percent)	10.3	9.1	7.8	6.4	5.2	4.7	4.6	4.5
Average annual nonfarm employment	1,252,000	1,284,500	1,317,700	1,346,500	1,386,400	1,419,700	1,444,700	1,468,400
Annual percent change in employment	0.8	2.6	2.6	2.2	3.0	2.4	1.8	1.6
Jobs (change over previous year)								
Total Nonfarm	10,000	32,500	33,200	28,800	39,900	33,300	25,000	23,700
Natural Resources	0	0	0	0	0	0	0	0
Construction	-200	1,800	3,900	2,900	5,700	2,300	1,700	2,600
Manufacturing	700	1,800	1,200	2,600	3,700	1,000	-400	0
Wholesale Trade	1,300	2,000	400	-200	300	1,000	500	500
Retail Trade	2,700	3,800	4,100	3,000	2,500	900	1,600	2,400
Transport / Warehousing / Utils	-400	1,200	-100	-200	1,200	500	300	300
Information	-900	300	-200	100	-500	100	100	200
Finance & Insurance	500	1,900	200	-1,800	1,500	1,300	500	600
Real Estate / Rental & Leasing	-200	400	800	400	400	900	500	200
Prof / Scientific / Tech Services	800	1,900	3,300	2,900	2,400	2,000	2,400	2,600
Management of Companies	400	1,500	1,900	600	500	600	200	200
Administrative & Support	600	2,800	2,600	-300	3,100	3,300	3,000	3,800
Educational Services	1,700	1,900	500	200	-200	700	600	400
Health Care / Social Assistance	1,700	4,700	6,000	4,900	7,300	6,000	5,600	4,000
Leisure & Hospitality	1,100	6,100	6,900	8,400	7,000	6,000	4,200	3,700
Other Services	1,600	1,500	100	2,700	1,000	800	1,100	900
Government	-1,500	-1,200	1,700	2,400	4,000	5,800	3,100	1,200
Housing								
Residential permits	5,223	6,193	8,447	6,603	10,005	9,970	10,977	11,729
Median home price	318,950	337,568	403,759	439,430	465,245	489,400	520,143	548,417

8 Ventura County

In the Southern California region, Ventura County is the smallest in terms of population and land area, being about half the size of Los Angeles County.

Famous for its military presence, its deep-water port at Port Hueneme and its strength in the biosciences, the county is also famous for its beaches, wineries and shopping, giving rise to a vibrant leisure and hospitality industry.

In 2016, Ventura County was home to just over 856,500 residents and an economy valued at \$43.1 billion (expected). Ventura County only experienced one year of negative real GDP growth related to the last recession, in 2008 when it declined by 6.2 percent, but there had been a pattern of declining growth from 2003 through 2007. Growth in GDP (in real terms) has remained positive from 2009 onward and is expected to grow by 1.4 percent in 2016. Real GDP growth is forecast to increase slightly to 1.7 percent in 2017, but fall back down to 1.4 percent in 2018.

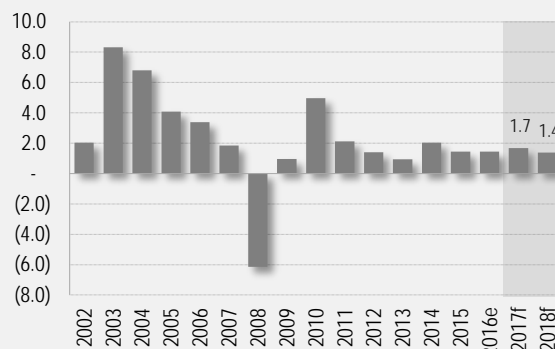
Employment

At 5.2 percent, the 2016 unemployment rate in Ventura County was 0.5 percentage points below last year's rate of 5.7 percent, but still higher than the 4.3 percent annual average recorded in 2006 (just prior to the recession). The average unemployment rate for the county since 2000 is 6.6 percent. The unemployment rate is forecast to flatten out over the next two years to 5.0 percent in 2017 and 4.9 percent in 2018, still remaining 0.6 percentage points higher than its prerecession low.

Total nonfarm employment grew from 294,800 jobs in 2015 to 298,300 jobs in 2016 (a gain of 3,500 jobs or 1.2 percent). Job growth should accelerate slightly from an average annual rate of 1.1 percent (2014 to 2016) to 1.6 percent (2017-2018), adding 9,640 jobs across nonfarm industries in the county in 2017 and 2018, reaching 307,920 in total nonfarm employment.

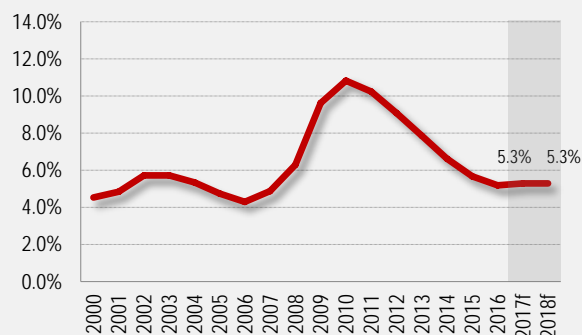
Nonfarm employment has been experiencing consecutive positive year-over-year growth since 2011 with an average annual growth rate of 1.3 percent from 2011 through 2016. Ventura County added 22,780 nonfarm jobs from its lowest point in 2010 (275,500 jobs) through 2016. However, it has yet to reach its

Exhibit 8-1
Growth in Real GDP Ventura County
(Annual % change)



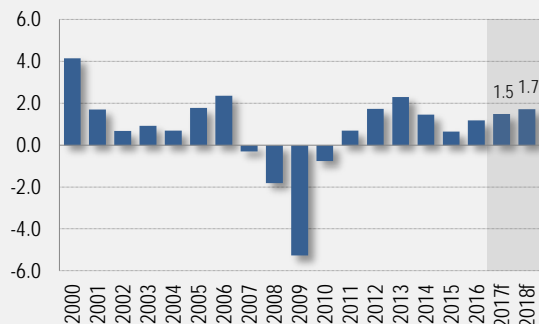
Source: BEA; estimates and forecast by LAEDC

Exhibit 8-2
Unemployment Rate



Source: CA EDD; forecast by LAEDC

Exhibit 8-3
Change in Employment
(Annual % change)



Source: CA EDD; forecast by LAEDC

prerecession peak, still remaining short by more than 1,000 jobs. Looking ahead, nonfarm employment in Ventura County is forecast to reach and surpass prerecession peak employment in 2017 and 2018, with 302,700 jobs and 307,920 nonfarm jobs respectively.

Almost all industry sectors added jobs in 2016. The largest private sector gains were in leisure and hospitality (adding 1,480 jobs), health care and social assistance (adding 1,140 jobs), the public sector (950 jobs) and construction, adding 520 jobs.

Most industry sectors are expected to add jobs over the next two years, with the exception of private education services, which will remain unchanged, and the sectors of manufacturing and natural resources, which are predicted to lose jobs over the period. The absolute number of jobs predicted to be shed (355 over the next two years) is very small compared to other counties in Southern California. ❖

Personal Income

Personal income in Ventura County has been rising (nominally) since 2010. In 2015, personal income totaled \$46.1 billion, is predicted to reach \$47.2 billion in 2016, and is forecast to continue its growth pattern into 2017 and 2018 reaching \$49.4 billion and \$51.2 billion respectively.

Real per capita income has also been increasing over the period reaching \$49,780 in 2015, predicted at \$50,290 in 2016, and forecast to increase to \$51,910 and \$53,220 in 2017 and 2018 respectively. Compared to the other five counties in the Southern California region, Ventura County has the highest per capita income. ❖

Major Industries

Almost all industry sectors will add jobs over the next two years but overall, the strongest job growth in terms of number of new jobs will be in the following industries:

Health Care and Social Assistance: Health care and social assistance is the county's largest private industry by employment. The vast majority of jobs in this sector in Ventura County are in the subsectors of ambulatory health care (over 40 percent), followed by social assistance (roughly a quarter) and hospitals (close to twenty percent). The number of health care and social assistance jobs is expected to expand by 1,530 in 2017

Exhibit 8-4

Job Forecast 2017 and 2018 by Industry Sector
(thousands of jobs)

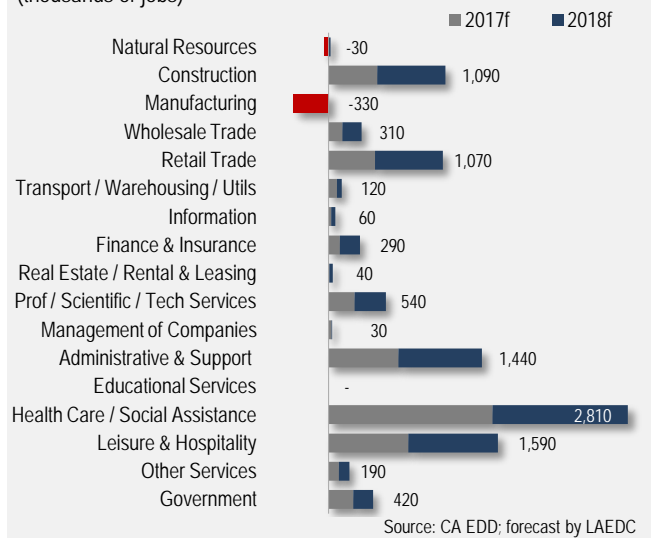
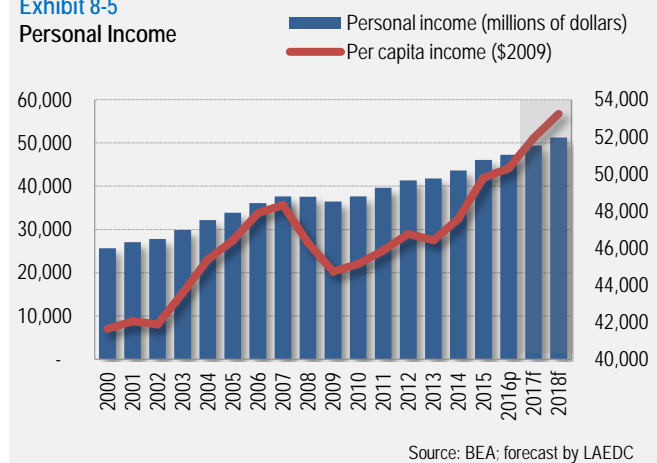


Exhibit 8-5

Personal Income



and add an additional 1,270 jobs in 2018, growth of 3.5 percent and 2.8 percent respectively.

Administrative and Support: This large sector is forecast to add 650 jobs and 790 jobs in 2017 and 2018 respectively. The largest component of employment in this sector is in employment services (about forty percent), followed by services to buildings and dwellings and waste management and remediation. Employment in this sector overall is forecast to grow at an average annual rate of 4.2 percent, adding 1,440 new jobs between 2016 and 2018.

Leisure and Hospitality: Accommodation and food services employment in Ventura County is related to the numerous amenities found across the county, its beaches, wineries, numerous museums and golf courses,

fine dining options and two harbors, Ventura and Channel Islands. Leisure and hospitality has posted annual consecutive increases in employment since 2010. The lion's share of jobs in this sector are in food services (about ninety percent). From 2016 to 2018, the sector is projected to add 1,590 new jobs, growing by 2.1 percent annually on average.

Retail Trade: Retail employment in Ventura County experienced declines from 2006 through 2009, but has added 4,600 jobs from 2009 through 2015, an average annual rate of 2.1 percent. Retail trade in Ventura County includes shopping at the Camarillo Premium Outlets, Harbor Village and more. After a shallow dip in employment, of 325 jobs from 2015 to 2016, the sector is expected to once again add jobs in 2017 and 2018. Growth will be relatively moderate, adding 1,070 jobs from 2016 through 2018, a rate of 1.4 percent annually.

Construction: Employment in the construction industry declined from 2006 through 2010, losing more than 9,200 jobs. The losses finally stopped in 2011, and has been experiencing consecutive annual job growth since 2012 at an annual average growth rate of 5.4 percent through 2016. With the housing market constrained in the county, new housing, including a number of multiunit complexes, will continue to provide for job growth in this sector. Construction is expected to add 1,090 jobs between 2016 and 2018, at an average annual growth rate of 3.1 percent and 4.2 percent in 2017 and 2018 respectively. ❖

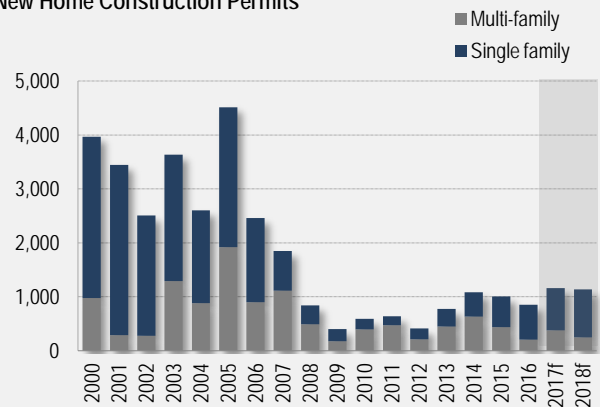
Housing

In 2016, the number of permits issued for new home construction in Ventura County fell over the year by 15.1 percent to 854 units permitted, the largest percentage drop in the five-county region. Highly variable from year-to-year even prior to the housing crash, new home building in Ventura County peaked at 4,516 units in 2005 before tumbling to just 404 units in 2009. Due to its small geographical size and relatively low levels of residential development, the share of single- to multi-family building is also quite variable with the share of single-family homes reaching as high as 92 percent (2001) and or falling as low as 26 percent (2011).

In 2016, the median home price in Ventura County increased over the year by 4.3 percent to an estimated \$519,800. The median price fell to a low of \$354,180 in this cycle after reaching a peak of \$651,229 in 2004. The median home price Ventura County has increased by nearly 47 percent since bottoming out in 2011, but ended last year 20 percent below the median price recorded 12 years ago. ❖

Exhibit 8-6

New Home Construction Permits

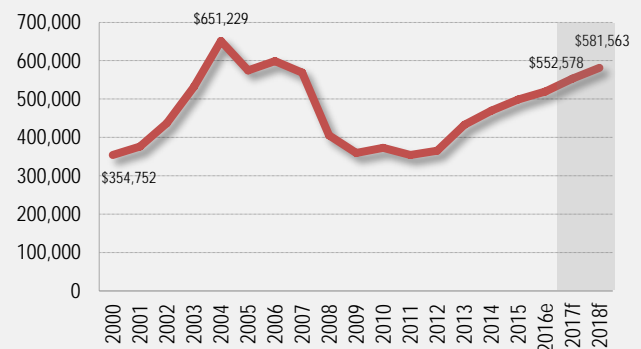


Source: California Home Building Foundation; CIRB; forecast by LAEDC

Exhibit 8-7

Ventura County Median Home Prices

(New and existing, attached and detached homes)



Source: DataQuick Information Systems; estimates and forecast by LAEDC

Exhibit 8-8

Ventura County Indicators

	Historical						Forecast	
	2011	2012	2013	2014	2015	2016	2017f	2018f
GDP								
Real GDP (millions \$2009 chained)	40,133	40,694	41,073	41,906	42,507	43,113	43,830	44,434
Annual percent change in real GDP	2.1	1.4	0.9	2.0	1.4	1.4	1.7	1.4
Total personal income (millions)	39,627	41,294	41,728	43,608	46,060	47,217	49,384	51,188
Per capita personal income (nominal)	47,679	49,430	49,619	51,539	54,155	55,210	57,478	59,313
Per capita personal income (\$2009)	45,853	46,755	46,404	47,570	49,779	50,287	51,912	53,222
Population								
Population (thousands)	831	835	841	846	851	856	861	866
Population growth rate	0.7	0.5	0.7	0.6	0.5	0.6	0.6	0.6
Labor market								
Unemployment rate (percent)	10.2	9.1	7.9	6.6	5.7	5.2	5.0	4.9
Average annual nonfarm employment	277,400	282,200	288,700	292,900	294,800	298,300	302,700	307,900
Annual percent change in employment	0.7	1.7	2.3	1.5	0.6	1.2	1.5	1.47
Jobs (change over previous year)								
Total Nonfarm	1,900	4,800	6,500	4,200	1,900	3,500	4,400	5,200
Natural Resources	100	0	-100	100	-300	-200	0	0
Construction	0	500	800	1,100	500	500	500	600
Manufacturing	-900	-700	0	700	-200	-500	-300	0
Wholesale Trade	200	100	300	-100	-200	200	100	200
Retail Trade	800	1,000	1,200	700	500	-300	400	600
Transport / Warehousing / Utils	200	200	200	100	0	0	100	0
Information	-200	300	0	100	-200	-300	0	0
Finance & Insurance	200	-800	-900	-300	-700	-300	100	200
Real Estate / Rental & Leasing	-100	0	200	100	-300	-100	0	0
Prof / Scientific / Tech Services	-200	600	400	-200	-100	300	200	300
Management of Companies	-500	-200	-100	0	100	100	0	0
Administrative & Support	300	1,200	1,000	-900	-500	300	700	800
Educational Services	0	0	0	0	0	0	0	0
Health Care / Social Assistance	800	1,900	2,200	1,200	1,100	1,100	1,500	1,300
Leisure & Hospitality	1,100	1,400	1,000	1,000	1,100	1,500	700	800
Other Services	0	200	300	100	-200	0	100	100
Government	200	-800	0	400	1,300	1,000	200	200
Housing								
Residential permits	640	410	777	1,082	1,006	854	1,161	1,138
Median home price	354,180	365,697	432,783	469,537	498,338	519,800	552,578	581,563

2017-2018

ECONOMIC FORECAST — & — INDUSTRY OUTLOOK



LOS ANGELES COUNTY
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