San Gabriel Valley Economic Partnership

CalPolyPomona
College of
Business Administration

2019 SAN GABRIEL VALLEY

ECONOMIC FORECAST SUMMIT

SAN GABRIEL VALLEY: SOCAL'S GLOBAL FORCE

THURSDAY, APRIL 4, 2019

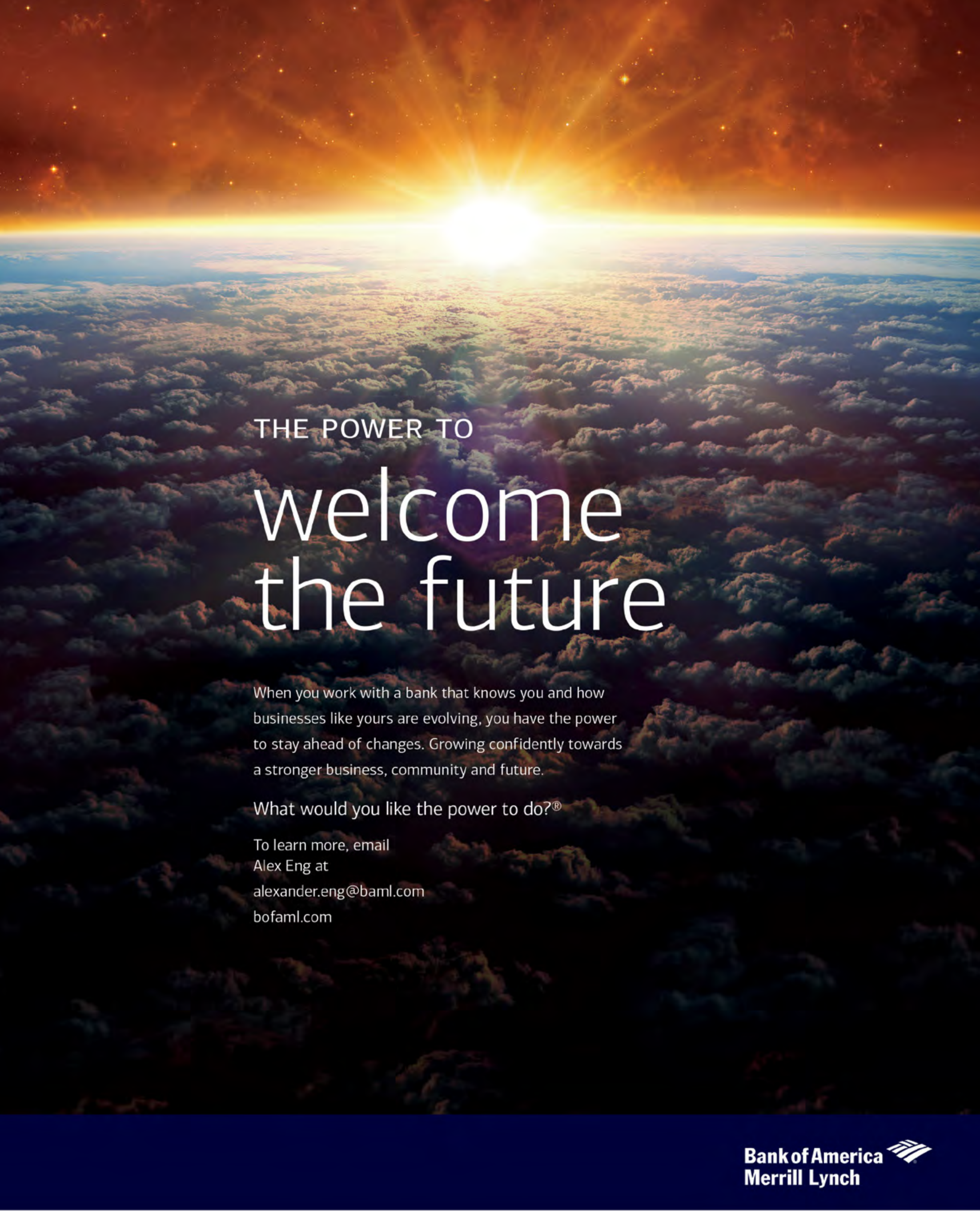

THE POWER TO
welcome the future
When you work with a bank that knows you and how businesses like yours are evolving, you have the power to stay ahead of changes. Growing confidently towards a stronger business, community and future.
What would you like the power to do?®
To learn more, email Alex Eng at
alexander.eng@baml.com
bofaml.com
Bank of America Merrill Lynch

Table of Contents

Institute for Applied Economics
Los Angeles County Economic Development Corporation
444 S. Flower Street, 37th Floor • Los Angeles, CA 90071
(888) 4-LAEDC-1 • www.LAEDC.org

San Gabriel Valley Economic Partnership
4900 Rivergrade Road,
Suite B130,
Irwindale, CA 91706
(626) 856-3400
info@sgvpartnership.org
www.sgvpartnership.org

This report was commissioned by the San Gabriel Valley Economic Partnership

The LAEDC Institute for Applied Economics provides objective economic and policy research for public agencies and private firms. The group focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in workforce development, transportation, infrastructure and environmental policy.

EXECUTIVE SUMMARY

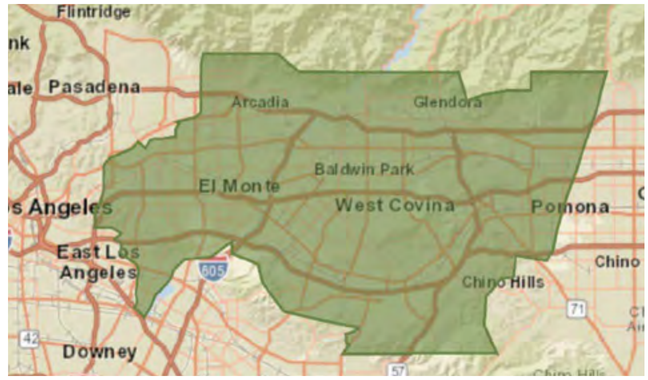
The San Gabriel Valley continues to be an economic powerhouse east of the City of Los Angeles, covering about 200 square miles. Its name derives from the San Gabriel River that follows through the center of the valley which itself was named for the Spanish Mission San Gabriel Archangel, originally built in 1771. Originally agricultural, the Valley is now wholly urbanized encompassing thirty-one cities and five unincorporated areas in Los Angeles County.

This report offers a snapshot of the region's resources, tracks its recent economic performance, and summarizes the economic outlook over the forecast period of 2019 and 2020. The findings contained in this report serve as a valuable tool for business people, government officials and households as they make spending and investment decisions for the forecast period and beyond.

Over the course of 2018, as the national and local economies continued to expand, the San Gabriel Valley economy also made notable progress as measured across a number of key indicators. Although challenges remain, including the regional housing crisis and rising international trade risks, the fundamentals look quite strong for the region.

The ethnic composition of the San Gabriel Valley's population has undergone significant diversification over the past two decades, and has experienced stable growth in terms of total numbers. Since 2010, the valley's population has grown by about 3.6%. Population growth rates of 0.3% is forecast for this year and next, primarily due to constraints on housing availability.

Continued population growth last year was accompanied by gains in wage and salary employment and payrolls. In 2018, employment in the San Gabriel Valley increased to an estimated 697,000 payroll jobs. That number was well over the pre-recession peak reached in 2008. With limited population growth and an already full employment economy, the increase in employment over the next 2 years is predicted to be modest. Wage and salary payrolls in 2018 totaled an estimated \$36.1 billion, up by 3.7% from 2017. Total nonfarm payroll is projected to increase by 3.2% to \$37.4 billion in 2018 and climb to \$38.7 billion in 2019 on the back of tightening labor market driving real wage growth.



Source: ESRI

Taxable sales in the valley have regained the ground lost during the recession. In 2018, it is estimated that taxable sales in the San Gabriel Valley increased to \$23.3 billion. By the end of 2020, taxable sales in the valley are expected to climb to \$24.4 billion.

The San Gabriel Valley housing market has improved but obstacles remain. Median prices for existing homes continue to rise in response to limited supply and increased demand, but after years of price increases and anemic real wage growth, affordability continues to be an issue for many would-be home buyers. At the same time, mortgage rates are expected to incrementally increase as inflation picks up, making home loans more restrictive to income-constrained households. New home construction has been even slower to recover but rising median prices and a lack of inventory are finally providing builders with the incentive to initiate new development projects. Residential building permits are expected to increase to 2,310 in 2020.

The San Gabriel Valley economy should benefit from a moderate but steady pace of growth in 2019 and 2020. The trajectory of the valley's economy will depend largely on the performance of the wider regional economy. Overall, the fundamentals are strong but there are substantial risks in terms of international trade in the context of a slowing global economy.

Despite the challenges that remain, the San Gabriel Valley has the assets to move forward: a diverse pool of human capital; world-class institutions of higher learning and research facilities; respected arts and cultural organizations; and a well-developed trade network.

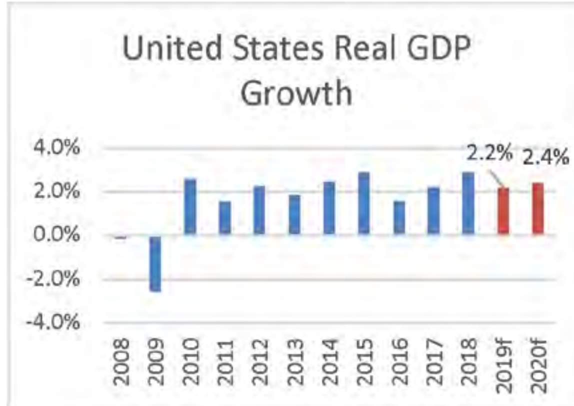
1 ECONOMIC ENVIRONMENT*

I. Forecasting Nationally: Steering the Economic Ship between the Rocks

Entering 2018, a bull stood at the helm of the economic ship of the United States. The bull has since been relieved of duty by a bear. Though by no means stormy, the national economic outlook is less exuberant and more cautious than one year ago. The fiscal stimulus anticipated and associated optimism due to the Tax Cuts and Jobs Act passed in December 2017 buoyed strong quarterly growth in the second and third quarters of 2018 but passed out of the system by the end of last year. Despite this, the U.S. economy, with growth-driving forces prevailing, will exceed all previous post-war economic expansions in duration by July 2019. Moderate, steady growth will likely characterize the national economic landscape in the near term and should be perceived as a net good in the context of increasing global uncertainty.

Taking stock, the U.S. economy is marked by strong fundamentals. Private residential investment, private non-residential investment and industrial production have all increased since *at least* 2016 on an annual basis. Respectively, these metrics have risen 8 percent, 6 percent and 4 percent year-over-year. Personal consumption also rose again last year, continuing a trend since 2009. Over the long term, the S&P 500 remains at record levels with an average quarterly score of near 2,700 as of the fourth quarter of 2018.

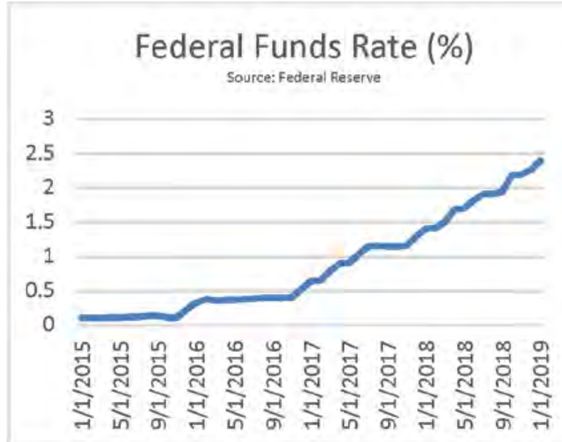
Resting on this foundation, a generally positive business environment and fiscal stimuli early in 2018, the U.S. economy expanded by almost 3 percent in 2018. These general upward trends enable the Los Angeles County Economic Development Corporation (LAEDC) to predict growth through 2020 with 2.2 and 2.4 percent growth in 2019 and 2020, respectively. This growth is forecast to be augmented by the projected creation of almost 3 million additional jobs by 2020; further declines in unemployment to 3.5 percent in 2019 and 3.1 percent in 2020; and persistent per capita real wage increases to over $51,000 nationally by 2020. Moreover, inflation is likely to remain moderate, hovering around 2 percent in the coming two years.



One source of concern continues to be the trade standoff between the United States and the People's Republic of China. Though promised earlier in the year, tariff increases on nearly $200 billion worth of Chinese imports to the U.S., already subject to a 10 percent tariff, did not go into effect pursuant to an agreement of reprieve between President Donald Trump and President Xi Jinping. As of the date of this forecast, ongoing negotiations between American and Chinese representatives have until a March 1st deadline to reach amicable agreements. Otherwise, the promised rate hike from 10 to 25 percent on the $200 billion worth of Chinese imports will be imposed. It is reasonable to presume the Chinese government will respond in kind and impose tariffs on American exports to China.

Outside frosty trade relations, China's economy appears to be slowing after two decades of meteoric growth. Year over year, the Chinese economy grew 0.3 percent less, and some experts estimate Chinese growth might have slowed more precipitously than official numbers state. Both Chinese retail sales and industrial production have followed a longer-term trend of decline, and policymakers have eased lending and reduced bank reserve requirements. At best, these moves signal adjustments to maintain a government-targeted status quo of between 6 and 6.5 percent annual growth; at worst, Chinese government and party officials are demonstrating a rush to compensate for a highly over-leveraged private sector and oversaturated real estate market.

*LAEDC 2019-2020 Economic Forecast



Closer to home, the United States, Canada, and Mexico successfully negotiated a new North American Free Trade Agreement (NAFTA) with a new name, the United States Mexico Canada Agreement or USMCA. Signed at the 2018 G20 summit in Buenos Aires, Argentina, the deal portends greater American access to Canadian dairy markets and new tariffs incentivizing greater automotive manufacturing in the United States. This new agreement also encourages Mexico to allow greater labor unionization and extends Canadian copyright protections. The U.S. Senate now has until mid-2019 to either ratify the USMCA or the withdrawal from NAFTA, executively initiated in December 2018, will occur without a new trilateral trade framework and trigger a reversion to pre-NAFTA trade rules.

Last, but certainly not least, “Brexit” currently poses additional uncertainty to U.S. and global economic health. As the U.S.’s fifth largest export partner and seventh largest by total trade value, Britain’s disorderly exit from the European Union portends disruption and financial loss along high-value supply chains on both sides of the Atlantic, including for aircraft, pharmaceutical products and automobiles. The United Kingdom is also the largest source of foreign direct investment to the U.S., so political and economic chaos would further complicate an extensive and multifaceted bilateral economic relationship.

Taking office in January 2019, the 116th Congress of the United States ushered in another biennium of divided government with a Democratic-controlled House and Republican-controlled Senate and White House. This division culminated in a 35-day partial government shutdown lasting from December 22nd, 2018 to January 25th, 2019, marking the longest shutdown, partial or total, in recent U.S. political history. The Congressional Budget Office (CBO) estimates that this shutdown and the associated loss of economic activity cost the U.S. economy $11 billion in nominal terms. This equates to a 0.1 loss in real GDP for fourth quarter 2018 and a 0.2 real GDP loss in first quarter 2019. Though much of this economic loss will be recovered in subsequent quarters, the CBO estimates $3 billion in output will be permanently lost.

It is conceivable that deep partisan divisions will continue through the 2020 elections. Alternatively, the current apparent strength of the House speakership in this Congress could also translate into an amicable political cohabitation between Capitol Hill and White House commensurate with that of the 1980’s. However, any political uncertainty and gridlock, fiscal or otherwise, can only hurt national economic prospects.

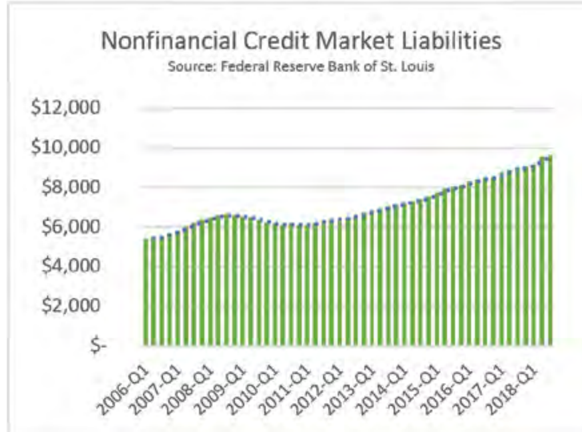
Beyond animal tropes, whether we’ve transitioned from a bull market to a bona fide bear market is still to be determined. What we do know is that market volatility is the new norm for now after a year of crests and corrections. Major indices, such as the Dow Jones Industrial Average and Standard and Poor’s 500, peaked in January and September 2018 only to crater in early December of last year. Market gyrations were largely driven by tech stocks that failed to perform to investor expectations[1]. These fluctuations are concomitant with flattening yield curve between short- and long-term interest rates, since both of these portend sobering investor sentiment. Though current market indices remain below the bullish highs of the previous year, a shifting tech-sector focus to services, and a market well above longer-term average, means these changes in fortune appear, for the moment, more corrective than chronic as would be seen in a full-blown and extended bear market, such as in the early 1970s.

1 Barchetto, Tony. “Tech Driving Most of the Market Gain so far in 2018 – Is that Unusual?” Seeking Alpha. October 8, 2018.

Federal monetary policy has also given cause for greater market turbulence over the last four quarters. As expected, the Open Market Committee voted to raise the Federal Funds Target by 100 basis points by the end of 2018, the last rate hike incurring some political rancor. Current expectations project two additional rate hikes totaling a 50-basis point increase by the end of the current calendar year, though the first of these hikes are likely to be later in 2019 than originally anticipated. In addition, the Federal Reserve will likely continue its course of reversing quantitative easing, referred to by some as quantitative tightening, though recent anxiety in the financial markets might encourage a slower, if also more irregular, deleveraging regimen.

Like its chief economic competitor, China, the post-recession United States has become heavily dependent on debt to finance economic activity. Since the end of 2010, nonfinancial corporate debt has ballooned from just over $6 trillion to over $9.6 trillion, or just over 50 percent of GDP.

In the context of an economy *also* dependent on monetary intervention for liquidity and a federal budget on track to run regular annual trillion-dollar deficits, these trends are cause for concern. Moreover, this does not speak to the proliferation of so-called shadow banking, such as hedge and private equity funds, and the tech sector's dependence on these non-bank financial institutions for cash.

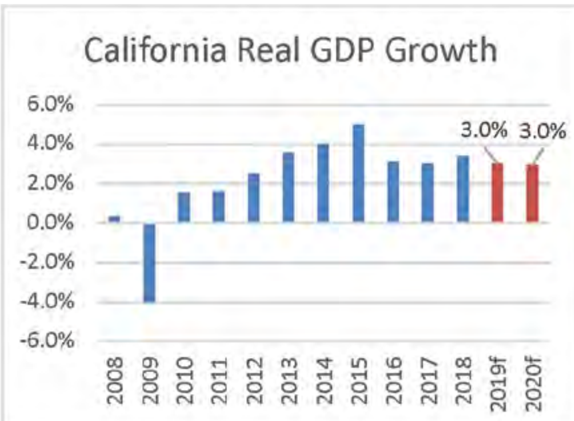


The U.S. macroeconomy faces many challenges in the several years ahead. Policy uncertainty, political gridlock, systemic vulnerabilities and the proliferation of debt all present risks to continued economic health both nationally and internationally. However, these issues should be cause for concern, but not panic. Real incomes continue to rise, and macroeconomic forecasts portend steady if modest continued GDP growth. Inflation also remains low and stable, meaning these gains are real and appear persistent over the near-term.

United States Economic Statistics and Forecast	2014	2015	2016	2017	2018	2019f	2020f
Real GDP Growth	2.5%	2.9%	1.6%	2.2%	2.9%	2.2%	2.4%
Real Personal Income Growth	4.2%	4.6%	1.5%	2.6%	2.2%	2.7%	2.5%
Total Employment Growth	2,567,500	2,882,200	2,530,000	2,275,300	2,399,300	2,515,300	2,424,900
Unemployment Rate	6.2%	5.3%	4.9%	4.4%	3.9%	3.5%	3.1%
Real Per Capita Income ($2012)	$45,772	$47,523	$47,883	$48,799	$49,578	$50,569	$51,509
CPI Change	1.6%	0.1%	1.3%	2.1%	2.4%	2.2%	1.9%

II. Passing the Baton: Capitalism with Californian Characteristics for a New Governor

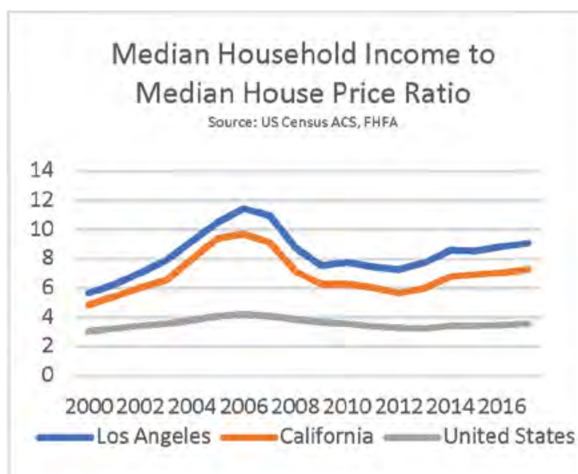
The era of Governor Brown has given way to that of Governor Newsom, and contrary to many expectations, Governor Newsom's proposed budget builds on the fiscal fastidiousness of his predecessor. Broadly, the proposed budget prioritizes education, health care, housing and disaster preparedness. Presuming continued revenue increases spurred by a continuously growing state economy, this proposed priority spending plan also includes a healthy dose of California optimism.



LAEDC expects, all else being held relatively equal, the trend of aggregate Californian economic confidence should continue. These good expectations are forecast to include 3.0 percent gross state product growth in both 2019 and 2020, furthering the trend of Californian economic growth exceeding national growth. This gross state growth is forecast to precipitate gains in real personal income by 2.9 and 2.8 percent in the coming two years, meaning the average Californian will earn over $52,000 in real annual terms by 2020. Moreover, this forecast predicts additional employment growth of roughly 320,000 jobs in both 2019 and 2020 with associated declines in unemployment to 3.7 and 3.4 in the respective forecast years. These job gains are estimated to occur across all sectors with the largest gains in construction, logistics, utilities, business services, education, health and tourism. The demand for housing, especially in coastal California, is also predicted to continue to motivate additional supply gains, with an over 8,000 year-over-year increase in permits in both 2019 and 2020. Despite these additions, home values are also expected to rise through 2020 to an average state value of over $593,000 by the end of 2020.

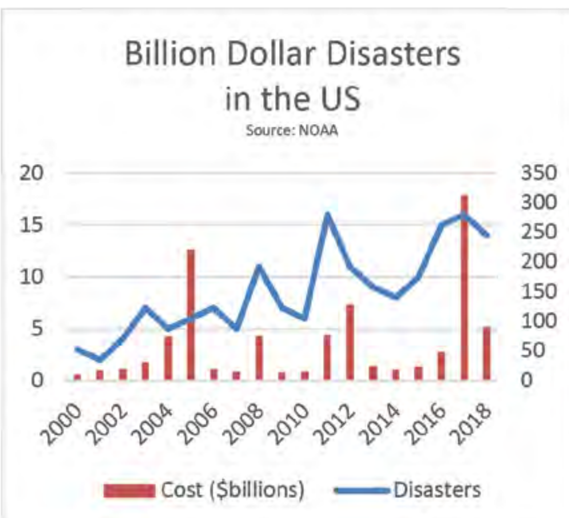
In keeping with local priorities, and state and local concerns, Governor Newsom's budget allocates $1.3 billion in one-time grants and loans to aid localities in building affordable housing units alongside stipulating new housing production to be developed by the Department of Housing and Community Development. Failure to meet these housing goals will incur limitations to a locality's access to state transportation funding. As goals are attained, additional monies will be made available. To broaden the housing focus, the governor's plan incorporates $500 million to expand middle-income housing loan access through the state's housing finance agency. Finally, the spending scheme recommends streamlining CEQA (California Environmental Quality Act) processes for homeless shelters, navigation centers and supportive housing.

These proposals could not come at a more opportune moment in California's history. In 2018, then-Lt. Governor Newsom cited in a 2016 McKinsey Global Institute study asserting California's status as 49th of the 50 states in per capita housing units. Based upon that metric, the state would need to build 3.5 million homes by 2025. Estimates vary regarding total housing stock shortfall; however, all estimates agree on the need for a significant acceleration of construction over the average of 100,000 units added per year between 2014 and 2018. Supply constraints and affordability are greatest in the Los Angeles Metropolitan and San Francisco Bay areas, where homes are only affordable to 29 and 18 percent of the resident populations, respectively.



Urban planners recommend that cities make every effort to keep the ratio of median household income to median house price under 4 to 1 to ensure a healthy economy and an undistorted housing market.[2] Currently no county in Southern California does so, and indeed the entire Southern California region averages a ratio of nearly 8 to 1, with the state not far behind.

In addition to its short-term social considerations, the paucity of affordable housing in California arguably serves as the strongest short- and long-term structural economic headwind in the state. In the short term, housing unaffordability hampers household formation, limits mobility and incentivizes talent to relocate out-of-state. Over the longer term, the bimodality of income distribution will worsen inequality; firms will relocate or select other states in the interest of their employees and labor costs; and economic growth will decelerate, decline or disappear.



The Governor's budget also prioritizes natural disaster-preparedness and emergency response infrastructure, including $415.1 million toward state silviculture practices and $172.3 million to improve emergency response communications. Major wildfires alone in 2018 cost the state an estimated $23 billion, at the lower bound, in economic losses. Moreover, the extent of economic costs from natural disasters, among them fires, floods and earthquakes, persist across time due to capital destruction and may shift the economy to a lower long-term growth rate.

Natural disasters and extreme weather, both events and patterns, pose longer-term implications to cornerstones of California's economy going forward. Chronic extreme weather, whether climate-induced drought or abnormally cold temperatures, stand to drastically impact the state's $48.4 billion agriculture industry. Given the trend of large wildfire events in Northern California, air and burn impacts should be expected on the state's wine grape crop. Central Valley production will also likely suffer from extreme heat and cold as temperature anomalies become more frequent.

In addition to economic impacts, natural disasters will cut into an already supply-strapped housing stock. Policymakers and builders will not only have to contend with the rate of household formation in considering housing targets, but attrition rates due to natural disaster will also need to be a primary factor in setting construction targets. Indeed, the 2018 Camp Fire in Butte County destroyed 14,000 homes in the city of Paradise alone.

Though not a priority in the proposed state budget, the high-tech centers in San Diego, the San Francisco Bay, Silicon Valley, Los Angeles and analogous economic regions across the state are the apple in every policymaker's eye. The appeal of high technology industry concentrations as engines of economic growth cannot be understated. However, the clout of these innovation-rich economic geographies is largely supported not by their own profitability but private equity. As an illustration, mobility giant Uber still reported net losses of nearly $1 billion in third quarter 2018, despite being nearly 10 years old. This narrative represents the rule rather than exception in the world of tech startups, where a 10-year birthday celebration is rare, acquisition common, and addiction to venture capital ubiquitous.

2 See, e.g., Alain Bertaud, "Order Without Design: How Markets Shape Cities" (MIT Press), November 2018

This reliance on venture capital at aggressively stepped-up valuations should be a cause for concern and caution. As reported by PricewaterhouseCoopers, the total venture capital investment amount in California reached an all-time high in third quarter of 2018 with $14.6 billion invested. However, the number of investment deals reached the lowest point in six years, and the number of seed investments as measured by both total value investment and the number deals were also at the lowest level since 2012. Expansion-stage investment was at a record high and late-stage investment similarly strong, indicating "smart money" chasing fewer deals, likely at higher valuations, and the early venture capital pipeline might be drying up.

As a primary catalyst of the last decade of Californian prosperity, systemic weaknesses in the "Silicon" landscape pose structural threats to the California dream. These risks are threefold. First, a potential withdrawal of venture capital away from the seed-stage ecosystem could pose a stumbling block to tech entrepreneurship and future product/service development and commercialization. In the context of rising interest rates, California's high-tech centers might see fewer new denizens in the coming years.

Second, the shift of venture capital toward later-stage investments reflects the broader trend of the tech sector toward concentration. This poses a rent-seeking problem best exemplified by lavish benefits heaped on Amazon by states and localities in the bid to host the second Amazon headquarters. While entrepreneurship endures, the ambition to have a "Silicon *somewhere*" is palpable. However, a tech industry dominated by giants means the competition between beach, valley, prairie, desert and any other aspirant Silicon geography will indeed be zero-sum to the detriment of all but the corporate actors extracting rent.

Thirdly, and finally, many highly valued firms concentrated in the state's technology-intensive centers are not generating revenues commensurate to their hype. The profitability problems of Tesla, Snap and Uber, among others, are well-documented and need not be belabored here. However, the dynamics of business have not changed to the extent that profit and profitability have become increasingly less important. Either through institutional fatigue or failure, financing for many of these companies can just as quickly disappear and companies not unwritten by the financial markets will collapse à la the dot-com bubble in 2000.

Buoyed by an economic expansion commensurate with and often in excess of the rest of the nation, the Golden State has gained much since the end of the Great Recession and therefore has much to lose. Though confronted with challenges, beyond even those presented here, California is famous for optimism, invention and re-invention. Appreciating and understanding these hindrances toward offering all current and future state residents the fullness of the California dream is the essential first step to overcoming them.

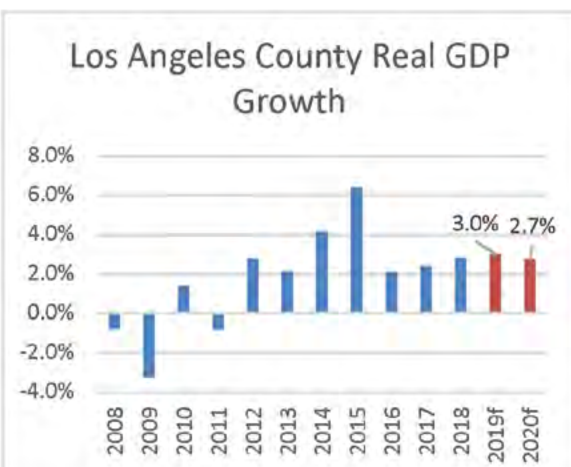
California Economic Statistics and Forecast

	2014	2015	2016	2017	2018	2019f	2020f
Real GSP Growth	4.0%	5.0%	3.1%	3.0%	3.4%	3.0%	3.0%
Real Personal Income Growth	5.0%	7.4%	2.3%	2.7%	2.7%	2.9%	2.8%
Total Employment Growth	424,200	474,000	427,100	340,200	330,600	322,700	318,500
Unemployment Rate	7.5%	6.2%	5.5%	4.8%	4.2%	3.7%	3.4%
Real Per Capita Income ($2012)	$44,875	$47,775	$48,541	$49,438	$50,363	$51,436	$52,447

III. 88 Cities, 125 Unincorporated Areas, One Common Future: Understanding the Trajectory of the LA County Economy

With over one in four Californians living in Los Angeles County alone, it goes almost without saying that whatever happens in Los Angeles greatly affects and influences the rest of the state. The current prosperity enjoyed by the county, on aggregate, and the long-awaited real income gains are emblematic of the trends taking place across the state. Job creation remains strong overall and in, though not exclusively so, high-paying industries offering upward mobility for Angelenos. Inasmuch as recent trends can inform future predictions, the Los Angeles County economy demonstrates strength, if imperfectly.

LAEDC projects 3.0% growth in real county product for 2019 and 2.7% growth in 2020, roughly keeping pace with state economy and exceeding national growth. This expansion will be on the back of robust employment increases in key service sectors such as health care and professional and business services, which will drive an additional increase in roughly 60,000 jobs per year. This will continue the long-term decline in the unemployment rate, although at a projected 4.3% in 2020 it should remain stubbornly higher than the national average.



Although strong real personal income growth is expected, averaging 2.6% in 2019 and 2.1% the following year, it will lag behind that of the state as a whole due to the relatively higher unemployment rate and greater degree of labor market slack.

As above, so below, however: Los Angeles is at the vanguard of California's housing shortage emergency. Indeed, over 57 percent of renter households in the Los Angeles metropolitan area – which includes Orange County – are considered rent burdened, that is, they spend one-third or more of their income on rental costs. Almost a full third of Los Angeles metropolitan residents are considered severely rent burdened, meaning they spend half or more of their income on rental costs. And, with two out of three Los Angeles households renting their residences, this critical situation affects -- or could affect -- more county households than not.

Though hardly the only smudge on the region's good news story of economic recovery and growth, this crisis poses the greatest long-term threat to local economic mobility and bottom-up prosperity. To the extent that a household is burdened with basic rental costs, less money is available to save, invest, consume or otherwise contribute to the economy, while also further burdening public social services and programs. Exacerbating matters, the movement of work away from salaried, full-time employment toward "gig", temporary or contract work means households increasingly face dual pressures from the labor and housing markets.

Moreover, the likelihood of buying and owning a home and accruing associated equity is also increasingly unlikely. The California Association of Realtors estimated that in the third quarter of 2018 only 22 percent of households in the county could afford a home, meaning they made at least $134,160 per year to afford the median home price of $628,940. (In Orange County, only 20 percent of households were found to be able to purchase a home.) Changing housing preferences aside (e.g., Millennials are more likely to rent and live in urban centers), these patterns bode poorly for economically stable household and family formation going forward.

Though its causes transcend the economic, homelessness, especially working homelessness, is, in large part, a result of housing unaffordability in the region. The Department of Housing and Urban Development's definition of homelessness limits who counts as homeless to those at imminent risk of losing their domicile; those without fixed or adequate nighttime shelter; or those without shelter considered suitable for human beings. These counts therefore do not consider those who have impermanent housing accommodations, such as those who might be moving from couch to couch. In a multi-jurisdictional effort to battle homelessness, the County of Los Angeles has committed $3.5 billion through Measure H, and the City of Los Angeles has similarly pledged $1.2 billion through Proposition HHH.

The latest counts of homelessness from 2018 estimate almost 53,000 residents of Los Angeles County at any one point in time grapple with homelessness, the majority without shelter and the remainder in tents, vans, automobiles and RV's. The good news is that this is a four percent decrease from 2017. The cities of Pasadena, Glendale and Long Beach, which conduct their own censuses of the homeless, estimate roughly 700, 260 and 1,860, respectively, of their residents experience homelessness at any point in time.

The key to a long-term solution to homelessness will not only be affordable housing and permanent supportive housing but *housing that is affordable*, that is, saturating the housing stock to the point of bringing rents and home prices to reasonable levels.

To this end, Los Angeles has begun to rise to the challenge in terms permitting of housing units, significantly outpacing the state and the region – indeed permitting is only marginally behind pre-Recession highs - but affordability remains elusive and housing construction will have to continue to rise markedly to make up the housing gap that has opened up over years of suppressed development.

LAEDC forecasts roughly 23,000 new units permitted in 2019, and 24,000 in 2020, an upward trend that will have to continue if home prices, which we see reaching nearly $650,000 dollars in 2020, are to decline to more attainable levels.

The battle to increase housing volume will continue and likely intensify the battle over zoning restrictions in Los Angeles County. In 1960, the City of Los Angeles alone was zoned to accommodate 10 million residents, only marginally below the current population of the entire county.[3] Community-based urban planning practices starting in the 1960s resulted in the city being presently zoned for only 4.3 million residents. However, the issue of zoning transcends the multigeneration – and perhaps intergenerational – struggle between single-family and multifamily residential zones. Indeed, it is estimated that a full 14 percent of all incorporated land in Los Angeles County is devoted to parking alone.[4] Solutions, however, need not be extraordinary or highly distortionary. For example, City of San Diego Mayor Kevin Faulconer announced a plan in December 2018 to eliminate parking minimums for developments within half a mile of transit hubs. The City of Buffalo approved a similar measure in 2017.

3 Morrow, G. D. (2013). "The Homeowner Revolution: Democracy, Land Use and the Los Angeles Slow-Growth Movement, 1965-1992." Ph.D. dissertation, University of California Los Angeles. ProQuest ID: Morrow_ucla_0031D_11873.

4 Mikhail Chester, Andrew Fraser, Juan Matute, Carolyn Flower, and Ram Pendyala. Parking Infrastructure: A Constraint on or Opportunity for Urban Redevelopment? A Study of Los Angeles County Parking Supply and Growth Journal of the American Planning Association, 2015, 81(4), pp. 268-286, doi: 10.1080/01944363.2015.1092879

Fortunately, transit-oriented development has already reached the City of Los Angeles through the voter-approved Measure M, passed in 2016 and made effective September 2017. Based on data from June 2018, the City had 112 Transit Oriented Communities (TOC) project applications, with the potential of yielding 5,571 new housing units. Of these, over 1,100 are designated as affordable units. Developments outside the urban core, such as the 19,000 home Centennial development near the Tejon Pass, might be essential ingredients to the housing affordability solution, but there are concerns about these more remote developments being too far from gainful employment, as well as cultural and recreational amenities (thus increasing GHG and other noxious emissions from mobile sources), and too exposed to natural disaster. The City of Los Angeles – the largest but still only one of 88 cities – has embarked on a comprehensive revision of the zoning code that has largely not changed since 1946.

Almost as urgent as the housing crisis in both the state and county, concerns over traffic congestion and gridlock have taken on new urgency in the context of the Super Bowl in 2022, the World Cup in 2026, and the 2028 Olympic Games. Worsening traffic congestion continues to drag on productivity and, above a certain threshold, economic growth, not to mention a source of personal stress. Metro's massive transit expansion plans are the county's most visible effort to relieve some congestion across the region, and LA Metro's CEO proposed (January 2019) a congestion fee during peak automobile traffic hours along with new subsidies for rail and bus fares.

Speaking of mobility, Los Angeles also supports a vibrant ecosystem of electric and autonomous vehicle designers, manufacturers, and service providers. Many ancillary industries, such as battery design and manufacturing and charger manufacturing, have also taken root. Not a moment too soon, either: in the City of Los Angeles alone, over 12,000 new electric vehicles (EVs) were sold in 2017 with several hundred to over a thousand new EV's sold in other cities across the county, from Santa Clarita to Long Beach, and Santa Monica to Pomona. Unfortunately, Los Angeles County only hosts 1,818 charging stations, of which only seven percent (7%) are fast chargers and many of those only available to Tesla vehicles.

In addition to being a logistical, productivity, economic growth, and environmental problem, inadequate transportation infrastructure poses an equity problem when coupled with housing affordability. Both housing and transportation in tandem will likely be the primary local issues for the foreseeable future.

In assessing the economic trajectory of Los Angeles, it is important to appreciate and account for the preferences of the culturally diverse Millennial generation that calls Los Angeles home. According to the Brookings Institute, Los Angeles County is over one-quarter Millennial, more than half of whom are Hispanic.

While Los Angeles has not seen a large aggregate attrition within this demographic cohort, it is also not one of the regions for high growth; that is the region may not be attracting its fair share of young people. Moreover, their move to Los Angeles has been uneven: the areas with the highest Millennial growth are in Downtown and the Mid-Wilshire corridor.[5] In a county as balkanized as Los Angeles, generational movement toward some localities and not others is, or will become, a zero-sum game for the economic activity and revenue they generate.

5 Hudson, Erin. "The zip codes where millennials congregate." The Real Deal. September 30th, 2018.

Going forward, Los Angeles County will have to contend with challenging attributes that have also made it one of the most unique metropolitan areas in the world: a strong historical emphasis on vast sprawls of single-family dwellings; a mosaic of cities with diverse populations and priorities; and a car culture that until recently eschewed extensive investment in alternative mobility solutions. These obstacles and the solutions proposed to overcome them will have lasting ramifications within and across the 88 cities and over 100 unincorporated areas. The collective decisions made in the next few years on critical policy issues, such as housing affordability and transportation, will be decisive to the longer-term economic trajectory of the county and region.

Los Angeles County Economic Statistics and Forecast							
	2014	2015	2016	2017	2018	2019f	2020f
Real GCP Growth	4.1%	6.4%	2.1%	2.4%	2.8%	3.0%	2.7%
Real Personal Income Growth	5.3%	6.7%	1.7%	1.6%	1.4%	2.6%	2.1%
Total Employment Growth	75,700	92,400	109,600	53,100	59,000	61,000	60,700
Unemployment Rate	8.3%	6.6%	5.2%	4.7%	4.6%	4.4%	4.3%
Real Per Capita Income ($2012)	$40,695	$43,099	$43,675	$44,239	$44,737	$45,689	$46,480

2 SAN GABRIEL VALLEY ECONOMIC INDICATORS

The San Gabriel Valley is an area uniquely distinct from greater Los Angeles County, in terms of demographic composition, industry employment, wages and income and industry concentration of business establishments. These indicators are explored here.

Source: SGVEP

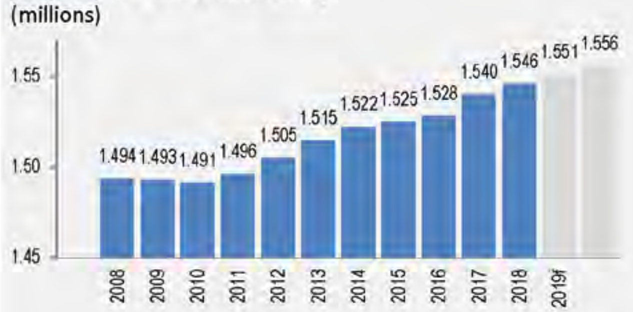
Demographics

Demographics of the resident populations provide context into the strengths and challenges of the region.

Population

There were around 1.55 million people residing within the 31 incorporated cities of the San Gabriel Valley in 2017. There were also approximately 300,000 additional persons living in the unincorporated regions of the valley.

Exhibit 2-1
Population in San Gabriel Valley
(millions)



Source: California Department of Finance

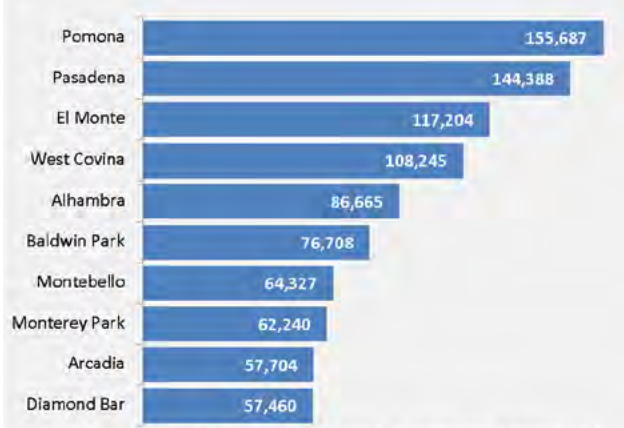
Overall, population in the San Gabriel Valley has changed little in the past decade. Since 2000, the population has increased by roughly 3.3% in the incorporated cities, compared with 7.6% in Los Angeles County and 16.7% in California.

From 2005 to 2010, population in the valley declined on a year-to-year basis. In the years following the recession, population growth resumed, slowly at first but eventually settling at an annual growth rate of around 0.5% for the past several years, on par with Los Angeles County as a whole.

In 2018, the most populous cities in the San Gabriel Valley were Pomona (155,687 residents), Pasadena (144,388), El Monte (117,204) and West Covina (108,245).

The fastest growing cities in the valley over the past five years were Azusa (5.1%), Monrovia (4.7%), Pasadena (3.4%), La Verne (3.4%), San Dimas (3.1%), South El Monte (3.0%), and Glendora (2.8%). Of note is that both of the largest cities in the San Gabriel Valley, Pomona and Pasadena, experienced significant population growth over the past five years. Only two cities posted a decline in population over the five-year period, Bradbury (-2.0%) and Sierra Madre (-0.8%) although several others have undergone very little growth.

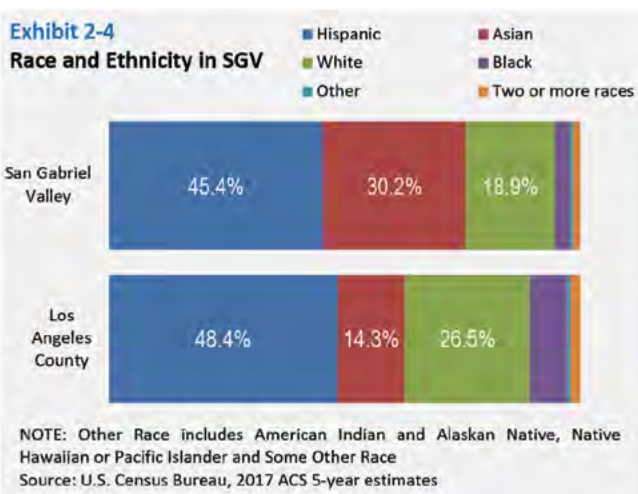
Exhibit 2-2
Ten Largest Cities in San Gabriel Valley
Population 2018



Source: California Department of Finance, Demographic Research Unit

Race and Ethnicity

The San Gabriel Valley's population is diverse in race and ethnicity, even more so than Los Angeles County. Hispanics/Latinos make up the largest ethnic group with a total population of roughly 701,000, and while they are most heavily concentrated in Irwindale, La Puente, South El Monte, Montebello and Baldwin Park, Hispanics and Latinos are well represented in most communities throughout the region.



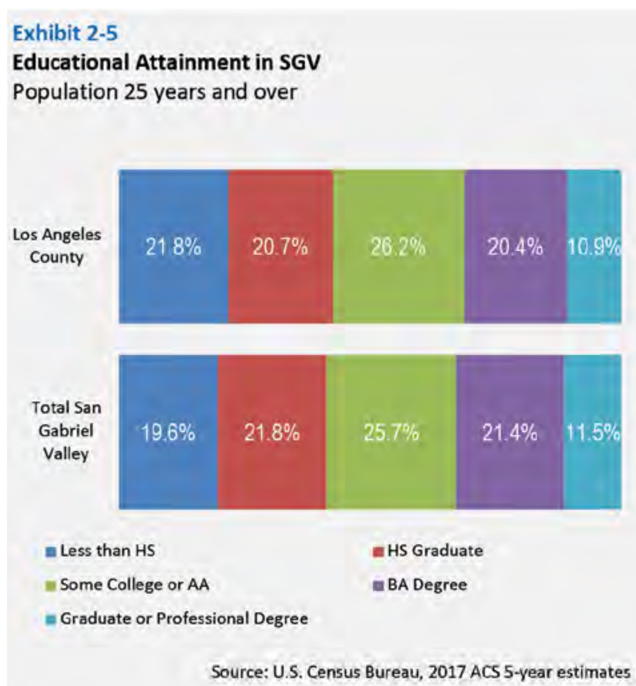
Asians are the next largest ethnic group in the San Gabriel Valley with a total population of 467,000. There is a large ethnic Chinese population that began with an influx of Taiwanese in the 1970s and more recently, mainland Chinese. There are nine cities in the San Gabriel Valley where Asians are a majority, including Monterey Park, Walnut, San Gabriel and Rosemead. The substantial population of Asian residents in the valley distinguishes it from the rest of Los Angeles, which has roughly half the proportion of Asian residents with respect to the larger Angeleno population.

Whites made up the third largest group in the valley with a population of 292,000, followed by African Americans (47,000). The balance of population (37,000) includes Native Americans, Hawaiians/Pacific Islanders, and persons who identified as "other" or of two or more races.

Educational Attainment

The San Gabriel Valley is home to many highly-educated workers. Excellent higher education is provided by numerous institutions including Caltech, the Claremont Colleges, Cal Poly Pomona, California State University Los Angeles, University of La Verne, Azusa Pacific University and the region's community colleges. However, there are a number of communities within the valley where educational attainment is more challenged.

The overall level of educational attainment in the San Gabriel Valley is slightly higher than that of Los Angeles County. For the valley as a whole, 80.4% of the population (25 years and older) has a high school diploma (or equivalent) and 32.9% has earned a Bachelor's degree or higher.



The cities with the largest percentage of adults holding a Bachelor's degree or higher are La Cañada Flintridge (75.1%), San Marino (73.4%), Sierra Madre (63.3%), South Pasadena (62.8%), and Bradbury (61.3%).

At the other end of the spectrum, there are twelve cities where the percentage of the adult population with a high school diploma is less than average for the valley as a whole. In both El Monte and South El Monte, less than 60% of the adult population has a high school diploma.

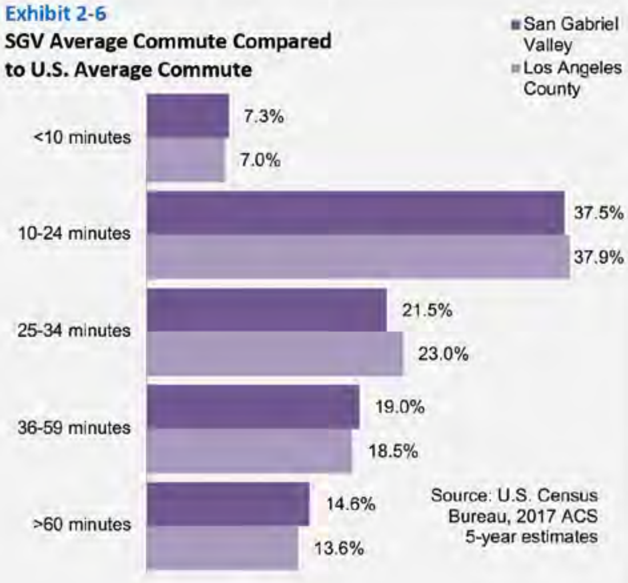
Commuting Patterns

Worker commuting patterns show that the majority of residents of the San Gabriel Valley (aged 16 and older) worked somewhere in Los Angeles County – 85% versus 15% who commuted to work outside the county.

Travel times to work for San Gabriel Valley residents are very similar to the distribution of commute times found in Los Angeles County as a whole.

The average one-way commute to work for people in the United States was 26.4 minutes. Similarly, 14.6% of residents in San Gabriel Valley spent at least one hour commuting to work, while countywide 13.6% did; the national share was lower at 8.9%.

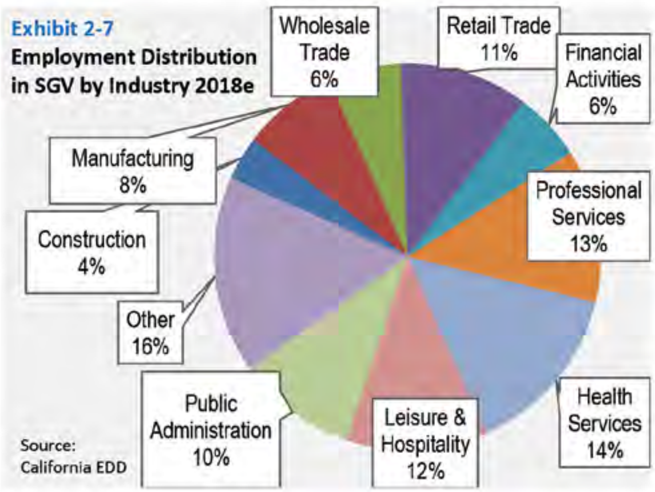
Exhibit 2-6
SGV Average Commute Compared to U.S. Average Commute



Employment and Unemployment

The distribution of jobs by industry in San Gabriel Valley is similar to Los Angeles County as a whole. The largest share of employment is in health care services, accounting for 14.6% of wage and salary jobs, followed by professional and business services, which hold a 12.9% share. Other large industry sectors are retail trade, leisure and hospitality and the public sector. Most of these industries will be discussed in the following section.

Exhibit 2-7
Employment Distribution in SGV by Industry 2018e



Source: California EDD

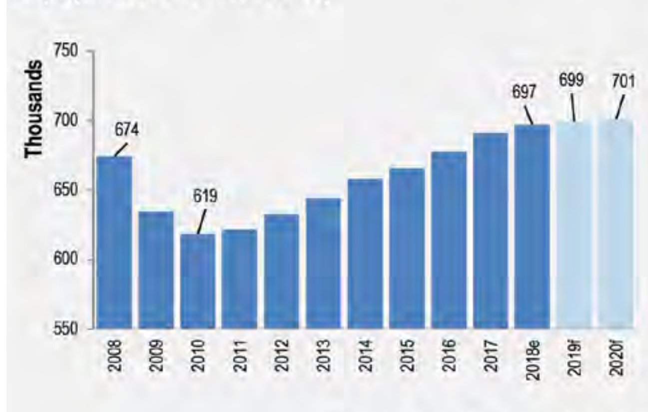
In 2018, wage and salary employment in the San Gabriel Valley increased to an estimated 697,068 jobs, up by around 1% from 2017. Based on LAEDC estimates, 9 of the 14 major industry sectors in the San Gabriel Valley added jobs in 2018. Total employment is currently at an all-time high, and we project that the region will continue to add jobs through 2020, albeit at a slower pace as we approach a full employment environment.

Source: SGVEP

Employment in public administration posted the largest gain over the year in 2018, adding over 2,000 jobs (an annual increase of 5.3%). Behind that, professional and business services and health services posted gains of roughly 1,600 and 1,500 respectively.

Total employment in the San Gabriel Valley is expected to reach to 698,676 jobs this year, equivalent to a 1.1% annual gain, and with an additional gain of 0.8% in 2019 bringing total wage and salary employment up to 704,093 jobs.

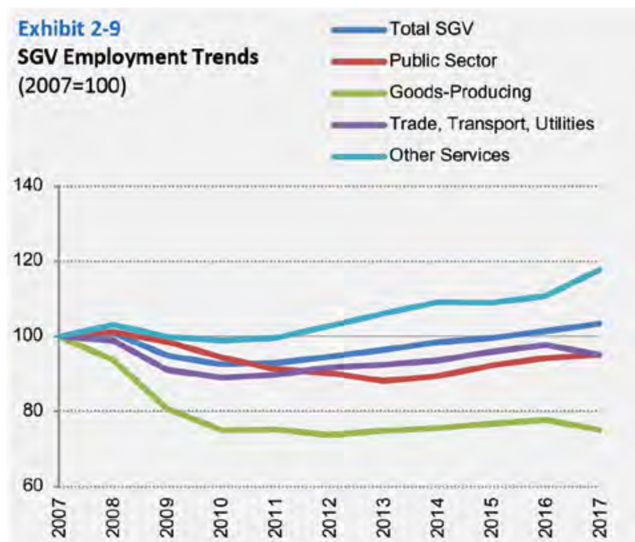
Exhibit 2-8
Employment in San Gabriel Valley



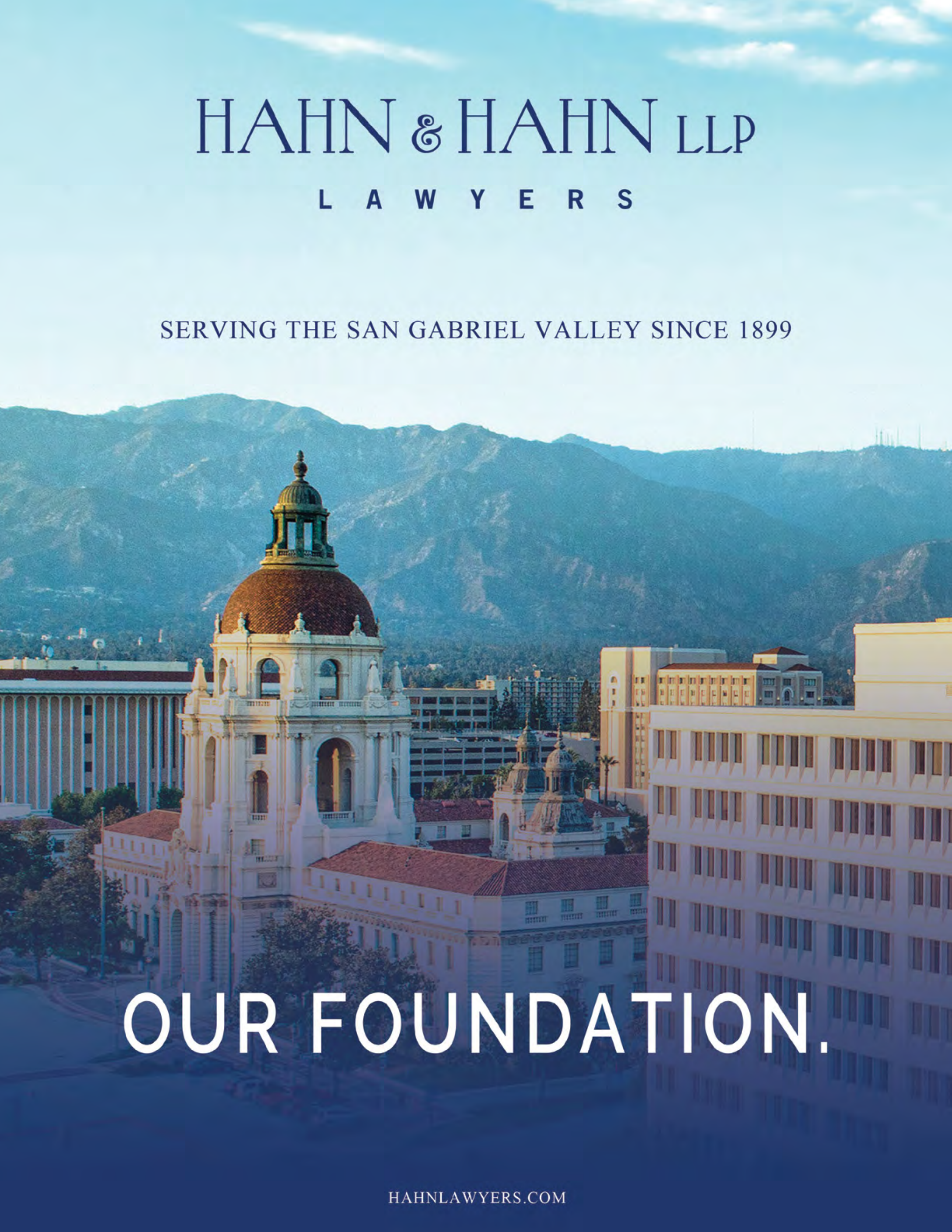
Source: California EDD; forecasts by LAEDC

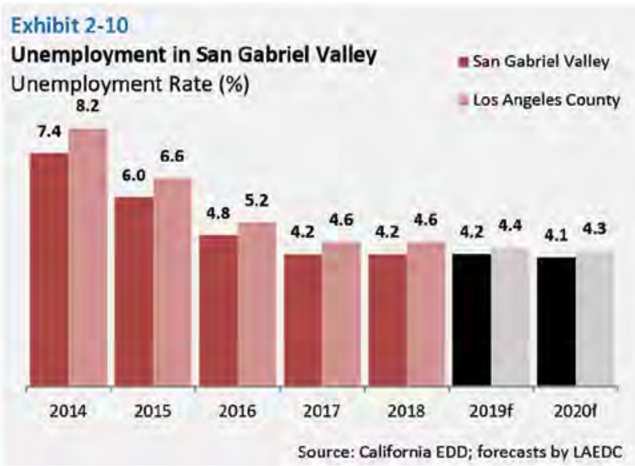
There were five sectors that recorded estimated declines in employment over the year: wholesale trade, retail trade, information, manufacturing and natural resources. Most of these declines were insubstantial and reflect the difficulty of adding more jobs to robust full employment situation. The only substantial decline was in wholesale trade (-2,000), which was likely heavily impacted by trade uncertainty.

Exhibit 2-9
SGV Employment Trends
(2007=100)



Source: California EDD; forecasts by LAEDC


HAHN & HAHN LLP
LAWYERS
SERVING THE SAN GABRIEL VALLEY SINCE 1899
OUR FOUNDATION.
HAHNLAWYERS.COM



Unemployment rates in the San Gabriel Valley, as across the county and state, have been leveling off after substantial declines in recent years. The current rate of unemployment in the San Gabriel Valley is 4.2%, compared to 4.6% for Los Angeles County.

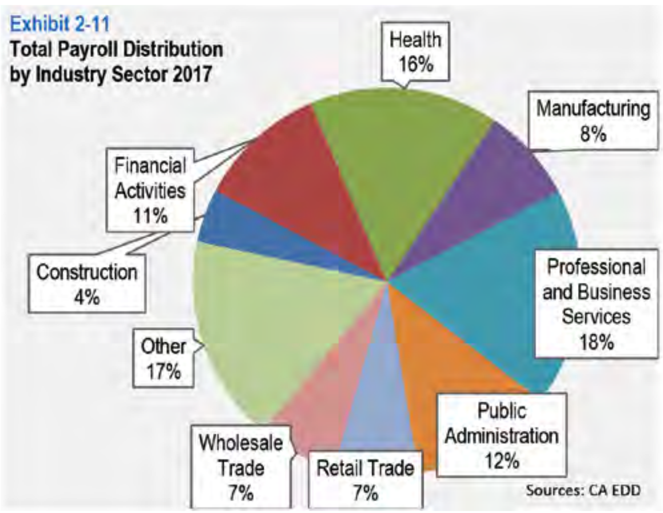
San Gabriel Valley cities enjoying the lowest unemployment rates are San Marino (1.8%), Industry (1.5%) and La Canada Flintridge (2.0%). Cities with the highest unemployment rates are Duarte (5.4%), Irwindale (5.0%) and Pomona (5.0%).

Unemployment is projected to continue to stay roughly steady over the next 2 years as employment gains are absorbed by an increase in labor force participation.

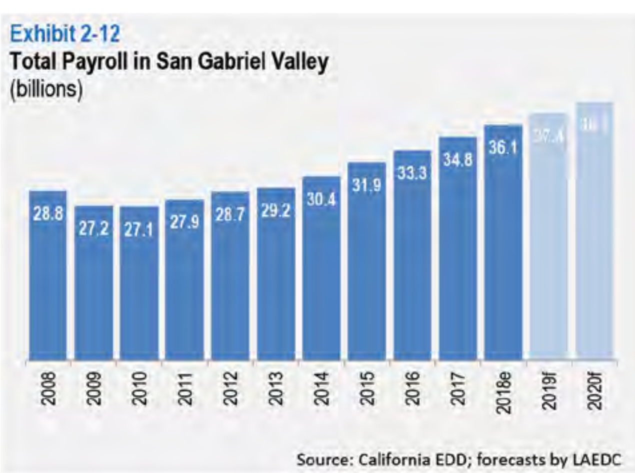

Source: SGVEP

Income and Wages

The distribution of total payroll by industry in San Gabriel Valley is shown below. Professional and business services account for the largest single share of payroll, equaling 18.2% of all payrolls paid in San Gabriel Valley. However, just behind it is the Health Services sector at 15.8%, reflecting the increasing importance of workers in the healthcare industry to the San Gabriel economy.

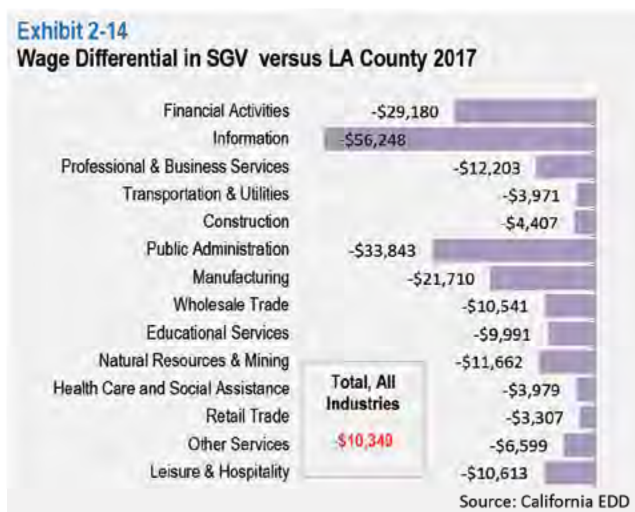


The total value of wage and salary payrolls in the San Gabriel Valley reached an estimated $36.1 billion in 2018, up by 3.8%, or $1.3 billion compared with 2016. Some of his effect is due to increases in payroll employment, but the tight labor market is also causing wages to rise substantially for the first time since the great recession. Total payrolls are projected to increase by 3.2% to $37.4 billion in 2018, mostly stemming from wage growth projections and increases in highly paid industry sectors.



The average annual wage in 2017 (the latest year for which actual annual data are available) in the San Gabriel Valley was $54,770.

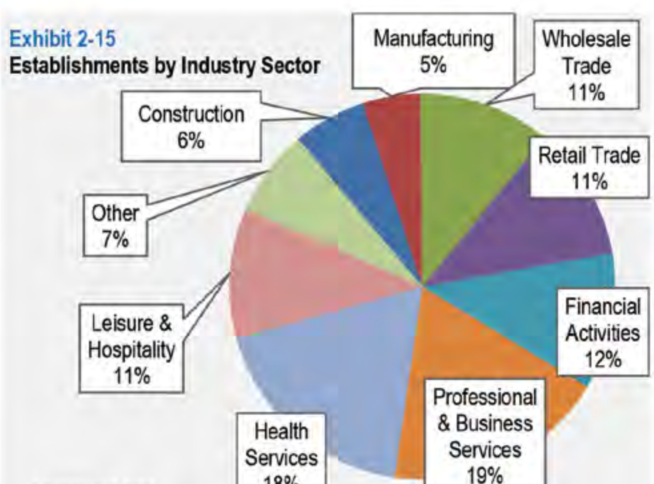
Average wages in the San Gabriel Valley remain lower than Los Angeles County across all industries, with a striking difference in the information sector, due to the spectacularly high wages offered by tech companies located primarily in the Silicon Beach area.



Business Establishments

There were 75,045 business establishments in the San Gabriel Valley in 2017, equivalent to 16.1% of the county's 467,225 establishments. The largest share were professional and business services with 18.6% of all establishments. The sector includes accountants, architects, engineers, lawyers, consultants, temporary employment services, and janitorial services. Health services ranked second in terms of establishments by industry, with 18.4% of all establishments, not including home health care providers. In addition to hospitals and clinics, there are numerous physicians' and dental offices, nursing and residential care facilities, and social assistance/child welfare facilities in the San Gabriel Valley.

Exhibit 2-15
Establishments by Industry Sector



Sources: CA EDD

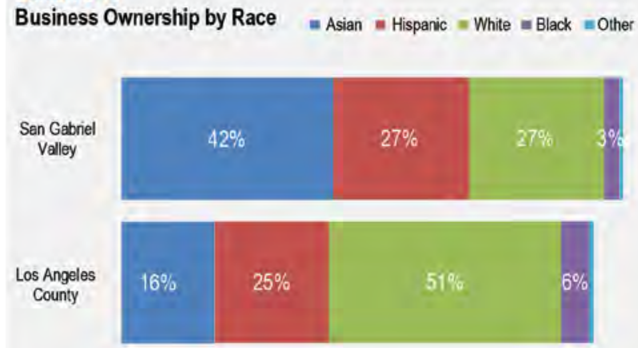
Several San Gabriel industries account for a sizeable percentage of all establishments in Los Angeles County. The San Gabriel Valley was home to 25.7% of Los Angeles County's health services establishments. It also holds 23.3% of the wholesale trade establishments and 20.4% of those in transportation and utilities.

Exhibit 2-16
SGV Share of LA County Establishments

Sources: CA EDD

One notable difference between the business establishments in the San Gabriel Valley and those in the broader Los Angeles County is that the companies in the valley have a vastly more diverse group of owners. Businesses in the broader county are majority owned by White owners, whereas in the valley Asians own the most businesses as a demographic group, and a much more equal share of ownership between the Hispanic and White communities. This difference in ownership is reflective of the broader diversity of the San Gabriel Valley, as well as the uniquely important Asian-American population.

Exhibit 2-17
Business Ownership by Race

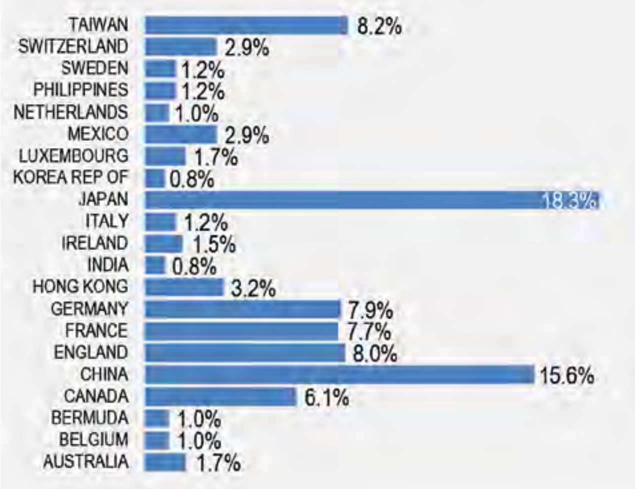


Source: U.S. Census Bureau, 2012 Survey of Business Owners

Foreign Direct Investment

Behind only New York City, Los Angeles is one of the largest recipients of foreign direct investment in the country. In particular, strong ties between the Asian-American community in the region with major trading partners in East Asia results in a heavy degree of business investment by major international firms.

Exhibit 2-18
Share of FDI Establishments by Country



The three largest contributors of foreign direct investment, in terms of number of establishments, are Japan at 18.3%, China at 15.6% and Taiwan at 8.2%, for a combined share of 42.1% of all firms. In terms of industries, foreign direct investment appears to be heavily weighted towards trade and manufacturing with Wholesale Trade, Retail Trade and Manufacturing accounting for a full 55.3% of all firms. There is also a significant presence of foreign investment in finance and insurance establishments.

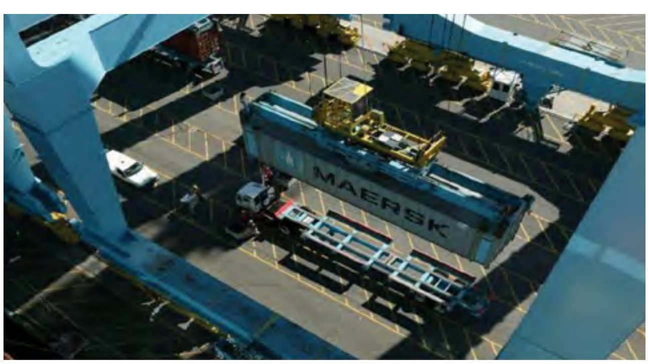


Exhibit 2-19
Share of FDI Establishments by Industry

Business Sales and Revenues

A new Economic Census, consisting of data from 2017, is scheduled to be released in the fall of 2019. However, despite being slightly dated, the most recent data from 2012 still gives insight into the structure and success of businesses in the San Gabriel Valley. Only focusing on employment data to measure the strength of an industry can be wildly misleading as it can easily mask critical information about productivity shifts and capital investment that are key to the success and health of our industries moving forward.

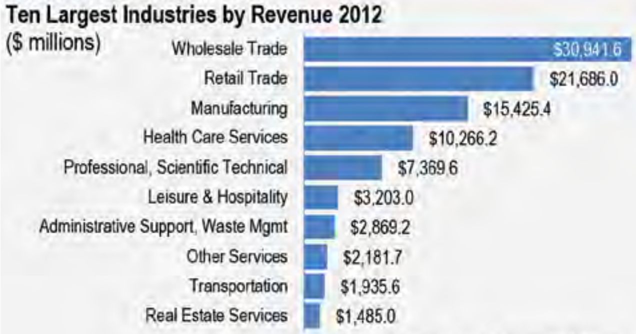
The 2012 Economic Census provided information on the following sectors:

- Administrative support and waste management services
- Health care and social assistance services
- Leisure and hospitality
- Manufacturing
- Other services
- Professional, scientific and technical services
- Real estate services
- Retail trade
- Transportation
- Wholesale trade

Based on these ten sectors, total business revenues for the San Gabriel Valley in 2012 were $98.6 billion. The highest revenue figures were found in wholesale and retail trade, and manufacturing, which represented 69% of the total for the San Gabriel Valley. The next most prominent sectors were health care, professional scientific and technical services, and leisure and hospitality.

The City of Industry had the highest business revenues ($27.1 billion) of all cities in the San Gabriel Valley in 2012. Not surprisingly, wholesale trade and manufacturing were the two leading sectors in the City of Industry. Pasadena was a distant second with total business revenues of $14.1 billion, coming mainly from professional, scientific and technical services. Together, these two cities (with about 9.0% of the total population) represented 42% of total business revenues in the San Gabriel Valley. Irwindale, Arcadia, El Monte, Montebello, Alhambra, West Covina and Azusa led amongst the remaining cities in the Valley.

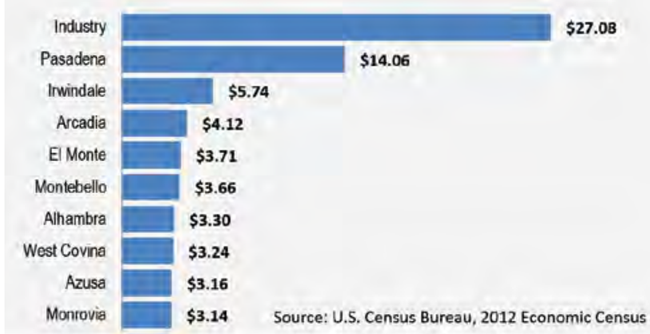
Exhibit 2-20
Business Revenues in SGV
Ten Largest Industries by Revenue 2012
($ millions)



Source: U.S. Census Bureau, 2012 Economic Census

The reader is cautioned that while this is the most recent data available on shipments by industry, changes in industry composition of each city may have had significant impacts on these relative positions since 2012.

Exhibit 2-21
Business Revenues in SGV
Ten Largest Cities in SGV 2012
($ billions)



Source: U.S. Census Bureau, 2012 Economic Census

3 INDUSTRIES OF THE SAN GABRIEL VALLEY

The San Gabriel Valley has a number of significant economic drivers including: health care, higher education, international trade, manufacturing, professional and business services, retail trade, and tourism. These industries are the foundation of the San Gabriel Valley's economic growth, drawing in dollars from outside the region, fostering innovation and creating wealth.

Housing and commercial real estate are also important components of the region's economy. Additionally, the San Gabriel Valley has a considerable number of people employed in public administration jobs.

Exhibit 3-1

Employment in San Gabriel Valley Health Care and Social Assistance (000s)

Source: California EDD; forecasts by LAEDC

Health Care

Health care is a large industry in the U.S. In 2017, national health care expenditures were $10,348 per person ($3.3 trillion in total) and accounted for 17.9% of GDP. Between 2017 and 2026, health care expenditures are projected to grow at an average rate of 5.5% per year.1 Efforts to contain costs are colliding with increased demand for health care services and ongoing public health crises. Fiscal pressures, sweeping regulatory changes under the Affordable Care Act, and more empowered consumers are creating a new health care economy.

In Los Angeles County, the health care industry employed over 692,000 workers in 2018. Over the last several years, health care employment has expanded at a rapid pace, increasing by an estimated 2.8% last year. Job counts have increased at hospitals, physicians' offices, and nursing and residential care facilities.

In the San Gabriel Valley, there were just over 100,000 individuals employed in the health care sector in 2018, not including those involved in services for the elderly and disabled, making health care by far the largest employment sector in the valley. The average annual wage in the health care sector is $43,254, as opposed to $47,234 for Los Angeles County as a whole. These wages are low due to the proliferation of aides and assistants.

Employment is expected to increase this year and again in 2020. This trend is being driven by demographics (population growth, an aging population, retiring baby boomers, and increased life expectancy), employment growth (health care is a consumer good), and healthcare reform, which has expanded the number of individuals with access to health insurance coverage.

While the many medical professionals in the region serve the local population, facilities such as the City of Hope and Huntington Memorial also attract patients from outside the area (i.e. medical tourism). In addition to providing treatment, other important related sources of economic activity are medical research and the production of medical instruments/devices.

Higher Education

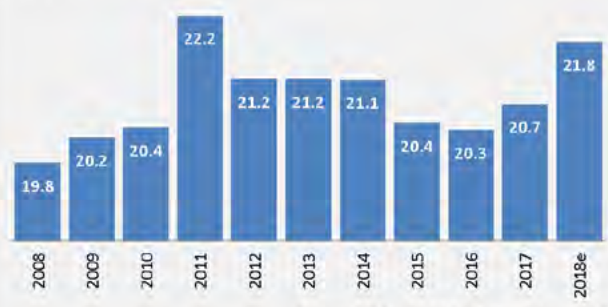
The San Gabriel Valley's universities and community colleges are among the region's most valuable assets and figure prominently in the valley's nonprofit sector. The San Gabriel Valley is home to several educational institutions (public and private) that play a leading role in creating the next generation of skilled workers, professionals, and entrepreneurs. This sector also includes many highly regarded community colleges that provide a stepping stone to four-year universities or vocational training. In this age of rapidly evolving technology, where ideas play a key role in growing the economy, education and skills acquisition are essential to bringing innovative ideas to life and transforming them into commercial applications.

Four-year postsecondary institutions include the California Institute of Technology (Caltech), University of La Verne, Azusa Pacific University, California State Polytechnic University Pomona, California State University Los Angeles, and the Claremont Colleges. The Art Center College of Design in Pasadena has an international reputation for automotive design and is strong in other creative disciplines as well. There are five community colleges serving the valley (Citrus College, Mt. San Antonio College, Rio Hondo College, East Los Angeles College, and Pasadena City College) offering academic and vocational training programs.

The presence of major centers of learning and research in the valley creates opportunities for business start-ups, many of which stay in the area. Research and development activities support aerospace, technology, medical device and biomedical firms. Spin-offs, particularly from Caltech and Cal Poly Pomona, have made important contributions to the "green" economy in areas of technology that include batteries, electric car charging stations, solar panels and nanotechnology.

In 2018, employment at private educational institutions increased by 1,000 after a series of declines in the previous few years and reached the highest level since 2011. The outlook for the region's publicly-funded and nonprofit schools is also improving. California's financial footing is much stronger and more funds for higher education have been allocated in the current state budget, easing (but not eliminating) the financial strain on CSU Los Angeles, Cal Poly Pomona and the region's community colleges.

Exhibit 3-2
Employment in San Gabriel Valley Private Educational Services
(000s)



Source: California EDD; forecasts by LAEDC

EMERGENCY SERVICES FASTER AND BETTER.

- ***Emergency Department Approved for Pediatrics***
- ***Fast Track for Minor Injuries***
- Heart Attack Receiving Center
- Comprehensive Stroke Care
- Top 1% Nationally for Patient Safety

FREE PHYSICIAN REFERRAL
626-790-7299

WWW.METHODISTHOSPITAL.ORG/ER

METHODIST HOSPITAL
of Southern California

Methodist Hospital of Southern California
300 W. Huntington Drive P.O. Box 60016
Arcadia, CA 91007

www.methodisthospital.org

MH19-0078

International Trade and Goods Movement

As with both Los Angeles County as a whole and the neighboring Inland Empire, the San Gabriel Valley economy depends in large part on domestic and international trade flows. Trade-related employment includes occupations in the wholesale trade, transportation, logistics, and distribution services.

In 2018, the wholesale trade industry in the San Gabriel Valley employed an estimated 42,300 workers and an additional 23,200 workers in transportation, warehousing and utilities. Additionally, the San Gabriel Valley has a relatively high concentration of wholesale trade employees, with 6.1% of the region employed in the sector.

About forty percent of the nation's imported containers enter the United States through the San Pedro Bay ports. Los Angeles and Long Beach rank number one and two, respectively, in total container throughput of any port in the Western Hemisphere. In 2018, the Ports of Los Angeles and Long Beach handled 17.5 million containers, an increase of 4.2% compared with 2017.

Due to increasing trade tensions and a slowdown in economic growth in Asia, we expect a more muted outlook for both the ports and trade associated employment, as early 2019 numbers suggest that trade is contracting precipitously across the region.

Exhibit 3-3
TEU Throughput - San Pedro Bay Ports
Millions of TEUs

Sources: Ports of Los Angeles and Long Beach; forecast by LAEDC

Source: SGVEP

Exhibit 3-4
Employment in San Gabriel Valley Wholesale Trade (000s)

Source: California EDD

Exhibit 3-5
Employment in San Gabriel Valley Transportation and Utilities (000s)

Source: California EDD

Manufacturing

The San Gabriel Valley is home to a diverse set of manufacturing sectors including computer and electronic products, plastics and rubber products, transportation equipment, chemicals, and furniture. In addition, the valley has a large contingent of fabricated metal products manufacturing firms. These are primarily small machine shops employing on average 20 people doing contract work for the aerospace, medical device, and defense industries.

Since 2002, total manufacturing employment in the San Gabriel Valley has been steadily trending down, although since 2010 it has stabilized. In 2018, an estimated 56,000 workers were employed by the valley's manufacturing firms, holding roughly steady compared to 2017. Manufacturing employment throughout Los Angeles County has seen similar declines. The average annual wage in the valley's manufacturing sector was $57,205 in 2017 (the latest year for which annual data are available) versus the countywide average of $78,916.

Although companies moving production overseas or to other states accounts for some of the employment decline, automated capital is increasingly replacing labor, while the remaining labor itself has become more productive. The result is that even as manufacturing employment levels have fallen throughout the county, the value of manufacturing output has increased.

Exhibit 3-6
Employment in San Gabriel Valley Manufacturing (000s)

Source: California EDD

Professional and Business Services

The professional and business services sector includes a diverse set of industries including professional, scientific, and technical services; management of companies and enterprises (corporate headquarters); and administrative, support, and waste services.

In the San Gabriel Valley, this industry employed the second largest number of workers in 2018 (behind health services) with an estimated 89,314 payroll jobs, an increase of 1.8% compared with 2017.

Wage and salary employment in business and professional services has increased since 2011, and the industry has finally returned to its pre-recession level of aggregate employment.

The average annual salary in 2017 (the latest for which actual annual data is available) in professional and business services was $67,633 as compared to a county-wide average of $79,837.

Exhibit 3-7
Employment in San Gabriel Valley Professional and Business Services (000s)

Source: California EDD; forecasts by LAEDC

Residential Real Estate

In 2018, Southern California's real estate market well and truly overheated, and the spectacular increase in home prices has finally begun to take its toll on sales, which have fallen in recent months.

If the region fails to address this major issue, substantial investment in housing production and zoning reforms, home ownership and financial security will remain elusive goals for many residents.

Median Home Prices

Median home prices have risen significantly throughout the San Gabriel Valley, boosted by strong demand and lean inventories. An influx of wealthy foreign investors has also exerted upward pressure on prices. The double-digit percentage gains recorded in many San Gabriel Valley cities in 2013 and 2014 have largely given way to more moderate price increases, but some areas (La Canada Flintridge, Hacienda Heights, South El Monte, San Marino, and Altadena) posted double-digit year-over- year gains in 2015. In 2018 most cities continued to see home prices rise, with Monrovia increasing the most at 7.7% followed by Pomona at 7.4% and Altadena at 7.0%. In contrast, the largest decline was in South Pasadena which saw prices fall 6.2%.

New Construction

New home construction is still at very low levels but the next two years should bring a moderate acceleration of building activity. Beginning in 2013 and continuing through 2015, new home construction in the San Gabriel Valley began to tilt towards multi-family homes, primarily apartments. The reversal of the long-run trend (of an industrial focus on single family over multifamily residential construction) can be attributed to the diminishing supply of land available for new home construction and changing consumer preferences for centralized urban environments.

Last year, the total number of permits issued for new residential construction in the San Gabriel Valley increased to 2,082 units permitted. This is a strikingly low number for a region of 1.5 million people, and though we expected slight increases in permitting this will not be sufficient to combat the affordability crisis.

LAEDC forecasts that homebuilders will pull permits for 2,145 new single and multi-family units in the San Gabriel Valley this year, roughly in line with the number in 2018, while an increase to 2,310 units is anticipated for 2020.

The San Gabriel Valley's housing market is undergoing the same overheating that the county as a whole is experiencing, and due to insufficient new construction, it is unlikely to abate in the near future. In the long run, we should expect to see more dense construction to take advantage of the demand and soaring prices, as well as a continued shift to multi-family units and more urban living.

Nonresidential Real Estate

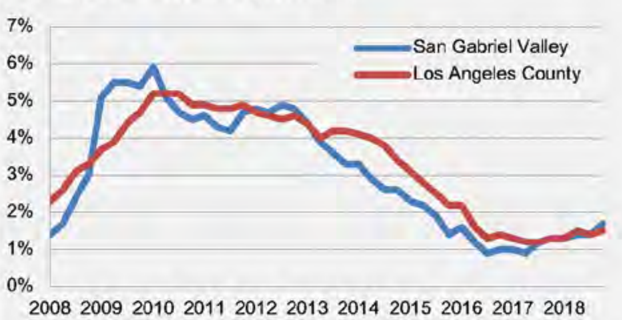
The fundamentals of commercial (offices, retail and hotel) and industrial real estate are strong, supported by employment growth and stronger economic activity.

Industrial Space

As a major gateway market for consumer and business goods, Southern California's industrial real estate markets have seen several years of steady improvement. The region is a hub for manufacturing, international trade and logistics, and entertainment, all of which use industrial space. Right now, the primary concern for the region's industrial market is not demand, but supply.

By the end of 2018, the San Gabriel Valley's industrial real estate market had continued to weaken with rising vacancy rates indicative of softening industrial demand. However, the vacancy rates are still at very low levels.

Exhibit 3-9
Industrial Vacancy Rates
Vacancy, quarterly averages (4Q18)



Source: Cushman & Wakefield

Source: SGVEP

Overall warehousing and distribution asking rents maintained at a rate of $.83 per square foot, an increase over $.71 the year before. Manufacturing asking rents fell also rose from $.53 to $.83. Rental rates should fall as softening demand is met with significant new construction.

Leasing activity in 2018 in San Gabriel Valley totaled 6.5 million square feet, over 1 million more than the previous year. By the end of 2018, there were 2,674,000 square feet of new product in the pipeline, as well as roughly 2,340,000 square feet of new completed industrial construction.

Los Angeles' previously high demand for industrial space has declined, and high quantities of new construction mean that we should expect vacancy rates to continue to rise.

Office Space

Office occupancy across Los Angeles had been on a consistent, if slow, upward trend up until the end of 2015, at which point it began to stagnate and rise again. In the fourth quarter of 2018 the overall vacancy rate in Los Angeles was 14.5%, a decrease from 15.1% in 2017. Net absorption (occupancy gains) was 3.0 million square feet, a significant increase from 1.8 million the year prior. Across the region, the average direct class A asking rent increased by 8.1% compared with the final quarter of 2016 to $3.58 per square foot.

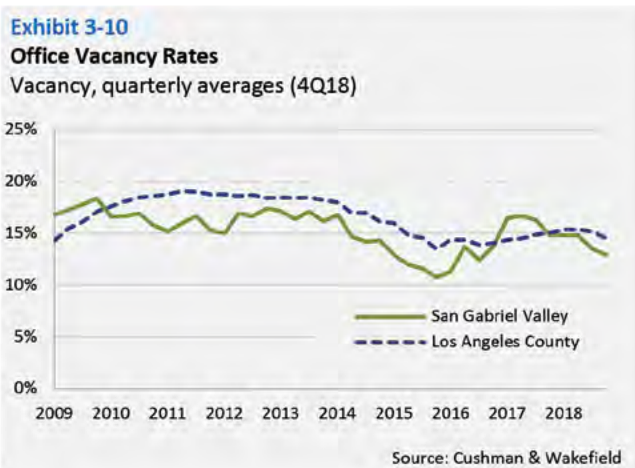
Office market fundamentals in the San Gabriel Valley have been stronger than the county as a whole in 2018. From a high of 16.7% mid 2017 they have dropped to 12.9% by the end of 2018. The county-wide office vacancy rate at the end of 2018 was 14.5%. Class A asking rents in the San Gabriel Valley increased from $2.36 per square foot in the final quarter of 2017 to $2.48 per square foot during the fourth quarter of 2017.

Leasing activity increased to 2018 to 765,312 square feet from 642,244 square feet leased in 2017. This resulted in net absorption being 230,960 square feet, above the 177,049 square feet absorbed in 2017. We expect the increase in demand to continue to drive leasing activity, particularly with a strong professional and business services sector to drive office needs.


The power to__
grow futures
Bank of America Merrill Lynch is proud to
support San Gabriel Valley Economic Partnership.
bofaml.com
Bank of America
Merrill Lynch
The power of global connections™

New Construction

Nonresidential construction experienced a very strong year of growth. The value of total nonresidential construction permits in the San Gabriel Valley rose significantly to $631 million in 2018, well over the previous year's $552 million and substantially above the pre-recession average of $400.2 million. Most of the new construction permits appear to be for alterations to existing structures, but strong demand for state-of-the-art warehouse and distribution facilities is prompting new development.



Stronger employment growth and the lack of new construction over the last several years will help drive the region's eventual office market recovery. The outlook for industrial space is more positive, but ongoing improvements will depend on expanding trade, e-commerce and manufacturing activity.

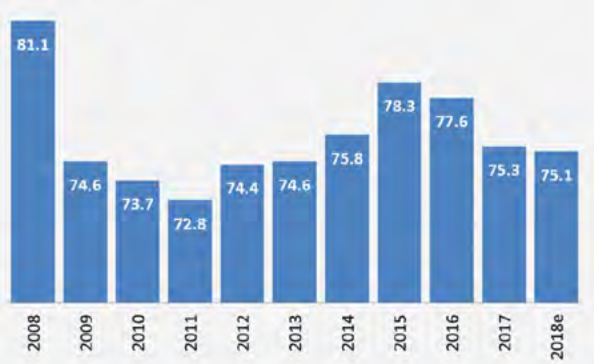
Retail Trade

The retail sector occupies a prominent place in the economy at both the national and local levels. Because such a substantial portion of U.S. economic activity depends on consumer spending, sales of retail goods and services is an important economic indicator. Retailers also generate a sizeable number of jobs that provide employment for individuals across a wide range of skill and income levels. Additionally, retail sales and use taxes are an important source of local government revenues.

After a booming year for retail sales nationally, consumer spending has begun to decline which, combined with increasing labor costs and more competition make the retail environment in 2019 a challenging one.

Measured by job counts, the retail sector was the San Gabriel Valley's fourth largest industry in 2018, employing over 75,000 workers. The average annual wage of retail trade workers in the San Gabriel Valley was $32,700 in 2016 (the latest year for which actual annual data are available), which was lower than the county average of $36,007.

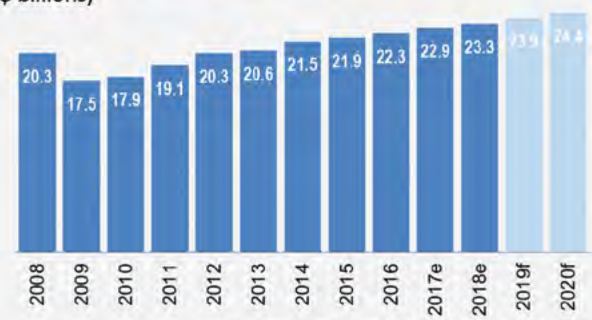
Exhibit 3-12
Employment in San Gabriel Valley Retail Trade (000s)



Source: California EDD; forecasts by LAEDC

The retail sector in the San Gabriel Valley has improved steadily since 2009, when taxable sales fell to their lowest point in the current economic cycle. While a handful of cities in the valley surpassed their prerecession taxable sales peak in 2016 (most current annual data available), overall, 2018 estimates of total taxable sales, at $23.3 billion, are above the previous pre-recession peak set in 2007. In 2019, taxable sales in the San Gabriel Valley are forecast to reach $23.9 billion, and $24.4 billion in 2020.

Exhibit 3-13
Taxable Sales in San Gabriel Valley
($ billions)



Source: California BOE; forecasts by LAEDC

The share of taxable sales in the valley relative to the county as a whole has been on a declining trend. In 2002 (when the LAEDC began tracking this data) the share was 17.5%. In 2016 (the latest year for which actual annual data is available) the region accounted for 15.0% of total taxable sales in Los Angeles County. At the same time the share of population has declined more moderately, from 15.5% to 15.0% over the same period.

Tourism and Hospitality

Tourism and hospitality is one of Southern California's largest, most visible and valuable industry sectors, employing thousands of people and generating billions of dollars in economic activity. While a significant part of leisure and hospitality activity is associated with tourism, many of these jobs serve the local population more so than the region's tourists and business travelers. Jobs in this industry include lodging, food services, the performing arts, museums, amusement parks and gambling establishments.

Employment in leisure and hospitality industries is expected to reach 82,205 in 2018, making it the third largest industry supersector in the San Gabriel Valley. There are a large number of low wage occupations in these industries, such as food preparation and servers, which pulls the average annual wage in the supersector below the San Gabriel Valley average. The average annual wage for leisure and hospitality industries in San Gabriel Valley in 2018 is $22,628 roughly half the average annual wage in San Gabriel Valley across all industries ($54,770). It is helpful to note that many of these jobs are also part time, and annual earnings are based on less than full time work.

Exhibit 3-14
Employment in San Gabriel Valley Leisure and Hospitality (000s)

Source: California EDD; forecasts by LAEDC

Tourism

Driving domestic demand for travel-related goods and services last year were gains in the U.S. labor markets and stronger personal income growth, both of which point to an increase in consumer spending. International visitation is expected to remain strong in 2019.

In 2018, Los Angeles County hosted a record 50 million visitors, an increase of 3.1% over the previous year and the eighth consecutive year in which Los Angeles County achieved record breaking visitor volume.

International visitation is especially strong in Los Angeles County. In 2018, 7.5 million international visitors arrived in Los Angeles, nearly 15% of total visitation, and a 3.6% uptick over 2017. While Mexico sent the largest number of international visitors at 1.8 million, China (excluding Hong Kong) was Los Angeles County's number one overseas market, up to over 1.2 million visitors. China is also the region's fastest-growing market, with consistent double-digit year-over-year growth in recent years. Other major international visitation came from Canada, the United Kingdom, and Japan.

The San Gabriel Valley attracts a substantial number of these visitors. Chinese tourists, in particular, are drawn to the region due to the large ethnic Chinese population that has settled in the valley since the 1970s.

2 Los Angeles 2017 Tourism Quick Facts, Los Angeles Tourism and Convention Board

Accommodation

The lodging market in the valley is supported by strong fundamentals. The region is home to world-renowned cultural attractions, a wide range of entertainment options and several large and influential corporations. Transient-occupancy taxes are also a significant revenue source for local governments.

The metrics used to measure the health of the lodging market indicate a healthy and expanding industry, continuing to achieve record high levels in occupancy rates and daily room rates. The average hotel occupancy rate for the San Gabriel Valley (except Pasadena) in 2018 was an estimated 71.3%, which was down from 74.22% in 2017. The average daily room rate increased to $128.4 from $130.5 in 2017, part of a continued strengthening of the market. The most critical measure to hoteliers is revenue per available room (RevPAR). In 2018, this was a $91.5.

In Pasadena the average occupancy rate was 70.9%, down from 74.4% a year earlier. Average daily rates edged up slightly from $202.4 in 2017 to $206.23 and RevPAR declined to $146.2 from $150.4.

One major risk to the lodging industry is economic weakness from China and Europe which may cause a decline in international travelers that will be difficult to make up for.

FULL REPORT:
The full LAEDC report in its entirety will be available following the 2019 SGV Economic Forecast at:
cba.cpp.edu
sgvpartnership.org

APPENDIX

Exhibit A-1
San Gabriel Valley Economic Indicators
Levels and Percent Change from Previous Year

Year	Population*	Total Employment	Payroll of Workers ($millions)	Housing Permits (Units)*	Total Taxable Sales ($millions)*
2008	1,493,891	674,367	28,805	2,100	20,330
2009	1,493,187	634,602	27,172	603	17,499
2010	1,491,404	618,581	27,065	632	17,936
2011	1,496,172	621,475	27,880	844	19,076
2012	1,505,125	632,723	28,673	867	20,316
2013	1,514,654	644,233	29,219	1,794	20,592
2014	1,522,325	658,079	30,387	2,892	21,512
2015	1,525,026	666,210	31,941	2,237	21,863
2016	1,528,209	677,565	33,304	2,240	22,347
2017	1540307	691,143	34,813	1,965	22,902
2018e	1545781	696,068	36,124	2,082	23,304
2019f	1,551,074	698,491	37,438	2,145	23,875
2020f	1,555,919	700,224	38,687	2,310	24,412

*Incorporated Cities Only

2008	-0.3%	0.9%	0.6%	-7.3%	-8.4%
2009	0.0%	-5.9%	-5.7%	-71.3%	-13.9%
2010	-0.1%	-2.5%	-0.4%	4.8%	2.5%
2011	0.3%	0.5%	3.0%	33.5%	6.4%
2012	0.6%	1.8%	2.8%	2.7%	6.5%
2013	0.6%	1.8%	1.9%	106.9%	1.4%
2014	0.5%	2.1%	4.0%	61.2%	4.5%
2015	0.2%	1.2%	5.1%	-22.6%	1.6%
2016	0.2%	1.7%	4.3%	0.1%	2.2%
2017	0.5%	2.0%	4.5%	0.1%	1.1%
2018e	0.4%	0.7%	3.8%	3.8%	1.8%
2019f	0.3%	0.3%	3.6%	3.6%	2.5%
2020f	0.3%	0.2%	3.3%	3.3%	2.3%
2008	-0.3%	0.9%	0.6%	-7.3%	-8.4%

Sources: California Dept. of Finance, Demographic Research Unit
California EDD, Labor Market Information Division, ES202 data;
Construction Industry Research Board; California Homebuilding Foundation
California Board of Equalization; forecasts by LAEDC

Exhibit A-2

Population of Incorporated Cities and Unincorporated Areas of San Gabriel Valley

City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alhambra	83,551	83,221	83,089	83,611	84,337	84,892	85,231	85,908	86,237	86,420	86,665
Arcadia	55,707	55,975	56,364	56,572	56,554	56,432	56,872	56,908	57,194	57,506	57,704
Azusa	46,117	46,227	46,361	46,444	46,772	47,534	48,216	49,107	49,424	49,606	49,954
Baldwin Park	76,066	75,666	75,390	75,116	75,683	75,944	76,022	76,183	76,116	76,463	76,708
Bradbury	999	1,017	1,048	1,062	1,079	1,091	1,099	1,103	1,110	1,068	1,069
Claremont	34,850	35,259	34,926	35,087	35,420	35,742	35,839	36,109	36,165	36,293	36,446
Covina	47,701	47,726	47,796	48,017	48,408	48,698	48,886	49,041	48,905	48,901	49,006
Diamond Bar	55,610	55,379	55,544	55,838	56,095	56,189	56,367	56,476	56,919	57,245	57,460
Duarte	21,356	21,409	21,321	21,420	21,584	21,724	21,808	21,937	22,038	21,999	22,013
El Monte	114,920	114,434	113,475	114,193	114,922	115,487	116,012	116,472	116,927	116,942	117,204
Glendora	49,775	49,840	50,073	50,370	50,861	51,243	51,822	51,914	51,928	52,452	52,703
Industry	541	481	451	438	436	436	436	436	435	437	437
Irwindale	1,480	1,461	1,422	1,403	1,401	1,431	1,432	1,435	1,391	1,414	1,450
La Cañada Flintridge	20,313	20,249	20,246	20,339	20,482	20,583	20,648	20,661	20,673	20,638	20,683
La Puente	40,139	39,990	39,816	39,883	40,154	40,343	40,505	40,629	40,576	40,640	40,686
La Verne	31,449	31,234	31,063	31,203	31,658	32,177	32,307	33,045	33,058	33,169	33,260
Monrovia	36,369	36,407	36,590	36,737	36,923	37,030	37,170	37,312	37,411	38,735	38,787
Montebello	62,505	62,463	62,500	62,864	63,121	63,196	63,391	63,779	63,792	64,142	64,327
Monterey Park	60,304	60,441	60,269	60,307	61,346	61,553	61,722	61,870	61,796	62,154	62,240
Pasadena	135,305	136,502	137,122	139,040	139,600	139,663	140,149	140,310	140,960	143,379	144,388
Pomona	150,865	149,935	149,058	149,959	151,580	152,957	153,629	154,135	154,151	154,718	155,687
Rosemead	53,849	53,877	53,764	54,006	54,427	54,670	54,850	54,988	54,926	54,940	55,267
San Dimas	33,789	33,596	33,371	33,486	33,517	33,456	33,732	34,238	34,215	34,471	34,507
San Gabriel	39,870	39,798	39,718	39,886	40,096	40,168	40,234	40,318	40,339	40,781	40,920
San Marino	13,136	13,107	13,147	13,124	13,204	13,227	13,276	13,319	13,251	13,255	13,272
Sierra Madre	10,881	10,881	10,917	10,881	10,954	10,985	11,012	11,028	10,972	10,973	10,896
South El Monte	20,257	20,326	20,116	20,193	20,253	20,273	20,332	20,679	20,798	20,864	20,882
South Pasadena	25,358	25,486	25,619	25,608	25,776	25,864	25,938	26,045	26,018	26,026	26,047
Temple City	35,098	35,284	35,558	35,725	35,961	36,082	36,080	36,140	36,220	36,236	36,411
Walnut	29,305	29,285	29,172	29,472	29,778	29,936	30,027	30,081	30,106	30,151	30,457
West Covina	106,426	106,231	106,098	106,188	107,062	107,454	107,753	108,083	108,250	108,289	108,245
Total	1,493,891	1,493,187	1,491,404	1,498,472	1,509,444	1,516,460	1,522,797	1,529,689	1,532,301	1,540,307	1,545,781

Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2017

Exhibit A-3

Ethnicity and Race in the San Gabriel Valley

City	Hispanic or Latino	White	Black or African American	Native American and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other	Two or more races
Alhambra	37.6%	8.6%	1.6%	0.3%	50.2%	0.3%	0.0%	1.3%
Arcadia	11.7%	22.3%	1.4%	0.2%	61.2%	0.2%	0.2%	2.8%
Azusa	63.8%	19.7%	2.4%	0.2%	11.6%	0.2%	0.2%	1.9%
Baldwin Park	74.0%	3.6%	1.9%	0.8%	18.7%	0.7%	0.2%	0.2%
Bradbury	11.9%	40.7%	1.6%	0.2%	44.3%	0.0%	0.0%	1.3%
Claremont	26.4%	50.1%	5.2%	0.5%	13.6%	0.0%	0.2%	3.9%
Covina	56.0%	24.6%	3.5%	0.3%	13.5%	0.0%	0.4%	1.7%
Diamond Bar	18.4%	19.6%	3.8%	0.4%	54.5%	1.0%	0.1%	2.1%
Duarte	48.9%	24.1%	6.9%	0.3%	17.1%	0.1%	0.3%	2.3%
El Monte	65.2%	4.0%	0.5%	0.1%	29.0%	0.5%	0.1%	0.6%
Glendora	31.8%	51.2%	2.2%	0.4%	10.5%	0.2%	0.3%	3.5%
Industry	46.0%	12.6%	1.0%	0.2%	39.1%	0.1%	0.2%	0.7%
Irwindale	63.5%	22.5%	0.6%	0.0%	13.5%	0.0%	0.0%	0.0%
La Cañada Flintridge	93.3%	5.4%	0.0%	0.0%	0.9%	0.0%	0.4%	0.0%
La Puente	17.4%	52.8%	0.3%	0.1%	26.1%	0.1%	0.0%	3.2%
La Verne	84.7%	3.4%	0.9%	0.1%	10.3%	0.2%	0.1%	0.3%
Monrovia	36.3%	50.2%	3.8%	0.4%	7.2%	0.0%	0.1%	2.1%
Montebello	41.5%	35.8%	5.0%	0.1%	14.0%	0.2%	0.2%	3.2%
Monterey Park	77.6%	7.3%	1.2%	0.2%	12.8%	0.1%	0.0%	0.7%
Pasadena	26.4%	3.9%	0.3%	0.2%	66.8%	0.7%	0.1%	1.6%
Pomona	34.4%	36.5%	9.7%	0.1%	16.0%	0.1%	0.4%	2.7%
Rosemead	70.6%	11.7%	6.0%	0.3%	9.5%	0.2%	0.3%	1.3%
San Dimas	33.6%	3.8%	0.2%	0.3%	61.3%	0.1%	0.0%	0.7%
San Gabriel	25.5%	10.4%	1.3%	0.3%	60.8%	0.4%	0.0%	1.3%
San Marino	32.3%	46.7%	2.4%	0.4%	15.7%	0.1%	0.2%	2.2%
Sierra Madre	25.4%	12.0%	0.5%	0.1%	60.5%	0.2%	0.1%	1.2%
South El Monte	9.8%	32.2%	1.3%	0.0%	53.7%	0.3%	0.1%	2.6%
South Pasadena	16.2%	66.6%	1.2%	0.2%	11.1%	0.2%	1.4%	3.1%
Temple City	82.0%	3.6%	0.1%	0.0%	14.2%	0.0%	0.0%	0.1%
Walnut	20.2%	41.9%	2.9%	0.2%	29.0%	0.1%	0.4%	5.3%
West Covina	20.6%	15.6%	0.5%	0.2%	61.2%	0.3%	0.0%	1.5%

Source: U.S. Census Bureau, 2012-2016, 5-year Estimates, American Community Survey

City	<9th Grade	HS Graduate	AA Degree	BA Degree	Graduate or Professional Degree	% of Population w/BA or Higher
Alhambra	18.3%	24.4%	23.8%	22.8%	10.8%	33.6%
Arcadia	8.2%	14.9%	24.6%	33.1%	19.3%	52.4%
Azusa	21.6%	28.0%	30.3%	13.7%	6.3%	20.0%
Baldwin Park	33.1%	32.5%	22.1%	10.0%	2.2%	12.2%
Bradbury	7.0%	10.2%	21.5%	35.1%	26.3%	61.3%
Claremont	5.8%	10.7%	27.6%	24.0%	31.9%	55.9%
Covina	13.9%	23.7%	34.7%	20.4%	7.3%	27.7%
Diamond Bar	7.2%	14.6%	26.0%	34.4%	17.7%	52.1%
Duarte	16.8%	22.1%	31.2%	17.7%	12.2%	29.9%
El Monte	42.6%	27.3%	18.5%	9.2%	2.4%	11.6%
Glendora	9.9%	18.9%	35.0%	22.4%	13.7%	36.1%
Industry	13.4%	23.1%	29.3%	23.4%	10.7%	34.2%
Irwindale	17.1%	24.9%	34.2%	21.2%	2.6%	23.8%
La Cañada Flintridge	25.1%	29.1%	36.7%	7.5%	1.6%	9.1%
La Puente	2.2%	5.9%	16.8%	37.7%	37.4%	75.1%
La Verne	38.1%	29.7%	21.8%	8.3%	2.0%	10.4%
Monrovia	8.3%	17.2%	36.7%	22.5%	15.2%	37.7%
Montebello	21.8%	20.7%	26.2%	20.4%	10.9%	31.2%
Monterey Park	11.5%	18.5%	32.4%	24.3%	13.4%	37.7%
Pasadena	27.0%	28.7%	24.4%	14.6%	5.3%	19.8%
Pomona	21.3%	23.5%	23.3%	21.9%	10.0%	31.9%
Rosemead	12.4%	13.7%	22.8%	27.6%	23.5%	51.1%
San Dimas	31.5%	24.7%	26.2%	13.1%	4.6%	17.7%
San Gabriel	35.2%	25.9%	21.0%	14.0%	3.9%	17.9%
San Marino	14.3%	20.5%	26.3%	29.6%	9.3%	38.8%
Sierra Madre	7.1%	18.1%	37.6%	24.6%	12.6%	37.2%
South El Monte	20.3%	26.5%	21.0%	24.6%	7.5%	32.1%
South Pasadena	3.1%	6.3%	17.3%	32.3%	41.1%	73.4%
Temple City	0.7%	12.0%	24.0%	35.9%	27.4%	63.3%
Walnut	47.2%	26.9%	17.1%	6.2%	2.6%	8.8%
West Covina	4.1%	10.4%	22.7%	33.3%	29.6%	62.8%

Exhibit A-5

Employment by Major Industry Sector in San Gabriel Valley

Industry Sector	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018e
Natural Resources & Mining	2,226	1,713	1,558	1,510	1,530	1,613	1,629	1,596	1,647	1,653	1,552
Construction	29,338	23,747	21,558	21,839	21,330	21,862	22,539	24,016	25,685	25,073	25,554
Manufacturing	71,467	63,322	59,271	59,259	58,176	58,796	58,944	58,645	58,002	56,067	55,953
Wholesale Trade	43,629	38,785	38,940	39,986	41,044	42,300	42,226	42,464	44,633	44,348	42,275
Retail Trade	81,138	74,603	73,695	72,781	74,434	74,598	75,828	78,277	77,557	75,280	75,061
Transportation & Utilities	23,117	22,746	20,568	21,379	21,741	21,318	21,889	22,711	23,965	23,228	23,220
Information	12,050	10,675	9,877	9,891	9,952	10,379	10,469	10,304	9,670	10,139	9,551
Financial Activities	43,071	39,159	36,671	35,930	36,825	36,592	35,791	35,832	37,713	39,584	39,906
Professional & Business Services	89,145	81,219	81,546	80,635	83,432	84,638	88,464	83,962	84,107	87,716	89,314
Education	19,784	20,208	20,372	22,208	21,161	21,166	21,149	20,442	20,329	20,750	21,778
Health Services [1]	79,840	83,076	86,387	87,730	88,850	89,786	91,797	93,797	96,569	100,519	102,040
Leisure & Hospitality	64,058	61,070	59,375	60,665	63,471	66,810	70,090	72,941	76,255	81,658	82,205
Other Services [1]	40,763	42,353	40,069	39,791	43,560	49,430	50,885	50,789	49,850	53,020	55,755
Public Administration	71,407	69,619	66,679	64,424	63,760	62,231	63,165	65,129	66,580	67,366	69,525
Unclassified	3,334	2,307	2,015	3,447	3,457	2,714	3,214	5,306	5,003	4,744	3,377
San Gabriel Valley Total	674,367	634,602	618,581	621,475	632,723	644,233	658,079	666,210	677,565	691,143	697,068
% Share of LA County	16.0%	15.9%	15.8%	15.8%	15.7%	15.7%	15.7%	15.6%	15.4%	15.5%	15.5%

% Change From Prior Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018e
Natural Resources & Mining	-19.3%	-23.0%	-9.0%	-3.1%	1.3%	5.4%	1.0%	-2.0%	7.0%	0.4%	-6.1%
Construction	-10.9%	-19.1%	-9.2%	1.3%	-2.3%	2.5%	3.1%	6.6%	-1.1%	-2.4%	1.9%
Manufacturing	-3.6%	-11.4%	-6.4%	0.0%	-1.8%	1.1%	0.3%	-0.5%	5.1%	-3.3%	-0.2%
Wholesale Trade	-2.7%	-11.1%	0.4%	2.7%	2.6%	3.1%	-0.2%	0.6%	-0.9%	-0.6%	-4.7%
Retail Trade	-2.0%	-8.1%	-1.2%	-1.2%	2.3%	0.2%	1.6%	3.2%	5.5%	-2.9%	-0.3%
Transportation & Utilities	5.1%	-1.6%	-9.6%	3.9%	1.7%	-1.9%	2.7%	3.8%	-6.1%	-3.1%	0.0%
Information	-13.3%	-11.4%	-7.5%	0.1%	0.6%	4.3%	0.9%	-1.6%	5.2%	4.9%	-5.8%
Financial Activities	-7.2%	-9.1%	-6.4%	-2.0%	2.5%	-0.6%	-2.2%	0.1%	0.2%	5.0%	0.8%
Professional & Business Services	-2.2%	-8.9%	0.4%	-1.1%	3.5%	1.4%	4.5%	-5.1%	-0.6%	4.3%	1.8%
Education	-8.1%	2.1%	0.8%	9.0%	-4.7%	0.0%	-0.1%	-3.3%	3.0%	2.1%	5.0%
Health Services	1.1%	4.1%	4.0%	1.6%	1.3%	1.1%	2.2%	2.2%	4.5%	4.1%	0.5%
Leisure & Hospitality	1.3%	-4.7%	-2.8%	2.2%	4.6%	5.3%	4.9%	4.1%	-1.8%	7.1%	0.7%
Other Services*	8.4%	3.9%	n/a	-0.7%	9.5%	13.5%	2.9%	-0.2%	2.2%	6.4%	5.2%
Public Administration	1.2%	-2.5%	-4.2%	-3.4%	-1.0%	-2.4%	1.5%	3.1%	-5.7%	1.2%	3.2%
San Gabriel Valley	0.9%	-5.9%	-2.5%	0.5%	1.8%	1.8%	2.1%	1.2%	1.7%	2.0%	0.7%
Los Angeles County	-1.0%	-5.5%	-1.5%	0.6%	2.3%	1.9%	1.8%	2.2%	2.6%	1.2%	1.1%

[1] Figures for 2008 forward are not directly comparable with earlier years due to industry coding changes. Beginning with the first quarter of 2013, the Bureau of Labor Statistics reclassified many NAICS code 814 Private Households (that engage in employing in-home health care workers) into NAICS code 624120 Services for the Elderly and Persons with Disabilities.

Sources: California Employment Development Department, ES202 data, 2017 estimates by LAEDC

Exhibit A-6

Unemployment Rate of Incorporated Cities of the San Gabriel Valley

City	2011	2012	2013	2014	2015	2016	2017	2018	Change from '17 to '18
Alhambra	8.1%	7.2%	6.4%	5.4%	4.4%	3.4%	3.0%	3.9%	0.9%
Arcadia	7.2%	6.4%	5.7%	4.8%	3.9%	3.0%	2.6%	3.4%	0.8%
Azusa	9.3%	8.3%	7.4%	6.2%	5.1%	3.9%	3.4%	4.4%	1.0%
Baldwin Park	15.8%	14.2%	12.8%	10.9%	8.9%	7.0%	6.1%	4.8%	-1.3%
Bradbury	8.8%	7.9%	7.0%	6.1%	4.9%	3.8%	3.4%	2.0%	-1.4%
Claremont	11.6%	10.4%	9.3%	7.8%	6.4%	5.0%	4.4%	4.2%	-0.2%
Covina	14.3%	12.9%	11.5%	9.8%	8.0%	6.3%	5.5%	4.8%	-0.7%
Diamond Bar	7.9%	7.1%	6.3%	5.3%	4.3%	3.3%	2.9%	3.6%	0.7%
Duarte	11.0%	9.9%	8.8%	7.4%	6.1%	4.7%	4.1%	5.4%	1.3%
El Monte	14.9%	13.3%	11.9%	10.2%	8.3%	6.5%	5.7%	4.6%	-1.1%
Glendora	10.5%	9.3%	8.3%	7.0%	5.7%	4.5%	3.9%	4.2%	0.3%
Industry	3.7%	3.7%	3.6%	1.8%	1.8%	1.8%	1.7%	1.5%	-0.2%
Irwindale	15.8%	14.1%	12.7%	10.8%	8.8%	7.0%	6.1%	5.0%	-1.1%
La Cañada Flintridge	4.8%	4.2%	3.8%	4.4%	3.4%	2.8%	2.4%	2.0%	-0.4%
La Puente	10.8%	9.7%	8.6%	7.3%	5.9%	4.6%	4.1%	4.6%	0.5%
La Verne	9.4%	8.4%	7.5%	6.3%	5.1%	4.0%	3.5%	4.3%	0.8%
Monrovia	9.5%	8.4%	7.5%	6.3%	5.2%	4.0%	3.5%	3.9%	0.4%
Montebello	10.5%	9.4%	8.4%	7.1%	5.7%	4.5%	3.9%	4.9%	1.0%
Monterey Park	10.9%	9.7%	8.7%	7.3%	6.0%	4.7%	4.1%	4.1%	0.0%
Pasadena	10.9%	9.7%	8.7%	7.3%	6.0%	4.7%	4.1%	3.9%	-0.2%
Pomona	13.5%	12.1%	10.8%	9.2%	7.5%	5.9%	5.1%	5.0%	-0.1%
Rosemead	13.9%	12.5%	11.2%	9.5%	7.7%	6.1%	5.3%	4.2%	-1.1%
San Dimas	9.7%	8.7%	7.7%	6.5%	5.3%	4.1%	3.6%	4.2%	0.6%
San Gabriel	7.6%	6.8%	6.0%	5.1%	4.1%	3.2%	2.8%	3.6%	0.8%
San Marino	4.8%	4.3%	3.8%	3.2%	2.6%	2.0%	1.7%	1.8%	0.1%
Sierra Madre	8.3%	7.4%	6.5%	5.5%	4.5%	3.5%	3.1%	2.9%	-0.2%
South El Monte	6.7%	5.9%	5.2%	4.4%	3.6%	2.8%	2.4%	3.4%	1.0%
South Pasadena	8.7%	7.8%	6.9%	5.8%	4.7%	3.7%	3.2%	3.9%	0.7%
Temple City	8.1%	7.2%	6.4%	5.4%	4.4%	3.4%	3.0%	3.7%	0.7%
Walnut	8.9%	7.9%	7.0%	5.9%	4.8%	3.7%	3.1%	3.5%	0.4%
West Covina	14.7%	13.2%	11.8%	10.0%	8.2%	6.4%	5.7%	4.5%	-1.2%
San Gabriel Valley	11.0%	9.8%	8.7%	7.4%	6.0%	4.8%	4.2%	4.2%	0.0%

Source: California Employment Development Department

Exhibit A-7

Average Wages by Major Industry Sector, 2017

Industry Group	SGV	LA County	% Difference SGV to LAC
Financial Activities	$94,760.9	$123,941.0	30.8%
Information	$75,738.8	$131,987.0	74.3%
Professional & Business Services	$67,633.8	$79,836.8	18.0%
Transportation & Utilities	$65,663.7	$69,635.0	6.0%
Construction	$61,206.4	$65,613.7	7.2%
Public Administration	$60,218.8	$94,061.6	56.2%
Manufacturing	$57,205.8	$78,916.0	38.0%
Wholesale Trade	$55,049.3	$65,590.0	19.1%
Educational Services	$49,511.4	$59,502.0	20.2%
Natural Resources & Mining	$49,264.9	$60,927.3	23.7%
Health Care and Social Assistance	$43,254.7	$47,234.0	9.2%
Retail Trade	$32,700.0	$36,007.0	10.1%
Other Services	$31,941.3	$38,540.0	20.7%
Leisure & Hospitality	$22,628.8	$33,242.0	46.9%
Total	$54,769.9	$65,118.9	18.9%

Source: California Employment Development Department, ES202 data

Exhibit A-8

Establishments by Major Industry Sector, 2017

Industry Group	SGV	LA County	SGV % of LAC
Natural Resources & Mining	80	482	16.5%
Construction	2,568	14,360	17.9%
Manufacturing	2,013	12,153	16.6%
Wholesale Trade	4,664	20,015	23.3%
Retail Trade	4,752	27,143	17.5%
Transportation & Utilities	1,553	7,595	20.4%
Information	656	10,346	6.3%
Financial Activities	4,814	26,682	18.0%
Professional & Business Services	7,815	48,866	16.0%
Education	775	7,975	9.7%
Health Services	7,716	29,974	25.7%
Leisure & Hospitality	4,581	33,633	13.6%
Other Services	32,205	227,020	14.2%
Total	75,045	467,225	16.1%

Source: California Employment Development Department, ES202 data

Exhibit A-9
Business Sales Revenues in the San Gabriel Valley in 2012
($ millions)

City	Manufacturing	Wholesale Trade	Retail Trade	Transportation	Real Estate Services	Prof & Technical Services	Admin Support, Waste Mgmt	Health Care Services	Leisure & Hospitality	Other Services	Total by City/Area
Industry [1]	6,765	15,486	3,195	655	172	172	201	93	193	78	27,080
Pasadena	172	2,272	2,701	139	320	3,928	485	2,643	617	464	14,056
Irwindale	2,458	1,745	202	118	26	45	139	981	23	D	5,744
Arcadia	194	527	860	43	98	444	66	582	220	869	4,120
El Monte	515	809	1,677	120	52	86	83	215	91	51	3,710
Montebello	754	1,167	818	145	77	41	137	365	101	44	3,659
Alhambra	307	477	1,637	52	66	92	86	329	170	46	3,298
West Covina	104	204	1,476	58	55	125	153	796	184	31	3,237
Azusa	1,505	883	471	10	14	64	104	32	48	25	3,155
Monrovia	720	545	779	18	32	595	78	159	109	96	3,143
Monterey Park	89	879	400	81	53	150	278	535	149	40	2,704
Baldwin Park	286	374	535	74	18	12	136	873	74	D	2,382
Diamond Bar	D	1,360	312	84	D	210	78	119	75	50	2,304
Covina	344	143	671	15	64	131	148	359	99	16	2,001
Glendora	363	163	688	21	47	77	38	331	75	65	1,958
San Dimas	D	304	538	31	67	353	62	180	72	77	1,713
San Gabriel	56	220	473	50	45	49	64	352	106	42	1,469
La Verne	205	527	356	31	21	38	28	73	65	D	1,363
Claremont	115	48	380	6	25	231	11	214	91	15	1,158
Rosemead	D	246	461	33	15	35	45	166	112	23	1,151
South El Monte	D	159	196	3	D	99	16	80	46	17	676
All Other	473	2,405	2,859	149	219	392	431	788	483	133	8,503
San Gabriel Valley	15,425	30,942	21,686	1,936	1,485	7,370	2,869	10,266	3,203	2,182	98,584

D: Withheld to avoid disclosing data for individual companies
[1] The retail trade sector includes 70 “nonstore” retail establishments with revenues of about $1.7 billion. These are primarily electronic shopping and mail-order houses
Source: U.S. Census Bureau, 2012 Economic Census

Exhibit A-10
Housing Stock in the San Gabriel Valley 2017

City	Total Housing Units	Single Detached	Single Attached	Two to Four	Five or More	Mobile Homes	Total Occupied	Vacancy Rate	Persons per HH
Alhambra	31,721	13,801	3,856	3,710	10,324	30	29,935	5.6%	2.9
Arcadia	21,070	12,838	2,130	1,255	4,847	0	19,703	6.5%	2.9
Azusa	14,374	6,732	1,985	1,416	3,687	554	13,517	6.0%	3.5
Baldwin Park	17,923	12,765	1,238	599	3,006	315	17,178	4.2%	4.4
Bradbury	409	391	7	0	11	0	354	13.4%	3.0
Claremont	12,459	8,205	1,336	1,007	1,888	23	11,857	4.8%	2.6
Covina	16,674	9,674	1,528	835	4,091	546	15,968	4.2%	3.0
Diamond Bar	18,753	13,519	1,765	1,055	2,046	368	18,163	3.1%	3.2
Duarte	7,337	4,691	937	235	1,312	162	7,113	3.1%	3.0
El Monte	29,316	16,376	3,733	1,473	6,229	1,505	28,220	3.7%	4.1
Glendora	18,280	13,271	1,412	692	2,235	670	17,730	3.0%	2.9
Industry	68	58	0	6	0	4	65	4.4%	3.1
Irwindale	400	359	10	4	21	6	375	6.3%	3.7
La Cañada Flintridge	7,092	6,516	186	96	250	44	6,870	3.1%	3.0
La Puente	9,802	6,788	483	403	2,098	30	9,483	3.3%	4.3
La Verne	12,147	7,758	931	660	929	1,869	11,704	3.6%	2.7
Monrovia	15,021	8,458	1,736	1,103	3,566	158	14,328	4.6%	2.7
Montebello	20,013	9,821	1,656	2,464	5,806	266	19,220	4.0%	3.3
Monterey Park	21,179	12,155	1,993	2,123	4,844	64	20,247	4.4%	3.1
Pasadena	62,170	26,395	4,225	5,257	26,163	130	57,226	8.0%	2.5
Pomona	41,496	24,994	3,080	3,512	7,932	1,978	39,548	4.7%	3.8
Rosemead	14,960	11,213	1,451	853	1,277	166	14,383	3.9%	3.8
San Dimas	12,793	7,356	1,673	312	2,001	1,451	12,222	4.5%	2.8
San Gabriel	13,543	7,462	1,689	775	3,609	8	12,693	6.3%	3.2
San Marino	4,483	4,428	15	0	40	0	4,295	4.2%	3.1
Sierra Madre	5,121	3,552	328	337	904	0	4,780	6.7%	2.3
South El Monte	4,840	3,537	189	243	421	450	4,657	3.8%	4.5
South Pasadena	11,157	4,972	662	1,402	4,121	0	10,453	6.3%	2.5
Temple City	12,250	9,876	913	345	1,009	107	11,674	4.7%	3.1
Walnut	9,022	8,596	85	35	303	3	8,749	3.0%	3.5
West Covina	32,900	21,243	3,117	1,235	6,960	345	31,659	3.8%	3.4
Total of Incorp. Cities	497,245	297,222	44,096	33,409	111,271	11,247	471,798	4.94%	3.22
County Total	3,546,853	1,726,593	232,359	288,033	1,241,589	58,289	3,338,658	5.9%	3.0
SGV % of Los Angeles County	14.1%	17.2%	19.1%	11.6%	9.0%	19.3%	14.2%	-	-

Source: State of California, Department of Finance, E-5 Housing Estimates for Cities, Counties and the State — January 1, 2011- 2017

Exhibit A-11

Residential Construction Permits

Number of Building Permits Issued for New Housing Units

City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alhambra	92	67	57	92	6	158	13	275	37	71	103
Arcadia	133	55	63	140	146	192	248	154	133	248	70
Azusa	4	3	35	129	110	193	303	111	108	162	154
Baldwin Park	11	24	10	62	23	5	18	56	27	57	62
Bradbury	5	1	3	2	3	1	2	0	14	2	10
Claremont	5	39	78	3	2	24	111	23	42	40	36
Covina	0	0	0	32	45	56	39	1	6	26	32
Diamond Bar	5	3	1	4	4	7	48	127	13	77	37
Duarte	32	1	0	37	13	57	0	0	0	1	39
El Monte	33	26	9	89	53	35	184	38	124	193	291
Glendora	346	161	22	3	103	1	284	98	192	101	50
Industry	3	2	4	0	0	0	0	0	0	0	0
Irwindale	0	1	0	0	0	1	1	3	13	6	0
La Cañada Flintridge	17	15	11	17	10	8	8	20	10	6	6
La Puente	15	11	9	0	7	11	8	0	1	2	57
La Verne	102	6	2	2	1	219	78	6	15	231	45
Monrovia	181	4	8	0	9	2	11	4	441	6	5
Montebello	16	4	59	4	0	1	54	48	6	51	2
Monterey Park	227	3	19	7	7	11	30	57	61	14	20
Pasadena	549	24	56	25	155	101	537	578	410	169	525
Pomona	112	5	1	47	44	255	44	159	214	181	290
Rosemead	30	37	18	12	22	8	11	29	60	60	97
San Dimas	27	3	1	1	5	199	2	8	18	6	2
San Gabriel	10	11	11	1	7	54	50	100	71	76	19
San Marino	7	2	3	4	8	10	16	19	9	8	15
Sierra Madre	0	0	1	0	1	0	1	0	1	0	1
South El Monte	3	1	3	1	6	2	61	59	31	4	2
South Pasadena	5	2	1	7	7	6	3	5	4	19	6
Temple City	51	37	38	35	25	143	209	141	82	92	64
Walnut	35	34	44	84	44	21	18	16	55	54	34
West Covina	44	21	65	4	1	13	500	102	42	2	8
Total Incorporated Cities	2,100	603	632	844	867	1,794	2,892	2,237	2,240	1,965	2082

Source: CIRB, California Homebuilding Foundation

Exhibit A-12
Median Home Value by Community
($ 000)

City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alhambra	445	426	442	431	423	467	527	552	572	609	630
Altadena	584	525	545	513	525	594	635	668	712	778	832
Arcadia	705	695	775	768	778	900	1078	1106	1046	1121	1108
Azusa	356	278	272	265	265	312	350	368	396	425	450
Baldwin Park	348	266	268	257	259	306	345	365	399	425	443
Claremont	538	497	483	481	459	511	578	617	634	658	652
Covina	398	341	349	333	328	374	420	441	469	506	525
Diamond Bar	499	458	478	454	451	529	582	610	626	665	696
Duarte	388	324	308	305	299	349	394	415	438	468	475
El Monte	371	317	328	313	315	362	403	426	451	486	508
Glendora	465	417	414	395	393	441	493	515	548	574	586
Hacienda Heights	495	445	476	460	462	530	572	598	614	645	624
La Cañada Flintridge	1183	1098	1088	1065	1076	1229	1362	1472	1587	1727	1783
La Puente	359	258	275	263	266	313	352	374	400	431	451
La Verne	505	457	453	428	415	467	523	579	601	629	641
Monrovia	487	442	452	433	435	494	548	568	598	635	684
Montebello	437	357	360	343	338	380	421	445	480	521	505
Monterey Park	471	434	431	426	416	477	541	548	565	616	608
Pasadena	596	546	530	511	509	577	633	672	707	757	789
Pomona	323	226	222	221	226	269	314	331	355	391	420
Rosemead	410	371	387	367	367	417	451	484	515	551	574
Rowland Heights	466	423	439	424	420	483	531	569	583	612	643
San Dimas	480	431	424	397	400	443	508	548	580	600	594
San Gabriel	536	504	515	519	523	582	634	676	695	733	754
San Marino	1459	1385	1399	1361	1410	1648	1968	2200	2202	2310	2402
Sierra Madre	730	672	663	642	641	726	796	848	916	964	1029
South El Monte	369	300	305	302	301	344	389	407	431	457	486
South Pasadena			725	729	773	863	934	1036	1074	1199	1124
Temple City	524	506	533	525	524	591	665	688	722	760	796
Walnut	594	550	564	557	552	649	722	756	753	789	779
West Covina	407	348	365	352	346	395	442	463	490	530	547

Source: Zillow

Exhibit A-13

Annual % Change of Median Home Value by Community

(Percent change from prior year)

City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alhambra	-13.2%	-4.3%	3.8%	-2.4%	-1.9%	10.5%	12.8%	4.8%	3.6%	6.5%	3.5%
Altadena	-11.3%	-10.1%	3.7%	-5.8%	2.2%	13.2%	6.9%	5.2%	6.6%	9.2%	7.0%
Arcadia	-6.9%	-1.5%	11.5%	-0.9%	1.3%	15.7%	19.8%	2.6%	-5.4%	7.2%	-1.2%
Azusa	-19.3%	-21.9%	-2.2%	-2.4%	-0.1%	17.6%	12.3%	5.1%	7.7%	7.2%	5.9%
Baldwin Park	-19.4%	-23.6%	0.6%	-4.1%	1.0%	18.0%	12.8%	5.8%	9.3%	6.5%	4.3%
Claremont	-11.0%	-7.8%	-2.7%	-0.4%	-4.5%	11.1%	13.1%	6.8%	2.7%	3.8%	-0.9%
Covina	-17.9%	-14.4%	2.4%	-4.4%	-1.5%	13.9%	12.2%	5.0%	6.5%	7.7%	3.9%
Diamond Bar	-14.4%	-8.2%	4.2%	-4.8%	-0.8%	17.4%	10.1%	4.8%	2.6%	6.3%	4.6%
Duarte	-17.4%	-16.6%	-4.8%	-1.2%	-2.0%	16.8%	13.1%	5.4%	5.4%	6.8%	86.9%
El Monte	-17.3%	-14.6%	3.4%	-4.4%	0.5%	15.0%	11.4%	5.7%	5.9%	7.6%	4.6%
Glendora	-14.1%	-10.2%	-0.8%	-4.6%	-0.3%	12.1%	11.8%	4.6%	6.4%	4.7%	2.1%
Hacienda Heights	-14.1%	-10.2%	7.0%	-3.4%	0.4%	14.8%	7.9%	4.5%	2.8%	5.0%	-3.2%
La Cañada Flintridge	-9.9%	-7.3%	-0.8%	-2.1%	1.0%	14.2%	10.8%	8.1%	7.8%	8.8%	-89.7%
La Puente	-19.1%	-28.0%	6.4%	-4.4%	1.2%	17.6%	12.6%	6.3%	7.1%	7.7%	4.5%
La Verne	-13.2%	-9.5%	-1.0%	-5.4%	-3.0%	12.4%	12.0%	10.8%	3.9%	4.6%	2.0%
Monrovia	-12.6%	-9.2%	2.3%	-4.1%	0.3%	13.7%	10.9%	3.7%	5.2%	6.2%	7.7%
Montebello	-17.6%	-18.3%	0.9%	-4.7%	-1.6%	12.5%	11.0%	5.5%	7.9%	8.6%	-3.2%
Monterey Park	-13.4%	-7.8%	-0.7%	-1.0%	-2.5%	14.8%	13.4%	1.3%	3.1%	9.0%	-1.3%
Pasadena	-9.8%	-8.3%	-3.0%	-3.5%	-0.5%	13.4%	9.8%	6.2%	5.1%	7.1%	4.2%
Pomona	-19.6%	-30.2%	-1.6%	-0.7%	2.5%	19.0%	16.7%	5.4%	7.3%	10.0%	7.4%
Rosemead	-14.4%	-9.5%	4.4%	-5.1%	0.0%	13.5%	8.3%	7.3%	6.4%	6.9%	4.3%
Rowland Heights	-16.8%	-9.1%	3.6%	-3.4%	-0.9%	15.1%	10.0%	7.1%	2.5%	5.0%	5.0%
San Dimas	-14.2%	-10.1%	-1.7%	-6.3%	0.6%	10.9%	14.7%	7.7%	5.9%	3.5%	-1.1%
San Gabriel	-7.9%	-5.9%	2.1%	0.6%	0.8%	11.3%	8.9%	6.8%	2.7%	5.5%	2.9%
San Marino	-2.7%	-5.1%	1.1%	-2.7%	3.6%	16.9%	19.4%	11.8%	0.1%	4.9%	4.0%
Sierra Madre	-6.9%	-7.9%	-1.3%	-3.2%	-0.2%	13.4%	9.6%	6.5%	8.1%	5.2%	6.7%
South El Monte	-18.0%	-18.7%	1.5%	-1.0%	-0.2%	14.0%	13.3%	4.7%	5.7%	6.1%	6.4%
South Pasadena	----	----	----	0.5%	6.1%	11.6%	8.3%	10.8%	3.7%	11.7%	-6.2%
Temple City	-8.5%	-3.3%	5.3%	-1.5%	-0.1%	12.7%	12.5%	3.4%	4.9%	5.3%	4.7%
Walnut	-11.7%	-7.4%	2.5%	-1.1%	-0.9%	17.6%	11.1%	4.7%	-0.4%	4.9%	-1.3%
West Covina	-18.9%	-14.5%	4.9%	-3.6%	-1.6%	14.1%	11.9%	4.8%	5.8%	8.3%	3.2%

Source: Zillow

Exhibit A-14
Nonresidential Vacancy Rates

		OFFICE VACANCY RATES (%)		INDUSTRIAL VACANCY RATES (%)	
Year	Qtr	San Gabriel Valley	Los Angeles County	San Gabriel Valley	Los Angeles County
2008	Q1	11.5	11.3	1.4	2.3
	Q2	14.7	11.1	1.7	2.6
	Q3	13.5	11.6	2.4	3.1
	Q4	12	12.6	3	3.3
2009	Q1	16.8	14.3	5.1	3.7
	Q2	17.3	15.5	5.5	3.9
	Q3	17.8	16.1	5.5	4.4
	Q4	18.4	17.1	5.4	4.7
2010	1Q	16.6	17.6	5.9	5.2
	2Q	16.7	18.1	5.1	5.2
	3Q	16.9	18.5	4.7	5.2
	4Q	15.8	18.6	4.5	4.9
2011	1Q	15.2	18.8	4.6	4.9
	2Q	16	19.1	4.3	4.8
	3Q	16.7	19	4.2	4.8
	4Q	15.3	18.8	4.7	4.9
2012	1Q	15	18.8	4.8	4.7
	2Q	16.9	18.6	4.7	4.6
	3Q	16.7	18.7	4.9	4.5
	4Q	17.4	18.4	4.8	4.6
2013	1Q	17.2	18.5	4.4	4.4
	2Q	16.4	18.4	3.9	4
	3Q	17.1	18.5	3.6	4.2
	4Q	16.2	18.2	3.3	4.2
2014	1Q	16.8	18	3.3	4.1
	2Q	14.7	17	2.9	4
	3Q	14.2	17	2.6	3.8
	4Q	14.3	16.1	2.6	3.4
2015	1Q	12.9	16	2.3	3.1
	2Q	12	14.8	2.2	2.8
	3Q	11.6	14.6	1.9	2.5
	4Q	10.8	13.5	1.4	2.2
2016	1Q	11.3	14.4	1.6	2.2
	2Q	13.7	14.4	1.2	1.6
	3Q	12.4	13.9	0.9	1.3
	4Q	13.8	14.1	1	1.4
2017	1Q	16.5	14.4	1	1.3
	2Q	16.7	14.5	0.9	1.2
	3Q	16.3	14.9	1.2	1.2
	4Q	14.8	15.1	1.3	1.3
2018	1Q	14.8	15.4	1.3	1.3
	2Q	14.8	15.4	1.4	1.5
	3Q	13.5	15.2	1.4	1.4
	4Q	12.9	14.5	1.7	1.5

Source: Cushman and Wakefield

Exhibit A-15

Nonresidential Construction Permits

(All nonresidential construction ($millions)

City	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Alhambra	$21.4	$8.3	$6.4	$39.9	$16.5	$24.2	$33.0	$15.2	$6.4	$13.6	$32.9
Arcadia	42.3	28.1	9.0	22.3	24.5	26.7	45.8	17.7	48.4	46.5	13.7
Azusa	6.9	1.2	3.1	1.6	2.2	26.8	5.0	34.5	27.6	12.3	19.2
Baldwin Park	5.2	1.6	0.9	0.6	0.2	4.7	19.7	10.5	10.0	2.7	6.5
Bradbury	0.8	0.5	0.1	0.1	0.0	0.5	1.0	0.4	3.9	1.9	4.6
Claremont	20.3	42.7	36.3	31.0	5.2	49.8	41.5	16.8	9.0	39.1	11.0
Covina	11.3	6.9	20.4	7.1	8.1	6.4	5.7	3.4	5.2	3.3	1.2
Diamond Bar	5.0	6.0	6.9	7.8	1.1	7.8	8.9	4.7	9.2	9.5	5.3
Duarte	31.1	36.9	6.3	7.2	2.6	4.2	6.2	2.9	4.7	7.2	6.4
El Monte	28.8	14.6	21.9	10.0	3.7	14.3	8.5	66.7	9.9	10.8	70.5
Glendora	28.2	11.2	7.6	8.6	4.2	6.5	15.1	8.3	14.7	13.5	6.7
Industry	101.1	40.4	56.1	51.4	39.6	33.6	90.9	37.7	50.8	63.8	31.3
Irwindale	18.7	9.9	36.8	15.4	6.3	16.1	16.7	12.0	18.8	55.7	17.3
La Cañada Flintridge	10.5	6.8	7.2	9.3	6.0	6.6	6.4	7.4	2.4	1.3	14.0
La Puente	7.1	3.2	0.5	0.4	0.1	5.5	10.8	5.4	4.3	4.4	2.2
La Verne	13.8	3.5	6.7	22.2	4.0	15.3	19.0	80.4	6.5	6.9	18.8
Monrovia	17.6	5.7	3.7	2.6	0.1	0.3	1.1	23.7	41.8	7.9	6.5
Montebello	9.9	11.8	8.8	6.1	10.6	18.3	11.4	9.5	5.7	4.3	2.6
Monterey Park	6.6	11.5	9.2	6.9	5.5	4.7	4.4	7.3	6.3	87.6	36.0
Pasadena	67.8	53.7	67.7	83.0	64.8	96.7	103.7	106.4	96.1	93.4	203.7
Pomona	47.2	10.2	8.4	14.2	3.9	71.0	46.1	13.8	52.6	6.6	31.9
Rosemead	10.6	7.6	28.3	12.1	15.9	13.0	12.9	10.8	19.2	6.6	19.6
San Dimas	6.2	4.9	7.2	4.2	0.5	11.3	11.5	9.3	10.8	1.9	13.5
San Gabriel	3.6	5.1	2.4	1.5	0.1	24.4	3.8	6.1	28.5	10.2	4.6
San Marino	3.7	1.9	2.5	6.6	0.5	44.4	3.1	15.0	3.9	2.5	1.9
Sierra Madre	0.8	0.4	0.2	0.2	0.0	0.1	0.5	0.1	0.5	0.4	0.2
South El Monte	12.9	16.5	6.0	5.2	3.7	6.2	7.1	4.0	7.4	10.2	3.9
South Pasadena	4.6	3.0	1.9	2.0	2.1	2.7	13.6	3.5	1.1	4.6	2.3
Temple City	1.6	4.9	2.5	1.5	3.9	17.2	3.6	4.4	4.0	2.0	2.4
Walnut	1.0	5.3	0.6	0.4	0.2	3.2	3.2	1.5	1.7	3.4	2.0
West Covina	47.4	43.7	27.4	24.0	21.0	24.1	114.6	14.8	23.5	18.9	38.6
Total Incorporated Cities	$594.1	$408.0	$402.9	$405.4	$257.4	$586.5	$674.6	$554.0	$534.9	$552.9	$631.0

Source: CIRB, California Homebuilding Foundation

Exhibit A-16
Total Taxable Sales in San Gabriel Valley
(Annual averages, $ millions)

City	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pasadena	3,084	3,154	2,973	2,625	2,647	2,724	2,818	2,858	2,923	2,988	3,054
Industry	2,989	3,067	2,759	2,363	2,434	2,663	2,999	2,725	2,818	2,624	2,736
West Covina	1,361	1,353	1,252	1,081	1,089	1,156	1,260	1,335	1,441	1,523	1,549
El Monte	1,783	1,700	1,336	1,075	1,050	1,126	1,258	1,301	1,401	1,422	1,480
Pomona	1,437	1,434	1,243	980	1,055	1,101	1,192	1,239	1,332	1,354	1,395
Alhambra	1,184	1,185	1,129	1,025	1,046	1,091	1,206	1,284	1,328	1,356	1,387
Montebello	1,132	1,088	1,005	828	902	956	971	1,026	1,075	1,121	1,139
Arcadia	845	857	824	753	762	813	842	891	940	932	973
Monrovia	813	782	726	628	662	740	760	769	806	843	854
Covina	809	791	701	582	581	628	694	676	734	787	812
Glendora	654	660	629	568	568	615	658	690	711	734	733
San Dimas	561	564	551	500	511	533	501	489	507	487	485
Baldwin Park	558	567	529	463	481	525	538	513	506	517	523
Azusa	444	443	429	348	370	417	444	462	477	447	438
Monterey Park	449	432	397	354	359	395	411	445	479	515	518
Duarte	458	418	365	357	386	393	422	445	461	483	480
Rosemead	298	351	365	339	341	357	368	389	398	409	442
South El Monte	395	420	427	354	334	353	378	388	397	418	426
Irwindale	478	458	433	347	355	325	328	337	351	357	329
San Gabriel	353	347	325	280	294	324	348	353	355	335	349
La Verne	339	372	366	299	315	337	344	342	358	376	371
Claremont	442	402	306	238	233	267	302	308	329	331	323
Diamond Bar	347	352	311	272	286	306	311	315	329	408	434
La Cañada-Flintridge	183	193	192	176	183	201	212	234	240	240	233
La Puente	231	220	201	179	200	209	209	215	237	251	268
South Pasadena	168	167	164	146	148	156	166	176	191	192	189
Walnut	172	186	169	142	147	159	168	168	174	178	189
Temple City	145	156	153	136	141	149	151	154	162	165	169
San Marino	40	42	43	37	33	34	34	38	38	40	41
Sierra Madre	26	26	26	23	22	24	23	25	27	29	27
Bradbury	0	0	0	0	0	0	0	0	0	0	0
Total Incorporated Cities	$22,179	$22,187	$20,330	$17,499	$17,936	$19,076	$20,316	$20,592	$21,521	$21,863	$22,347

Source: California State Board of Equalization

Exhibit A-17

Hotel Occupancy Data for San Gabriel Valley

San Gabriel Valley (excluding Pasadena):

Year	Occupancy Rate	Average Daily Rate	Annual % Change	RevPAR	Annual % Change
2012	69.7%	102.35	3.3%	71.32	11.3%
2013	70.5%	109.59	7.1%	77.24	8.3%
2014	71.2%	116.14	6.0%	82.74	7.1%
2015	74.3%	122.63	5.6%	91.15	10.2%
2016	76.5%	128.19	4.5%	98.09	7.6%
2017	76.7%	132.3	3.2%	101.47	3.4%
2018	77.5%	130.44	-1.4%	101.07	-0.4%

Pasadena:

Year	Occupancy Rate	Average Daily Rate	Annual % Change	RevPAR	Annual % Change
2012	83.9%	155.85	4.2%	130.83	14.1%
2013	84.6%	162.44	4.2%	137.39	5.0%
2014	83.8%	179.93	10.8%	150.83	9.8%
2015	84.7%	183.65	2.1%	155.58	3.1%
2016	82.6%	199.61	8.7%	164.78	5.9%
2017	77.1%	209.31	4.9%	161.45	-2.0%
2018	82.8%	196.39	-6.2%	157.29	-2.6%