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San Joaquin Valley
BUSINESS FORECAST

EMERGING TRENDS IN THE VALLEY'S ECONOMY

Stanislaus State

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**SAN JOAQUIN VALLEY
BUSINESS FORECAST REPORT 2018**
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Port of Stockton*

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Executive Summary

Prices in the San Joaquin Valley have been rising more significantly and are likely to continue at this pace in the near future. Some of the cost-push factors are wage growth, new tariff structure and resulting retaliation, and the price of oil. Oil prices are currently falling but are likely to remain higher than the previous year. Adding to the price pressures are demand-pull factors resulting from aggregate demand expanding in a peaking economy and the effect on disposable income coming from tax cuts. Consequently, the Federal Reserve is likely to continue increasing interest rates about every three months and simultaneously engage in monthly balance sheet reductions of $50 billion to keep inflation under control. Although rates are nearing neutral, the Fed still plans to make a few more hikes, with the first of these expected in December. Further, overall price growth in the Western Region has steadily stayed above the national growth, due to the differences resulting from demand conditions.

Our position from previous reports of a peaking economy is still valid, since rising interest rates are outweighing the impact of the tax cuts on the Valley economy. These counterforces generated mixed effects in the Valley economy. Fresno, Kings, Merced and San Joaquin counties reported decreases in total employment growth, while Kern, Madera, Stanislaus and Tulare counties reported employment growth basically equivalent to the previous year. Thus, the slow-down in Valley total employment growth continued for another year in 2018. Projections point to an average yearly growth of 1.45 and 1.05 percent in Valley total employment in 2019 and 2020, respectively.

Merced County took the lead in annual job growth at 2.16 percent, followed by San Joaquin at 2.03 percent and Fresno at 1.89 percent. While Kern posted very small growth at 0.08 percent, growth in Madera and Tulare counties was the same at 1.61 percent. Stanislaus and Kings counties posted 1.20 percent average annual growth in 2018.

Growth in employment categories was mixed in 2018. Information employment again worsened in 2018, reflected in a -2.07 percent change. Construction continued to grow the fastest, jumping to a significantly higher rate of 7.88 percent. It was followed by education and health services employment at 3.18 percent, which was a decline from the previous year's growth of 4.79 percent. Transportation and utilities employment was the third-fastest growing category of employment at 3.09 percent, followed by wholesale trade employment at 2.08 percent. Government employment grew 1.74 percent in 2018, marginally faster than the 2017 rate of 1.67 percent. Leisure and hospitality services employment grew 1.55 percent in 2018, a substantial decline from the 2017 rate of 2.92 percent. Growth in manufacturing employment was 1.33 percent in 2018, twice the 2017 rate of 0.61 percent. The growth clearly reflected activity from newly constructed third-party distribution centers scattered around the Valley. Contrary to expectations, retail trade employment grew 1.20 percent in 2018, faster than the 2017 growth of 0.99 percent, but it was still one of the slowest growing categories of employment. Financial activities employment, reflecting peak activity in mortgages and refinancing, grew 1.06 percent, exceeding the 2017 growth of 0.77 percent.

After a very long lag following the end of the recession, housing permits registered a huge 32.84 percent spike in 2018. Valley home prices grew at an average annual rate of 8.50 percent, about the same rate as 2017, reflecting a shortage in inventory. Given the continued increases in long-term interest rates, now about 5 percent, projections point to slower growth over the next two years. Foreclosure starts in California halted their long-declining pattern and continued to remain steady in 2018, as in 2017.

Higher tariffs and their retaliatory effects began to take their toll on the Valley economy in terms of significantly lower exports of almonds, wine and cherries. Cement and rebar imports from China through the Port of Stockton went down considerably and are being replaced by domestic production, but only at higher prices — which in turn increased home purchase prices and other places where cement and rebar are used. Valley consumers are feeling the impact of the trade wars by paying more for the same bundle of goods they bought before, such as toys and other items at retail outlets. Prices of durables — such as refrigerators, dishwashers and cars — also have increased due to tariffs on steel. Consumers therefore were less well-off this year than in 2017, because of inflation and the higher cost of goods in general. Valley workers stand to lose from tariffs, while workers in other parts of the nation where steel is produced stand to gain.

Total deposits in Valley community banks increased 8.25 percent, slightly faster than the previous year's growth of 8.01 percent, as interest rates climbed upward. The pace of growth in total deposits was a little higher than the typical growth of 7.34 percent. Assets in non-accrual in the Valley began trending upward as rates continue to increase. A similar pattern was observed in assets in default 30-89 days, and assets in default 90-plus days. There was, however, a significant 13.38 percent spike in Valley net loans and leases — about twice the rate of 6.92 percent in 2017, when there was a rush to take advantage of still-low rates despite the upward trend. Interest rates are now about 5 percent, adding on average $150 per month to monthly mortgage payments.

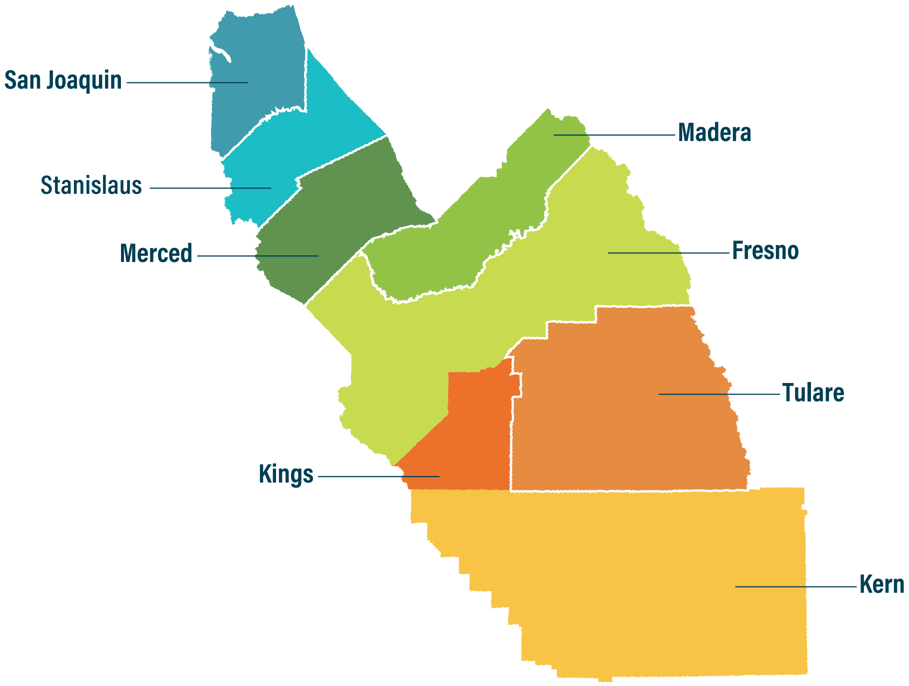
The mixed effects are projected to continue in the Valley, but overall a slower pace is expected in the coming years, attributed mainly to the Federal Reserve's decision to continue increasing interest rates to cool-off a peaking economy and an inflation rate that is now consistently above the long-term average rate.

Introduction

The long-term data in this report spans from January 2001 to October 2018. The medium-term forecasts span from November 2018 to December 2020. Forecasting a range rather than a point provides a more realistic assessment of likely future values. When actual numbers fall within the upper and lower forecast bands, the forecast is deemed accurate. The yearly average figure for 2018 is from the first nine months of the year, including preliminary values for September. A new section, External Sector, is added in this year's report.

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

San Joaquin Valley



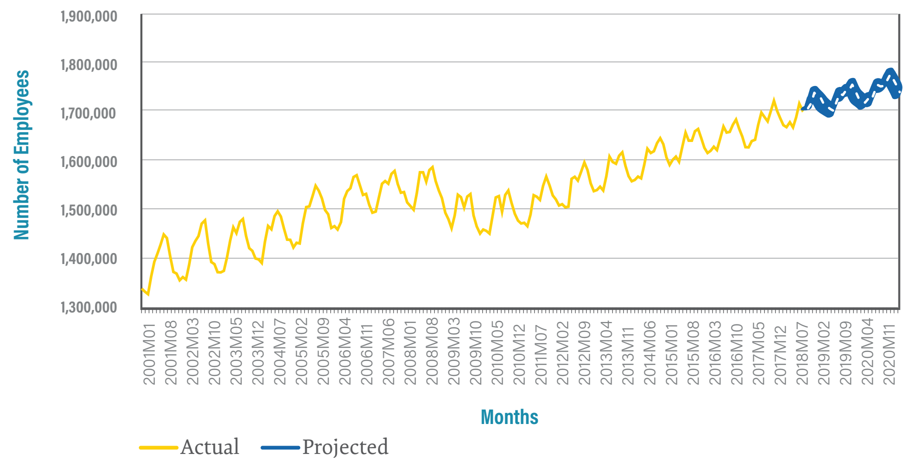
Employment Indicators

The Bureau of Labor Statistics occasionally revises its employment numbers, and such was the case in 2018, when it significantly revised numbers as far back as January of 2013. The statistics we use in compiling this report were affected by these revisions. Tax cuts and ongoing rate increases continued to produce mixed results in the Valley economy. In addition, increases in tariffs and their retaliatory effects on the economy had a bearing on Valley exports, imports and prices, both at the retail and wholesale levels.

Growth in total employment varied quite significantly by county when compared to the previous year's growth. Merced County grew the fastest, followed by San Joaquin, but both counties grew less than in the previous year. Tulare and Madera counties grew at about the same rate as the previous year at roughly 1.61 percent. Kern employment grew very little at 0.08 percent. Stanislaus and Kings counties grew at 1.20 percent. Growth in Stanislaus County's total employment improved, but Kings County's growth was slower than the previous year.

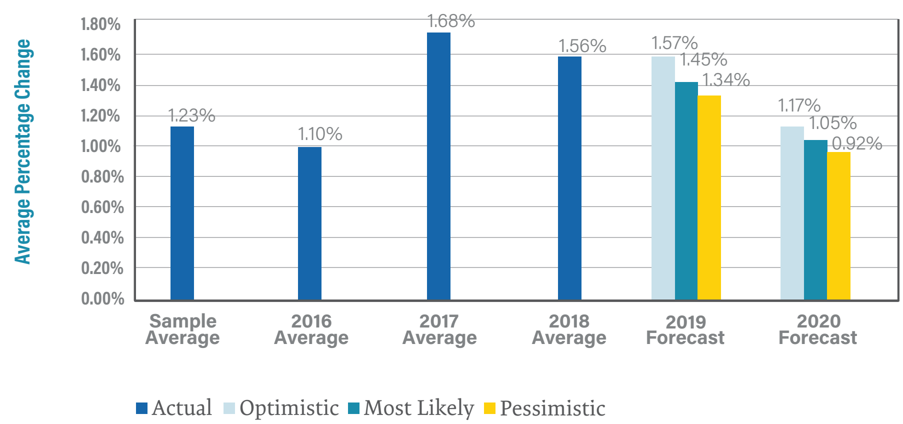
Information employment continued to worsen, as it had in 2017. Growth in all categories of employment also was mixed in 2018. Construction was the fastest-growing category of employment in 2018, followed by education and health services. Trade, transportation and utilities employment was the third-fastest growing category in 2018. Growth in wholesale trade employment continued to exceed retail trade employment in 2018, as it structurally should in the Valley.

Total Employment



The prevailing trend line has flattened a bit since 2016. At this slower pace, total employment in the Valley has exceeded 1,700,000 and is expected to reach 1,750,000 by the end of 2020. Nevertheless, the 1.56 percent average yearly growth displayed in 2018 mirrored the typical annual growth since 2001. Projections point to an average growth of 1.25 percent in 2019 and 2020, just about the same growth as the benchmark rate of 1.23 percent.

Total Employment: Historical vs. Projected Average Yearly Growth

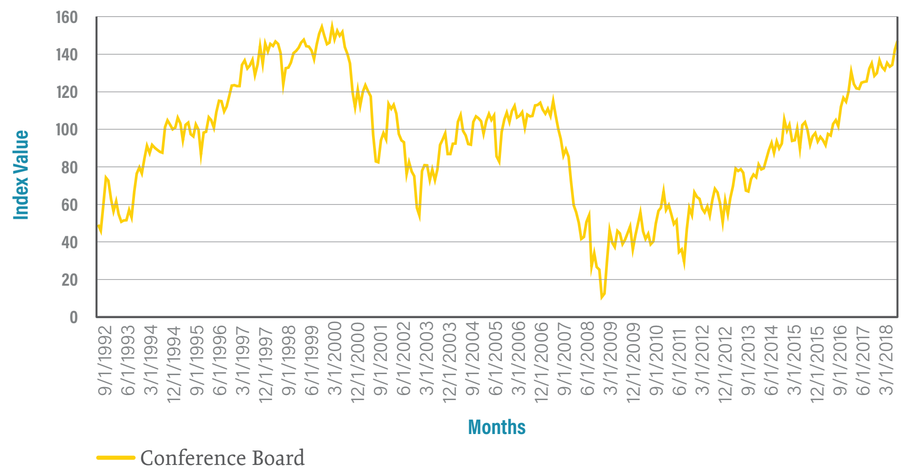


The Conference Board Consumer Confidence Index, an important leading indicator, is en route to reaching its highest mark since 1992. The last time such high index values were observed was back in 1999. The upward trend steepened following the second half of 2018. However, rising long-term interest rates are likely to exert downward pressure, somewhat dampening the growth in consumer confidence following the second half of 2019.

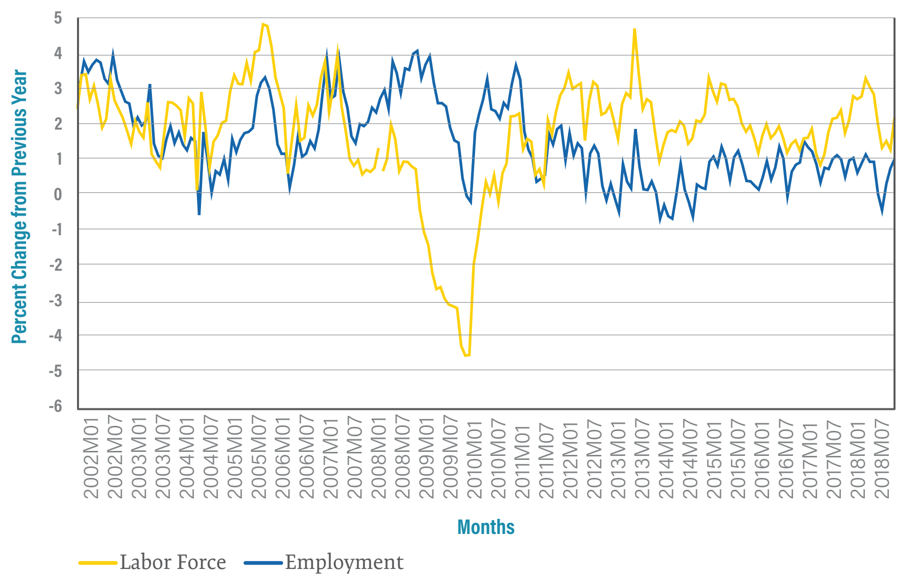
The Valley's total employment growth continued to remain above the labor force growth in 2018. This pattern, which emerged in 2011, appears to be the new structural norm since it has lasted for seven years. Faster growth of employment than the labor force is indicative of labor demands in the Valley. It also may indicate a flow of people returning to the labor force after dropping out since the end of the Great Recession.

For the first time since 2013, Valley employment growth exceeded state employment growth. This new emerging pattern is in line with the structural characteristics of the Valley relative to those of the state. Such a pattern had prevailed until 2009, but had reversed in the four years immediately after the Great Recession hit. In the coming months, growth is expected to be in line with this structural pattern where the Valley's employment growth exceeds that of the state. One caveat however, is the more vulnerable characteristic of the Valley economy to interest rate hikes than that of the state, due to the predominance of unskilled workers in the Valley.

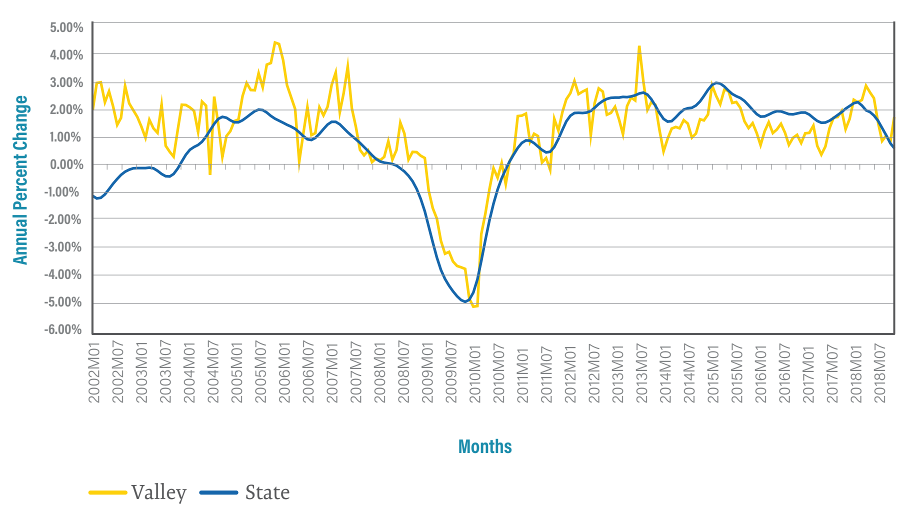
Consumer Confidence Index



Labor Force vs. Employment Growth



Employment Growth: State vs. San Joaquin Valley



Employment Indicators

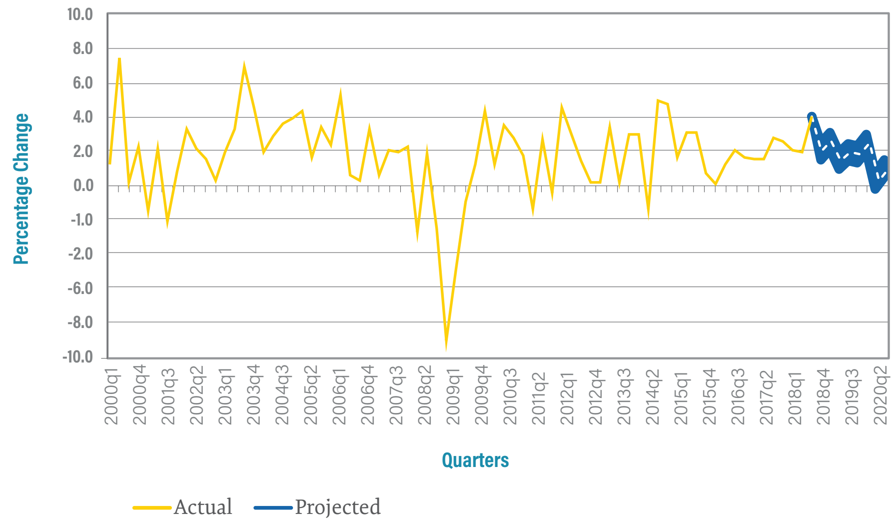
The depreciation in the U.S. tariffs and resulting retaliation produce nothing but a lose-lose situation in the long run for all countries involved. There is ample evidence of such an outcome in the past following trade wars, and it is not very likely the outcome will be different this time. The progression of escalation — as commonly evidenced in the past — starts with competitive devaluations that result in currency wars, as was a common theme of the popular media a few years back. When currency wars are not resolved, they lead to trade wars in the form of higher tariffs and spiraling retaliation that, if not resolved, often lead to physical wars. Consistent with a plateaued economy, real gross domestic product (RGDP) growth rate is projected to grow at an average rate of 2.01 percent in the coming two-year period.

At 3.18 percent, education and health services employment in the Valley grew at a slower pace in 2018 than 2017. Despite this slower pace, employment in the category is well on its way to surpassing 225,000 by the third quarter of 2019. The robust growth pattern in education and health services employment was hardly altered, even during the recessionary years. This category of employment is a good indicator of how the Valley economy grows over the years and clearly reflects an influx of population into the region.

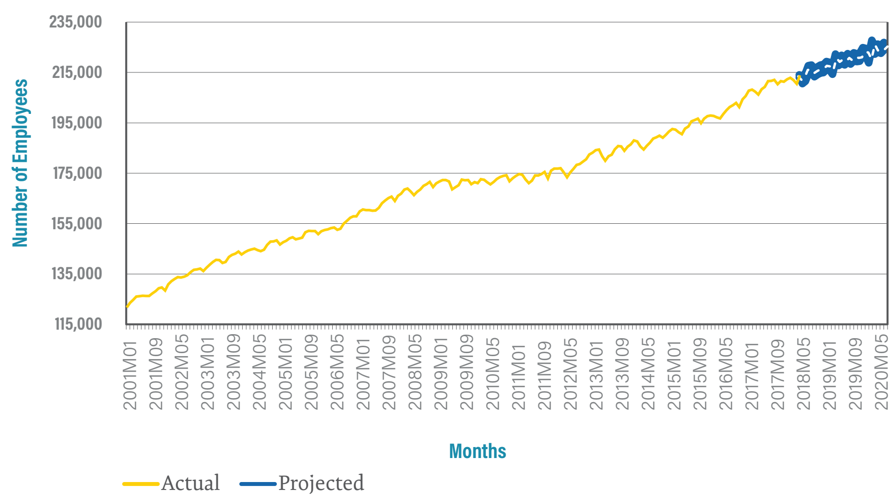
Typical yearly growth in education and health services employment is about 3.45 percent, but the yearly growth in 2018 was a bit slower, at 3.18 percent. Projections point to an average annual growth of 2.66 percent in 2019 and 2.37 percent in 2020 as the economy begins to cool off following simultaneously occurring rate increases and balance sheet reductions of the Federal Reserve by about $50 billion a month.

The Valley manufacturing employment long-term benchmark rate had become positive in 2017 for the first time since the end of the recessionary years. The same pattern in this

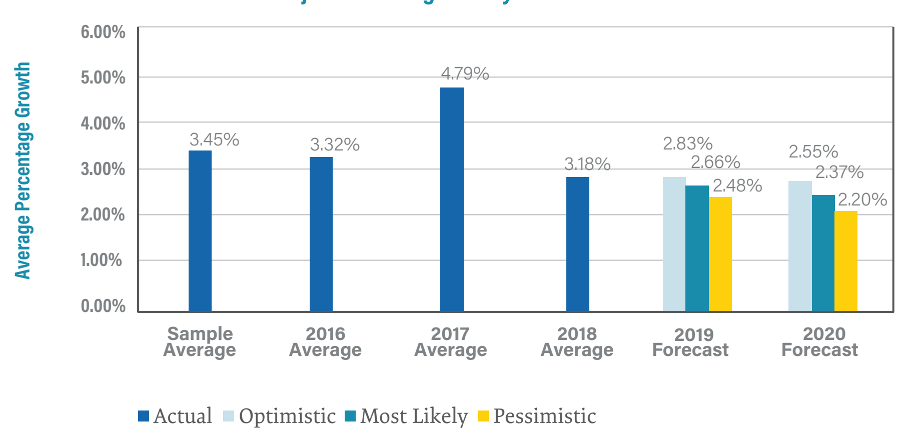
U.S. Real GDP Annual Growth



Education and Health Services Employment



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

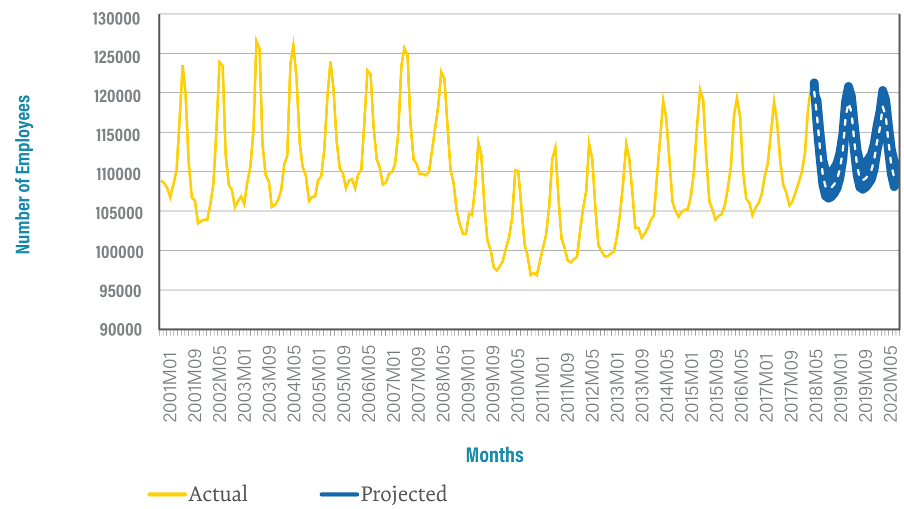


benchmark growth rate was maintained in 2018. Manufacturing employment in the Valley displayed the fastest growth since 2015, as more distribution centers opened in counties such as San Joaquin and Fresno. Such dynamics also were consistent with those of the Purchasing Managers Index of the Institute of Supply Management, an important leading indicator in the manufacturing industry. ▶

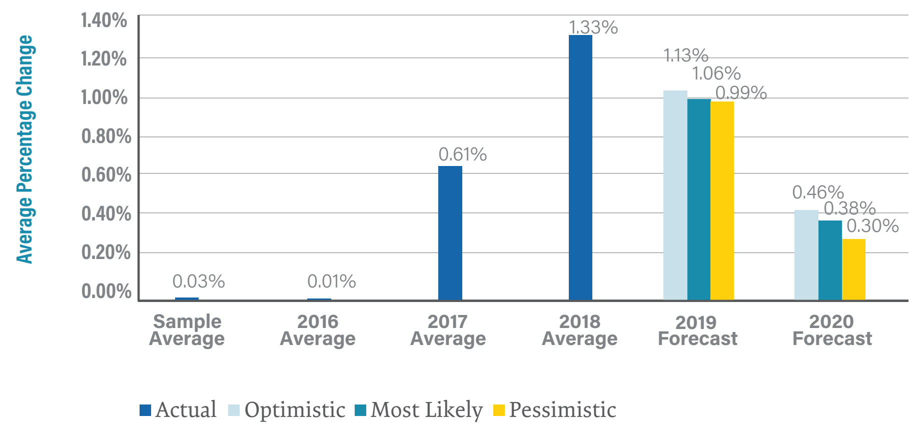
The Valley's manufacturing employment is projected to reach 115,000 by the first half of 2020. Some marginal improvement is expected in this category of employment following the easing of some regulations yet to materialize on the part of the new administration. As the effect of tariffs and retaliation are felt more heavily in the coming months, some manufacturing jobs will be negatively affected and the duration of the impact is likely to be long-lasting. When combined effects are taken together, Valley manufacturing employment is ▶ projected to grow at an average yearly rate of 0.72 percent in 2019 and 2020.

The Purchasing Managers Index of the Institute for Supply Management came very close to breaking its record value set in July 2004, but has remained slightly shy of that level in 2018. In the coming months, the expectation is that the Index will just do that, and reach a new record since 2001, despite the flattening trend. Nationwide, 2018 manufacturing employment grew at an average yearly rate of 2.02 percent. For the first time since the Great Recession, manufacturing employment growth ▶ nationwide has exceeded that of the Valley. This is not surprising since the winners from the new tariff structure are those who benefit from tariffs — such as the steel industry on the East Coast — and the losers are those who suffer from retaliation — such as the Valley. Subsidies to mitigate the losses are not a solution since the cost of those subsidies ultimately are paid by consumers, including those in the Valley. At 0.59 percent, there was basically very little growth in statewide manufacturing employment. Compared to these numbers, the Valley's performance in manufacturing employment remains noteworthy.

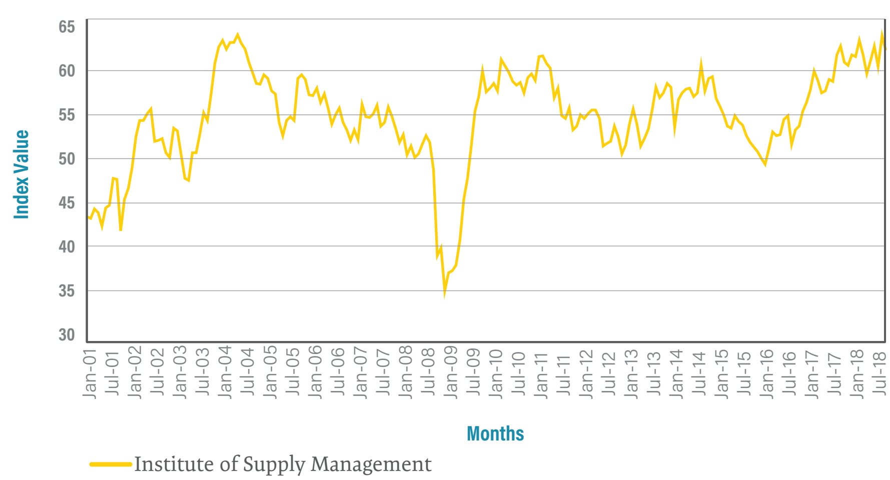
Manufacturing Employment



Manufacturing Employment
Historical vs. Projected Average Yearly Growth



Purchasing Managers Index



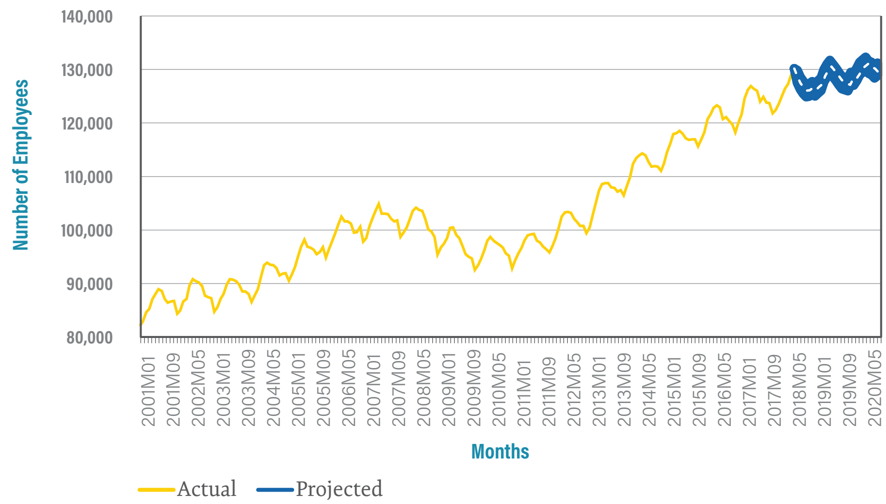
As one of the first categories to be affected by rising interest rates, leisure and hospitality services employment continued to slow in 2018, and further slowing is projected in the category in the coming months. At this slower pace, leisure and hospitality services employment is expected to exceed 130,000 by the first half of 2020. Statewide growth in leisure and hospitality services employment also slowed to 2.52 percent, but was faster than growth in the Valley. The discrepancy between the state and the Valley reflects the higher vulnerability of the Valley than the state to increases in interest rates.

Valley leisure and hospitality services employment typically grows at an average yearly rate of 2.29 percent, but the growth in 2018 of 1.55 percent trailed that long-term benchmark growth rate. Consequently, this category of employment moved down as one of the top performing categories to fourth from last, growing faster than information, retail trade and financial activities employment. Projections point to further slowing, at 1.27 percent in 2019 and 1.01 percent in 2020.

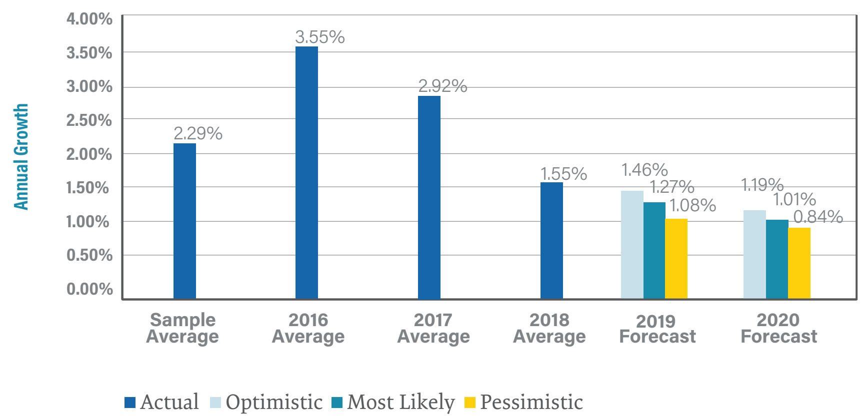
"THE DISCREPANCY BETWEEN THE STATE AND THE VALLEY REFLECTS THE HIGHER VULNERABILITY OF THE VALLEY THAN THE STATE TO INCREASES IN INTEREST RATES."

Trade, transportation and utilities employment was the third-fastest growing category in 2018. Employment levels are projected to reach 300,000 by the first half of 2020. Growth in 2018 came in higher than 2017 and was above the long-term benchmark growth of 1.78 percent. Given the effect from tariffs and retaliation, some slowing is expected over the two-year period ahead.

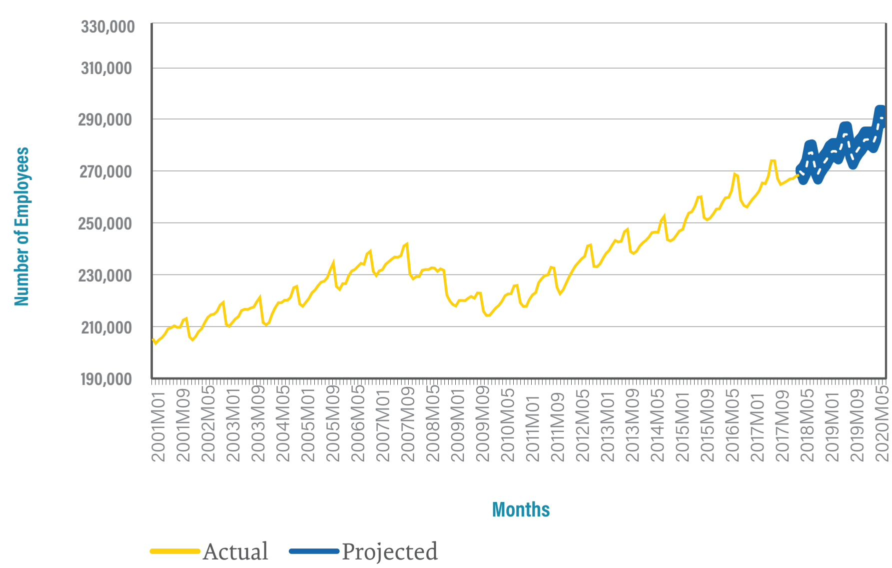
Leisure and Hospitality Services Employment



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



Trade, Transportation and Utilities Employment

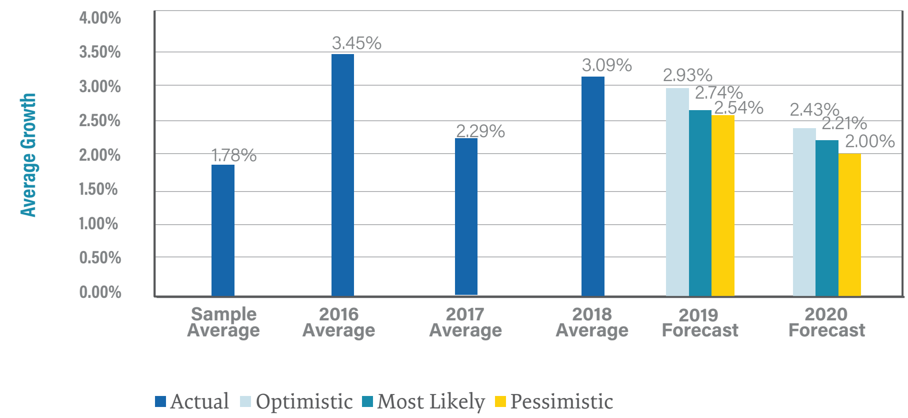


Other factors contributing to slower growth projections are the price of oil and increasing interest rates. Statewide, transportation and utilities employment grew 3.79 percent. The Valley's transportation and utilities employment growth, at 3.09 percent, was slower than that of the state and the nation. Nationwide, growth in this category of employment was only a little higher at 3.13 percent. Projections point to an average yearly growth of 2.74 percent in 2018 and 2.21 percent in 2020, a pace of growth still higher than the long-term benchmark growth of 1.78 percent.

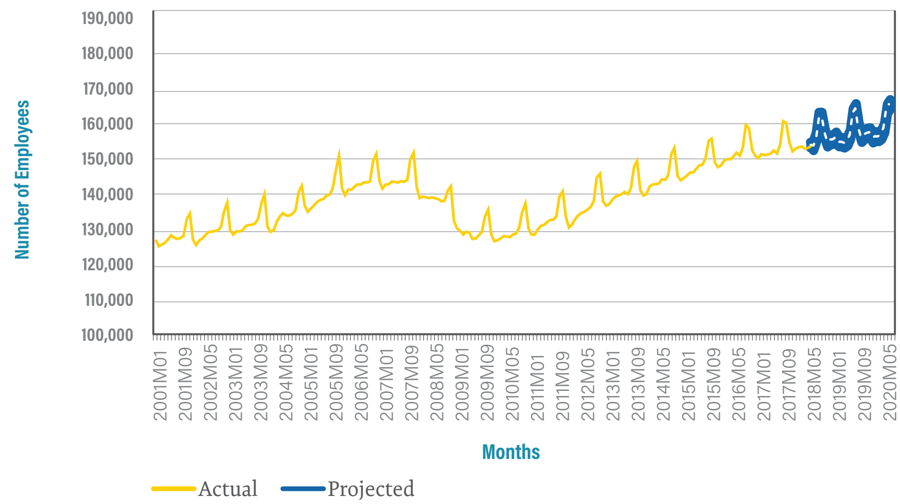
Surprisingly, the Valley's retail trade employment, at 1.20 percent, posted faster growth in 2018 than in 2017. But compared to previous years when retail trade was one of the fastest growing categories of employment, retail trade employment came in third from last in 2018. Given the determination of the Federal Reserve to increase rates further, along with a tariff-driven decline in purchasing power, a slower pace is projected in the coming months. At this slower pace, retail trade employment is expected to reach a lower level of 160,000 by the first half of 2020.

The average yearly growth of 1.20 percent in retail trade employment came in higher than the 1.13 percent benchmark growth in this category. Statewide, retail trade employment grew by 0.81 percent. Nationwide, growth was even slower at 0.39 percent. Thus, the Valley's retail trade employment growth in 2018 was faster than the nation and the state. However, the nature of the predominantly unskilled workforce poses a greater risk in the Valley. Projections point to an average annual growth of 1.01 percent in the coming two-year period.

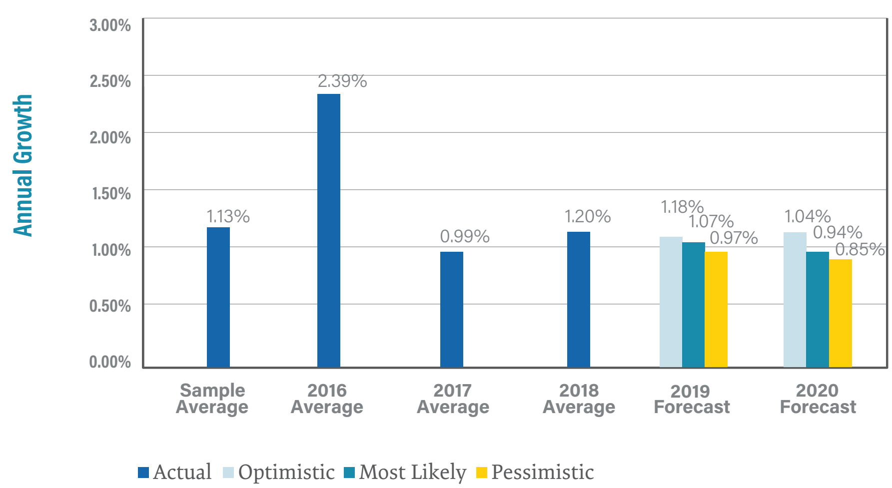
Trade, Transportation and Utilities Employment: Historical vs. Projected Average Yearly Growth



Retail Trade Employment



Retail Trade Employment: Historical vs. Projected Average Yearly Growth



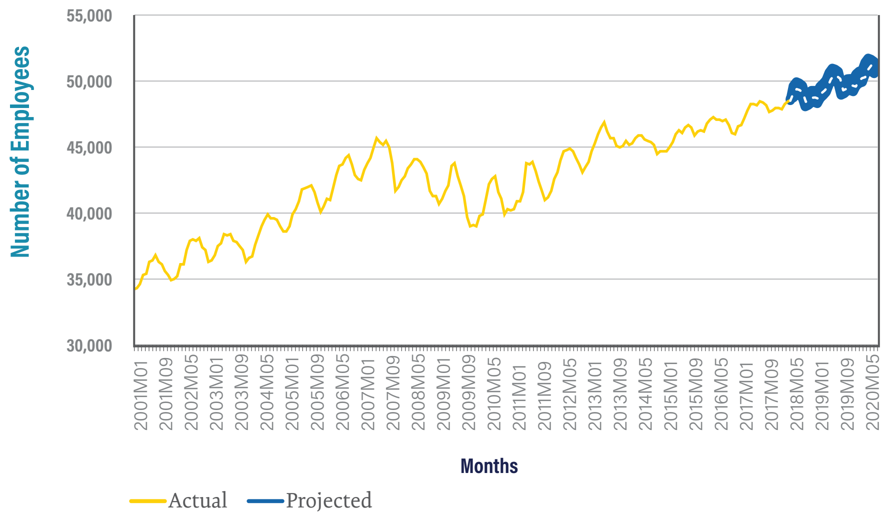
Employment Indicators

The dynamics of Valley wholesale trade employment have changed since 2013, reflecting the impact of the drought years. As the Valley continues to reel from drought, rising interest rates and trade wars are hampering faster recovery. Even though other regions of the nation, such as the steel belt, stand to gain from higher tariffs, the Valley economy stands to lose from the resulting retaliation. Subsidies would not help, since they ultimately come out of consumers' pockets. Even under zero retaliation, the Valley would lose due to higher prices faced by the consumer with no change in income levels from higher tariffs. At this varied pace, wholesale trade employment levels are expected to exceed 50,000 by the third quarter of 2019.

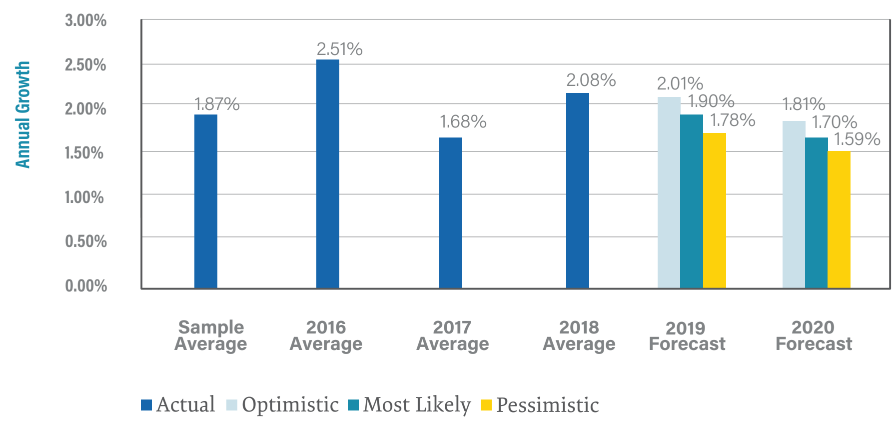
In line with structural patterns, wholesale trade employment growth was faster than retail trade employment growth in 2018, as it was in 2017. This was not the case in the years prior to 2017. At 2.08 percent, the annual yearly growth in 2018 was higher than the long-term benchmark rate. Recent rains have helped very little in solving the water problems of the Valley, but more storage is needed to overcome water problems in the long-run, particularly given the recent growth in the region. Projections point to an average yearly growth of 1.90 percent in 2019 and 1.70 percent in 2020.

Information employment in the Valley declined in 2018, but at a slower pace than in 2017. Employment levels in this category are expected to stabilize around 10,000 sometime in the near future as the drop continues to slow. The stagnant pattern in statewide information employment ended, posting 2.15 percent average yearly growth in 2018. Nationwide, there was worsening in this category by 1.15 percent in 2018.

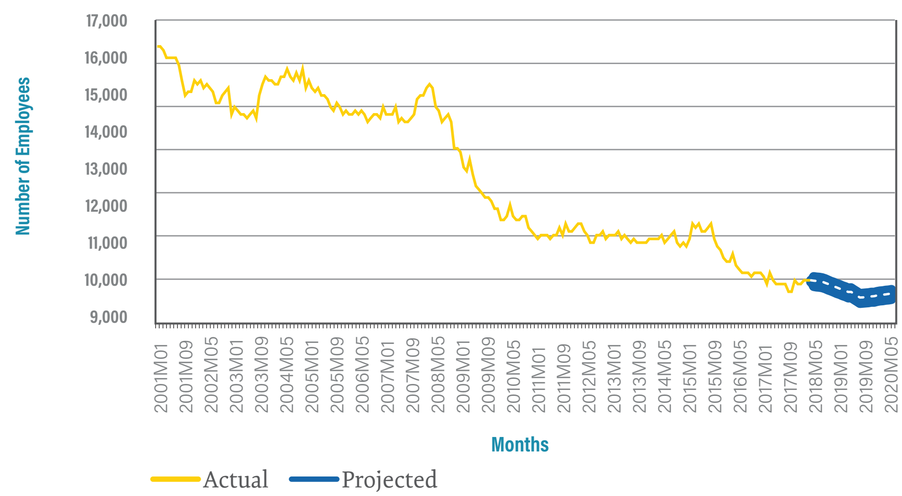
Wholesale Trade Employment



Wholesale Trade Employment: Historical vs. Projected Average Yearly Growth



Information Employment



For the first time since 2015, declines in Valley information employment were slower than the long-term benchmark rate of -2.06 percent. The decline in this series has slowed by about 2.0 percent since 2016, pointing to a tendency to level at the present change in pace. Improvement by about 2.0 percent was not enough to switch from negative to positive territory in 2018. Projections point to a slower decline, by -1.55 percent, in 2019 and a slightly faster decline in 2020 at -1.78 percent.

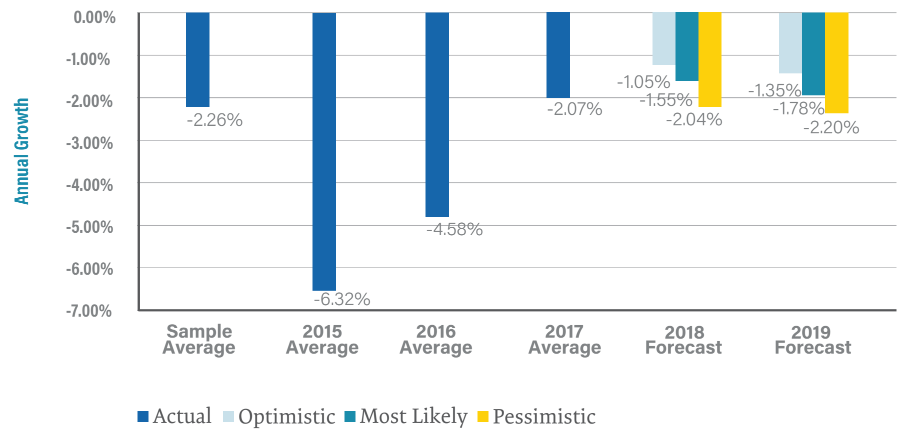
7.88%

AVERAGE YEARLY GROWTH OF CONSTRUCTION EMPLOYMENT IN 2018

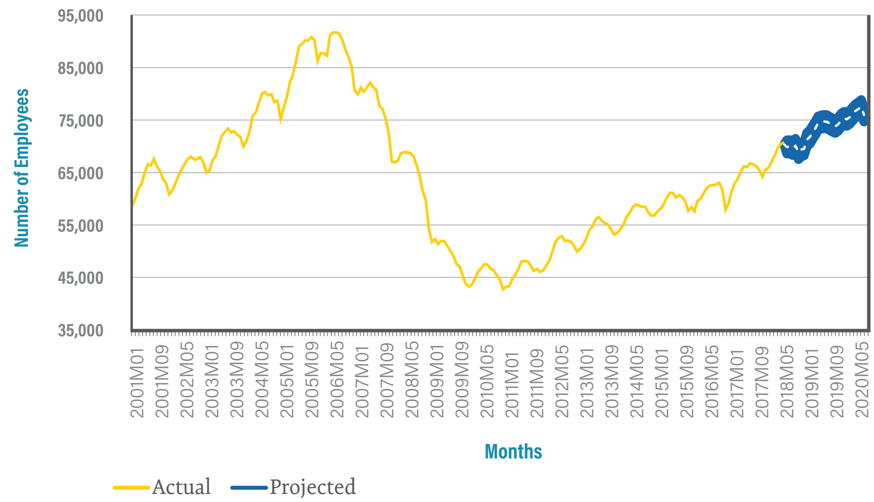
Construction employment continued its reign as the fastest-growing sector in 2018 by posting a very significant 7.88 percent average yearly growth. Employment levels in this category are expected to reach 75,000 by the second half of 2019. Growth in 2018 was the fastest since 2012. Due to rising rates and balance sheet reduction on the part of the Federal Reserve, construction employment in the Valley is expected to grow at a slower speed over the next two years.

The long-term benchmark average yearly rate now stands at 0.86 percent. At the national level, construction employment grew 4.01 percent in 2018. At the state level, growth in the category stood at 6.59 percent. Faster growth than the state and the nation in construction employment points to the existing growth potential in the Valley and the demand resulting from low inventory. Projections point to an average annual growth of 6.24 percent in 2019 and 4.23 percent in 2020.

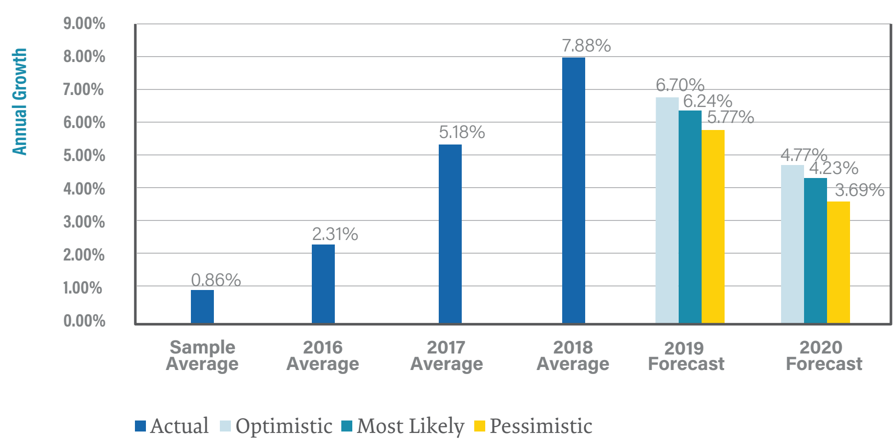
Information Employment: Historical vs. Projected Average Yearly Growth



Construction Employment



Construction Employment: Historical vs. Projected Average Yearly Growth




ENERGY

Employment Indicators

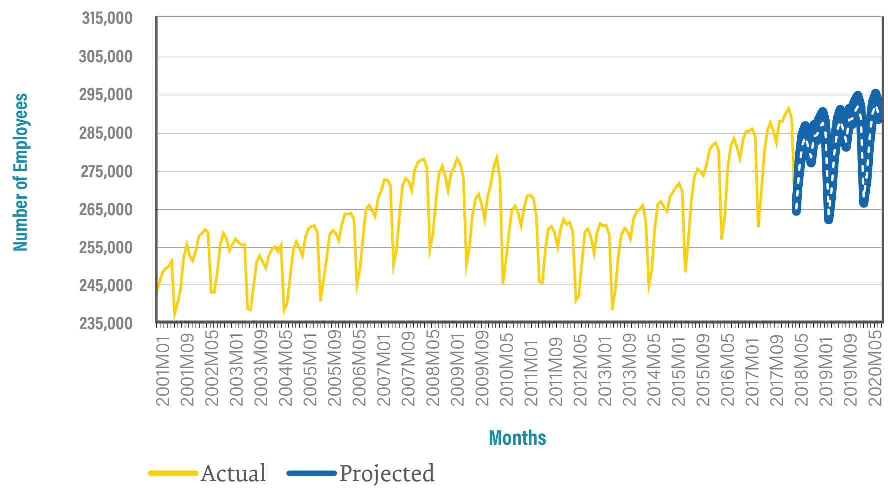
Total government employment is projected to exceed 295,000 by the first half of 2020. At a 3.53 percent average yearly rate, government employment tied with wholesale trade ▶ employment as the third-fastest growing category. Government employment grew at a slower pace in 2017 than 2016, pointing to a lagged behavior in slowdown when compared to other categories of employment in the Valley. Such lagged 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.

TOTAL GOVERNMENT EMPLOYMENT IS PROJECTED TO EXCEED 295,000 BY THE FIRST HALF OF 2020.

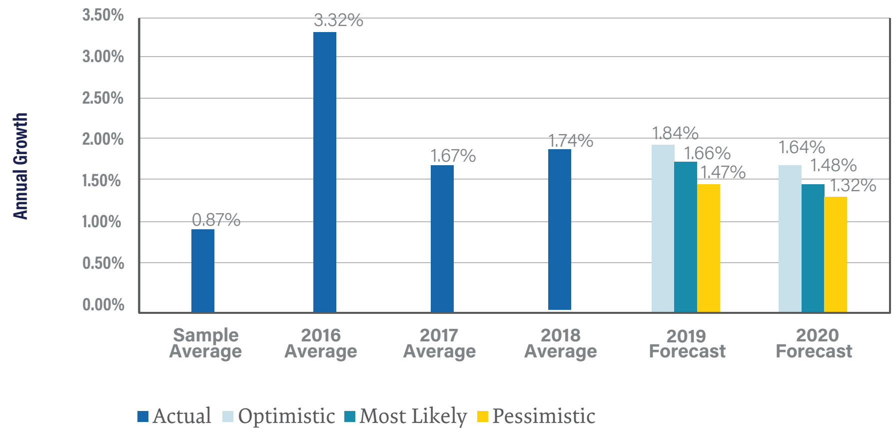
Government employment is projected to reach 300,000 by the first half of 2020. Although growth in this category was slightly faster in 2018 than 2017, at a 1.74 percent average yearly rate, it was still more than the twice the rate of long-term benchmark growth of 0.87 ▶ percent. Government employment has a delayed response to business cycles, since it is a lagged indicator. Growth in government employment is expected to slow further, with projections pointing to an average yearly growth of 1.66 percent in 2019 and 1.48 percent in 2020.

Valley financial activities employment grew 1.06 percent in 2018, which was a faster pace than the 0.77 percent of 2017. Valley community banks saw heightened activity in total deposits following increases in time deposit account rates. A rush to refinance and greater activity in net loans and leases before rates rose further were other factors. Financial activities employment is projected to reach 44,000 by the first half of 2020. ▶

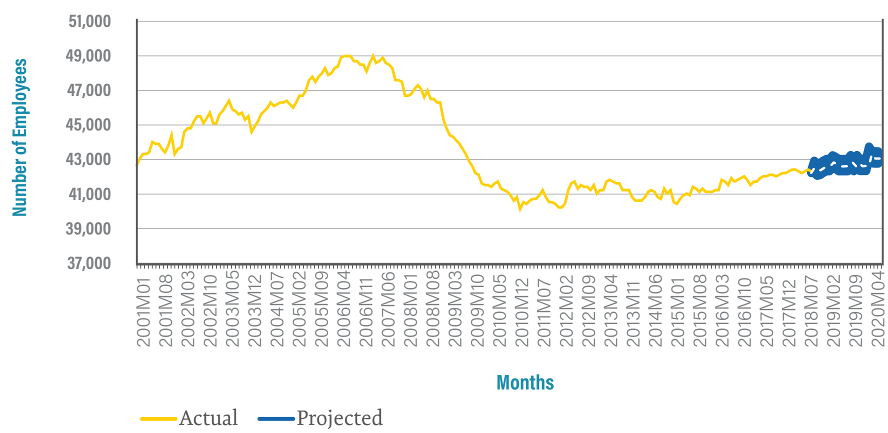
Government Employment



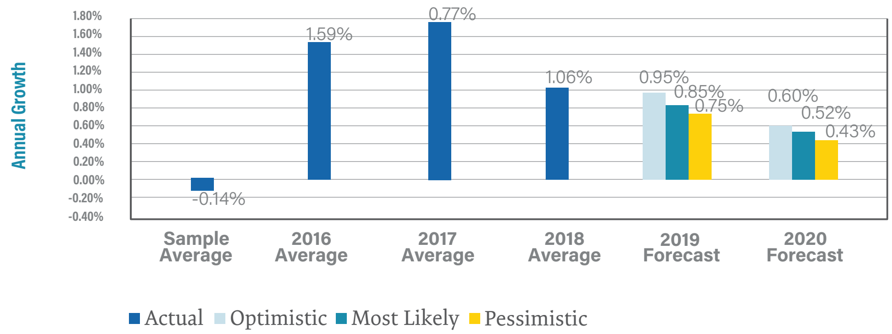
Government Employment: Historical vs. Projected Average Yearly Growth



Financial Activities Employment



Financial Activities Employment: Historical vs. Projected Average Yearly Growth



The long-term benchmark rate in this sector will not stand at -0.14 percent and is likely to switch from negative to positive territory in the coming months. Tax cuts are not expected to have as much benefit to financial activities in the Valley as nationwide, due to factors such as the higher price of homes in the West and high unemployment rates in the Valley. Compared to the benchmark rate, financial activities employment growth, at 1.06 percent, was quite significant in 2018. Employment growth in financial activities, however, is expected to slow further in the coming months as long-term rates continue to rise beyond the 5 percent threshold. Projections point to an average annual growth of 0.85 percent in 2019 and 0.52 percent in 2020.

The Fed still plans to make a few more rate hikes, and will continue to implement balance sheet reductions of about $50 billion a month. These moves, plus the relatively disadvantaged position of the Valley and the state under the new tax cuts, continue to have mixed effects on Valley employment levels. In this environment of mixed economic effects, total employment in Merced County grew the fastest in 2017, followed by San Joaquin County. Construction employment grew the fastest, followed by education and health services employment in the Valley in 2018. Information employment repeated as the only category to post a decline in employment, although the decline was about 2.0 percent slower than the previous year.

Housing Sector

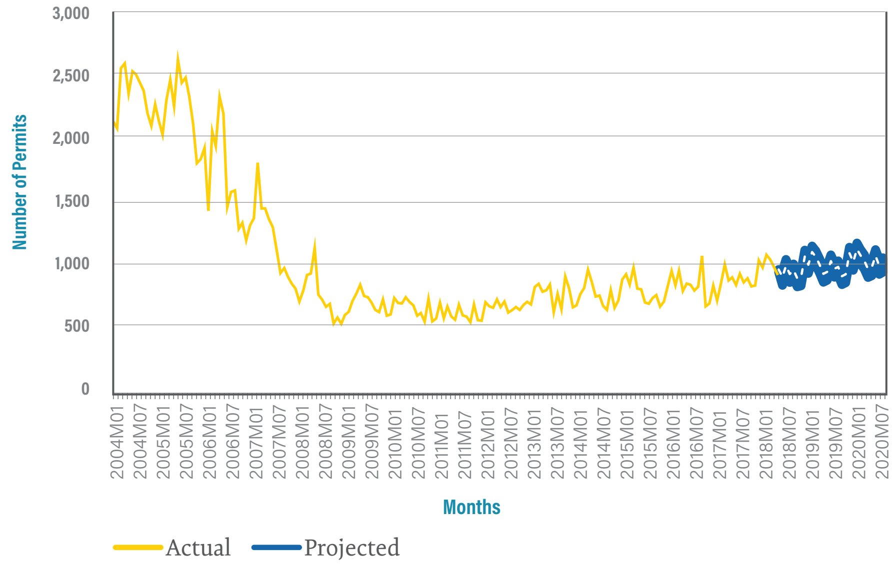
In this section of the report we utilize the data from the San Joaquin Valley's eight Metropolitan Statistical Areas (MSAs): Fresno; Bakersfield-Delano; Hanford-Corcoran; Madera-Chowchilla; Merced; Modesto; Stockton and Visalia-Porterville. The aggregated data from the eight MSAs make up the total single-family building permits in the Valley.

There was a very significant spike in 2018 housing permits, corresponding to a 32.84 percent increase. Following a spike like this, next year's housing permits are naturally expected to be much lower. High demand for housing resulting from low inventory for so many years was the main reason for this spike. Valley housing permits are expected to exceed 800 permits per month by the end of the first half of 2020.

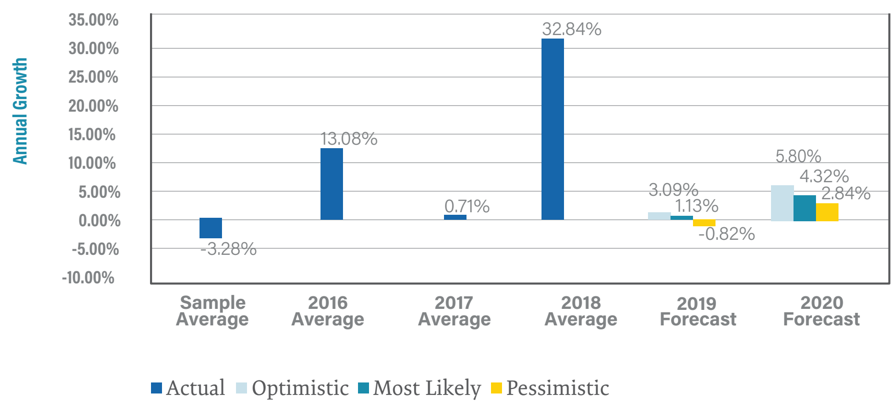
Over the same eight-month period, the Merced MSA issued 160 permits in 2018, as opposed to 92 in 2017. Stockton issued 1506, versus 907 in 2017. Madera issued 312 housing permits in 2018, versus 181 the year before. With 1,636 single-family building permits issued, Fresno came in first, followed by Stockton and Bakersfield. Bakersfield issued 1,446 housing permits in 2018. Visalia issued 861 housing permits, versus 713 in 2017. With only 43 permits, Modesto was the only MSA that issued fewer housing permits in 2018 than 2017. Projections point to average annual growth of 1.13 percent in 2019 in single-family building permits and 4.32 percent increase in 2020.

The steep decline in California foreclosure starts that began in 2009 has halted. The prevailing dynamics of 2018, which began in 2017, now appear very different, exhibiting a flat pattern with small occasional spikes. There will likely be a turning point in foreclosure starts in the coming months, after which the series will begin to increase more significantly. Major reasons for such an expectation are the continued increase in interest rates and balance sheet reductions of about $50 billion a month on the part of the Federal Reserve.

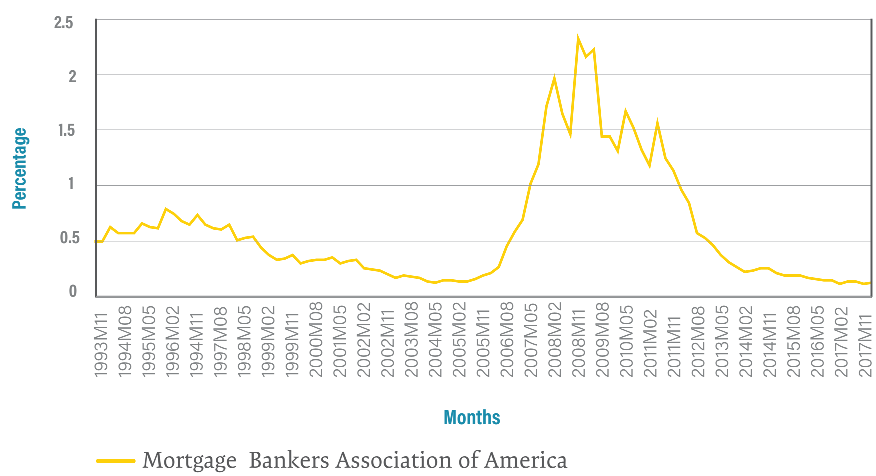
Single Family Building Permits



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



Foreclosure Starts in California



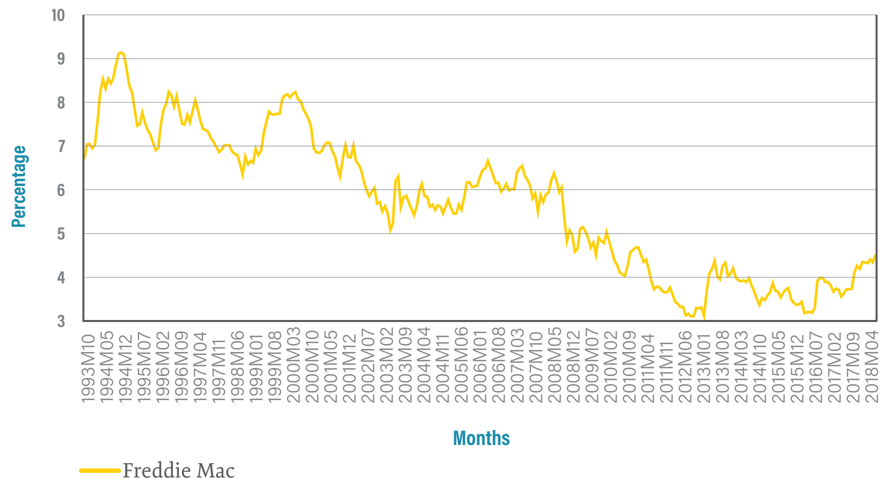
Thirty-year mortgage rates reached the critical 5 percent rate and are not likely to stay there given the ongoing tightening of the Federal Reserve. Inflation rates are now sustained above 3.0 percent, pointing to further increases in long-term rates. At these current rates, average monthly mortgage payments would rise $150. ▶ Further, the stock markets have begun responding more negatively to further increases in interest rates due to the impact on the cost of borrowing.

The yearly increase in home prices in the Valley was 8.50 percent in 2018, compared to 8.27 percent in 2017. The shortage in the housing supply contributes to the increase in home prices in the Valley. In regions like San Francisco the market has shifted and — after peaking — have actually started to decline. The growth in housing prices is expected to slow further following the increase in mortgage rates to 5 percent, curtailing the demand for housing, despite the existing shortage in inventory. ▶

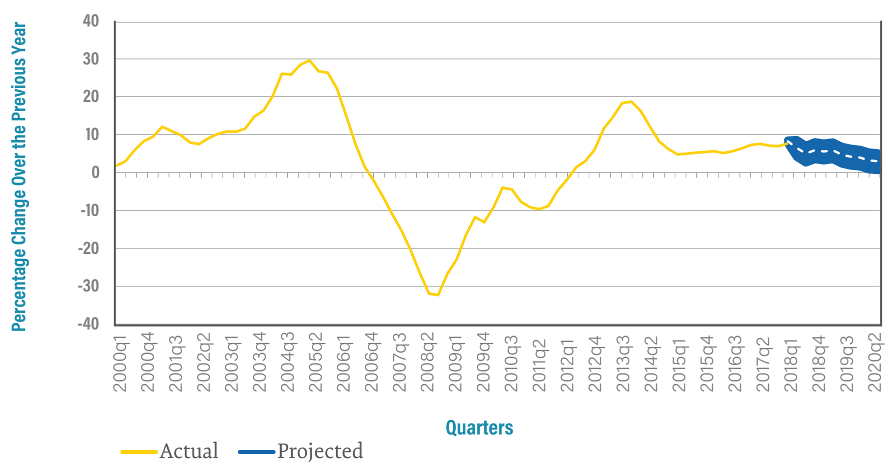
The fastest increases in home prices in 2018 were observed in the Merced MSA at 9.97 percent, followed by Stockton at 9.79 percent and Modesto at 9.91 percent. Home prices increased at slowest pace in Bakersfield, at 5.28 percent, and in Hanford, at 6.64 percent. In Fresno, home prices increased by 8.77 percent in 2018, while Madera saw a 9.41 percent increase. Valley home values are projected to increase at an average annual rate of 6.12 percent in 2019 and 4.20 percent ▶ in 2020.

Given the current inflation rates, which are a worry for the Federal Reserve, and the rising costs of production from higher wages, the price of oil and higher tariffs, rates are likely to climb further, along with further reductions in the Federal Reserve's balance sheet. The expectation of soft landing the economy without dipping into a recession will hopefully materialize in the near future, halting the need to raise rates further. Thus, home values are projected to increase at a slower pace in the Valley in the coming two-year period.

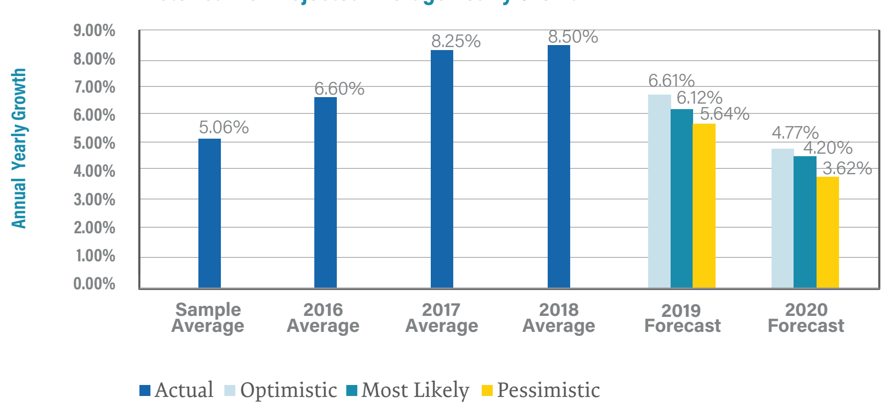
30 -Year Fixed Rate



Yearly Percentage Change in Housing Prices



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



Inflation and Prices

The yearly rate of inflation rose to 3.36 percent and stayed above 3 percent for ten consecutive months, the longest duration since the end of the Great Recession. Increases in overall price levels were mainly driven by cost-push factors such as the rising price of oil, wage increases and higher tariffs. Tax cuts and signs of overheating in the economy are added pressures on the inflation rate coming from the demand-pull side.

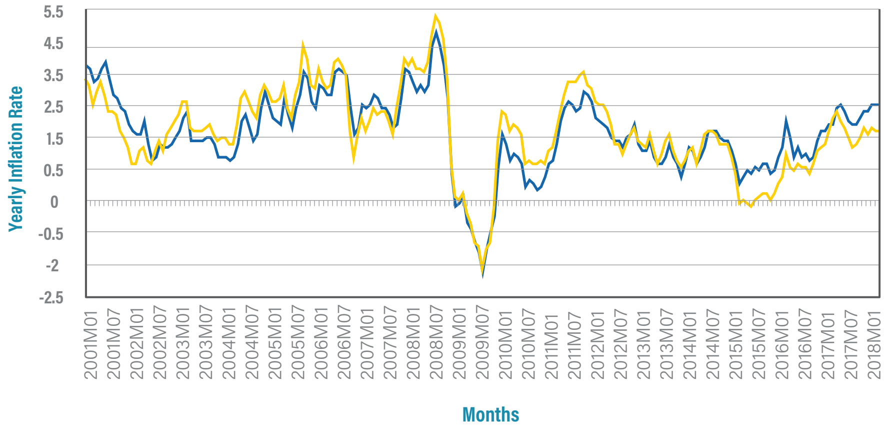
Since 2015, prices consistently have been rising faster in the West than nationwide. Therefore, aggregate demand appears to expand faster on this side of the nation than elsewhere. The last time such high inflation rates were observed was in July 2011, but at that time the inflation rate came down rapidly instead of sustaining above 3 percent for ten months. Naturally, achieving price stability is now a major concern for the Federal Reserve, prompting further rate hikes and balance sheet reductions until inflation is tamed.

"SINCE 2015, PRICES CONSISTENTLY HAVE BEEN RISING FASTER IN THE WEST THAN NATIONWIDE."

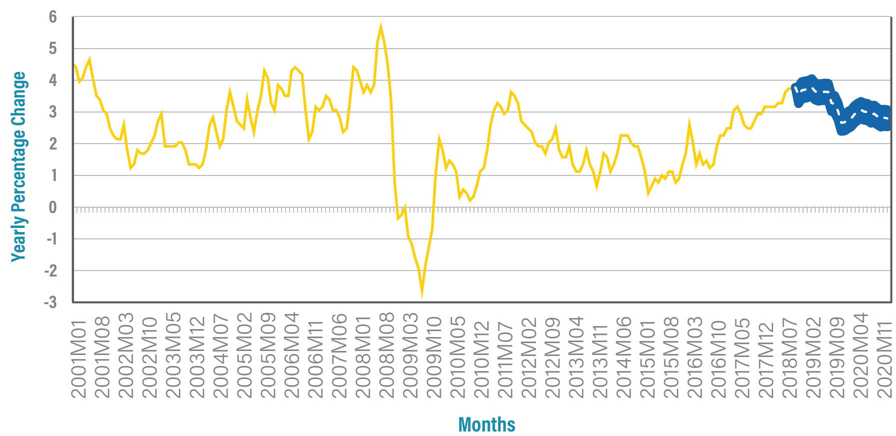
Since 2015, prices have been steadily increasing. Inflation was at 1.34 percent in 2015, rose to 1.93 percent in 2016, to 2.82 percent in 2017 and to 3.36 percent in 2018. The current administration's desire to keep the value of the dollar low is another factor putting upward pressure on the rate of inflation.

The long-term benchmark inflation rate now stands at 2.29 percent. For the past two years, the rate of inflation came in higher than this benchmark rate. Valley consumers are likely to feel the further decline in their purchasing power in the coming months. Projections point to an average yearly increase of 3.20 percent 2019 and 2.87 percent in 2020, assuming the Federal Reserve's rate hikes and balance sheet reductions policies achieve their objectives.

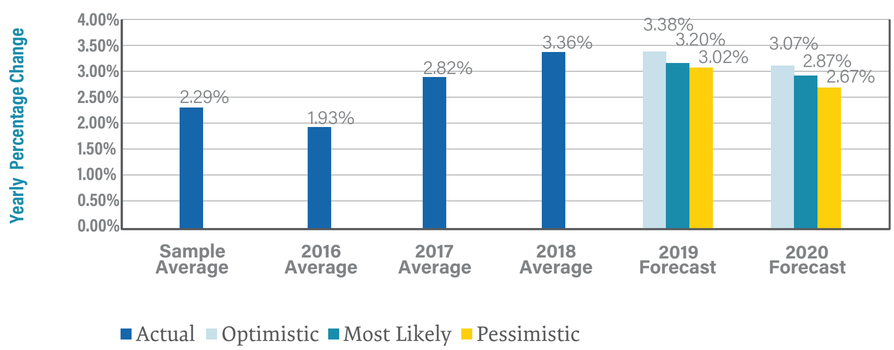
Inflation Rate: Nationwide vs. West



U.S. West Inflation Rate



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



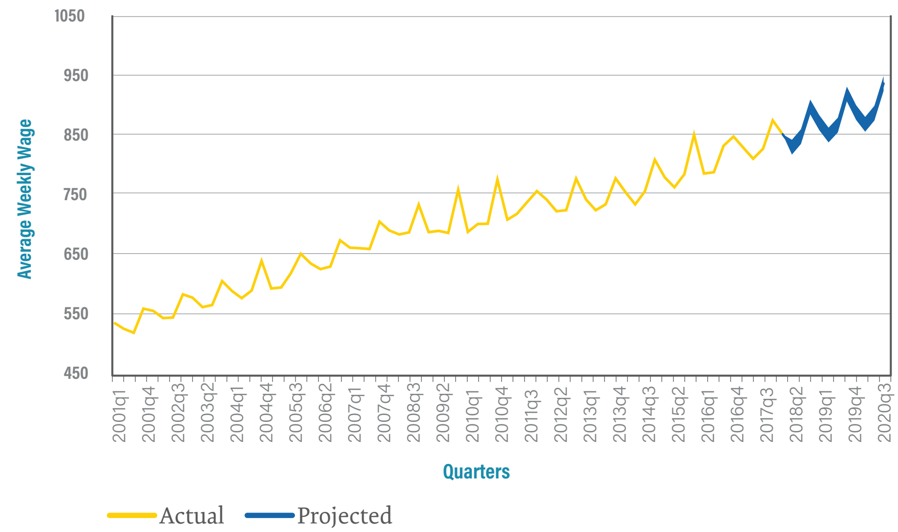
Average weekly wages rose 2.66 percent in 2018, slightly faster than the 2.59 percent rise in 2017. Clearly, wage pressures coming from the cost-push side have not subsided. The average yearly increase in wages, both in 2017 and 2018 were slightly less than the long-term benchmark rate of 2.82 percent. Wages are projected to grow at a slower ▶ pace despite the effect of tax cuts, as the economy's response to rising interest rates and balance sheet reduction becomes more evident.

Despite the interventions of the Federal Reserve, the economy has not cooled off to the desired level. However, with long-term interest rates now around the critical 5 percent, the effect is more likely to be felt by the economy. Wages are projected to grow more slowly than the inflation rate in the coming months. Projections point to an increase in average weekly wages at an annual rate of 2.35 in 2019 and 2.05 percent in 2020. ▶

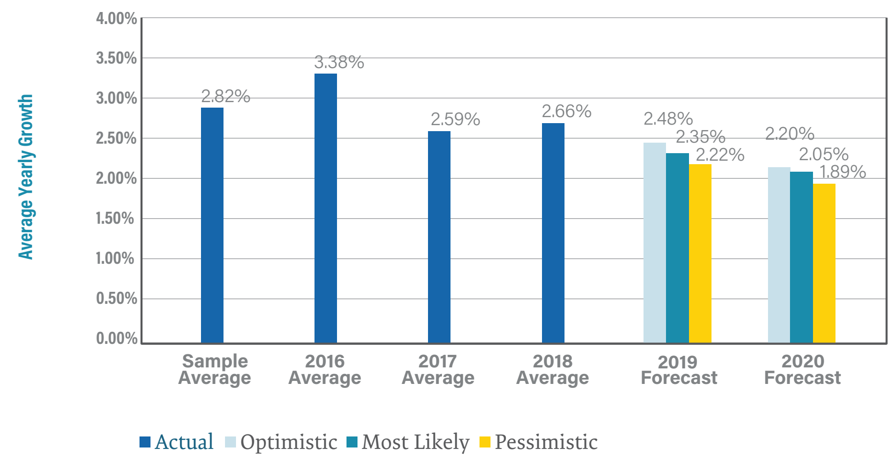
"THE RATE OF INFLATION INCREASED AT A FASTER PACE THAN WAGE INCREASES IN 2018."

The rate of inflation increased at a faster pace than wage increases in 2018. The corresponding loss of purchasing power on the part of the Valley consumer is about 0.70 percent. Projections of the inflation rate and wages point to a continuation of this trend corresponding to at least a 1.0 percent loss in purchasing power in 2019 and 2020. ▶

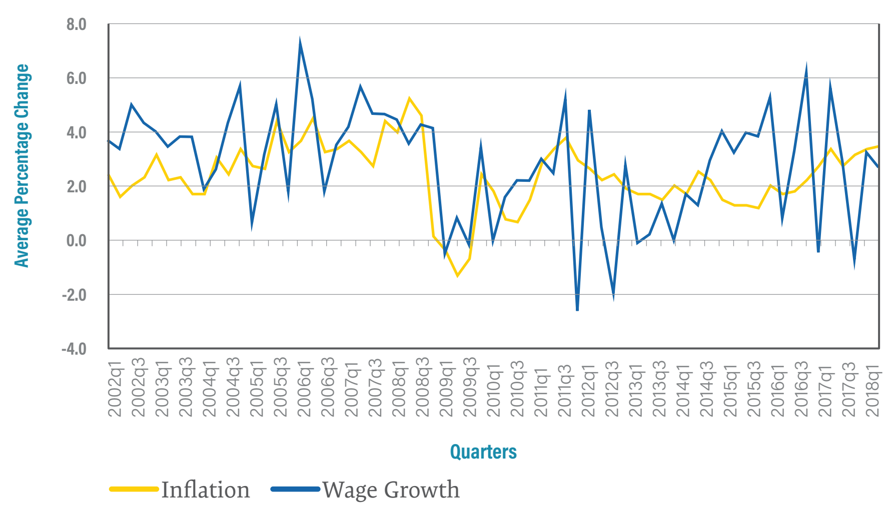
Quarterly Average Weekly Wages



Weekly Wage Growth:
Historical vs. Projected Average Yearly Growth



Yearly Wage Growth vs. Inflation



Banking and Capital Markets

Valley community bank deposits grew 8.25 percent in 2018, not much different from the previous year's growth of 8.01 percent. However, the slow-down that had been taking place in total bank deposits over the past three years came to an end in 2018. The historical rate, also the long-term benchmark rate, now stands at 7.34 percent. Valley bank deposits continue to increase faster in a sustained manner than this benchmark rate. The faster rate of increase can be attributed to higher rates offered by banks on time deposits and similar accounts.

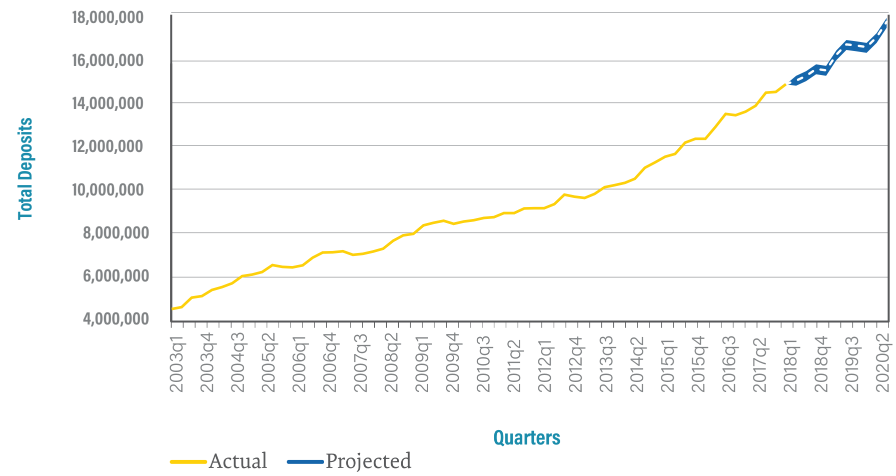
The ongoing increases in interest rates helped Valley community bank deposits and bank profitability. Tax cuts also should help increase bank deposits to some extent. Community bank deposits in the Valley are projected to increase at an average annual rate of 7.86 percent in 2019 and 6.80 percent in 2020 as the expected slowing of the economy from rate hikes gradually begin to affect banking activities.

VALLEY BANK DEPOSITS CONTINUE TO INCREASE FASTER IN A SUSTAINED MANNER THAN THE BENCHMARK RATE OF 7.34%.

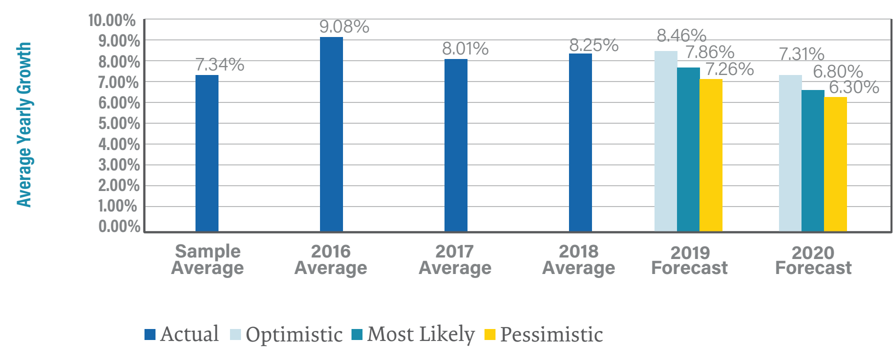
The turning point reached at the third quarter of 2017 in bank assets in non-accrual following the steady increases in interest rates appears to be permanent. The series is now clearly sloping upward and gradually becoming steeper. It might be time for the Valley consumer to reconsider balance sheets by reducing high credit card balances and take advantage of zero introductory rates offered by banks that now extend more than 12 months.

Assets in default 30 to 89 days display consistent behavior, although more modestly than assets in non-accrual. Assets in default 90-plus days show a steeper trend upward than assets in default 30 to 89 days.

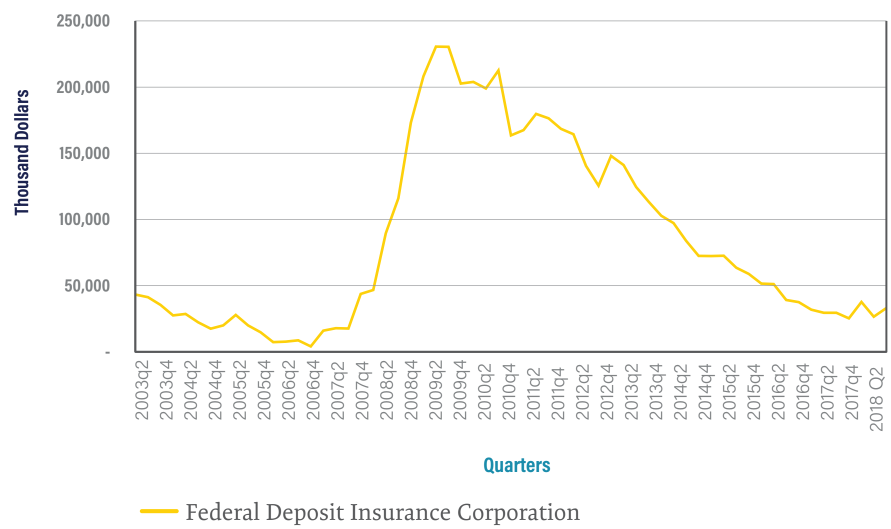
Total Bank Deposits (in $ Thousands)



Total Bank Deposits: Historical vs. Projected Average Yearly Growth



Assets in Nonaccrual

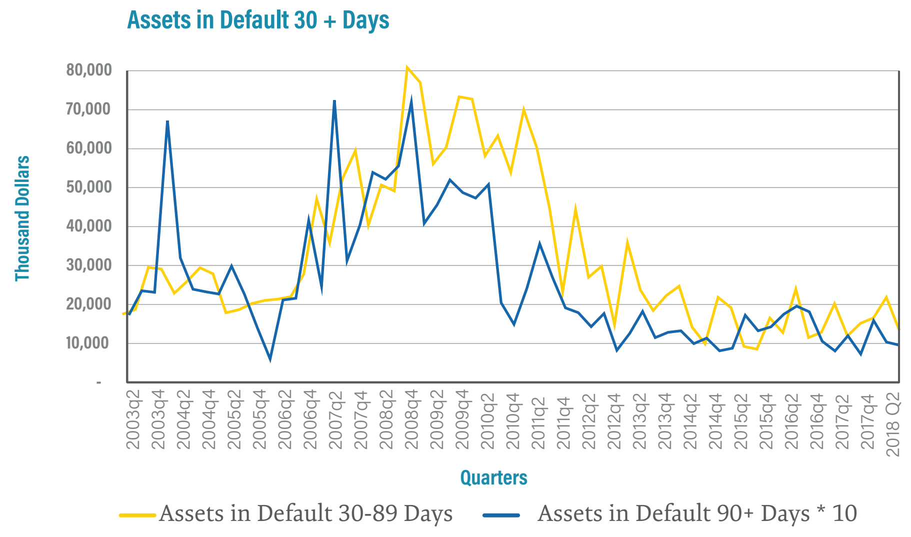


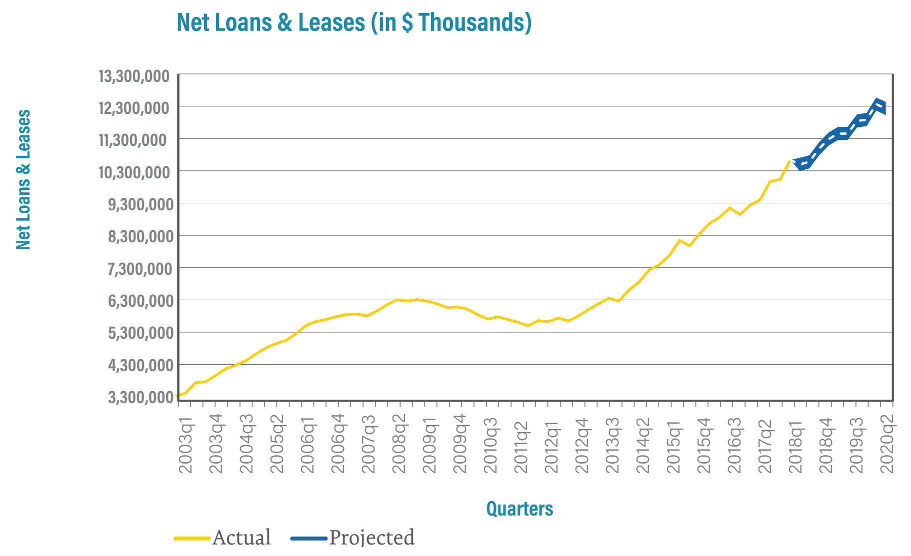
Assets in default 90-plus days have already exceeded a value of 10,000 on the vertical axis. Assets in default 30 to 89 days most likely will exceed this value in the coming months as the borrowing costs increase further.

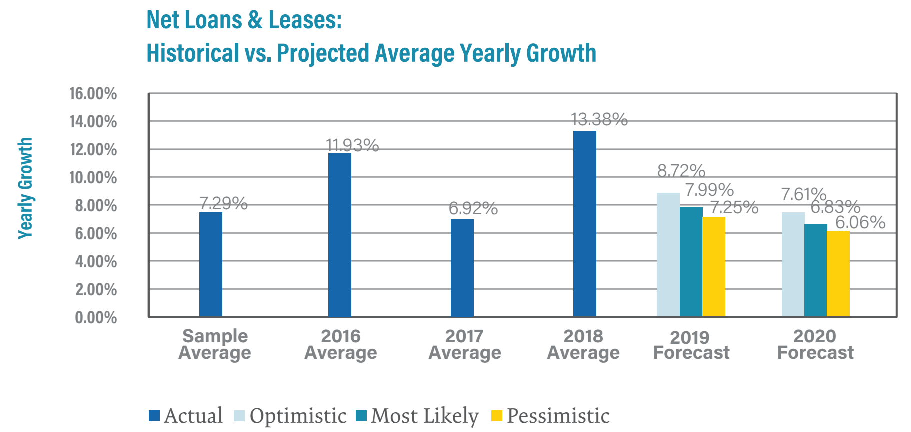
Net loans and leases grew 6.92 percent in 2017, consistent with the dynamics observed in total bank deposits. However, the growth of 6.92 percent was much lower than the 8.02 percent growth in total bank deposits, pointing to about a 1.1 percent deficit in lending. A slowdown in Valley net loans and leases has occurred every year 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.

Valley community banks net loans and leases increased in 2018 at a significant rate of 13.38 percent, a rate of increase not consistent with the 8.25 percent increase in bank deposits. This means that banks in the Valley have extended loans that far exceed their receipts in deposits and therefore have used their reserves to extend these loans at higher rates to increase their profitability. As the Fed reaches its desired goal of cooling off the economy, both deposits and loans likely will grow below historical benchmark rates. Net loans and leases are projected to increase at an average yearly rate of 7.99 percent in 2019 and 6.83 percent in 2020.

The overall economy has not yet cooled to the desired level, which means interest rates will continue to rise for some time. The continuation of rate hikes and balance sheet reductions of about $50 billion per month eventually will discourage borrowers and investors from taking out loans as frequently as they did when interest rates were lower. Higher default rates likely will persuade bankers to become more prudent in extending loans.

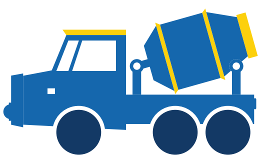






This new section of the report pertains only to the activity of the Valley's sole deepwater port, the Port of Stockton. Ships that berth on the port only load and off-load bulk items and not containers. The main items the port handles are items such as cement, rebar, liquid fertilizer and rice. Forecasts will be generated for these series when the number of observations satisfies the minimum requirement.

Imports of materials used in construction have decreased drastically due to higher tariffs. During the recessionary years, cement imports dwindled to zero and had been gradually ▶ increasing since then, but the imposition of new tariffs struck a blow to that trend. When replaced by domestic cement, the cost of this important building material will almost certainly rise, further increasing the already-high purchase price of homes in the Valley.



"IMPORTS OF MATERIALS USED IN CONSTRUCTION HAVE DECREASED DRASTICALLY DUE TO HIGHER TARIFFS."

Another heavily traded construction item affected by higher tariffs is rebar. Rebar imports also have decreased significantly ▶ since the imposition of higher tariffs, down to 19,794 tons in 2018. Domestic price of rebar is naturally much higher than imported rebar, which would further increase the cost of construction in the Valley. Consumers therefore would have to pay a much higher price to purchase homes in the Valley.

Cement Imports (by tonnage)

Year	2014	2015	2016	2017	2018
January	0	19,000	32,098	48,302	28,086
February	19,000	22,849	57,180	29,940	33,497
March	0	49,817	19,000	39,259	77,112
April	15,000	0	24,238	111,167	75,474
May	0	53,475	31,390	48,748	106,062
June	19,000	0	76,157	102,850	66,571
July	0	54,270	63,339	86,705	120,649
August	18,050	31,000	77150	73,276	56,292
September	0	31,525	0	95,518	31,881
October	18,270	49,859	42,343	86,583	0
November	0	32,600	70,560	104,609	0
December	24,991	29,603	37,030	75,353	0
Total	**11,4311**	**373,997**	**530,486**	**902,310**	**595,624**

Rebar Imports (by tonnage)

Year	2014	2015	2016	2017	2018
January	0	0	9,969	5,771	0
February	0	13,962	21,615	0	0
March	0	26,233	4,271	0	0
April	14,062	7,295	0	2,177	8,046
May	8150	8,377	14,461	7,774	0
June	0	9,030	78,42	4,565	3,597
July	4,234	0	0	8,608	0
August	0	18,364	41,180	4,812	0
September	4,439	3,957	15,771	7,720	8,151
October	4,988	16,059	16,623	0	0
November	5,059	1,572	3,572	0	0
December	0	7,903	0	0	0
Total	**40,932**	**11,2752**	**135,304**	**41,427**	**19,794**

Many farmers have begun importing liquid fertilizer to fight the drought. By the end of 2017, steadily increasing since 2014, liquid fertilizer imports had reached a total value of 700,555 tons. Noteworthy is the near two-fold jump in imports from 2014 to 2015. ▶

It is evident from the first eight months of 2018 that imports of liquid fertilizer once again will reach the same levels that existed in earlier years, underscoring the dire necessity to store more water in the Valley. Given that no action has taken place in terms of water storage, imports of liquid fertilizer will likely remain high during the upcoming two-year period and beyond.

As of the third quarter of 2015, Stanislaus Sulfur, tire chips, coal and rice are examples of exports from the Port of Stockton. Exports of rice have begun decreasing gradually since 2016, but the decrease is not yet attributed to retaliation, since most exports go to Japan. However, demand for almonds has decreased 47 percent, wine exports fell by 15 percent and the export of cherries through the port fell by 36 percent. ▶

Naturally, tariffs eventually cause imported items to decrease drastically over time. A replacement of their domestic counterparts would mean Valley consumers would have to pay a higher price for these items at the store, leading to a loss of purchasing power. There is convincing evidence in history that no one gains under protectionist measures, and with retaliation the outcome is a lose-lose situation for all involved parties.

Liquid Fertilizer (by tonnage)

Year	2014	2015	2016	2017	2018
January	11605	57419	22047	62361	46160
February	23027	24615	62027	73335	27929
March	41946	120300	29046	49100	73753
April	18515	66159	95408	43752	19103
May	76016	40036	139119	118362	146210
June	43225	79493	79444	81620	70681
July	0	46500	65449	58047	18187
August	95781	13749	17510	32604	60956
September	22204	48115	22401	56993	15500
October	17028	18523	36038	37259	
November	72753	41438	68056	12398	
December	0	75931	21575	74723	
Total	**422100**	**632279**	**658120**	**700555**	**478479**

Rice (by tonnage)

Year	2014	2015	2016	2017	2018
January	0	13000	25001	26001	0
February	0	0	0	0	12000
March	12893	13001	24001	0	12000
April	21395	12074	13001	25037	13005
May	0	0	25001	13001	12000
June	24001	12000	23002	13001	12016
July	0	27000	0	0	13001
August	0	12000	11065	0	0
September	0	12000	0	0	0
October	0	12000	0	0	0
November	0	0	26001	12000	0
December	12000	49006	12000	0	0
Total	**70289**	**162083**	**159071**	**89040**	**74023**

Concluding Remarks

The Valley's total employment growth slowed a bit further in 2018, but the yearly rate of growth in 2018 stayed above the historical benchmark rate.

Total employment grew the fastest at the county level in Merced and San Joaquin, while the slowest growth occurred in Kings County. Construction employment was the fastest-growing category of employment in 2018, as in previous years, followed by education and health services employment. Transportation and utilities employment grew at the third-fastest pace, followed by wholesale trade employment. Valley manufacturing employment displayed relatively strong performance in 2018, as it did in 2017. Information employment declined at a much slower rate in 2018 than in previous years.

Average yearly housing prices grew slightly faster in 2018 than in 2017. Given the effect of continued rate hikes, home values are likely to increase at a slower pace in 2019 and 2020. There was a big spike in single-family building permits, responding to the existing low inventory in the Valley. Building permits and construction employment are projected to slow in growth, given the continued increases in interest rates around the critical rate of 5 percent.

Wages and the price of oil continued to add pressure to the rate of inflation, which registered above 3.0 percent for ten consecutive months. Consequently, inflation rising more than wages negatively affected the Valley consumers' purchasing power. The economy has not cooled off to the desired extent yet and inflation — now at 3.36 percent — is a main concern of the Federal Reserve in deciding to keep hiking interest rates.

"THE VALLEY WILL CONTINUE TO FEEL THE MIXED EFFECTS OF RATE HIKES AND TAX CUTS. HIGHER TARIFFS AND RESULTING RETALIATION ADDITIONALLY WILL COMPLICATE THE PICTURE."

Total bank deposits in the Valley did not display consistent dynamics with net loans and leases. The increase in net loans and leases was almost twice the rate of the increase in total bank deposits. Banks were extending loans from their reserves to increase their bank profitability, given rising borrowing costs. Assets in non-accrual had a well-defined turning point at the third quarter of 2017 that appears so far to be permanent. Assets in default also are increasing, consistent with assets in non-accrual. Assets in default 90-plus days appear to be increasing faster than assets in default 30-89 days and likely will rise further as borrowing costs continue to increase.

The Valley will continue to feel the mixed effects of rate hikes and tax cuts. Higher tariffs and resulting retaliation additionally will complicate the picture. There will be winners and losers from the new international trade policies, but while the steel belt will stand to gain, regions like the Valley will definitely stand to lose from higher prices resulting from tariffs and no change in their income. With retaliation, Valley incomes will fall, drastically worsening the picture coming from higher tariffs alone. Subsidies will not help since they ultimately come out of consumers' pockets. Rate hikes will have a bigger impact on the Valley than at the state and national levels. Tax cuts will not benefit the Valley to the same extent as the nation due to much higher unemployment rates in the Valley, a greater number of low-income families and a greater proportion of unskilled to skilled workers.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