

QUARTERLY ECONOMIC REPORT

RIVERSIDE & SAN BERNARDINO COUNTIES, CALIFORNIA

VOL. 31 NO. 2

APRIL 2019

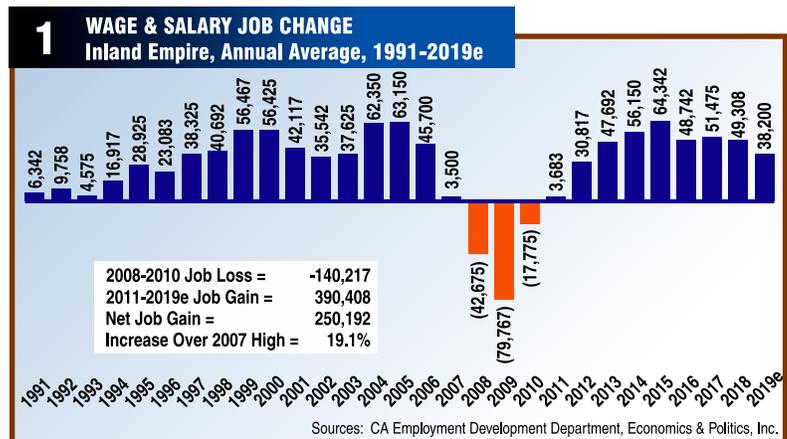
\$5.00

INLAND EMPIRE QUARTERLY ECONOMIC REPORT

INLAND EMPIRE 2019 FORECAST ... GROWTH CONTINUES BUT MUTED!

John E. Husing, Ph.D.

In 2019, the Inland Empire will continue the expansion underway since 2011. Through 2018, 352,208 jobs have been created. The 2019 gain is forecasted at another 38,200 jobs, up 2.52% (*Exhibit 1*). If this occurs, a total of 390,408 local jobs will have been created from 2011-2019 taking the area to 1,556,857 positions. That would be 250,192 jobs or 19.1% above the pre-recession high of 1,306,342 in 2007. Unemployment is forecasted to stay at 4.2% in 2019. Importantly among California's metropolitan areas, the Inland Empire's 2018 growth of 49,308 jobs ranked second, somewhat below Los Angeles (60,908) and well above San Francisco (33,067), San Diego (32,500), Orange County (32,133), Silicon Valley (20,333) and the East Bay (20,550) (*Exhibit 2*). Its 3.36% growth rate led the state ahead of San Francisco (2.97%).



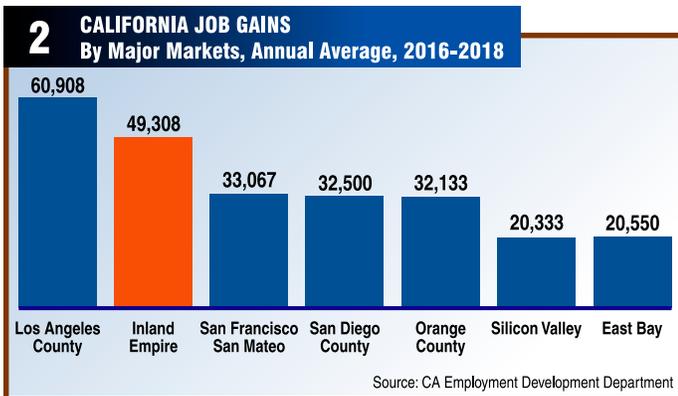
U.S. GROWTH

The U.S. economy supplies the ocean of forces affecting its regions. In the 2008-2010 Great Recession, the country lost -8,707,000 jobs (-6.3%). From February 2010 to March 2019, it has gained back 21,101,000 positions or far more than double (142.3%) the jobs that were lost (*Exhibit 4, p. 4*). The national economy now has 9.0% more jobs than its pre-recession high. Unemployment peaked at 10.0% in October 2009. It was 3.8% in March 2019. In 2019, GDP is forecasted by the Federal Reserve to grow 2.1%, a modest framework for national job growth.

With just 3.8% of workers unemployed by the traditional measure and 7.3% if workers who left the labor force or are unwillingly working part time are included, the U.S. is at full employment. In these conditions, the Federal Reserve would normally continue raising interest rates in 2019. However, the consumer price index rose just 1.9% from March 2018-2019, indicating there is little inflation so they see no further rate rises this year. In this situation, Freddie Mac's 30 year fixed mortgage rate average 4.14% in April 2019, down from 4.47% in April 2018, a potential boost for homebuyers. The value of the U.S. dollar has strengthened in the past year and stands 6.5% above its March

Continued on page 2

2018 level. This means imports are less expensive to Americans by roughly that percent, while U.S. exports are more expensive to the world. That should help the Inland Empire's logistics sector but hurt its manufacturers. West Texas Intermediate oil prices were at \$63.54 in April 2019, up 28.3% from the recent low in December 2018 of \$49.52. That should hurt consumer spending in modest income areas like the Inland Empire.



INLAND EMPIRE ECONOMIC BASE

The five sectors powering the Inland Empire's economic base are being helped by the national environment:

Logistics. The logistics industry (*wholesale trade; trucking & warehousing*) has been the primary driver of the inland economy in recent years. The strong U.S. economy has led imported containers entering through the San Pedro Bay ports in 2018 to set a record of 9.0 million 20-foot equivalent container units (*teu*), though it appears to be slowing to 8.7 million in 2019 (*Exhibit 12*). Meanwhile, with e-commerce expanding at a 14-15% compounded rate even conventional retailers have begun aggressively creating and staffing large regional fulfillment centers. Their goal is to respond to on-line consumers with same-day deliveries. Almost all the facilities supporting Southern California e-commerce are in the Inland Empire. Inland logistics job growth thus remains strong, adding 12,917 jobs in 2018 to reach 192,500 (*Exhibit 7*). The 2018 median pay in the logistics group of sectors was \$47,946. For 2018, 80% of workers had occupations requiring high school or less schooling and earning a median of \$19.86 an hour. For entry level workers, it was \$15.67. **A gain of 9,000 to 201,500 is forecasted in 2019 (*Exhibit 3*).** The slower forecast is due to the sudden difficulty in finding sites for expansion.

Construction has generally been one of the Inland Empire's strongest job creators with its 2006 record at 127,500 jobs. The sector faltered from 2006-2011, off -68,400 jobs (-56.3%) (*Exhibit 7*). From 2012-2018, it added back 45,700 positions including 7,442 in 2018 to be the area's second fastest growing sector and reach 104,800 jobs (*Exhibit 7*). However, that remains -22,7000 short of the 2006 high (-17.8%). Construction's 2018 median pay was \$53,322. **In 2019, it is forecasted to add 6,000 jobs as industrial and infrastructure construction continues and residential remains constant.**

Construction growth is being powered by the 26.1 million square feet of industrial projects being built, 73.7% of new space in Southern California. The voter passage of SB 1 funding is also helping by increasing road and highway building. Construction growth is also forecasted in 2019 in part because residential pricing is rising rapidly. New homes were up 1.3% to \$455,529 from

first quarter 2018-2019, showing developers have the ability to raise prices. Existing home prices rose 3.4% to \$353,381 in that period, just -9.4% below the 2007 record. Importantly, with rising existing home prices, few homeowners face notices of default.

Health care was the only Inland Empire sector to expand employment throughout the recession (*Exhibit 5*). That growth continues with out-patient clinics, medical offices, hospitals and nursing homes hiring workers. The sector added 6,300 jobs in 2018 to reach 142,500. Propelling the expansion has been the increasing demand due to the Affordable Care Act (ACA) which saw uninsured local residents fall from 877,969 (20.5%) to 351,398 (7.8%) in 2012-2017, down -576,571 (-60.0%). Also impacting demand are the 1,102,090 residents (24.1%) aged 55 and over and the 634,672 under age 10 (13.9%). Despite the sector's job growth, the Inland Empire remains underserved with one health care worker for every 32.2 residents, 22.8% above the state's average of 26.2. That fact along with the inland area's poor public health metrics means that health care employment will continue growing. In 2018, median pay in the sector was \$62,363. **Given the controversy over the ACA, and the fact Medicaid only covers 65% of health provider costs, the health care forecast is restrained to only 4,800 new jobs in 2019.**

Manufacturing has had a small but positive impact in bringing outside monies into the Inland Empire's economy. However, the sector added just 2,050 jobs in 2018 to reach 101,300. Here, growth continues to be restrained due to state regulatory policies and the high cost of its energy. For example, each kilowatt hour of industrial electricity cost 12.64¢ in California in May 2018 more than double Nevada (5.37¢) and nearly that for Arizona (6.89¢). Thus, the U.S. created 1,186,000 (10.2%) manufacturing jobs during 2011-2018 while California added only 84,800 (6.8%), just 7.1% of the national gain. The 2018 median pay in the sector was \$54,800. **It is forecasted to create 1,000 more workers in 2019 given recent restraints on the sector.**

Higher paying private & public sectors other than health care have added little strength to the Inland Empire's recent growth (*Exhibit 6*). These sectors include management and professions, colleges, utilities, information and mining. The group tends to rely on workers with Associate of Arts or higher degrees, an inland area weakness, though there are cities near the coastal counties that have become competitive (*Exhibit 11*). Private firms in the group tend to migrate into the Inland Empire or grow internally when its economy is strong. However, internet usage has allowed more coastal firms to serve the area remotely.

Meanwhile, government employment is also relatively high paying. It rises or falls with changes in state and federal workers in the area and changes in local city, county and agency jobs due to tax revenues fluctuations. From 2011 to 2018, state and federal employment was -3,083 below its 2007 peak. 2018 growth was just 417 jobs. Local government is now 1,767 jobs above its 2007 high after adding 1,892 in 2018 with both factors driving local government above pre-recession highs. Taxable sales are up 29.9% from their 2006 high and purchasing power has grown as prices have only risen 21.9% since then. Assessed valuation is 19.1% over its 2008 peak. Purchasing power of property taxes on valuation is up a little as prices have risen 18.2% since 2008.

In 2018, these private and public high paying sectors gained a net of 4,900 jobs to reach 207,200. **The full group is forecasted to add another 3,600 positions in 2019.** This, despite the need for professionals by the housing industry, the region's 3.59 million

population and its 1.5 million job base. The 2018 median pay in these combined sectors was \$68,040.

Other Sectors. Moderate paying non-blue collar sectors in the Inland Empire include K-12 education (*median pay: \$62,581*) and finance, insurance and real estate (*median pay \$50,719*). Local schools added 4,542 jobs in 2018 to reach 138,067 as budgets expanded significantly with the state’s new priority on modest income areas. However, financial activities lost -567 positions in 2018, falling to 43,658. This occurred as internet usage reduced the staffing needed to process many financial transactions and realtors had trouble finding homes to sell with volume relatively flat for the past eight years (*Exhibit 16*). **K-12 education is forecasted to add another 4,000 positions in 2019: the financial sectors will lose -100. The combined group will add 3,900.**

Lower paying sectors in the Inland Empire generally grew in 2018, adding 11,808 jobs to reach 588,800. This included gains in social assistance (6,258), eating and drinking (3,867), administrative support (3,033), other services (142) and accommodation (50). However, retailing shrank due to the impact of e-commerce (-42) and amusement declined (-267). The net growth in 2018 was due to funds flowing into the region from sectors like logistics, construction and medical care that was re-spent in these sectors. Meanwhile, weather related agriculture (-58) declined. So did employment agencies (-1,292), a traditional result as labor markets tightened. The combined median pay of the group was \$32,177. **They are expected to be up another 9,900 in 2019.**

California’s Growth. In 2018, California added 340,217 jobs, up 2.0%. This has brought the state’s wage and salary employment to a record 17.6 million. The sectors most crucial to the Inland Empire saw state gains, including construction (49,108; 6.1%), logistics (35,633; 2.8%), health care (33,867; 2.2%), professions and management (46,817; 3.1%) and manufacturing (14,050; 1.1%). Interestingly, the Inland Empire’s growth in 2018 was faster than California in construction (7.6% to 6.1%), logistics (7.2% to 2.8%) and health care (4.6% to 2.2%). It was slower in management and professions (4.2% to 3.1%) and the same in manufacturing (*see Exhibit 8, page 5*).

QER 2019 FORECAST

The 2019 Inland Empire forecast is for a gain of 38,200 jobs (2.5%) to 1,556,867, significantly below the 49,308 gain (3.4%) in 2018 (*Exhibit 3*). The annual average unemployment rate is predicted to remain at 4.2%. These predictions were created sector by sector based upon local trends, with allowance for the area’s strengths and weaknesses plus its relationship to California and U.S. trends. All four broad areas of economic activity are expected to grow:

1. Clean Work, Good Paying (Over \$62,500). The Inland Empire’s better paying sectors are expected to add a total of 8,400 jobs in 2019, up 2.4% to 357,933 and represent 22.0% of area employment growth. This comes after a gain of 11,117 positions (3.3%) and a 13.8% share of growth in 2018. Health care will add 4,800 jobs, down from 6,267 in 2018 as the sector reacts cautiously to Affordable Care Act attacks and Medicaid services being reimbursed at only 65% of costs. The combination of management, professional, collegiate and governmental employment will add 3,600 jobs compared to the 4,850 in 2018. The lack of a highly educated population plays a key role in this forecast, as does the fact that the internet allows many professionals to serve the region remotely.

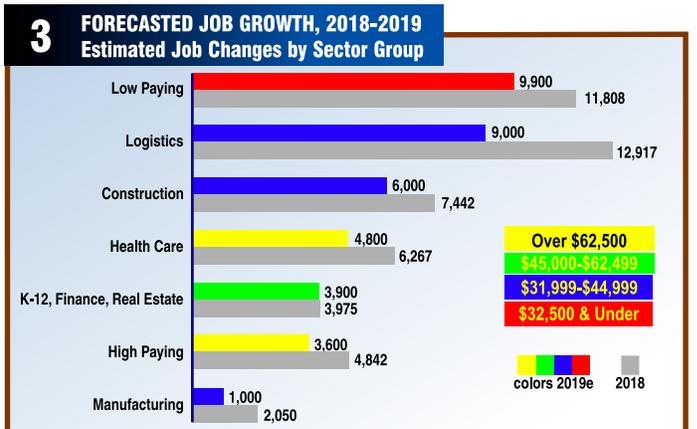
2. Clean Work, Moderate Paying (\$45,000-\$62,499). In 2019, financial organizations and local school districts will add 3,900 jobs, a gain of 2.1% to 185,625 and account for 10.2% of growth. This is down from 6,500 (2.2%) in 2018 though up from that year’s 8.1% share of growth.. K-12 education will add 4,000 new positions, down from 4,542 last year as school funding grows slower. Financial activities will decline by -100 positions versus a loss of -567 in 2018 as home sales remain restrained, and the internet subdues local financial processing.

3. Blue Collar, Moderate Paying (\$45,000-\$62,499). The Inland Empire’s modestly educated labor force and lower costs for homes and industrial facilities have historically caused its moderate paying blue collar firms to be the fastest growing sectors. In 2019, this strength continues with the combined group expected to add 16,000 jobs, a growth rate of 4.0% to 414,592 and representing 41.9% of new positions. That is down from a gain of 22,408 (6.0%) and a 45.4% share in 2018. Logistics will grow by 9,000 workers, down from 12,917. It is propelled by increases in imports and the expansion of fulfillment centers but faces a shortage of available sites. Construction sector will exert itself as the housing market joins industrial and infrastructure building with the sector. It will add 6,000 jobs after an increase of 7,442 in 2018. Manufacturing will add 1,000 jobs versus 2,050 in 2018.

4. Lower Paying (\$32,500 & Below). Like most U.S. areas, a large portion of the Inland Empire’s economy is in sectors that pay lower incomes. In 2019, they are forecasted to add 9,900 jobs (1.7%) to 598,717 and represent 25.9% of employment growth. That would be down from 11,808 new jobs (2.0%) in 2018 though above its 23.9% share. Growth is believed to slow as internet purchases reduce retail spending and low unemployment creates shortages of entry level workers.

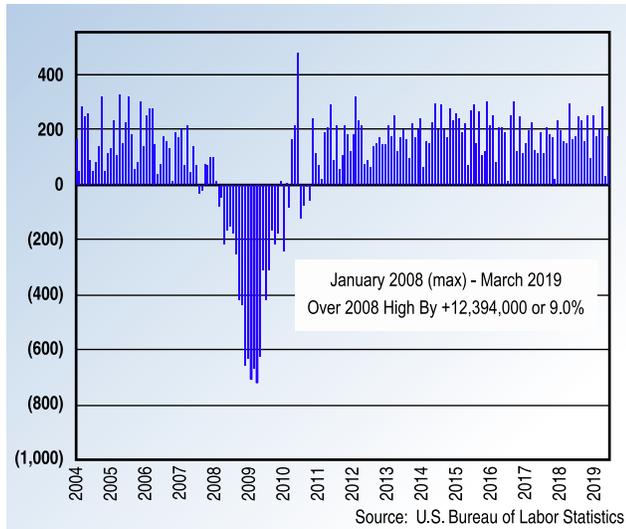
SUMMARY

In 2019, the Inland Empire economy should gain 38,200 jobs (2.5%), after adding 49,308 in 2018 (3.4%). The expansion will continue partly because of the area’s traditional advantages for blue collar/technical sectors (*less expensive land, modestly priced labor, growing population*) as well as continued growth in health care, and a small addition of jobs in higher paying sectors. As these sectors add workers, they will bring dollars into the area that then circulate through its population serving sectors causing them to expand as well. Interestingly, 25.9% of growth is forecasted for lower paying sectors and 74.1% in moderate and better paying jobs. That is a good mix as 60%-40% is a more normal distribution (*Exhibit 3*).



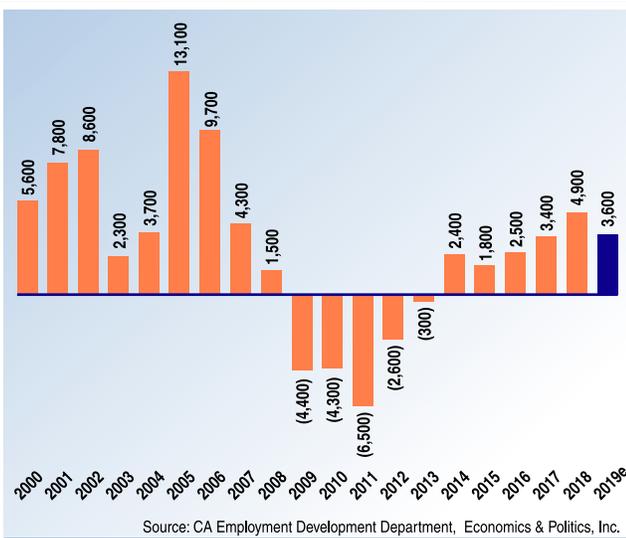
Source: Economics & Politics, Inc.

4 JOB CREATION OR DESTRUCTION U.S., 2004-2019, Seasonally Adjusted (000)



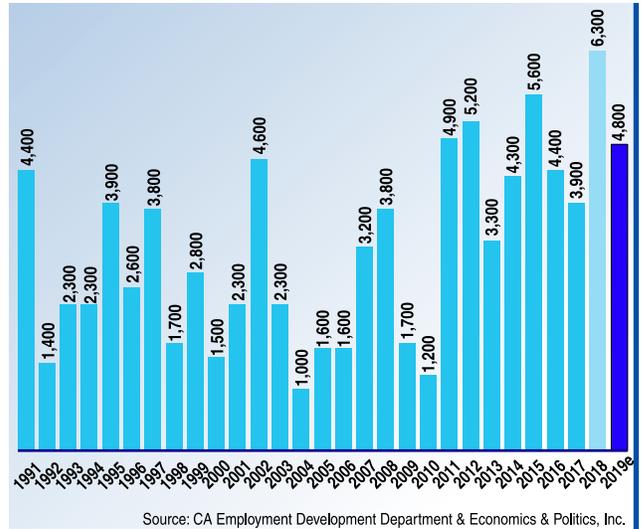
U.S. Job Creation. The deep 2008-2010 U.S. recession eliminated -8.7 million jobs (-6.3%). However, from February 2010 to March 2018, the economy created 21.1 million jobs. That brought U.S. jobs to 150.8 million in March 2019, up 12.4 million or 9.0% above the January 2008 pre-recession high of 138.4 million. It means that the national forces affecting local economies like the Inland Empire continue providing a positive environment. However, the fact that banks face a squeeze on their interest rate earnings, with the short term rates at which they acquire money about equal to long term rates where they loan and earn returns may augur for a slowdown in lending and slower growth as 2019 progresses.

6 PROFESSIONS, SCIENCE, MANAGEMENT, COLLEGES, GOVERNMENT Inland Empire, 2000-2019e



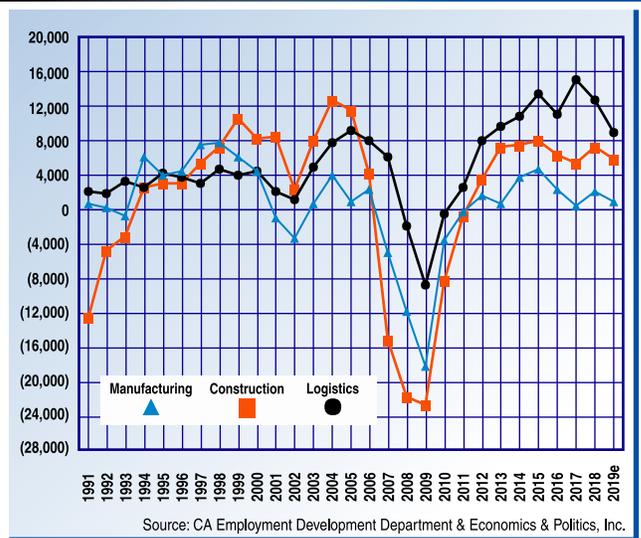
Non-Health Care, High Paying Sectors. The Inland Empire's high paying non-health care sectors had a combined 2018 median pay level of \$68,040. The group, which includes management, professionals, colleges, mining, information and utilities plus government added 56,600 jobs from 2000-2008 to reach 210,300. It then retreated by -18,100 jobs from 2009-2013 with housing developers and related professionals in trouble, financial operations retreating to their coastal centers and serving inland clients via the internet as well as government sales and property taxes declining. A partial recovery from 2014-2018 added back 15,000 jobs as the economy improved. The 2019 forecast is for 3,600 more jobs. That would bring the group to 210,800 jobs, 500 positions above its pre-recession high.

5 HEALTH SERVICES JOB GROWTH Inland Empire, 1991-2019e



Health Care. Hospitals, ambulatory care and residential care operations had a 2018 median pay level of \$62,363. They represent the only Inland Empire sector without job losses in the Great Recession. During the 2011-2018 general recovery, they added 37,858 jobs to reach a record 142,492. Importantly, the Affordable Care Act was responsible for creating health care demand as the local uninsured population fell -60.0% from 877,969 (20.5%) in 2012 to 351,398 (7.8%) in 2017, off -576,571 (-60.0%). Unfortunately, many of the newly insured are on Medicaid which is only reimbursed at 65% of costs, restraining health care job growth. That caution is heightened by the continuing attacks on the ACA yielding a low 2019 forecast of 4,800 new jobs.

7 BLUE COLLAR/TECHNICAL SECTOR GROWTH Inland Empire, 1991-2019e



Blue Collar/Technical Drivers. The Inland Empire's historic strength has been in the blue collar sectors that bring money to it from the outside world. The logistics sector has added 84,000 jobs during 2011-2018 to reach 192,500. The sector is forecasted to add 9,000 in 2019, down from 12,900 in 2018 as developable space is harder to find. Its 2018 median pay was \$47,946. Construction dropped by -68,400 jobs in the recession but added back 45,700 by 2018 to reach 104,800. It is expected to add 6,000 positions this year. Its 2018 median pay was \$53,322. Manufacturing lost -38,300 positions in the recession and has added back 16,100 through 2018 to sit at 101,300 jobs. It is forecasted to add 1,000 jobs in 2019, down from 2,050 in 2018. The 2018 median pay was \$54,800.

COMPARISON OF 2018 INLAND EMPIRE VS. CALIFORNIA: SHARES OF JOB CHANGES

From 2017-2018, the Inland Empire economy added 49,308 jobs, up 3.4%, while California created 340,217 jobs, up 2.0% (*Exhibit 8*). Employment growth in this region represented 14.5% of the jobs created in the state. That said, there are serious differences in the share of job growth in each sector found in the inland area versus the state.

HIGH PAYING SECTORS

Among sectors paying median incomes of \$62,500 and above, the Inland Empire's share of growth (22.5%) was far below that for California (32.4%) during 2018. Three local sectors accounted for a smaller share of growth than for the state: management & professions (4.1% v. 13.8%), information (-0.2% v. 4.1%) and higher education (1.0% v. 2.5%). In the inland area growth was more heavily dependent on the other high paying sectors: health care (12.7% v. 10.0%), local government (3.8% v. 2.0%), federal & state (0.8% v. 0.2%), utilities (-0.2% v. -0.3%) and mining (0.4% v. 0.3%).

MODERATE PAYING SECTORS

Of sectors paying \$45,000-\$62,499, the share of 2018 job growth in office based operations was split compared to the state. K-12 education employment gains (9.2% v. 5.7%) were a much higher share of the Inland Empire's growth, while financial activities were a smaller share (-1.1% v. +1.6%). Here we see the state's new school funding priority favoring poorer districts. However, the tendency of finance and insurance firms to serve inland clients from their coastal county offices also shows up as does the inland real estate slowdown.

Also seen in the data is the enormous strength of the Inland Empire for blue collar/technical firms among sectors paying \$45,000-\$62,499. For the area, the strength in logistics was a huge share of local job growth in 2018 compared to the state (26.2% v. 10.5%). Construction's share of growth was similar between the region and the state (15.1% v. 14.4%). Manufacturing's share was weak in both (4.2% v. 4.1%). These facts underscore the competitive advantages of the region in logistics but also the long term worry as technology impacts each of these groups.

LOW PAYING SECTORS

During 2018, there was a significant difference in the share of growth in Inland Empire sectors paying median incomes of \$32,500 and below compared to the state. Social assistance operations had a heavier role in inland growth than California (12.7% v. 8.8%). This was also true of administrative support jobs (6.2% v. 2.4%) and eating & drinking (7.8% v. 6.5%). Retail trade vanished in importance to growth in both (-0.1% v. -0.1%) as the impact of e-commerce took hold. For the inland area, employment agencies were a smaller share of job growth than for California (-2.6% v. 6.2%). This was also true of other services

8 JOB GROWTH SHARES Inland Empire & California, 2017-2018

Sector	Inland Empire Job Change	% of Job Growth	Growth Rate	CA: Job Change	% of Job Growth	Growth Rate	IE Share of Growth More or Less Than CA
Mgmt & Professions	2,025	4.1%	4.2%	46,817	13.8%	3.1%	-9.7%
Information	(117)	-0.2%	-1.0%	13,842	4.1%	2.6%	-4.3%
Higher Education	508	1.0%	2.6%	8,483	2.5%	2.0%	-1.5%
Mining	200	0.4%	20.7%	875	0.3%	4.0%	0.1%
Utilities	(75)	-0.2%	-1.5%	(1,167)	-0.3%	-2.0%	0.1%
Federal & State	417	0.8%	1.1%	692	0.2%	0.1%	0.6%
Local Government	1,892	3.8%	2.4%	6,733	2.0%	0.8%	1.8%
Health Care	6,267	12.7%	4.6%	33,867	10.0%	2.2%	2.7%
Clean Work, Good Pay	11,117	22.5%	3.3%	110,142	32.4%	2.1%	-9.9%
Financial Activities	(567)	-1.1%	-1.3%	5,400	1.6%	0.6%	-2.7%
K-12 Education	4,542	9.2%	3.4%	19,383	5.7%	1.6%	3.5%
Clean Work, Moderate Pay	3,975	8.1%	2.2%	24,783	7.3%	1.2%	0.8%
Manufacturing	2,050	4.2%	1.1%	14,050	4.1%	1.1%	0.1%
Construction	7,442	15.1%	7.6%	49,108	14.4%	6.1%	0.7%
Logistics	12,917	26.2%	7.2%	35,633	10.5%	2.8%	15.7%
Dirty Work, Moderate Pay	22,408	45.4%	6.0%	98,792	29.0%	2.9%	16.4%
Employment Agcy	(1,292)	-2.6%	-3.0%	21,017	6.2%	4.5%	-8.8%
Other Services	142	0.3%	0.3%	11,408	3.4%	1.8%	-3.1%
Amusement	(267)	-0.5%	-1.4%	7,483	2.2%	2.4%	-2.7%
Accommodation	50	0.1%	0.3%	4,850	1.4%	2.1%	-1.3%
Agriculture	58	0.1%	0.4%	1,767	0.5%	0.4%	-0.4%
Retail Trade	(42)	-0.1%	-0.0%	(208)	-0.1%	-0.0%	0.0%
Eating & Drinking	3,867	7.8%	3.0%	22,083	6.5%	1.6%	1.3%
Admin. Support	3,033	6.2%	5.5%	8,017	2.4%	1.4%	3.8%
Social Assistance	6,258	12.7%	8.8%	30,083	8.8%	3.9%	3.9%
Lower Paying Jobs	11,808	23.9%	2.0%	106,500	31.3%	1.6%	-7.4%
Total, All Industries	49,308	100.0%	3.4%	340,217	100.0%	2.0%	

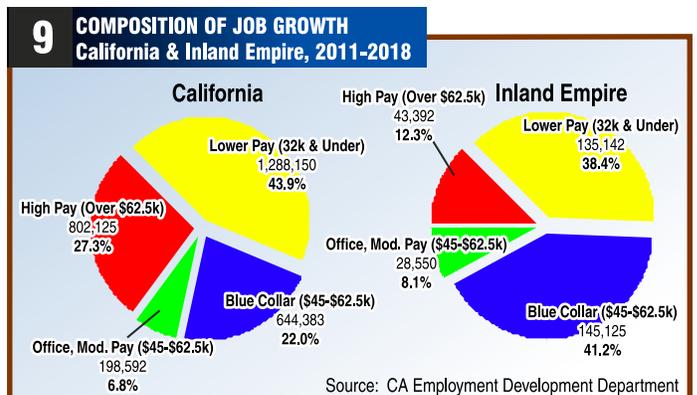
Source: CA Employment Development Department; Economics & Politics, Inc.

(0.3% v. 3.4%), amusement (-0.5 v. 2.2%), accommodation (0.1% v. 1.4%) and agriculture (0.1% v. 0.5%).

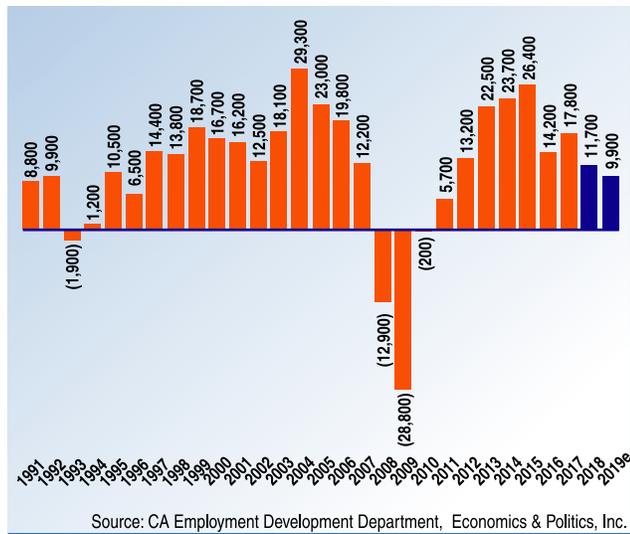
SUMMARY

The differences in job growth from 2011-2018 between the Inland Empire and California (*Exhibit 9*) show the very different competitive advantages for the inland area compared to the state generally. Blue collar/technical jobs continued as a local strength and a state weakness in 2018 (41.2% v. 22.0%). To a lesser extent, this is also true of office based median paying jobs in K-12 education plus finance, insurance and real estate (8.1% v. 6.8%). On the other hand, higher paying sectors in management, professions, information, health care and government are an inland weakness and a state strength (12.3% v. 27.3%). Interestingly, lower paying sectors played a smaller role in Inland Empire growth than for the state (38.4% v. 43.9%).

As economic development professionals look at this information, the desire to overcome the weakness in high paying jobs is clearly a daunting one. Also, the strength in blue collar/technical jobs is scary given that technology is targeted towards eliminating this form of work as does the impact of much of California's regulatory environment. ■

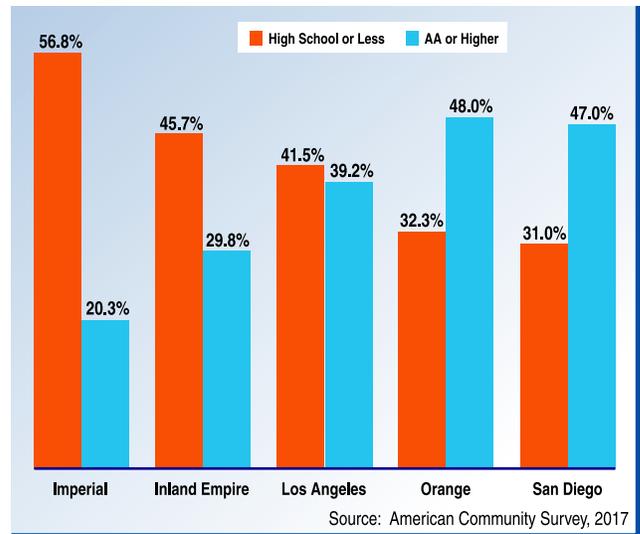


10 LOWER PAYING SECTORS & POPULATION SERVING SECTORS Inland Empire, 1991-2019e



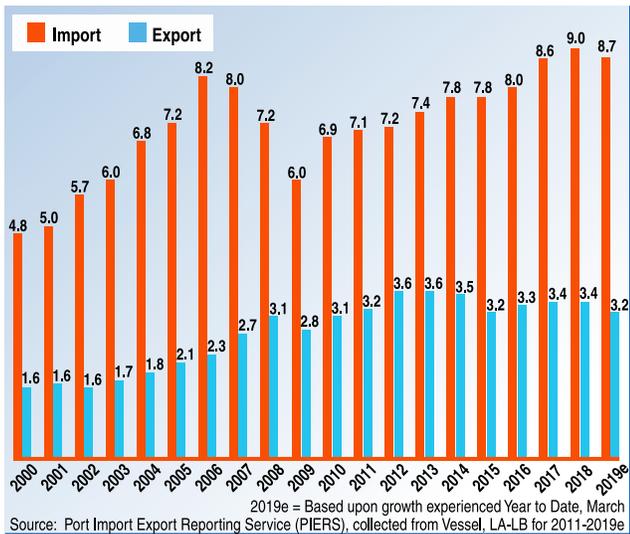
Lower Paying Sectors. Median pay in the Inland Empire's lower paying sectors is \$32,500 or less. They represent about 40% of employment as money brought by other sectors changes hands in local stores and service outlets. In the 2008-2010 recession, these sectors lost 41,900 jobs as the dollars moving through the local economy shrank. In the 2011-2018 recovery and expansion, they added back 135,200 positions to reach 588,800 as those dollar flows increased. That was 93,300 more jobs than were lost. The 2019 forecast is for a modest 9,900 more jobs as regional growth continues but the pace slows. This group includes eating and drinking, retailing, accommodations and entertainment as well as social service, business and consumer services, agriculture and part timers.

11 EDUCATIONAL ATTAINMENT, HIGH SCHOOL OR LESS, AA & ABOVE Southern California Market, December 2017



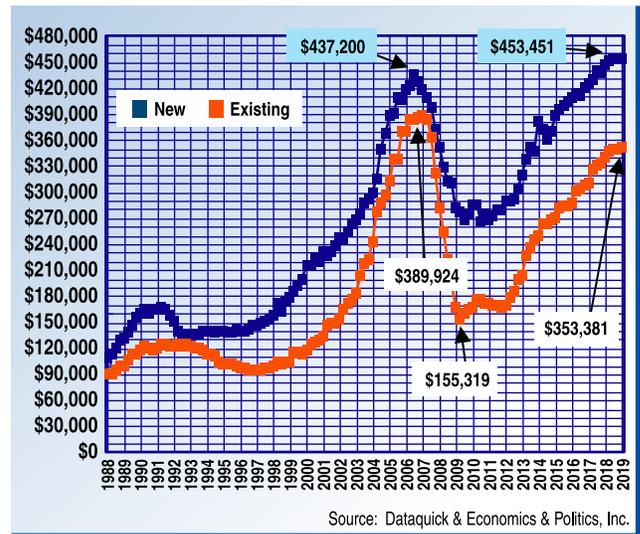
AA Degrees & Above. The Inland Empire's educational attainment has favored blue collar/technical job growth and inhibited the growth of professional, engineering, managerial and scientific sectors. In 2017, 45.7% of area adults had high school or less schooling. That compared to 41.5% in Los Angeles County, 32.3% in Orange County and 31.0% in San Diego County. Meanwhile, the inland area had just 29.8% of adults with Associate of Arts or higher degrees well below Los Angeles (39.2%), San Diego (47.0%) and Orange (48.0%) counties. This dilemma is the reason the Inland Empire's leadership is increasingly focused on how to expand training at the AA and above level.

12 IMPORT & EXPORT VOLUME, 2000-2019e Ports of Los Angeles & Long Beach (mil. teus)



Port Volumes. A key driver of the Inland Empire's economy is the volume of cargo flowing through the ports of Los Angeles and Long Beach. In 2018, the two ports saw imported containers reach 9.0 million twenty-foot equivalent containers (teus), a record and up 1.7% or 56,592 containers from 2017. Along with e-commerce, which continues growing nationally at 14-15% compounded, this volume will mean sustained strong growth in trucking and warehousing jobs in the Inland Empire. The recent strengthening of the dollar should help imported containers though slowing international trade and tariffs have cut volume in early 2019 to a forecasted level of 8.7 million teus, down -7.5%.

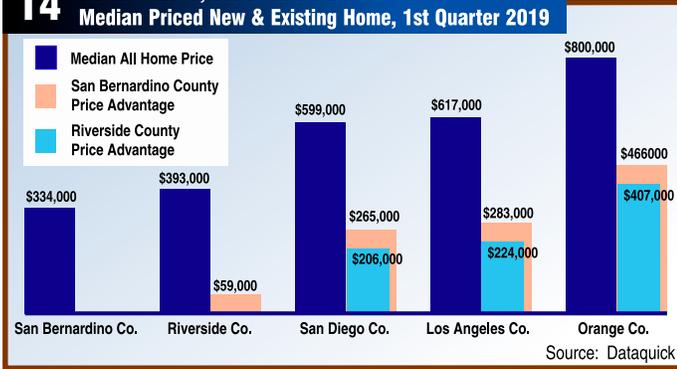
13 PRICE TRENDS, NEW & EXISTING HOMES Inland Empire, 1988-2019, Quarterly



Residential Prices. During first quarter 2019, the Inland Empire's residential prices have continued rising. Existing median home prices rose from \$341,858 in first quarter 2018 to \$353,381 in 2019, up \$11,523 or 3.4%. Since the 2009 low of \$155,319, prices have more than doubled (127.5%) but remain -9.4% under the \$389,924 high in 2006. Since many homes sold at the 2005-2007 peak were overpriced and purchased with questionable mortgages, prices need not reach the record highs for the market to be normal since many were lost to foreclosures. New homes reached \$453,451 in early 2019, up 1.3% from \$449,760 in first quarter 2018. That was \$18,329 or 4.2% above the 2006 record of \$437,200.

INLAND EMPIRE HOUSING MARKET SOARING PRICES, MODEST SALES

14 HOME PRICES, SO. CALIFORNIA MARKETS Median Priced New & Existing Home, 1st Quarter 2019

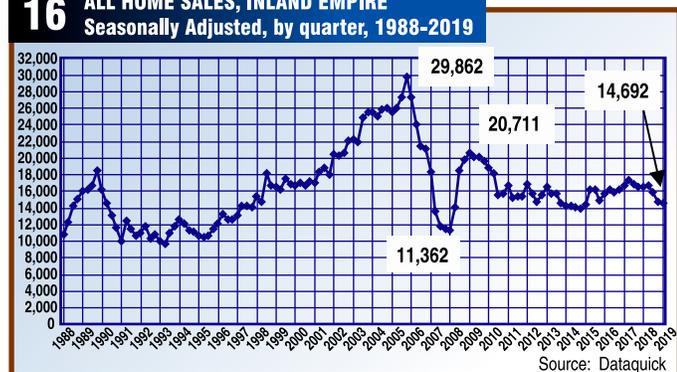


In first quarter 2019, single family sales in the Inland Empire's residential market remain in neutral. Since 2010, they have fluctuated from 14,500 to 16,000 seasonally adjusted sales, tailing off of late (*Exhibit 16*). Meanwhile, the inland region's first quarter residential prices have increased significantly, up 3.4% (*existing*) and 1.3% (*new*) from 2018 (*Exhibit 13, page 6*). The levels respectively reached \$353,381 and \$455,529. That put them -9.4% below and 4.2% above their pre-recession highs (\$389,924; \$437,200). Meanwhile, total permit valuations were 10,056 in 2018, just under the 10,518 in 2017.

Prices. In first quarter 2019, the traditional pricing advantage in the Inland Empire's housing market remained (*Exhibit 14*). In 1st quarter 2019, the median priced San Bernardino County home sold at \$334,000, while in Riverside, it was \$393,000 (*half higher/half lower*). Compared to San Diego County (\$599,000), families can save \$206,000-\$265,000 migrating inland. Los Angeles County buyers (\$617,000) can save \$224,000-\$283,000 moving inland. In Orange County (\$800,000), a family can save \$407,000-\$466,000 on the median inland home. As people begin to desire homes, these differentials tend to drive the Inland Empire's home markets.

Volume. Seasonally adjusted new and existing Inland Empire home sales in first quarter 2019 were 14,692 units, down from 16,582 in first quarter 2018 (*Exhibit 16*). Growth

16 ALL HOME SALES, INLAND EMPIRE Seasonally Adjusted, by quarter, 1988-2019



should rise in 2019 now that millennials are aging and starting to form families. However, to date, high prices and lack of available supply have stymied that result.

Looking at raw volume data, Riverside County had 6,237 existing home sales in first quarter 2019, down -12.7% from 7,148 in 2018 (*Exhibit 15*). San Bernardino County had 4,741 existing home sales, down -9.2% from 5,221 in first quarter 2018. By sub-market, Coachella Valley had Riverside County's smallest percentage loss in volume (1,255; -9.3%) though total volume was dominated by the South I-215 area (1,309; -9.8%). In San Bernardino County, the areas east of the I-215 led in percentage gain (402; 1.8%) while the Victor Valley led in volume (956; -7.4%).

Riverside County's first quarter 2019 new home volume was 1,082, up 2.9% from 1,052 in 2018 with the largest percentage gain in the rural desert (65; 66.7%). The volume

15 HOME DEED RECORDINGS Inland Empire, 1st Quarter, 2018-2019

NEW HOMES				EXISTING HOMES			
Area	1 st 2018	1 st 2019	% Chg.	Area	1 st 2018	1 st 2019	% Chg.
SB Desert	4	6	50.0%	East of I-215	395	402	1.8%
Victor Valley	90	84	-6.7%	SB Desert	528	531	0.6%
West of I-15	469	354	-24.5%	Victor Valley	1,032	956	-7.4%
San Bdnno-Highland	96	63	-34.4%	I-15 to I-215	772	708	-8.3%
I-15 to I-215	135	68	-49.6%	San Bdnno-Highland	696	630	-9.5%
SB Mountains	4	2	-50.0%	West of I-15	1,106	942	-14.8%
East of I-215	35	8	-77.1%	SB Mountains	692	572	-17.3%
SAN BDNO COUNTY	833	585	-29.8%	SAN BDNO COUNTY	5,221	4,741	-9.2%
Rural Desert	39	65	66.7%	Coachella Valley	1,384	1,255	-9.3%
I-215 South	252	322	27.8%	I-215 South	1,452	1,309	-9.8%
Coachella Valley	71	82	15.5%	Pass Area	354	316	-10.7%
Moreno Valley	61	68	11.5%	I-15 South	1,325	1,146	-13.5%
Pass Area	115	125	8.7%	Corona, Norco	730	631	-13.6%
Riverside	85	85	0.0%	Riverside	896	767	-14.4%
Corona, Norco	160	126	-21.3%	Moreno Valley	479	394	-17.7%
I-15 South	269	209	-22.3%	Rural Desert	528	419	-20.6%
RIVERSIDE COUNTY	1,052	1,082	2.9%	RIVERSIDE COUNTY	7,148	6,237	-12.7%
INLAND EMPIRE	1,885	1,667	-11.6%	INLAND EMPIRE	12,369	10,978	-11.2%

Source: Dataquick

leader was the I-215 south (322; 27.8%). San Bernardino County's volume was 585 units, down 29.8% from first quarter 2018's volume of 833. The desert areas had the largest percentage gain (6; 50.0%), the largest volume was west of the I-15 (354, -24.5%).

Summary. As indicated, the Inland Empire's housing volume continues to remain in a narrow band. San Bernardino County's new home sales shrank dramatically while Riverside County had a little growth. Overall the markets have lately retreated to just under 15,000 sales. Certainly, prices are soaring with new homes (\$455,529) 4.2% above their 2007 peak (\$437,200). Existing homes (\$353,381) are now only -9.4% below their 2007 level (\$389,924). Looking ahead, interviews with realtors indicated the frustration with the lack of supply to sell to the growing number of potential buyers. Ultimately, this should translate into more new home construction, though the low FHA lending limit (\$431,250) is hurting the new home market in particular. Fannie Mae and Freddie Mac's limits are better at \$484,350.