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# San Joaquin Valley **BUSINESS FORECAST**

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# Emerging Trends in the VALLEY'S ECONOMY



S Stanislaus State

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### SAN JOAQUIN VALLEY **BUSINESS FORECAST**

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**Executive Summary** 

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Following several years of gradual expansion, total employment in the San Joaquin Valley appears to be hovering near its peak level of 1.70 million, representing a slowdown in growth that began in 2016 and continued into 2018. A decline in total employment is not likely to begin soon, but there is evidence pointing to this slowdown in almost all categories of employment.

Inflation has risen to a yearly rate of 3.1 percent and is a concern for the Federal Reserve, which is likely to continue its pattern of hiking interest rates about every three months to cool off the economy. Attempts to tame inflation, however, will run counter to tax cuts and increased government spending, which is an effort to improve the infrastructure of the national economy. Thus, it is not surprising to see behavior at the regional level that reflects, to some degree, the offsetting effects of monetary and fiscal policy.

Regions such as the Valley, however, are likely to suffer more from interest rates hikes than other well-developed regions.

In addition, the tax cuts will not have the same benefit to Valley consumers because of higher unemployment rates, home prices, and the unskilled/ skilled composition ratio of the workforce. It is a wellknown economic principle that when individuals know with certainty their income will increase in the future, they will start spending more today. This behavior on the part of the Valley consumer, however, has not yet begun to take place following the announcement of tax cuts.

Projections point to

an average yearly growth of 0.75 percent in Valley total employment over the next two years. This is noteworthy because the yearly growth in total employment in 2017 was 0.90 percent, which fell below the long-term average rate of 1.18 percent for the first time since the end of the recessionary years.

While job growth in the Valley lagged overall, Stanislaus County — for the first time — led the region in job growth at 1.93 percent, followed by Madera and Fresno counties at 1.82 and 1.16 percent, respectively. Stanislaus County employment normally grows at about the same rate as the Valley average. Kern and Kings counties were the only ones that grew marginally faster in 2017 than in 2016. Total employment growth was slower in 2017 than in 2016 for all other counties. Average yearly growth in Kern and Kings registered 0.21 and 0.07 percent, respectively, in 2017. Over the same period, San Joaquin County employment grew 0.57 percent, while Merced and Tulare counties grew 0.53 and 1.06 percent, respectively.

Information employment was the only category that posted a decline in 2017. While all other categories of employment

grew in 2017, construction and manufacturing employment were the only sectors to grow faster in 2017 than in 2016. Construction was the fastest-growing category of employment in 2017. The slow-down in growth was most visible in those employment categories that are relatively more sensitive to changes in interest rates, such as retail trade and leisure and hospitality services employment.

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Valley home prices grew by 8.27 percent in 2017, a higher pace than in the previous two years. However, given the increasing pattern in long-term interest rates, projections point to slower growth over the next two years. About the same number of housing permits were issued in 2017 as in the previous year, which, as an important leading indicator, points to slower growth in the months ahead.

Rate hikes, combined with tax cuts and infrastructure spending, are likely to have mixed effects on the dollar. While tax cuts will tend to depreciate the dollar, rate hikes tend to have the opposite effect. As such, it appears that the preference of the current administration is to maintain



a weak dollar. Rising inflation is another factor that would put further pressure on the dollar to depreciate. The weak dollar will improve the Valley's exports of agricultural goods, however, Valley consumers will see a further decrease in their purchasing power from the higher price of imported goods. Newly imposed tariffs on China may increase the domestic price of steel and induce a retaliatory response, negatively affecting almond and other agricultural exports.

Toward the end of 2017, the inflation rate stayed above 3.0 percent for three consecutive months — a similar to what

occurred just prior to the recessionary years. In 2017, the price of oil continued to climb, putting cost-push pressure along with wages to further raise the rate of inflation. Rising inflation and wages are important factors behind the Federal Reserve's decision to keep increasing interest rates. Projections point to successful implementation of Federal Reserve policies to tame inflation and achieve price stability.

As expected, foreclosure starts began climbing back up as the increase in long-term interest rates became very visible. Non-accruals of community banks in the Valley also began displaying similar increases. Valley bank deposits, net loans and leases all rose at a slower pace in 2017 and are projected to maintain this pace over the next two years.

Given the mixed effects on the national front, the Valley economy is projected to maintain a slower pace in the year ahead due to the faster impact of the financial markets, and slightly improve in 2019 as a result of the effect of tax cuts on the goods markets of the overall economy, thus exhibiting oscillatory behavior around the newly attained peak.

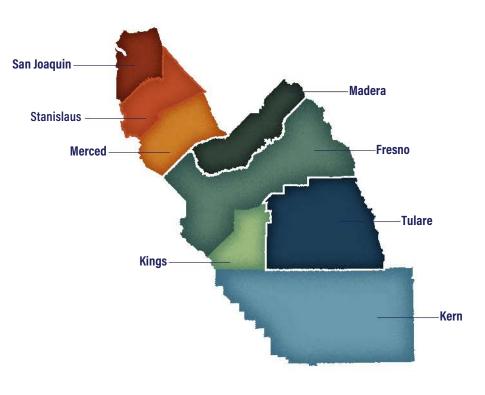
## 🕒 Introductio

This report, now in its eighth year, has benefited greatly from its chosen broad focus on the San Joaquin Valley. Each edition has garnered increasing attention from private and government constituencies from throughout the Valley, and this attention would not have occurred had the report maintained a single-county focus.

The long-term data in this report spans January 2001 through March 2018. The medium-term forecasts span from July 2018 to June 2020. The yearly averages reported in this year's edition are from the full 12 months of 2017, including preliminary values for December 2017.

The remainder of this report is organized as follows: First we provide a discussion of San Joaquin Valley labor market condition, followed by an examination of the Valley's real estate market. We then cover prices and inflation and finish with a look at banking and capital market indicators.

### **San Joaquin Valley**



**Employment Indicators** 

**2018** is a unique year. The impact of the tax cuts on the economy will occur in the midst of continued rate hikes by the **Federal Reserve**, predicted to occur just about every three months. These two aggregate demand management tools will have mixed effects on the Valley economy. While tax cuts serve to increase aggregate demand, rate hikes tend to do just the opposite. Further, financial markets have a quicker impact on the overall economy than do the goods markets. Because there are more unemployed people, the positive effect of the tax cuts will be felt relatively less in the Valley, and due to the unskilled nature of the workforce, the negative effect of the rate hikes will be higher. Tariffs, along with retaliatory effects, will have a disproportionate impact on Valley's farm-related exports, such as almonds, and worsen the purchasing power of the region's consumers due to higher prices of retail goods related to the steel industry.

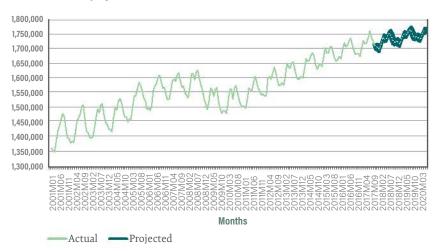
**Number of Employees** 

### EMPLOYMENT IN THE SAN JOAQUIN VALLEY IS STILL PROJECTED TO REACH 1,750,000 IN THE SECOND HALF OF 2020.

Total employment grew in all Valley counties, but at slower speeds than in 2016. Stanislaus County posted the fastest growth in 2017 ▶ at 1.93 percent. This figure contrasts previous years, when growth in Stanislaus County was nearly identical to the Valley's average yearly growth. Kern and Kings were the only counties that added jobs marginally faster in 2017 than in 2016. At this slower pace of growth, total employment in the San Joaquin Valley is still projected to reach 1,750,000 in the second half of 2020.

Information employment was the only category that posted a decline in 2017. ► All categories of employment — with the exception of construction employment — grew, but at a slower pace in 2017 than in 2016. Construction was the fastest growing category of employment in 2017, followed by manufacturing employment. The slow in growth was most visible in those employment categories relatively more sensitive to changes in interest rates, such as retail trade and leisure and hospitality services employment.

### **Total Employment**

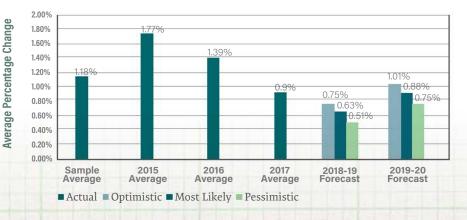


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#### Total Employment: Historical vs. Projected Average Yearly Growth



**Consumer Confidence Index** 



Labor Force vs. Employment Growth







Such high index values of consumer confidence haven't been observed since 2000. The Conference Board's Consumer Confidence Index is an important leading indicator that signals future consumption plans of consumers. The steep trend has become flatter in the past few months, which — along with other indicators in the same direction — point to peak activity. Rising long-term interest rates are likely to dampen further the improving trend in consumer confidence during the second half of 2018 and onwards. ►

While both rates displayed a slowing trend in the first half of 2017, total employment grew at a faster pace than the labor force in the Valley. In the second half of 2017, employment growth gained some seasonal speed but still remained below the pace observed during the same interval in 2016. Given the mixed impact of monetary and fiscal policies and the vulnerable structure of the work force in the Valley, growth in employment will likely slow down, together with the labor force, consistent with peak level activity.

Employment growth across California continues to outpace the Valley. In the first half of 2017, the slowdown in growth was very visible in the Valley, while state employment growth continued to gain some speed. In the latter part of 2017, the Valley's employment growth caught up with the state. In the coming months, however, growth in the two series is expected to slow, particularly in the Valley, as categories of employment such as retail and leisure and hospitality services begin to feel the continued effects of rising rates.

**Employment Indicators** 

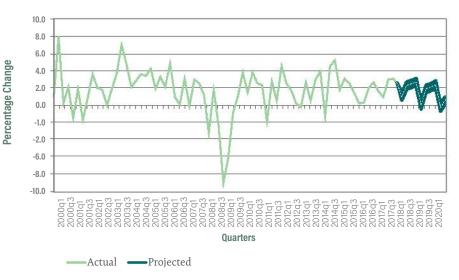
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Changes in regime-favoring protectionist measures in the U.S. will put downward pressure on net foreign income. If other countries retaliate, tariffs will lead to trade wars, causing loss of welfare for all parties involved. Consistent with a cooling economy, the real gross domestic product (RGDP) growth rate projections point to an average annual real economic growth of 2.05 percent from the second half of 2018 to the first half of 2020. ►

When other categories of employment begin to display signs of slowing, the education and health services employment categories emerge as the better-performing indicators. Such a pattern occurs because growth in this category of employment is very stable over the years, showing little signs of fluctuation. Indeed, during the recessionary years, a pattern was observed in which all other categories performed less robustly than education and health services employment. We are seeing some signs of this pattern beginning to take place as the economy slows and hovers around the peak level. ►

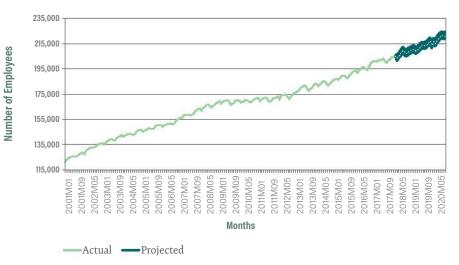
### OUR PROJECTION THAT THE VALLEY'S EDUCATION AND HEALTH SERVICES EMPLOYMENT WOULD REACH 215,000 BY THE SECOND HALF OF 2017 WAS ACCURATE.

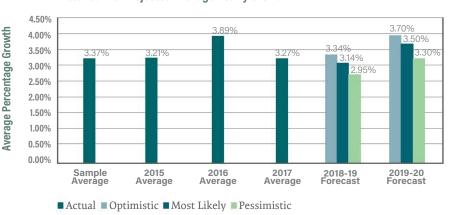
Our projection that the Valley's education and health services employment would reach 215,000 by the second half of 2017 was accurate, and employment in this category is likely to reach 235,000 by the second ▶ half of 2020. Education and health services employment grew at 3.27 percent in 2017, a pace slower than that of 2016, at 3.89 percent. This yearly growth in 2017 was about the same as the series' long-term benchmark growth of 3.37 percent. Projections point to about the same speed of growth of 3.14 percent from the second half of 2018 to the first half of 2019, and 3.50 percent from the second half of 2019 to the first half of 2020. **U.S. Real GDP Annual Growth** 



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**Education and Health Services Employment** 





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



### MANUFACTURING EMPLOYMENT DID RELATIVELY BETTER IN 2017 THAN 2016.

When compared with the other dynamics, manufacturing employment did relatively better in 2017 than 2016. The series also displayed a pattern of increase consistent with the Purchasing Managers Index of ▶ the Institute of Supply Management. The long-term benchmark of the series switched from negative to positive territory in 2017. The trend in employment levels in Valley manufacturing employment, apart from seasonal variations, is projected to reach 115,000 by the second half of 2020.

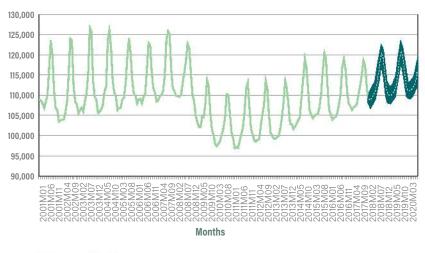
The Valley's annual average rate of growth in manufacturing employment during 2017 was 1.34 percent mainly due to thirdparty distribution centers in cities such as Tracy and Fresno. The pace of growth was significantly greater than the long-term benchmark rate of 0.02 percent. Given the recent easing of some regulations ► yet to materialize on the part of the new administration, some improvement is expected in this category of employment. Valley manufacturing employment is projected to grow at an average yearly rate of 0.85 percent from the second half of 2018 to the first half of 2020.

The last time the Purchasing Managers Index of the Institute for Supply Management reported such high numbers was in 2011. The index value, now above 60, is another leading indicator for manufacturing activity and points to peak level activity. Nationwide, 2017 manufacturing employment grew at an average yearly rate of 0.07 percent. However, over the last three months of 2017 and the first three months of 2018 this average exhibited better 🕨 performance, increasing to 1.35 percent. At 0.01 percent, there was basically no growth in statewide manufacturing employment. The picture was not better over the last three months of 2017 and first three months of 2018. Compared to these numbers, the Valley's performance in manufacturing employment is relatively significant.

#### **Manufacturing Employment**

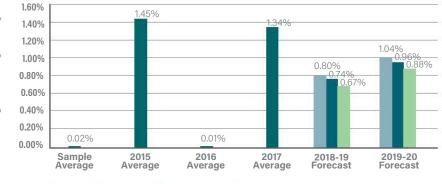
Number of Employees

**Average Percentage Change** 



—Actual —Projected

#### Manufacturing Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic

#### Purchasing Managers Index



**Employment Indicators** 

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Leisure and hospitality services employment was one of the categories first affected by rising rates. The growth in 2017 at 1.31 percent in this category was half the rate of 2.71 percent in 2016. At this slower pace, leisure and hospitality services employment is expected to exceed 130,000 by the first half of 2020. Statewide growth in leisure and hospitality services employment at 2.70 percent was faster than in 2017, pointing to the more vulnerable nature of the Valley to indicators such as the movement in interest rates.

The average yearly growth of 1.31 percent in 2017 came below the series' long-term benchmark rate of 2.17 percent for the first time since the end of the recessionary years. In the coming months, growth in this category is projected to slow further, particularly if high inflation rates persist and interest rates continue to rise. Projections point to an ► average yearly growth of 1.52 percent from the second half of 2018 to the first half of 2019, and 2.44 percent from the second half of 2019 to the first half of 2020, when marginal improvement from tax cuts become more visible in the goods and services market.

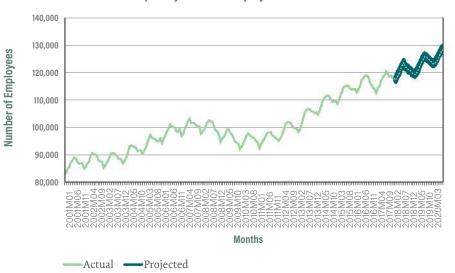
Annual Growth



### PROJECTED TRADE, TRANSPORTATION AND UTILITIES EMPLOYMENT LEVELS TO REACH 290,000 BY THE FIRST HALF OF 2019.

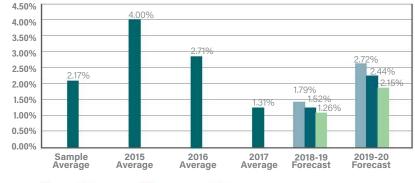
Trade, transportation and utilities employment remained the second-fastest growing ► category in 2016. Employment levels are projected to reach 290,000 by the first half of 2019. Growth in 2016 was slower than 2015, about twice the long-term benchmark growth of 1.70 percent.

Leisure and Hospitality Services Employment

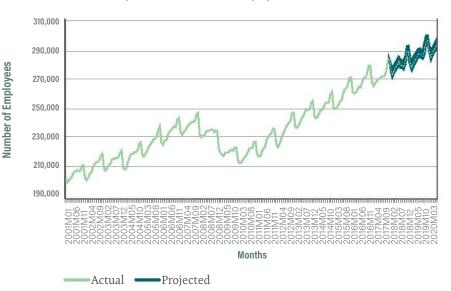


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Leisure and Hospitality Services Employment: Historical vs. Projected Average Yearly Growth



■Actual ■Optimistic ■Most Likely ■Pessimistic



#### **Trade, Transportation and Utilities Employment**

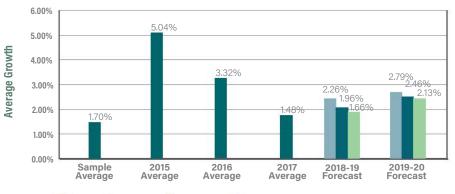
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The trend in this category continued to flatten in 2017. Average yearly growth in trade, transportation and utilities employment, at 1.48 percent, was less than half the 2016 rate of 3.32 percent. Projections point to an average yearly growth of 1.96 percent from the second half of 2018 to the first half of 2019, and 2.46 percent from the first half of 2019 to the second half of 2020.

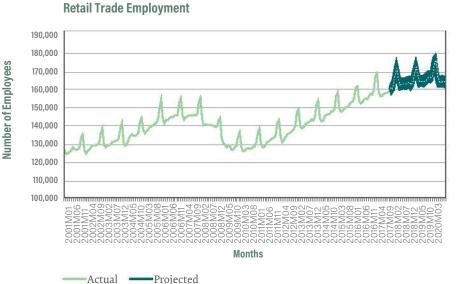
The Valley's retail trade employment no longer is the fastest growing category of employment, as was the case a few years ago. Dropping from first to second-from-last in speed of growth, retail trade employment was the category most vulnerable to the increase in interest rates. Rising borrowing costs and credit card rates have led to cutbacks in consumption and employment in this category. At this slower pace, retail trade is expected to reach a lower level of 160,000 by the first half of 2020.

### BENCHMARK GROWTH IN RETAIL TRADE EMPLOYMENT NOW STANDS LOWER AT 1.22%.

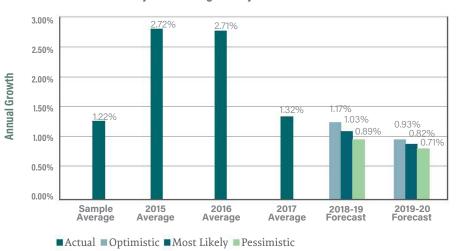
Benchmark growth in retail trade employment now stands lower at 1.22 percent. The growth in 2017 of 1.32 percent came very close to this benchmark rate. Further rate hikes will almost undoubtedly bring the growth below the benchmark rate for the first time since the end of the recession. Projections point to an average annual growth of 1.03 percent from the second half of 2018 to the first half of 2019, and 0.82 percent from the second half of 2019 to the first half of 2020. ► Trade, Transportation and Utilities Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



#### Retail Trade Employment: Historical vs. Projected Average Yearly Growth



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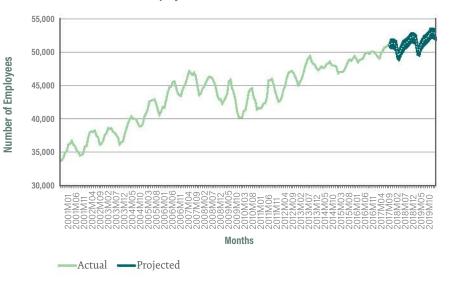
### **Employment Indicators**

As wholesale trade employment began to recover from the drought years, seasonal variations once again started to become visible. Wholesale employment is expected to exceed 52,500 by the second half of 2020. As farm-related employment, wholesale ► trade employment growth supersedes retail trade employment in the Valley. Thus, in 2017, consistent with this structural pattern, wholesale trade employment began to outpace retail trade employment, a pattern that was not observed during the drought years.

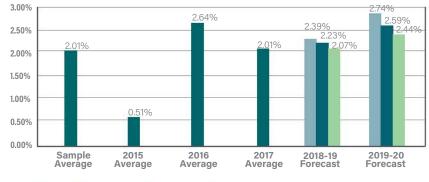
### WATER STORAGE ISSUES REMAIN A REAL PROBLEM TO OVERCOME IN THE LONG-RUN.

Valley wholesale trade employment grew at a slower pace in 2017 than 2016. At 2.01 percent, the annual yearly growth in 2017 was identical to the long-term benchmark rate. Recent rains have helped alleviate the impact of drought in the Valley, but water storage ► issues remain a real problem to overcome in the long-run. Projections point to an average yearly growth of 2.41 percent from the second half of 2018 to the first half of 2020.

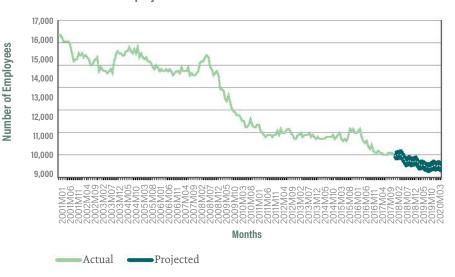
Valley information employment continued to worsen in 2017. Statewide, improvement in information employment was very small, growing only 0.58 percent in 2017. Nationwide, there was basically no improvement in information employment, with an average annual rate of 0.04 percent. Employment levels in this category will oscillate around 10,000 in the Valley, pointing to no significant improvement in the coming months. ► Wholesale Trade Employment



### Wholesale Trade Employment: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



### **Information Employment**

**Annual Growth** 

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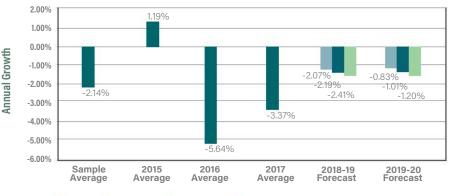
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The decline in 2017 information employment at -3.37 percent was not as bad as the -5.64 percent in 2016, yet the decline was still greater than the long-term benchmark rate of -2.14 percent. Considering that growth was non-existent in the state and nationwide, problems in this category cannot be entirely linked to workforce issues in the Valley. Projections point to a decline at -2.19 percent from the second half of 2018 to the first half of 2019, and at -1.01 percent from the second half of 2019 to the first half of 2020.

### CONSTRUCTION EMPLOYMENT RE-EMERGED AS THE FASTEST GROWING CATEGORY OF EMPLOYMENT IN 2017.

Construction employment re-emerged as the fastest growing category of ► employment in 2017. In 2016 and earlier, employment in this category had fallen from being the fastest-growing to the seventh-fastest growing category. Because of the mixed effects of ongoing rate hikes and deficit spending under an environment of lower taxes, construction employment in the Valley is expected to grow at a slower speed over the next two years.

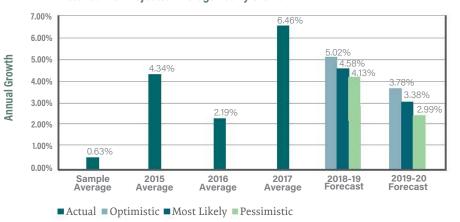
Employment in this category is expected to reach 70,000 by the end of the second half of 2020. The long-term benchmark average yearly rate now stands higher at 0.63 percent. Growth at 6.46 percent was higher than both 2016 and 2015, during which employment in this category grew 2.19 and 4.34 percent, respectively. Projections point to an average annual growth of 4.58 percent from the second half of 2018 to the first half of 2019, and 3.38 percent from the first half of 2019 to the second half of 2020. Information Employment: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



#### Construction Employment: Historical vs. Projected Average Yearly Growth



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### **Employment Indicators**

### At a 2.00 percent average yearly rate, government employment was the thirdfastest growing category. Government employment grew at a slower pace in 2017 than 2016, pointing to a slowdown as other categories

of employment in the Valley. Such behavior was expected, since government employment generally is a lagging indicator to the overall economy. Employment in this category makes up 20 percent of the Valley's entire employment and is a main driver for the region's economy.

Government employment is projected to reach 300,000 by the first half of 2020. Although growth in the category was slower in 2017 than in 2016, at a 2.00 percent average yearly rate, growth still came at more than the twice the rate of the long-term benchmark growth of 0.86 percent. Growth in government employment still is expected to slow further and to be more in line with other categories' growth in the coming months. Projections point to an average yearly growth of 1.59 percent from the second half of 2018 to the first half of 2020. ▶

## 44,000 **EMPLOYMENT LEVEL PROJECTED** BY THE FIRST HAI F OF 2020.

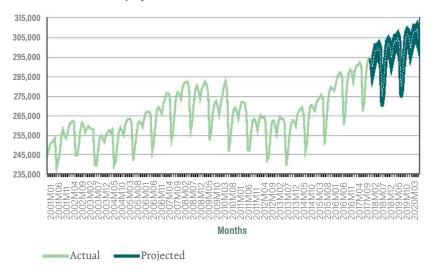
Growth in Valley financial activities employment slowed to 1.13 percent in 2017. Refinancing activities began to slow as interest rates rose further in 2017. Tax cuts are not ▶ expected to benefit California and the Valley as much as at the national level due to the increasing price of homes in the region. At this slower pace, employment is projected to reach 44,000 by the first half of 2020.

**Government Employment** 

Number of Employees

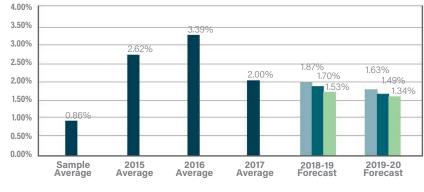
Annual Growth

Number of Employees

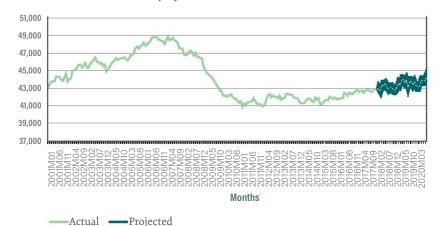


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### **Government Employment:** Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



#### **Financial Activities Employment**

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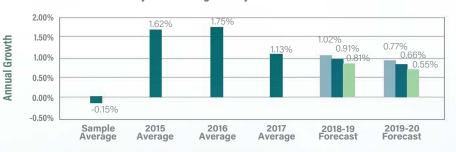
When the long-term benchmark rate of -0.15 percent of the series is taken into account, financial activities employment growth over the past three years was ▶ relatively significant. Employment growth in this category, however, is expected to slow further in the coming months. Projections point to an average annual growth of 0.91 percent from the second half of 2018 to the first half of 2019, and 0.66 percent from the second half of 2019 to the first half of 2020.



### ALL COUNTIES Posted Employment Growth in 2017.

Ongoing rate hikes, imposed roughly every three months by the Federal Reserve to tame inflation, and the relatively disadvantaged position of the Valley along with California under the new tax cuts, likely will combine to have mixed effects on Valley employment levels. An initial slowdown in immediate response of financial markets to the rate hikes in the coming months is to be followed by the lagged effect of tax cuts on the goods markets. In this environment of mixed economic effects, total employment in Stanislaus County grew the fastest in 2017, followed by Madera and Fresno. All counties posted growth but at significantly varying speeds. Construction employment grew the fastest, followed by education and health services employment in the Valley. Information employment was the only category that posted a decline in employment.

Financial Activities Employment: Historical vs. Projected Average Yearly Growth









The eight Metropolitan Statistical Areas (MSAs) that make up the San Joaquin Valley include Bakersfield-Delano, Fresno, Hanford-Corcoran, Madera-Chowchilla, Merced, Modesto, Stockton and Visalia-Porterville. Housing indicators reflect the aggregated indicators belonging to these MSAs.

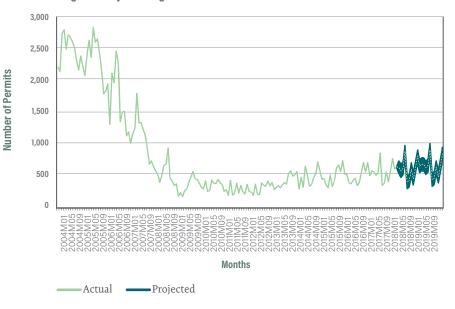
About the same number of housing permits were issued in 2017 as in 2016. Consequently, the growth rate in housing permits in 2017 was very small, at 0.71 percent. Rising 30-year rates in 2017 was the main reason for the same amount of permits being issued ▶ in 2017 as in 2016. Valley housing permits are expected to reach 750 permits per month by the end of the first half of 2020.

With 1,915 single-family building permits issued, Bakersfield came in first, followed by Fresno, which issued 1,900 permits in 2017. Stockton came in third with 1,670 permits issued in 2017, followed by Visalia, which issued 1,138 permits. As in 2016, Hanford did not issue any permits in 2017, while only 27 permits were issued in Modesto. Madera and Merced issued 389 and 172 housing permits, respectively. Projections point to average annual growth of 4.63 percent in single-family building permits over the next two years. ►

## **4.63%** PROJECTED AVERAGE ANNUAL GROWTH OF SINGLE-FAMILY BUILDING PERMITS OVER THE NEXT TWO YEARS

Foreclosure starts halted the declining pattern that existed since 2009, and began exhibiting a flat pattern from the first quarter of 2017. However, a small spike in the fourth quarter of 2017, followed by a slight upward pattern, suggests a turning point in foreclosure starts in late 2017. Due to higher long-term rates ▶ and further increases on the way, this turning point is likely to be permanent rather than temporary. As an important leading indicator, foreclosure starts will likely increase more significantly over the next two-year period.

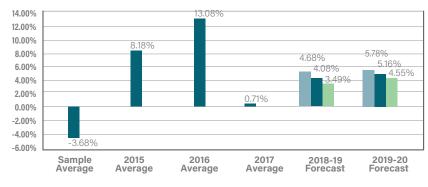
Single-Family Building Permits



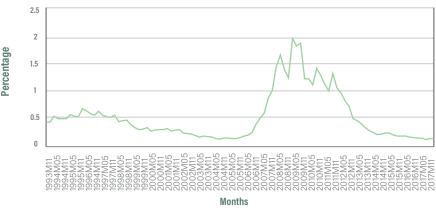
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#### Single-Family Building Permits: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



#### Foreclosure Starts in California

Annual Growth

Mortgage Bankers Association of America

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30-year rates began climbing above 4.0 percent and sustained this rate more consistently than before. Inflation rates at sustained rates above 3.0 percent also point to further increases in long-term rates. When compared with the historical values since 2001, despite upward pressures on 30-year rates, current interest rates are still low, and those considering refinancing or purchasing homes should act now rather than later, when interest rates are likely to be much higher.

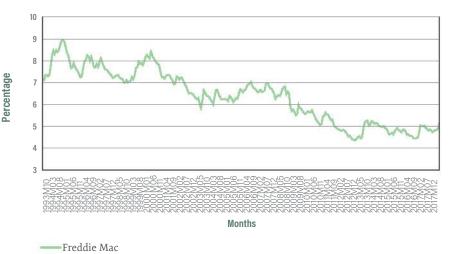
### THE YEARLY PERCENTAGE INCREASE IN HOME PRICES IN THE VALLEY CONTINUED AT 8.27%.

The yearly percentage increase in home prices in the Valley continued at 8.27 percent, higher than in 2016 and 2015. The average yearly rate of increase in 2016 was 6.60 percent, and in 2015 growth was slightly lower at 6.52 percent. The shortage in supply of housing is contributing to the increase in home prices. The growth in housing prices is expected to slow further, following the increase in mortgage rates, which will likely curtail the demand for housing more than the shortage in housing supply.

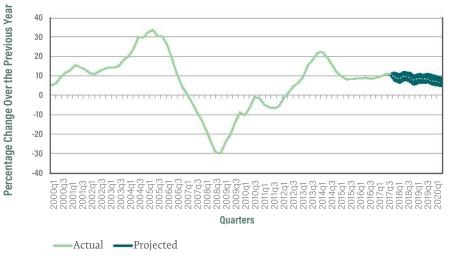
The fastest increases in home prices in 2017 were observed in Stockton at 9.97 percent, followed by Madera at 9.10 percent. Home prices increased at the slowest pace in Bakersfield at 4.27 percent and in Visalia at 6.54 percent. In Merced, home prices increased by 8.45 percent in 2017. Modesto saw an 8.87 percent increase in home prices. Valley home values are projected to increase at an average annual rate of 5.82 percent from the second half of 2018 to the first half of 2020.

Given higher-than-typical rates of inflation in the current economy, and the rising costs of production from higher wages and price of oil, the Federal Reserve's policy of rate hikes is expected to continue for some time into the future. High interest rates will likely suppress demand more than the existing shortfall in supply to keep home prices rising further. Home values are projected to increase at a slower pace in the Valley in the coming two-year period.

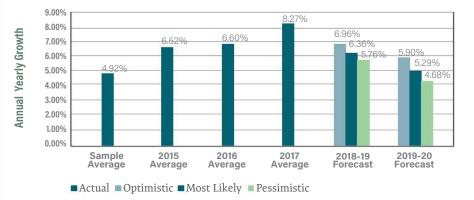
#### **30-Year Fixed Rate**



**Yearly Percentage Change in Housing Prices** 



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



**Inflation and Prices** 

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The yearly rate of inflation crept up to 3.1 percent and stayed at this high rate for three consecutive months toward the end of 2017. The increases in the overall price level were driven mainly by cost-push factors, such as wage increases and the rising price of oil. Recently imposed tax cuts and tariffs are likely to put added pressure on the inflation rate from the demand-pull side in the coming months. ►



### THE INFLATION RATE HAS BEEN RISING GENERALLY FASTER ON THE WEST COAST.

Since the second half of 2017, prices rose ► significantly faster on the West Coast than at the national level. The inflation rate has been rising generally faster on the West Coast than the nation since the first quarter of 2015. The second quarter of 2011 was the last time such high inflation rates were observed on the West Coast. Achieving price stability is a major concern of the Federal Reserve, prompting further action to increase rates and prevent the economy from overheating.

The average yearly rate of inflation came out to 2.82 percent in 2017, higher than the 1.93 percent rate in 2016 and 1.34 percent in 2015. When these numbers are taken into account, it becomes very apparent that prices have ▶ been rising steadily since 2015. Tax cuts at the national level are likely to put further upward pressure from the demand side on the rate of inflation, combined with cost-push pressures coming from wages, tariffs and the price of oil. The depreciating domestic currency is another factor increasing the price of imported goods and hence the rate of inflation.

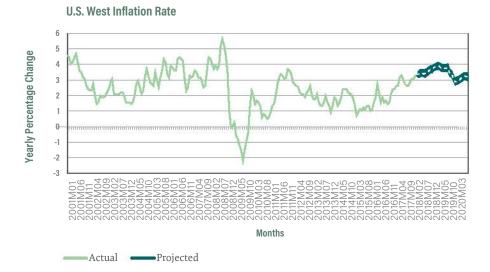
Inflation Rate: Nationwide vs. West

**fearly Inflation Rate** 

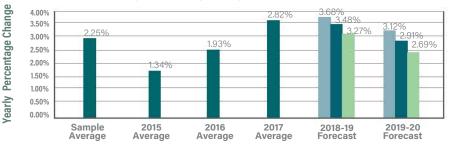


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#### U.S. West Inflation Rate: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic

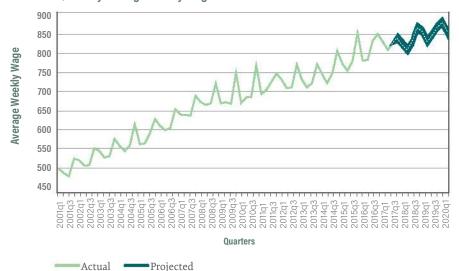
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For the first time since the end of the recession, the yearly rate of inflation at 2.82 percent in 2017 came in higher than the long-term rate of 2.25 percent. Added factors in 2018 that did not exist before that time are likely to put further pressure on the ▶ inflation rate. Valley consumers are likely to feel the further decrease in their purchasing power in the coming months. Projections point to an average yearly increase of 3.48 percent during to 2018-19 interval, and 2.91 percent in the 2019-20 interval.

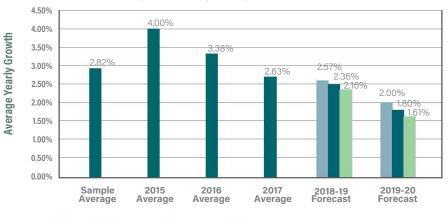
Average weekly wages rose 2.63 percent in 2017, which was slower than the 3.38 percent rate in 2016 and the 4.0 percent rate in 2015. The 2017 increase in average weekly wages was roughly the same as the yearly rate of inflation 2.82 percent in 2017 – resulting in a 0.19 percent loss of purchasing power by the Valley consumer. Wages are projected to grow at a slower pace in the coming months, despite the effect of tax cuts.

Consistent with an economy that is cooling off, wages are expected to rise slower than the rate of inflation. While there were consecutive yearly decreases in wage growth since 2015, inflation rates were simultaneously increasing every year since 2015. Projections point to an increase in average weekly wages at an annual rate of 2.08 percent over the next two years.

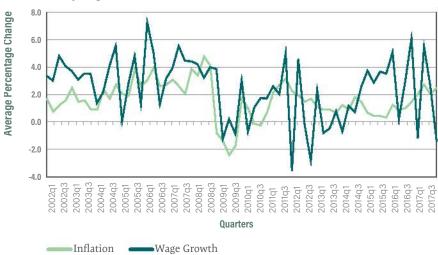
The consecutive increases in the inflation rate, concurrent with the consecutive decreases in wage growth, means the purchasing power of the Valley consumer has been decreasing since 2015, despite these up and down fluctuations. Projections of the inflation rate and wages point to a continuation of this trend corresponding to about a 1.0 percent loss in purchasing power every year from the second half of 2018 to the first half of 2020. The divergent pattern is likely to give way to convergence in the two series over the coming months. **Quarterly Average Weekly Wages** 



Weekly Wage Growth: Historical vs. Projected Average Yearly Growth



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic



Yearly Wage Growth vs. Inflation

### IIII Banking and Capital Markets

**Fotal Deposits** 

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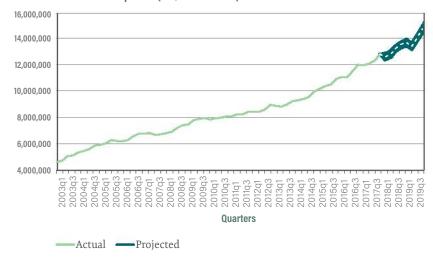
Valley community bank deposits grew 8.01 percent in 2017, registering the third consecutive slowdown. Average yearly growth in Valley bank deposits came in at 10.21 percent in 2015, followed by 9.08 percent in 2016. Nevertheless, all were above the typical historical rate of 7.30 percent, inclusive of the recessionary period and the drought years. ►

The increase in interest rates will help Valley community bank deposits. Tax cuts will also help, though at a later period than the effect of the rate hikes. Bank deposits in the Valley are projected to increase at an average annual rate of 6.29 percent from the second half of 2018 to the first half of 2019, and then at a slightly higher rate of 7.42 percent from the second half of 2020. ►

### VALLEY BANK ASSETS IN NONACCRUAL REGISTERED A VERY SIGNIFICANT SPIKE IN THE FOURTH QUARTER OF 2014.

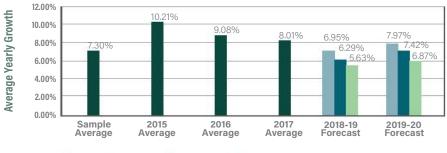
Consistent with the increases in interest rates resulting from the Federal Reserve's rate hikes, Valley bank assets in nonaccrual registered a very significant spike in the fourth quarter of 2014, halting the declining pattern that existed since 2009. The low value that occurred in the third quarter is likely to register as a permanent turning point for the series. The beginning pattern of rising bank assets in non-accrual suggests that Valley consumers are reconsidering balance sheets. Those consumers with high credit card balances are now driven to cut back on credit card purchases and are additionally urged to take advantage of zero percent introductory rates offered by banks that now extend more than twelve months.

Total Bank Deposits (in \$ Thousands)



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Total Bank Deposits: Historical vs. Projected Average Yearly Growth



Actual Optimistic Most Likely Pessimistic



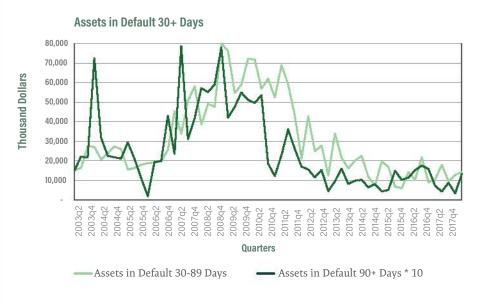
Assets in default 30-to-89 days registered an increase in the fourth quarter of 2017, together with assets in default 90-plus days. Assets in default 30-to-89 days and 90-plus days have exceeded a value of 10,000 on the vertical axis scale. Both series will further display an increasing trend in the coming months due to rising borrowing costs.

Net loans and leases grew 6.92 percent in 2017, consistent with the dynamics observed in total bank deposits. However, that growth was much lower than the 8.02 percent in total bank deposits, indicating a 1.10 percent approximate deficit in lending. Valley net loans and leases slowdown in growth has occurred annually since 2015, similar to the slowdown in total bank deposits. Noteworthy is that the 2017 rate of growth in net loans and leases came in slower than the historical benchmark rate of 7.08 percent. ►

Net loans and leases will likely grow at a slower pace together with total bank deposits in the coming months. The growth in net loans and leases will lag behind the growth in total deposits due to disincentives to higher borrowing costs. Further, both will likely grow below historic benchmark rates in the coming months. Net loans and leases are projected to increase at an average yearly rate of 4.83 percent from the second half of 2018 to the first half of 2019, and increase slightly at 5.70 percent from the second half of 2019 to the first half of 2020. ►

In an environment of higher prices and rising rates, slower growth in net loans and leases will create slower growth in aggregate demand. Higher rates will continue to discourage borrowers and investors from taking out loans as they did when interest rates were lower. Higher default rates will result in bankers being more prudent in extending loans.

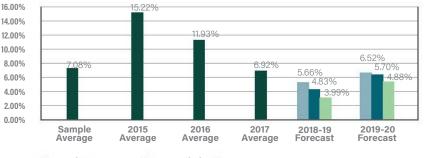
'early Growth



Net Loans and Leases (in \$ Thousands)



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



■ Actual ■ Optimistic ■ Most Likely ■ Pessimistic

## Concluding Remarks

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Valley total employment growth continued to slow in 2017, the third consecutive year exhibiting such dynamics. Noteworthy is that for the first time since the end of the recession the rate of growth in 2017 fell below the historical benchmark rate.

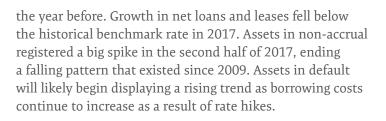
Total employment grew the fastest at the county level

in Madera and Stanislaus. Slowest growth occurred in Kern and Kings. Construction employment came back on top as the fastest-growing category of employment in 2017, followed by education and health services employment. A lagged indicator, government employment, tied with wholesale trade employment as the third-fastest growth category during 2017. Information employment continued to decline, while Valley manufacturing employment displayed relatively strong performance in 2017 when compared to the year before.

Average yearly housing prices grew faster in 2017 than in 2016 and 2015. Given the effect coming from continued rate hikes, home values are likely to increase at a slower pace in 2019 and 2020. About the same number of single-family building permits were issued as the year before. However, building permits and construction employment are expected to reflect falling demand from rising rates and are likely to increase at a slower pace than in previous years.

Wages and the price of oil exerted added pressure on the rate of inflation, which registered above 3.0 percent for three consecutive months in the fourth quarter of 2017, negatively affecting the purchasing power of the Valley consumer. Inflation is displaying a rising pattern and is one of the main concerns of the Federal Reserve in continuing to hike rates.

Valley total bank deposits displayed consistent dynamics with net loans and leases. However, both series increased less than



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The Valley will continue to feel a disproportionate impact coming from a series of rate hikes compared to the state and national levels. Tax cuts will benefit the Valley much less than elsewhere in the nation. The disproportionate impact from rate hikes and tax cuts mainly results from higher unemployment rates and a higher ratio of unskilled to skilled workers. The unskilled 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.

### Disclaimer

**AVERAGE YEARLY HOUSING** 

**PRICES GREW FASTER IN 2017** 

THAN IN 2016 AND 2015.

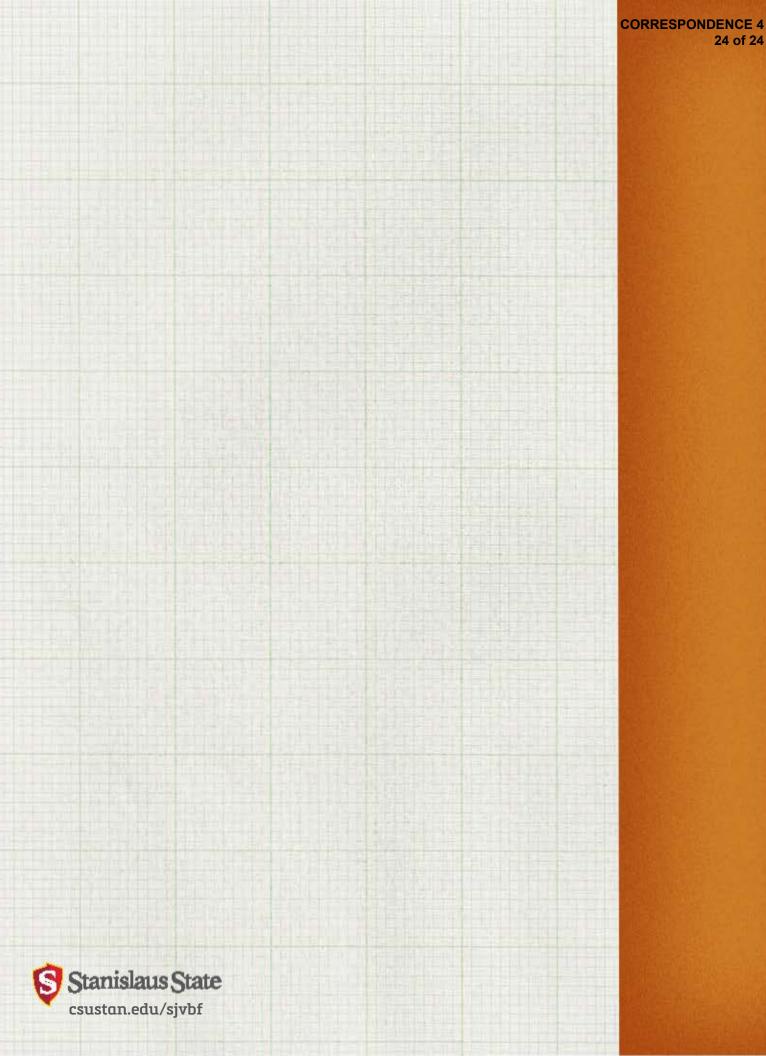
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### Forecast Accuracy Table

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APPENDIX	ERROR	ACCURACY	TURNING POINT
Total Employment	1.72%	98.28%	Yes
Real GDP Growth	-0.11%	99.89%	Yes
Construction	1.61%	98.39%	Yes
Education & Health	-1.27%	98.73%	No
Government	0.97%	99.03%	Yes
Financial Services	0.77%	99.23%	Yes
Information	0.50%	99.50%	Yes
Leisure & Hospitality	-0.01%	99.99%	Yes
Manufacturing	1.48%	98.52%	Yes
Retail Trade	0.50%	99.50%	Yes
Trade, Transportation	1.33%	98.68%	Yes
Wholesale Trade	0.01%	99.99%	Yes
Inflation	-0.60%	99.40%	No
Quarterly Average Wage	-2.17%	97.83%	Yes
Housing Permits	0.09%	99.91%	Yes
Change in Housing Price	-7.72%	92.28%	Yes
Total Bank Deposits	4.10%	95.90%	Yes
Net Loans/Leases	-0.81%	99.19%	Yes
Overall	0.39%	99.61%	





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