

SAN JOAQUIN VALLEY BUSSINESS FORECASS FORECASS REPORT 2017 Volume VI Issue 2

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2012 Contributors

SAN JOAQUIN VALLEY **BUSINESS FORECAST REPORT 2017**

csustan.edu/sjvbfr

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Volume VI, Issue 2

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From a structural viewpoint, it is a well-known fact that the San Joaquin Valley's unemployment rate and the ratio of unskilled-to-skilled persons in the labor force are much higher than that of the nation. Higher unemployment rates from the recent and scheduled interest rate hikes of the Federal Reserve, together with balance sheet reduction, will have a disproportionate impact on the Valley economy because the Valley has a greater number of low-income families and disadvantaged business enterprises. While the rate impact may be at the desired level to cool the national economy, the disproportionate impact will create lower total employment growth rates locally than the previous years. The President's tax cut plan is not expected to mitigate to a significant degree the impact of interest rate hikes in the Valley. Projections point to an average yearly growth of 1.49 percent in Valley total employment over the next two years. The resilience of the Valley and the recent rains to some degree alleviated the negative impact of the drought and allowed the region to maintain an employment growth rate still higher than 1.25 percent - the typical prevailing

long-run growth rate. Some improvement is expected from the much-anticipated easing of regulations on the farming sector by the new administration. However, 2016 was another year in which there were no significant attempts by the state to add water storage capacity in the Valley. With current capture levels, the Valley continues to remain unprepared for drought years.

the average home price rose by **6.56 %**

Madera and Stanislaus counties grew the fastest, at 3.53 and 2.22 percent, respectively. Stanislaus County employment normally grows at about the same rate as the Valley average, and 2016 was the first year during which Stanislaus County registered the second-fastest growth in total employment. These two counties were the only ones in the region that grew a faster in 2016 than 2015. Kern and Kings counties posted very small employment growth at 0.01 and 0.05 percent, respectively, in 2016. Total employment in Fresno County (1.89 percent) and San Joaquin County (1.82 percent) grew slightly above the Valley average. Total employment in Tulare and Merced counties grew at about the same rate as the Valley average at 1.62 and 1.51 percent, respectively.

Information employment posted a surprising decline in the second half of 2016, ending the Valley's streak of growth in all categories the past three years. Retail trade, wholesale trade and government employment grew at a faster pace in 2016 than in 2015. Employment growth in the remaining categories grew at a slower pace in 2016. After a significant revision by the Bureau of Labor Statistics, manufacturing employment posted the smallest growth at 0.01 percent, due to layoffs in the shale oil industry that was a reaction to the decrease in oil prices. Categories more sensitive to changes in interest rates, such as retail trade, likely will be affected

to a much greater degree than other categories, such as financial activities employment.

The average home price rose by 6.56 percent, roughly the same rate as the 2015 rise of 6.68 percent. Projections point to slower growth in housing prices over the next two years as the Federal Reserve continues to implement rate hikes. Valley-wide housing permits posted slower growth, falling from 16.23 percent in 2015 to 12.39 percent in 2016. The growth in housing permits is projected to slow by about an additional 4 percent from the second half of 2017 to the first half of 2018 and another 2 percent after that.

The U.S. dollar, after hitting an all-time high in value against other currencies during the second half of 2016, began depreciating recently. Given the current administration's emphasis on a weak dollar to boost exports, the dollar is expected to depreciate further. Valley exports of agricultural goods are expected to improve as the dollar depreciates, but consumers will see a corresponding decrease in purchasing power.



At a yearly rate of 3.0 percent in February of 2017, consumer price index inflation increased at the fastest pace since 2011, due to the increase in oil prices from \$26 a barrel. Wages rose at a yearly rate of 5.89 percent in the fourth quarter of 2016, the fastest recorded increase since 2001. Rising inflation and wages was a factor behind the Federal Reserve's decision to hike rates. The price of oil reached above \$50 dollars per barrel because of output cuts on the part of OPEC, but because of increased exports from the United States of shale oil and

other factors that worked against production cuts, oil prices fell below \$50 dollars a barrel in the first quarter of 2017. Oil production cuts are not expected to be permanent. Taking away cost-push factors on the rate of inflation, increases in price levels should return to the long-run benchmark of 2.46 percent in 2018.

Following the increase in interest rates, foreclosure starts climbed back from all-time lows and are expected to climb further following the rate hikes. Valley bank deposits slowed their pace in 2016, while net loans and leases increased at an even slower rate. Rate hikes will increase margins and lead to the greater profitability of Valley community banks.

Provided that the geopolitical tensions ease over the next two years and within the confines of structural limits, the Valley economy will perform at a slower pace than previous years. Recent rains will have a positive impact, but not to the extent of offsetting the effects coming from the national factors, mainly interest rate hikes observed in March of 2017 and December of 2016 and a series of others to follow over the next two years.

lntroduction

This update report utilizes series data from January 2001 to April 2017, while two-year medium-term forecasts span July 2017 to June 2019. Our aim is to forecast a range rather than a point to provide a more realistic assessment of likely future values. The actual numbers are expected to fall within the upper and lower forecast bands. The yearly average figure for 2016 is from the full 12 months of the year, including preliminary values for December.

The remainder of this report is structured as follows: Section B reports labor market conditions for the San Joaquin Valley; Section C reports the real estate market based on eight metropolitan statistical areas of the Valley; Section D discusses prices and inflation; and Section E reports indicators from local banking and capital markets.

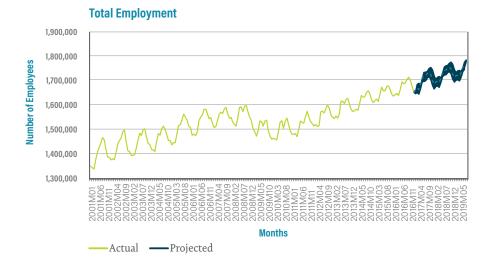


Employment Indicators

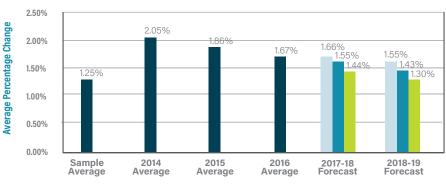
It is a well-known fact that structural unemployment rates, together with unskilled to skilled labor force ratio, are much higher in the Valley than in the state and the nation. This being the case, any contractionary policy impact on aggregate demand will be felt inevitably at a greater degree in the Valley than in the state and the nation. Constituents at the margin, such as low-income families and disadvantaged business enterprises will feel the most heat from the rate hikes of March 2017 and December 2016 as well as the others likely to take place over the next two years. The President's tax cut plan is not expected to mitigate to a significant degree the impact of interest rate hikes in the Valley.

Total employment in all counties grew, but Kern and Kings counties posted basically no growth, posting a yearly average of 0.01 and 0.004 percent, respectively. Stanislaus County on the other hand posted the secondfastest growth in 2016 at 2.22 percent. This is unlike the previous years, in which growth in Stanislaus country was almost identical to the Valley's average yearly growth. Madera County posted the fastest increase in growth at 3.58 percent in 2016. Further, Madera and Stanislaus were the only two that grew faster in 2016 than 2015. Fresno and San Joaquin, at 1.89 and 1.61 percent, respectively, grew slightly faster than the Valley average, while Merced and Tulare grew about the same rate as the Valley at 1.62 and 1.51 percent, respectively.

At this slower pace of growth, total employment in the San Joaquin Valley is still projected to reach 1.8 million in the second half of 2019. As the Valley's total employment growth rate slows, the long-term trend line will become flatter than it was in the prerecession years.



Information employment posted a huge decline in the second half of 2016, reverting from positive to an average negative yearly percentage change of -5.64 percent. Provided that the Bureau of Labor Statistics (BLS) does not revise these numbers upward, information employment was the first category of employment to register declines previously observed during the Great Recession. Manufacturing employment numbers were revised by the BLS to report stagnant activity in 2016, despite a rising Purchasing Managers Index in the last quarter of 2016 and first quarter of 2017. Layoffs that occurred in the shale oil industry during 2016 in counties such Kern, mainly due to bottoming oil prices, brought down employment numbers. Other categories of employment grew in 2016 at varying degrees. The most significant growth occurred in retail trade employment, at a rate faster than 2015, followed by trade, transportation and utilities employment. Government employment and wholesale trade employment were other categories that grew faster in 2016 than 2015. The remaining categories of employment performed worse in 2016. Given this picture in employment, total employment is projected grow at an average yearly rate of 1.49 percent over the next two years.



Total Employment: Historical vs. Projected Average Yearly Growth

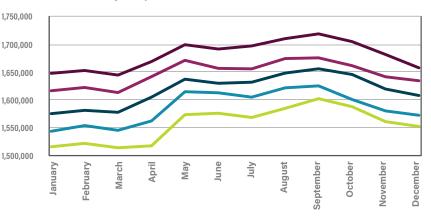
Actual Optimistic Most Likely Pessimistic

A comparison of the Valley's total ► employment between 2012 and 2016 shows that employment clearly grew over each previous year despite the impact of drought. The additions to employment displayed by the vertical distance between the lines were greatest from January to May during the years 2013 and 2015, whereas after the month of May, the vertical distance was greatest only in year 2014. Particularly, during 2016, the vertical distance began to shrink faster from the previous year after the month of September, and it was smallest from January to May.

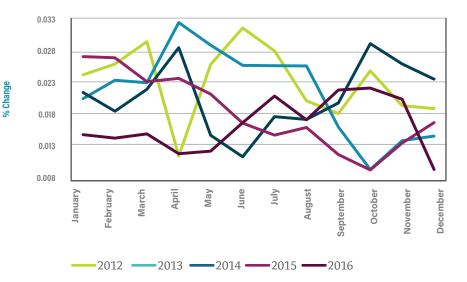
The comparison in percentage growth terms provides a clearer picture. When we compare the first quarter of each year, 2016 had the smallest total employment growth while the fastest first-quarter growth occurred in 2015. The same is true for the fourth quarter of each year. Among all years, 2016 had a sharp drop in total employment growth. The fastest growth in the first quarter occurred in 2015, whereas the fourth quarter's fastest growth was recorded in 2014. ▶

The Conference Board's Consumer Confidence Index caught up with the steep trend line that began in 2009 when index numbers came in well above 50 points and in consecutive increases through the fourth quarter of 2016. However, rising interest rates and inflation most likely will dampen the improvement in consumer confidence to some degree in the second half of 2017 and onward. ► Total Employment: Stacked Yearly Comparison in Levels

Number of Employees



Total Employment: Stacked Yearly Comparison in Growth





Consumer Confidence Index

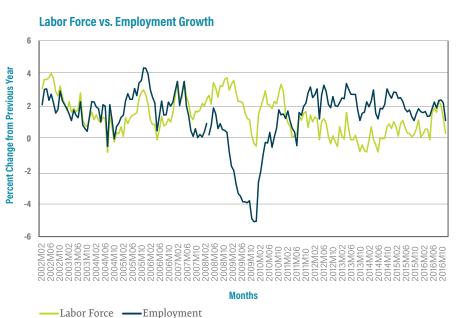
Employment Indicators

Employment growth in the Valley was consistently ahead of labor force growth from 2012 through the first half of 2016, but the lines merged in the second half of 2016, showing signs of a tightening labor market within own structural limits of the Valley. Employment growth and labor force growth clearly began to fall at about the same time interval. Given the impact of the recent rate hikes and others scheduled to take place in the coming months, it would not be surprising to see indicators further slow below the ▶ typical yearly employment growth rate of 1.25 percent.

"TOTAL EMPLOYMENT GROWTH IN THE VALLEY CONTINUED TO SLIGHTLY TRAIL THE STATE'S OVERALL RATE, SHOWING SIGNS OF CONTINUED STRESS FROM DROUGHT YEARS."

Total employment growth in the Valley continued to slightly trail the state's overall rate, showing signs of continued stress from drought years. Given the Federal Reserve's intervention to prevent the national economy from overheating, the disproportionate impact on the local economy would mean that the slower-than-the-state growth rates are likely to continue into the foreseeable future. ►

The divergent patterns in the U.S. and European economies continued into the first quarter of 2017, but for different reasons. The new administration favors protectionist measures in the U.S. that will put downward pressure on net foreign income along with the impact of the rise in interest rates. Consistent with a cooling economy, real gross dometic product (RGDP) growth rate projections point to an average annual real economic growth of 1.99 percent from the second half of 2017 to the first half of 2019, below the fullemployment level of RGDP growth of 2.24 percent. ►

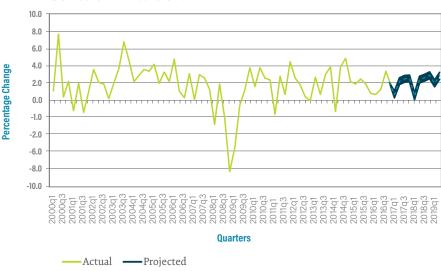




Annual Percent Change







U.S. Real GDP Annual Growth

Valley — State

Due to uncertainty surrounding the replacement of Affordable Care Act, some hospitals and health care centers laid-off workers, while others have put off hiring plans. The resulting confusion in hiring practices were reflected in some hospitals in metropolican statistical areas such as Modesto and Fresno, where support staffs were slashed, while others kept hiring nurses. The initial failing of the health care bill made the picture more uncertain for health care workers. The trend line, therefore, became slightly flatter in 2016 and likely will continue a flattening pattern in the coming months.

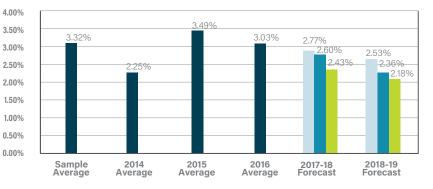
* VALLEY EDUCATION
AND HEALTH SERVICES
Employment is likely
To reach 215,000 by the
Second Half of 2017. "

Average Percentage Growth

Valley education and health services ► employment is likely to reach 215,000 by the second half of 2017. Education and health services employment, at 3.03, percent grew at a slower pace in 2016 after 2015 showed a 3.49 percent growth. The yearly growth in 2016 also was less than the series' long-term benchmark growth of 3.32 percent. Projections point to slower growth at 2.60 percent from the second half of 2017 to the first half of 2018, and at 2.36 percent from the second half of 2018 to the first half of 2019. **Education and Health Services Employment**



Education and Health Services Employment: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

Employment Indicators

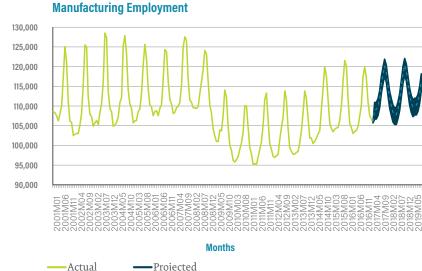
After the significant revision of manufacturing employment numbers by the BLS, Valley employment growth in this category came to a stall at 0.01 percent in 2016, in sharp contrast to the growth observed in 2015 and 2014. The numbers were also at odds with the increasing purchasing managers' index reported by the Institute of Supply Management. However, there were some signs of shrinkage. MSAs such as Modesto and Fresno laid off significant numbers of ▶ workers in 2016. Roughly six months after oil prices began to fall sharply, there were job losses in oil producing areas, including Bakersfield MSA. In these oil-heavy areas. downturns have been visible in industries beyond those directly involved in oil production.

Given these revised numbers, there was basically no growth in Valley manufacturing employment in 2016. Growth increments continued to become smaller and smaller in 2014 and 2015 by about 1.5 percent a year. Given the recent rains and recovery from drought conditions and expected easing of some regulations on the part of the new ▶ administration, some marginal improvement is projected in this category. Over the twoyear forecast interval, beginning from the second half of 2017 to the first half of 2019, manufacturing employment is projected to grow at an average yearly rate of 0.93 percent.

The Institute for Supply Management's Purchasing Managers Index (PMI) began registering a sharp increase in December 2016. The index, a leading indicator of future activity, registered 57.5 points in February, 2017 well above the 50-point line that is the threshold for economic expansion. ► Nationwide, 2016 manufacturing employment grew at an average yearly rate of 0.11 percent, which was a significant improvement over the previous year. The statewide manufacturing employment picture was not very different. At 0.33 percent, statewide manufacturing employment growth was only marginally better than that of the Valley and the nation.

Number of Employees

Average Percentage Change



Manufacturing Employment Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

65 60 55 50 index Value 45 40 35 30 25 20 Jul-13 lul-02 -03 Jul-03 lan-04 Jul-04 Jan-05 Jul-05 Jan-06 Jul-06 Jan-07 70-lul Jan-08 80 60 Jan-10 Jul-11 Jan-12 Jul-12 Jan-13 Jan-14 Jan-15 Jul-15 Jan-11 an--h -Inf -In(÷ Months -Institute of Supply Management

Purchasing Managers Index

"LEISURE AND HOSPITALITY SERVICES EMPLOYMENT POSTED A SLOWER GROWTH RATE (3.53 PERCENT) IN 2016 THAN 2015, BUT REMAINS ONE OF THE VALLEY'S STRONGER SECTORS. "

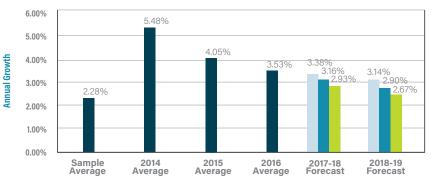
Leisure and hospitality services employment posting a lower growth rate (3.53 percent) in 2016 than 2015, but remains one of > the Valley's stronger sectors. This category of employment tied with government employment as the third-fastest growing employment category in the Valley. The post-recession growth rate likely will become flatter in the coming months, consistent with a cooling economy. Statewide growth in leisure and hospitality services employment was slightly greater than that of the Valley at 3.71 percent in 2016. Nationwide, employment growth in this category was less than that of the Valley at 3.04 percent.

Despite the slowing of growth, the 2016 growth in leisure and hospitality services employment was greater than the series long-term benchmark rate of 2.28 percent. Growth in this category is projected to slow further in the coming months, but it will remain above the long-term benchmark rate. Projections point to an average yearly growth of 3.16 percent from the second half of 2017 to the first half of 2018, and 2.90 percent from the second half of 2018 to the first half of 2019.

140,000 130,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 100,000 90,000 80,000 10

Leisure and Hospitality Services Employment

Leisure and Hospitality Services Employment: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

Employment Indicators

Trade, transportation and utilities employment remained the second-fastest growing category in 2016. Employment levels are projected to reach 290,000 by the first half of 2019. Growth in 2016 was slower than 2015 but still was more than twice the long-term benchmark growth of 1.75 percent. ►

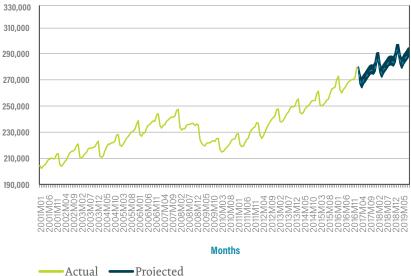
290,000 PROJECTED EMPLOYMENT LEVELS BY

THE FIRST HALF OF 2019.

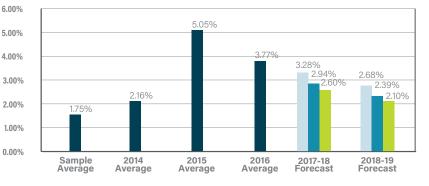
As the trend in this category begins to flatten, growth in trade, transportation and utilities employment is projected to revert back to the long-term mean growth over the next two years. Despite the positive effect of recent rains, the Federal Reserve's attempts to prevent the national economy from overheating will mean average annual growth in trade, transportation and utilities employment in 2018 and 2019 likely will oscillate around a slower growth rate of 2.66 percent. ►

Retail trade employment was a category in which growth in 2016 was higher than in 2015. Despite the expected slowdown in growth, employment in this category is projected to reach 180,000 by the second half of 2019. Retail trade is one of those sectors known to be very sensitive to changes in interest rates. As the Federal Reserve continues to implement a series of rate hikes, and along with balance sheet reduction, growth in this sector inevitably will become slower. It would not be surprising for bankruptcies to begin occurring in this industry, particularly in the Valley. ▶

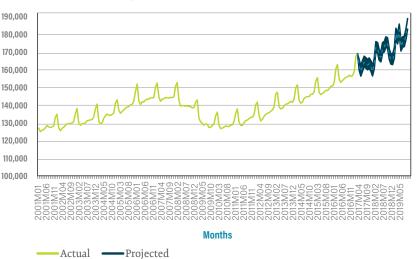
Trade, Transportation and Utilities Employment



Trade, Transportation and Utilities Employment: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



Retail Trade Employment

270,00 ch of 1.75 percent. ► 270,00 250,00 230,00

Average Growth

Number of Employees

The benchmark growth rate in retail trade employment stands at 1.35 percent, making 2016's rate of 4.32 percent more than three times the benchmark. Despite the elastic response of retail trade ► employment to rate hikes, growth in this category of employment is expected to continue to surpass the benchmark rate. Projections point to an average annual growth of 4.10 percent from the second half of 2017 to the first half of 2018 and 3.58 percent from the second half of 2018 to the first half of 2019.

Annual Growth

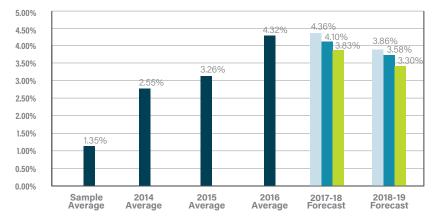
Annual Growth

As a farm-related category, wholesale trade employment began to recover in the second half of 2016. Seasonal variations that disappeared due to drought are beginning to be noticeable in the series' dynamics. Employment levels in this category are projected to exceed 50,000 by the first half of 2019. >

"IN 2014 AND 2015, AT 0.72 AND 0.51 PERCENT RESPECTIVELY, THERE WAS BASICALLY NO GROWTH IN WHOLESALE TRADE EMPLOYMENT DUE TO DROUGHT. "

In 2014 and 2015, at 0.72 and 0.51 percent respectively, there was basically no growth in wholesale trade employment due to drought. This stagnant activity changed in 2016, when the series posted an average yearly growth of 2.64 percent. Rate hikes, however, are expected to dampen further growth in wholesale trade employment in the coming months, despite the effect of rainy years. Projections point to an ▶ average yearly growth of 2.12 percent from the second half of 2017 to the first half of 2019.

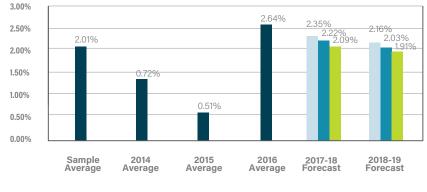
Retail Trade Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



Wholesale Trade Employment: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

With a surprise twist, Valley information employment worsened by -5.64 percent in 2016. A decline of this magnitude has not been observed since the recessionary years. This categorical worsening also was observed statewide, at -3.08 percent. Nationwide information employment did not change from the previous year, posting an average yearly growth of 0.82 percent. ►

The decline in information employment was more than the twice the decline of the long-term benchmark rate of -2.09 percent. In Bakersfield MSA, there were layoffs in 2016 following noticeable hiring in 2015 that made the 2016 growth rates appear very low. Further, layoffs by larger tech firms had a spill-over effect in the Valley due to the number of commuters who lost jobs. In addition, uncertainty surrounding the Affordable Care Act negatively affected labor demand for information technology personnel in the Valley. Projections point to some stabilization in this sector by the first half of 2018. Information employment is projected to decline by -3.03 percent from the second half of 2017 to the first half of 2018 and at -0.82 percent from the second half of 2018 to the first half of 2019. ►

"TREND IN CONSTRUCTION EMPLOYMENT IS EXPECTED TO BECOME FLATTER OVER THE NEXT TWO YEARS."

Growth in construction employment halved from 4.18 percent in 2015 to 2.16 percent in 2016. In the post-recession years, employment in this category fell from being the fastestgrowing to the seventh fastest-growing category in 2016. Trend in construction employment is expected to become flatter over the next two years as the effect of rate hikes is increasingly felt. ►



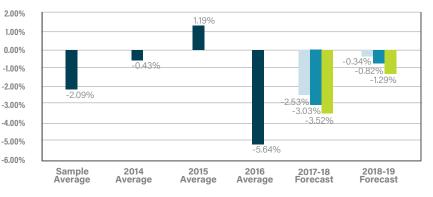
Number of Employees

Annual Growth

Number of Employees



Information Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



Construction Employment

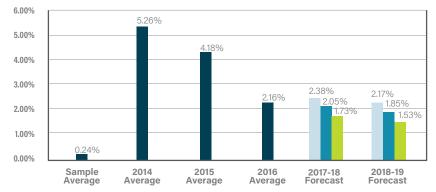
Considering that the long-term benchmark average yearly rate of growth stands at 0.24 percent, 2016's growth of 2.16 percent was relatively significant. Further declines in growth are expected, however, as a result of the negative effect of rising rates on the housing sector. While Bakersfield and Hanford reported declines in construction employment at -6.49 and -10.01 percent, respectively, Merced and Madera reported fastest growth in 2016 at 15.79 percent and 11.76 percent, respectively. Projections point to an average annual growth of 1.95 percent from the second half of 2017 to the first half of 2019. ►

"AT A 3.53 PERCENT AVERAGE YEARLY RATE, GOVERNMENT EMPLOYMENT TIED WITH LEISURE AND HOSPITALITY SERVICES EMPLOYMENT AS THE THIRD-FASTEST GROWING CATEGORY. "

At a 3.53 percent average yearly rate, government employment tied with leisure and hospitality services employment as the third-fastest growing category. Government employment was another category that performed better in 2016 than 2015. Employment in this category makes up one-fifth of the Valley's entire employment and is the main aggregate demand driver for the region. ►

Government employment is projected to reach 305,000 by the first quarter of 2019. Government employment is a lagged indicator, which explains the improvement in this category when other categories are displaying slower growth rate. Growth in government employment is expected to more in line with other categories' growth in the coming months. Projections point to an average yearly growth of 2.78 percent from the second half of 2017 to the first half of 2019. ►



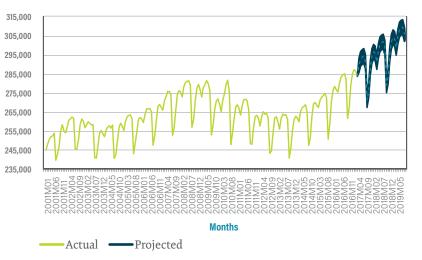




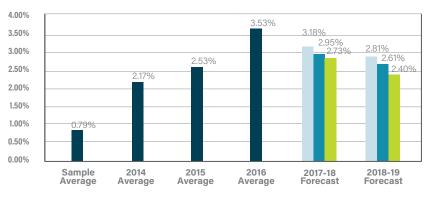
Nnual Growth

umber of Employees

Annual Growth



Government Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic

Employment Indicators

At an average yearly rate of 2.15 percent, financial activities employment grew at about the same pace in 2016 as it did in 2015, during which the rate of growth was 2.17 percent. Higher interest rates increase the profit margins of banks. Employment in this category likely will reach 45,000 by the second half of 2019. Madera and Merced were the two fastest growing MSAs in financial activities employment during 2016. ►

Compared to the long-term benchmark rate of -0.21 percent, financial activities employment growth was quite significant in 2015 and 2016. Employment in this category is not projected to exceed past year's growth over the next two years. Projections point to an average annual growth of 2.05 percent from the second half of 2017 to the first half of 2018, and 1.63 percent from the second half of 2019. ►

"GIVEN THE RECENT RATE HIKES AND A FEW MORE SCHEDULED IN THE COMING MONTHS, TOTAL EMPLOYMENT GROWTH LIKELY WILL SLOW FURTHER IN THE COMING TWO-YEAR PERIOD."

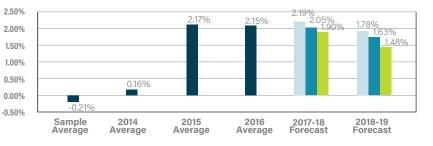
Given the recent rate hikes and a few more scheduled in the coming months, total employment growth likely will slow further in the coming two-year period. Madera and Stanislaus were the only two counties that grew faster year-to-year in 2016. The slowest employment growth was observed in Kern and Kings counties. Retail trade, wholesale trade and government employment grew faster in 2016 than in 2015. The remaining categories grew less in 2016 with the exception of information employment, which exhibited a significant worsening at an average yearly rate of -5.64 percent in 2016. 51, 49, 47, 45, 45, 43, 41, 39, 37,

Annual Growth





Financial Activities Employment: Historical vs. Projected Average Yearly Growth









The Bureau of Labor Statistics and the Census Bureau report eight Metropolitan Statistical Areas (MSAs) for the San Joaquin Valley. These MSAs are Fresno, Bakersfield-Delano, Hanford-Corcoran, Madera-Chowchilla, Merced, Modesto, Stockton and Visalia-Porterville. The aggregated data from the eight MSAs make up the single-family building permits in the Valley.

The growth rate of single-family building ▶ permits continued to recover in 2016. Growth, at 12.85 percent in 2016, came in higher than the 9.64 percent posted in 2015. However, rising mortgage rates resulting from rate hikes is expected to dampen growth in housing permits. Even at this slower pace, Valley housing permits are expected to exceed 800 permits per month by the end of first half of 2019.

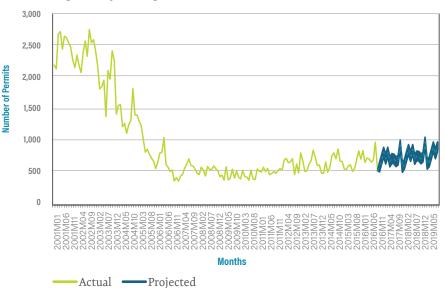
"THE GROWTH RATE OF SINGLE-FAMILY Building Permits Continued to Recover in 2016."

With 2398 single-family building permits issued, Fresno came in first, followed by Bakersfield, which issued 1875 permits in 2016. Stockton came in third with 1368 permits issued in 2016. Hanford, basically, did not ▶ issue any permits in 2016, while only 57 permits were issued in Modesto. Projections point to average annual growth of 8.62 percent in single-family building permits over the next two years.

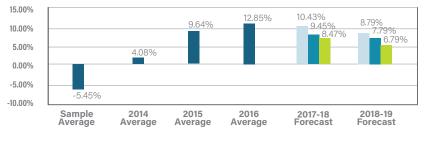
Annual Growth

In line with our earlier projections, foreclosure starts registered a spike in the fourth quarter of 2016 and first quarter of 2017. Higher long-term rates resulting from the Federal Reserve's rate hikes undoubtedly contributed to the increase in foreclosures starts. As a few more hikes are scheduled in the coming months, foreclosure starts likely will increase further over the next two years. ►

Single Family Building Permits



Single Family-Building Permits: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



Mortgage Bankers Association of America

16 | Stanislaus State

With the much-anticipated rate hikes in the fourth quarter of 2016, 30-year rates began climbing above 4.0 percent. Following the second hike in March of 2017, the increase in long-term rates likely will continue. Rising inflation is another factor contributing to the increasing pattern of the 30-year fixed rates. It would be benefical for those Valley consumers with adjustable mortgage rates to switch to fixed rates while interest rates are still relatively low. ►

In line with our predictions, the yearly percentage change in home prices in the Valley continued to stay in single digits. The average yearly rate of increase in 2016 was 6.67 percent and in 2017 growth was very slightly lower at 6.56 percent. The growth in housing prices are expected to slow further because the coming increase in mortgage rates will curtail the demand for housing. ►

The highest yearly increases in home prices were observed in Modesto at 8.49 percent, followed by Stockton at 8.30 percent. Home prices increased the least in Bakersfield at 3.18 percent and in Fresno at 5.13 percent. In Merced, home prices increased by 7.27 percent in 2016. Valley home values are projected to increase at an average annual rate of 5.40 percent from the second half of 2017 to the first half of 2019. ►

The Federal Reserve's policy of rate hikes is expected to continue in the coming months to prevent the national economy from overheating and to harness inflation. High interest rates will help keep the demand for housing market lower than in previous years. Home values very likely will appreciate at smaller rates than previous years, once again preventing the formation of destructive bubbles. **30 - Year Fixed Rate**

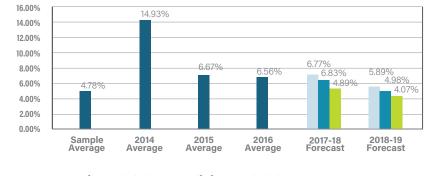
^percentage Change Over the Previous Year

Annual Yearly Growth



Vearly Percentage Change in Housing Prices

Yearly Growth in Housing Prices: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic

Inflation and Prices

The rate of inflation creeped up to 3.0 percent annually in the first quarter of 2017.

The increases in the overall price level driven by the cost-push factors were one of the main reasons for the Federal Reserve to resort to a series of rate hikes. Cost-push pressures built as oil prices increased to \$50 dollars a barrel following the output cuts of the oil exporting countries. However, shale oil production and exports in North America has begun to put downward pressure on the price of oil once again, bringing it below \$50 a barrel.

Since the second half of 2014, prices rose faster on the West Coast than the national average. The two series however merged in the first quarter of 2017, as both series exhibited convergence of aggregate demand expansion. The last time such high inflation rates were observed were in the fourth quarter of 2011. Thus, inflation remains as a worry for the Federal Reserve. ►



"HIGHER WAGES PUT UPWARD PRESSURE ON THE RATE OF INFLATION AS PRODUCTION COSTS BEGAN TO INCREASE."

Another cost-push factor observed in 2016 was rising wages. Higher wages put upward pressure on the rate of inflation as production costs began to increase. A decrease in cost-push factors, such as the falling price of oil, would have an impact on the decisions involving how many times the Federal Reserve chooses to hike rates to stabilize the national economy.

Inflation Rate: Nationwide vs. West



U.S. West Inflation Rate

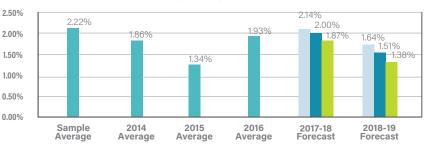
Yearly Inflation Rate

Percentage Change

Yearly



U.S. West Inflation Rate: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

Output cuts by the oil-exporting countries are not expected to last in an environment of shale oil production by non-member countries. However, a continuous depreciation of the home currency may place demand pull pressures on the rate of inflation. Projections point to an average yearly increase of 2.0 percent during to 2017-18 interval and 1.51 percent in the 2018-19 interval.

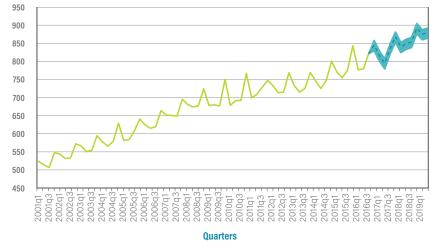
The third quarter of 2016 saw the biggest increase in average weekly wages recorded for the Valley by the BLS since 2001. The yearly increase in average weekly wages was 5.84 percent, more than twice the long-run benchmark rate of 2.88 percent. The yearly rate of inflation was 0.8 percent, adding more than 5 percent to the purchasing power of the Valley consumer.

The yearly increase in average weekly wages in 2016 (3.29 percent) was less than the 4 percent registered in 2015, another year during which average weekly wages rose faster than the rate of inflation. Projections point to an increase in average weekly wages at an annual rate of 2.93 percent over the next two years.

Average weekly wages rose 3.29 percent in 2016. The yearly increase in the Consumer Price Index was 1.93 percent during the same interval, resulting in an increase in worker's real wages by 1.36 percent in 2016. Since the second quarter of 2014, wage growth has mostly remained above the rate of inflation, with the exception of the first quarter of 2016, thus putting upward pressure on the price level coming from the cost-push side. The divergent pattern is likely to give way to convergence in the two series over the coming months.

Quarterly Average Weekly Wages

Average Weekly Wage



-Actual ---- Projected

Weekly Wage Growth: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



Yearly Wage Growth vs. Inflation

IIII Banking and Capital Markets

The effect of tightening labor market and rising wages could be seen in Valley bank deposits. Valley bank deposits grew 9.08 percent in 2016, slightly below the 2015 rate of 10.21 percent. Taking into account the long-term benchmark rate of 7.25 percent, the increase in both years were quite significant despite the effect of drought. ►

Fotal Deposits

Average Yearly Growth

Given the increase in interest rates, growth in bank deposits likely will increase for some time before beginning to slow again due to a cooling economy. Bank deposits in the Valley are projected to increase an average annual rate of 11.31 percent from the second half of 2017 to the first half of 2018 and at a lower rate of 8.65 percent from the second half of 2018 to the first half of 2019. ►

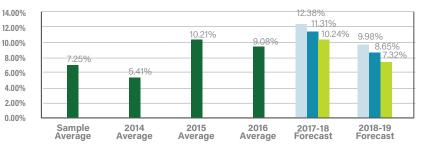
"GIVEN THE FEDERAL RESERVE'S RATE Hikes, valley bank assets in Nonaccrual likely will exhibit A rising pattern."

Given the Federal Reserve's rate hikes, Valley bank assets in nonaccrual likely will exhibit a rising pattern. Since the second quarter of 2007, bank assets in nonaccrual reached the lowest level in the second quarter of 2016, ► before registering a small spike in the third quarter of 2016, when the long-term interest rates began to move upward again following the anticipation of a rate hike. The rising level of bank assets in non-accrual would indicate a need on the part of consumers to rethink their balance sheets. Those consumers with high credit card balances could take advantage of zero introductory rates offered by banks that now extend more than 12 months.

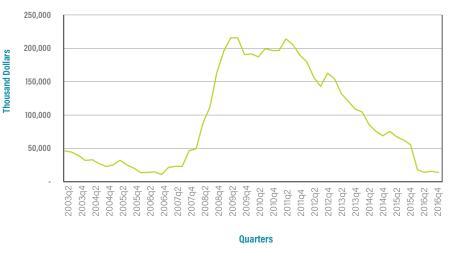
Total Bank Deposits (in \$ Thousands)



Total Bank Deposits: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



Federal Deposit Insurance Corporation

Assets in Nonaccrual

7.25 %

THE LONG-TERM BENCHMARK RATE OF GROWTH In Valley Total Deposits

Assets in default 30 to 89 days also registered a small increase at about the same time ► non-accruals increased and assets in default 90-plus days halted the downward sloping trend. Although assets in default 30 to 89 days and 90-plus days are both below the value of 10,000 on the vertical axis scale, both will display an increasing trend in the coming months due to the effect of higher cost of borrowing.

Net loans and leases displayed a consistent trend with total bank deposits in that the yearly rate of increase in 2016 was a bit lower than in 2015. Valley net loans and leases increased 15.22 percent in 2015, whereas the rate of increase in 2016 was 11.93 percent. The rate of growth in both years significantly surpassed the long-term benchmark rate of 7.09 percent.

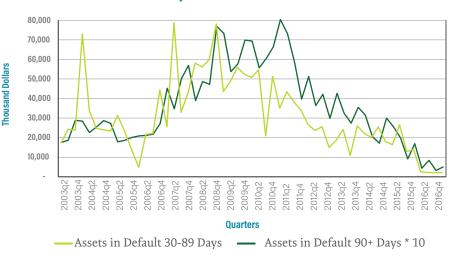
Vet Loans & Leases

fearly Growth

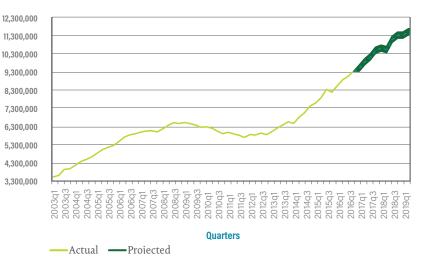
Net loans and leases likely will grow at a slower pace in the coming months due to increasing borrowing costs. The dampening of aggregate demand due to rate hikes also will play an important role in the future trajectory of net loans and leases. Net loans and leases are projected to increase at an average yearly rate of 10.51 percent from the second half of 2017 to the first half of 2018 and slow further to 8.31 percent from the second half of 2018 to the first half of 2019.

Assuming the Federal Reserve stays committed to a policy of rate hikes over the next two years, slower growth in net loans will in turn create slower growth in aggregate demand. The long-term benchmark rate of growth in Valley total deposits is 7.25 percent, whereas the same benchmark figure for net loans and leases is 7.09 percent, pointing toward a sustainable pattern in the long-run.

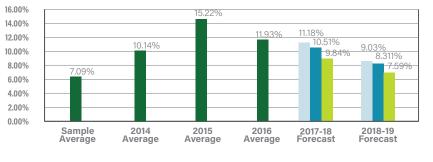
Assets in Default 30 + Days



Net Loans & Leases (in \$ Thousands)



Net Loans & Leases: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic

Valley total employment grew in 2016 but at a lower rate than in 2015. The Valley economy kept expanding but a slower rate than a year before. Rate hikes in December of 2016 and March of 2017 together with a series of scheduled hikes in the coming months along with balance sheet reduction likely will put Valley economic growth at a slower pace over the next two years.

Total employment grew the fastest at the county level in Madera and Stanislaus, while the slowest growth occurred in Kern and Kings. As a first, retail trade employment was the fastestgrowing category of employment in 2016, followed by trade, transportation and utilities employment. A lagged indicator, government employment tied with leisure and hospitality services employment as the third-fastest growth category during 2016. Information employment significantly worsened in 2016, together with statewide information employment. The fall in both indicators were as high as rates observed during the recessionary times and is a concern. Valley manufacturing employment displayed a stagnant pattern along with statewide and nationwide employment in the same category.

In line with our projections, average yearly growth in housing prices exhibited a growth pattern more consistent with the series' long-term benchmark growth rate of single digits. Given the effect coming from the rate hikes, home values likely will increase at a slower pace in 2018 and 2019. Single-family building permits along with construction employment will reflect the falling demand from rising rates, increasing at a slower pace than in previous years.



"...THE PURCHASING POWER OF VALLEY CONSUMERS IMPROVED DURING THE YEAR."

Wage growth was very significant in 2016 at 3.29 percent. Combined with a concurrent 1.93 rate of inflation, the purchasing power of Valley consumers improved during the year. Inflation, however, is displaying a rising pattern and is one of the main concerns of the Federal Reserve. Inflation will likely rise further before reverting back to the long-term sustainable rates as cost-push factors slowly dissipate. Valley total bank deposits displayed consistent dynamics with net loans and leases. The long-term benchmark yearly increase in total deposits was 7.25 percent while the same figure for net loans and leases was 7.09 percent, indicating a sustainable pattern over the long run. Assets in default likely will begin displaying a rising as borrowing costs increase due to the rate hikes. Net loans and leases are projected to grow at a slower pace for the same reason, while bank deposits due to higher rates likely will increase in growth before slowing down further.

In all, given that the Federal Reserve stays committed to a policy of higher rates, the Valley will feel a disproportionate impact coming from a series of rate hikes than at the state and national level. The disproportionate impact will result from structural shortcomings of the Valley, such as the presence of higher unemployment rates and the higher ratio of unskilled to skilled workers. These workers are subject to the greater likelihood of layoffs resulting from increases in costs of production. Another reason for the disproportionate impact is the presence of a relatively greater number of low income families in the Valley than nationwide.





Forecast Accuracy Table

	ERROR	ACCURACY	TURNING POINT
TOTAL EMPLOYMENT	-0.60%	99.40%	Yes
REAL GDP GROWTH	0.48%	99.52%	Yes
CONSTRUCTION	1.91%	98.09%	Yes
EDUCATION & HEALTH	1.04%	98.96%	Yes
GOVERNMENT	0.51%	99.49%	Yes
FINANCIAL SERVICES	0.15%	99.85%	Yes
INFORMATION	12.01%	87.99%	No
LEISURE & HOSPITALITY	1.10%	98.90%	Yes
MANUFACTURING	-2.19%	97.81%	No
RETAIL TRADE	83.00%	17.00%	Yes
TRADE, TRANSPORTATION	-1.49%	98.51%	Yes
WHOLESALE TRADE	0.55%	99.45%	Yes
INFLATION	0.48%	99.52%	Yes
QUARTERLY AVERAGE WAGE	0.35%	99.65%	Yes
HOUSING PERMITS	14.42%	85.58%	No
CHANGE IN HOUSING PRICE	1.49%	98.51%	Yes
TOTAL BANK DEPOSITS	-1.58%	98.42%	Yes
NET LOANS & LEASES	0.12%	99.88%	Yes
OVERALL	3.56%	96.44%	

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