ECONOMICS & POLITICS, inc.

INLAND EMPIRE
QUARTERLY ECONOMIC REPORT

RIVERSIDE & SAN BERNARDINO COUNTIES, CALIFORNIA

YEAR 32 JANUARY 2020

INLAND EMPIRE CREATES IT'S OWN MAJOR EMPLOYMENT HUBS

by
John E. Husing, Ph.D.
Economics & Politics, Inc.

It has long been the belief in California leadership and planning circles that areas like the Inland Empire should not be allowed to grow because it just adds to "sprawl" and commuting. Wrong! In the natural evolution of communities, the Inland Empire now has three sub-markets to which people living deeper in the Inland Empire or within northern Orange County or Los Angeles County's San Gabriel Valley commute for work.

In Southern California, there are an average of 1.26 jobs for every occupied home. Any area with less than that means a significant share of its workers must commute to work. Importantly, any place that has more than that is a destination for workers living elsewhere. In the Inland Empire, this is the case for three markets (*see Exhibit 5 in this report*).

First is the urban core of Riverside County including the cities of Riverside, Jurupa Valley, Corona and Eastvale. Together they have 299,069 jobs and only 189,684 occupied dwellings or a 1.58 jobs to occupied homes ratio. This makes it a major destination for commuters from deeper in the Inland Empire or the northern areas of Orange County or eastern areas of Los Angeles County.

Second is the Westend of San Bernardino County including the cities of Ontario, Rancho Cucamonga, Chino, Fontana, Chino Hills and Montclair. This area has 369,863 jobs and just 241,072 occupied dwellings or 1.53 jobs for every occupied home. Again, this is a job node for people from deeper in the Inland Empire or from eastern Los Angeles County.

Third is the East San Bernardino Valley including the cities of San Bernardino, Rialto,

Continued on back page

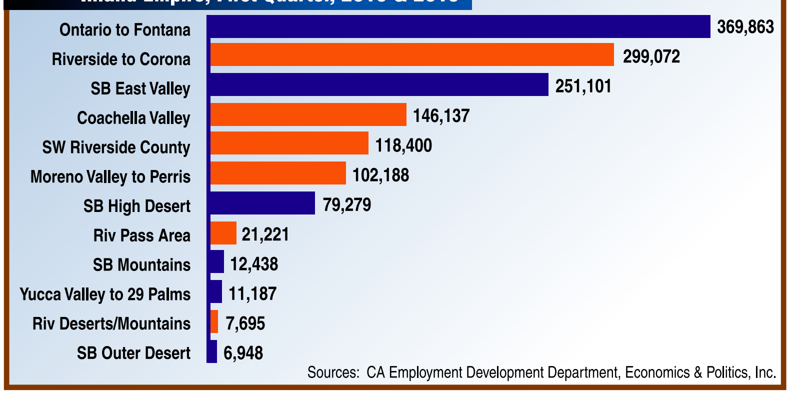
HOW STRONG ARE JOB LEVELS IN THE INLAND EMPIRE SUBMARKETS?

John E. Husing, Ph.D.

With detailed 2018 first quarter employment data available for each zip code in Riverside County and 2019 data for those in San Bernardino County, it is possible to take an in-depth look at how the six sub-markets that make-up each county are performing on five important metrics: total jobs, total payroll and average jobs per area, number of firms and jobs:housing balance. Below, they are ranked by payroll strength:

1. Ontario to Fontana. In San Bernardino County, this area includes these two major cities plus, Chino, Chino Hills, Montclair and Rancho Cucamonga. They have been receiving strong economic growth impulses from both Los Angeles and Orange counties as firms have migrated inland for decades. In first quarter 2019, the sub-region had 369,863 total jobs which was 50.6% of the county's 730,816 jobs or 26.0% of the Inland Empire's 1,425,528 (*Exhibit 1*). Workers received $4.57 billion or 50.8% of the county's $9.00 billion and 26.5% of the inland area's $17.23 billion (*Exhibit 2*). Average pay per job was $49,412, exceeded the county's average of $47,349 and the inland area's $48,336 (*Exhibit 3, see page 4*). Altogether, there were 19,727 firms in this sub-market, 53.4% of the county's 36,925 and 25.9% of the 76,204 in the wider area (*Exhibit 4*). The five cities in this sub-market had 369,863 jobs and 241,072 occupied dwellings, a 1.53 jobs:housing balance (*Exhibit 5*) making it a target to which workers commuted from within the Inland Empire (*Neutral = 1.26, Southern California's overall average*).

1 NUMBER OF JOBS BY SUB-MARKET
Inland Empire, First Quarter, 2018 & 2019



Sources: CA Employment Development Department, Economics & Politics, Inc.

Continued on page 2

Continued from front page

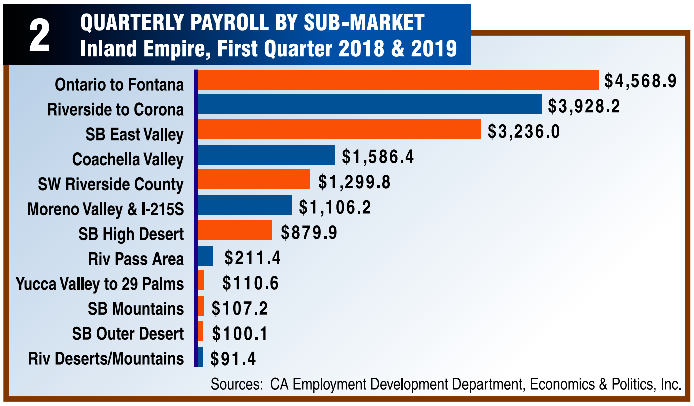
2. Riverside to Corona. In Riverside County, this area includes these two major cities plus Norco, Eastvale, Jurupa Valley and unincorporated El Cerrito, Home Gardens, Lake Mathews and Woodcrest. They also have been impacted by economic growth moving inland from impulses from Los Angeles and Orange counties for years. In first quarter 2018, the sub-region had 299,072 jobs which was 43.0% of the county's 694,712 and 20.9% of the Inland Empire's 1,425,528. Payroll from these employers totaled $3.93 billion or 47.8% of the county's $8.22 billion and 22.8% of the inland area's $17.23 billion. The average pay per job was $52,539 which exceeded the county's average of $48,275 and the inland area's $48,336. There were 14,192 firms in this sub-market, 36.1% of the county's 39,279 and 18.6% of the 76,204 in the wider area. The market's five cities had 299,069 jobs and 189,924 occupied dwellings, a 1.58 jobs:housing balance, making it a destination for commuting within the Inland Empire.

3. SB East Valley. This is the historic center of San Bernardino County including the cities of Colton, Grand Terrace, Highland, Loma Linda, Redlands, Rialto, San Bernardino and Yucaipa, plus unincorporated Bloomington, Lytle Creek, Mentone and Oak Glen. The area was hurt by the 1994 closure of Norton Air Force Base but has since largely recovered. In 2019, it had 251,101 jobs or 34.4% of the county's 730,816 jobs and 17.7% of the Inland Empire's 1,425,528. Local employees were paid $3.24 billion or 35.9% of the county's $9.00 billion and 18.8% of the inland area's $17.23 billion. Average pay per job was $51,549, exceeding the county's average of $47,349 and the inland area's $48,336. There were 9,780 firms in this sub-market, 26.5% of the county's 36,925 and 12.8% of the 76,204 employers in the two county area. The eight cities in this sub-market had 240,872 jobs and 174,494 occupied dwellings, a 1.38 jobs:housing balance which also made it a destination for workers commuting from elsewhere in the Inland Empire.

4. Coachella Valley. This Riverside County area has nine cities: Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs and Rancho Mirage plus unincorporated Bermuda Dunes, Mecca, North Palm Springs, Sky Valley, Thermal, Thousand Palms and Whitewater. Its economy specializes in tourism, retirees, health care and agriculture. Combined, there were 146,137 jobs in 2018, a 21.0% share of the county and 10.3% of the bi-county area. The $1.59 billion payroll accounted for 19.3% of those paid in the county and 9.2% for the Inland Empire. Average pay per job was $43,423, below the levels of both the county and wider region. There were 9,220 employers in the valley or 23.5% of those in the county and 12.1% in the Inland Empire. The Coachella Valley's nine cities had 131,610 jobs and 138,448 occupied homes, and a 0.95 jobs:housing balance. However, because of the valley's large numbers of retirees and seasonal residents, commuting from it is not a major issue.

5. Southwest Riverside County. San Diego County is largely the source of economic growth entering this region. Geographically, it is made up of Menifee, Murrieta, Lake Elsinore and Wildomar plus nearby Canyon Lake and unincorporated Quail Valley. In 2018, it had 118,400 jobs constituting 17.0% of the county and 8.3% of the inland area. Workers received $1.30 billion, a 15.8% share of county payrolls and 7.5% of the inland area. Average pay per job was $43,912, below both the county and inland county levels. There were 8,994 employers in the sub-market making up 22.9% of the county total and 11.8% of the Inland Empire's firms and agencies. The six cities located in the southwest market had 118,400 jobs and 130,796 occupied homes and a 0.91 jobs:housing balance. Again, it is a net commuter area.

6. Moreno Valley to Perris. Economic growth has recently been focusing on these two eastern urban Riverside County cities down Highway 60 and the I-215. Also affected have been nearby Hemet and San Jacinto plus unincorporated Homeland, Lakeview, March Air Reserve Base, Nuevo, Romoland and Winchester. In first quarter 2018,



this area had 102,188 total jobs which was 14.7% of those in Riverside or 7.2% of the Inland Empire's employment. Payroll from its firms and agencies totaled $1.11 billion or 13.5% of the county's total and 6.4% in the inland region (*Exhibit 2*). The average pay per job was $43,303 making it below the county's $49,275 and the inland area's $48,336. A total of 4,989 firms were in this sub-market, 12.7% of the county and 6.5% of the bi-county area. The area's four cities had 95,700 jobs and 114,082 occupied dwellings and a 0.84 jobs:housing balance meaning many workers had to commute elsewhere to work.

7. High Desert. This area sits above Cajon Pass in San Bernardino County's Mojave Desert. It includes Adelanto, Apple Valley, Barstow, Hesperia and Victorville plus unincorporated Helendale, Lucerne Valley, Phelan, Pinion Hills and Oro Grande. The area had the most affordable housing in Southern California before the Great Recession and was damaged badly in the downturn. In 2019, it had 79,279 jobs or 10.8% of the county's total and

5.5% of the Inland Empire. Payroll totaled $880 million or 9.8% of money paid out in the county and 5.1% for the inland area. Average pay per job was $44,396, below both the averages for the county and the Inland Empire. It had 5,000 firms, 13.5% of those in the county and 6.6% for the inland area. The five cities in the High Desert had 74,873 jobs and 102,961 occupied dwellings, a 0.73 jobs:housing balance meaning a large share of local workers had to commute down the I-15 freeway to work.

8. Pass Area. The area on the I-10 freeway over San Gorgonio Pass is composed of Banning, Beaumont and Calimesa plus unincorporated Cabazon and Cherry Valley. The market is just beginning to feel the impact of the outward migration of housing development and related population serving firms. It still has only 21,221 jobs, a 3.1% share of the county total and 1.5% share of the regional total. Its total payroll of $211 million was 2.6% share of the county's total and 1.2% for the region. Average pay per job was $39,841, well below the averages in both Riverside county and the wider region. There were 1,257 firms in the Pass Area or 3.2% of the county total and 1.6% in the Inland Empire. The area's three cities had 14,505 jobs and 29,022 occupied homes and a 0.50 jobs:housing balance meaning a large share of its workers must commute. However, if jobs in unincorporated Cabazon with its Morongo Casino and large outlet mall are included, the figure is 0.73, still low but better.

9. Yucca Valley-Twentynine Palms. This outlying San Bernardino County area is composed of incorporated Yucca Valley and Twentynine Palms plus unincorporated Johnson Valley, Joshua Tree, Landers and Morongo Valley. Its economy has been heavily influenced by the U.S. Marine Corps Air Ground Combat Center in Twentynine Palms. Recently, commuting to work in the Coachella Valley has become an important economic factor. In 2019, the area had 11,187 jobs, 1.5% of positions in the county and 0.7% for the Inland Empire. Its payroll totaled $110 million or 1.2% of the county's total and 0.6% for the inland area. Average pay per job was $39,456, below both the county and Inland Empire levels. It had 833 firms, 2.3% of the county total and 1.1% of the inland area. The two cities had 9,420 jobs and 17,198 occupied dwellings, a 0.55 jobs:housing balance meaning most local workers were commuters.

10. Mountains. In San Bernardino County's 20 mountain communities only Big Bear Lake is incorporated. The largest of the other places included Blue Jay, Crestline, Forest Falls, Lake Arrowhead, Running Springs and Wrightwood. This group's economies are largely based on tourism, vacation homes, retirees and some commuting. In 2019, they had 12,438 jobs, 1.7% of the county's total and 0.9% of the Inland Empire. Payroll totaled $107 million or 1.2% of the county's total and 0.6% for the inland area. Average pay per job was $34,490, well below the averages for the county and the Inland Empire. The area had 1,240 firms, 3.4% of the county total and 1.6% for the inland area. Big Bear Lake had 4,947 jobs and 2,299 occupied dwellings, a 2.15 jobs:housing balance meaning it is a destination for workers.

11. Outlying Deserts. Needles is the only incorporated city in San Bernardino County's outer deserts. The other 16 are small places mostly with one major economic function. For instance, mining drives Trona and Mountain Pass; Needles is an interstate travel and Colorado river tourist stop; Fort Irwin is a major U.S. Army desert training center; Baker serves tourists going to Las Vegas; Yermo is part of the U.S. Marine Corps logistics operation. In 2019, the outer desert had 6,948 jobs, 1.0% of the county's positions and 0.5% for the Inland Empire. Payroll totaled $100 million or 1.1% of the county's level and 0.6% for the inland area. Average pay per job was $57,597, well over the county and Inland Empire levels due to high mining pay. The deserts had 345 firms, 0.9% of the county total and 0.5% of the inland area. Needles had 1,154 jobs and 1,945 occupied dwellings, a 0.59 jobs:housing balance meaning many city workers were commuting to Laughlin, Nevada.

12. Outlying Deserts and Mountains. In Riverside County, Blythe is the only city in its outlying areas. Other locations include Desert Center, Idyllwild, Mountain Center, Anza and Aguanga. Blythe's economy is highlighted by two major state prisons, agriculture and river tourism. The other places largely depend on scenic tourism. There were 7,695 jobs in these places with 1.1% of the county's jobs and 0.5% for the region. The $91 million payroll was also 1.1% of the county and 0.5% of the Inland Empire. The $47,503 average pay was below the county and regional averages. The 627 employers were 1.6% and 0.8% respectively of the county and Inland Empire totals. In 2018 Blythe, had 5,721 jobs and 4,477 occupied homes giving it a 1.28 jobs:housing balance, meaning it has no commuter issue.

SUMMARY

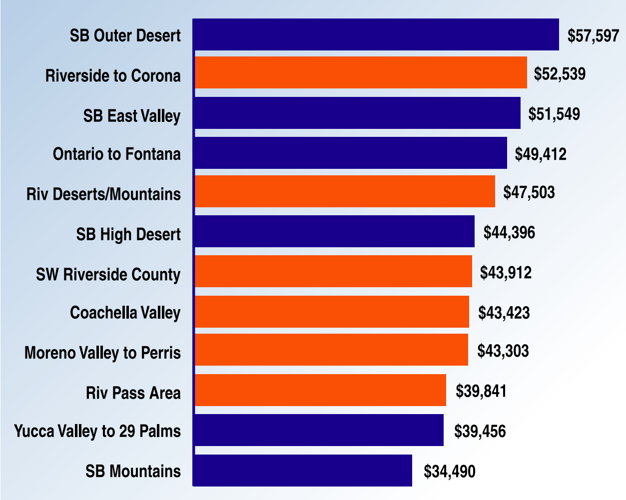
These sub-regional data reflect the fact that the Inland Empire's economy has matured as economic activity migrated out of the coastal counties into the area. Its dominate sub-markets are thus those adjacent to Los Angeles and Orange counties plus Southwestern Riverside County which has been affected by growth from San Diego County. As the inland area has matured, economic activity has migrated ever deeper into it and is now strongly affecting the Moreno Valley-Perris area, High Desert and Pass Area. Meanwhile, the Coachella Valley, mountains and outlying deserts have grown up in response to the success of local specialization like tourism, retiree services, agriculture and mining.

For further information on the economic analysis in the QER, visit Dr. John Husing's website at:

www.johnhusing.com

You'll also find pages on Dr. Husing's background, speaking engagements, downloadable presentations, adventures, and other items of interest.

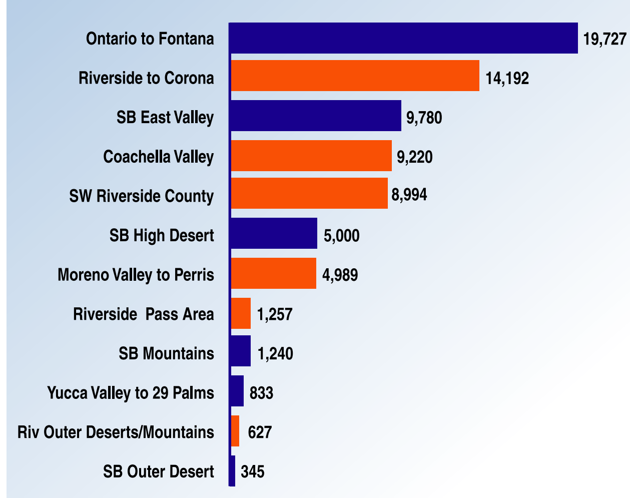
3 AVERAGE PAY PER JOB
Inland Empire, First Quarter 2018 & 2019



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

Average Pay Per Job. Annualizing the average pay per job, the highest paying sub-market was San Bernardino County's outer deserts (*$57,597*) where several high paying mining operations are located. This was followed by Riverside to Corona with significant numbers of government, university and manufacturing workers (*$52,539*). Third was the East SB Valley (*$51,549*) with several hospitals and tech firms like ESRI and Sorenson Engineering. Fourth was the large Ontario to Fontana sub-market (*$49,412*) with numerous logistics operations as well as large retail centers like Ontario Mills and Victoria Gardens. Fifth ranked was the very small Riverside desert and mountain areas with the average heavily impacted by the Chuckawalla Valley State Prison and Ironwood State Prison in Blythe (*$47,503*).

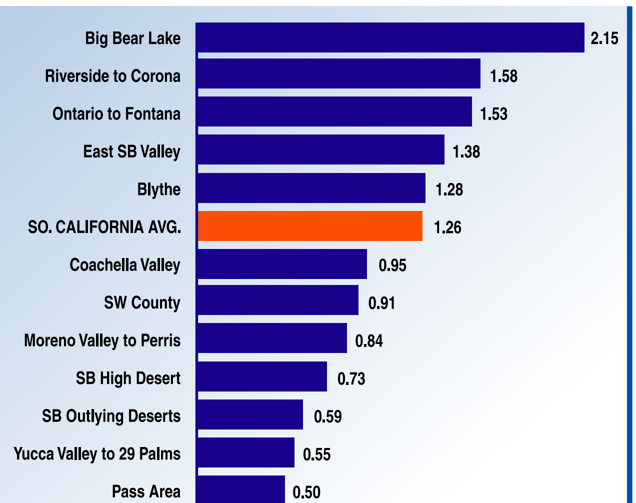
4 NUMBER OF EMPLOYERS BY SUB-MARKET
Inland Empire, First Quarter 2018 & 2019



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

Employers. The largest number of companies among the sub-markets were in the well developed Ontario to Fontana market (*19,727*). It was followed by the quite mature Riverside to Corona area (*14,192*). Both these markets are beginning to run out of developable land. Third ranked was the rapidly filling-in East San Bernardino Valley (*9,780*) that was once the Inland Empire's major job hub. Fourth was the Coachella Valley (*9,220*) which has long developed as a stand alone tourist and retirement economy. Southwest Riverside County ranked fifth (*8,994*) as the area has seen economic forces and population serving activities driven by growth largely coming from San Diego County.

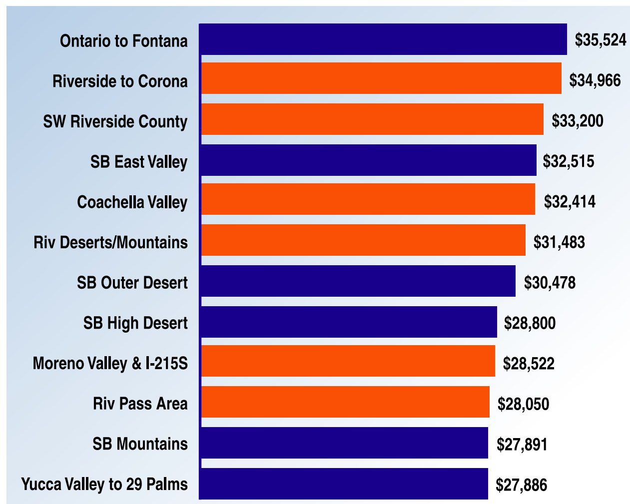
5 JOBS: HOUSING BALANCE
Inland Empire by Sub-Market 2018-2019



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

Jobs: Housing Balance. Not well known outside the Inland Empire is the fact that three of its major employment hubs are now commuter destinations from farther inside the region. Thus the jobs:housing balance in Riverside-Corona (*1.58*), Ontario-Fontana (*1.53*) and the East San Bernardino Valley (*1.38*) see more workers coming to them each workday than leaving. Two small markets are balanced: Blythe (*1.28*) and Big Bear Lake (*2.15*). Coachella Valley is also roughly balanced as many of its household members do not work. The other areas of the Inland Empire are net heavy commuter markets ranging from Riverside's Pass Area (*0.50*) to Southwest Riverside County (*0.91*). A neutral rating would be the jobs:housing ratio of 1.26 found for all of Southern California.

6 MEDIAN PAY BY SUB-MARKET
Inland Empire, First Quarter 2018 & 2019



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

Median Pay Per Job. Median pay is the level at which 50% of firms paid less and 50% paid more on average to their workers. This measure gives great weight to lower paying population serving jobs as they are a major part of any sub-market. First ranked was the Ontario-Fontana market (*$35,524*). It was followed by Riverside to Corona (*$34,966*). Third was Southwest Riverside County (*$33,200*). Fourth was the East San Bernardino Valley sub-market (*$32,515*). Fifth ranked was the Coachella Valley (*$32,414*). These figures are well below the average pay levels which give greater influence to higher paying firms.

INLAND EMPIRE EMPLOYMENT: 32,708 New Jobs; Up 2.2% in 2019

Inland Empire's job growth from 2018-2019 is estimated at 32,708 and a 2.2% growth rate. This is based upon first six months accurate reports from the U.S. Bureau of Labor Statistics (*BLS*) and preliminary CA Employment Development numbers for the last half. In 2018, the gain had been 49,308 (*3.4%*) indicating that the inland area economy's growth slowed significantly in 2019 (*Exhibit 7*). Looking at the period since the Great Recession (2011 to 2019), the Inland Empire has added 384,917 jobs putting it 18.7% above its 2007 high (*Exhibit 8*). That growth led all metropolitan areas in California as well as the state's expansion (*13.0% above 2007*).

7 INLAND EMPIRE EMPLOYMENT INFORMATION 2018-2019

Sector	2018	2019	Change	Growth	Share	2018 Growth	Growth	Share
Health Care	142,492	148,042	5,550	3.9%	17.0%	6,267	4.6%	12.7%
Mining	1,167	1,200	33	2.9%	0.1%	200	20.7%	0.4%
Local Government	81,033	83,183	2,150	2.7%	6.6%	1,892	2.4%	3.8%
Information	11,167	11,425	258	2.3%	0.8%	(117)	-1.0%	-0.2%
Mgmt & Professions	50,467	51,583	1,117	2.2%	3.4%	2,025	4.2%	4.1%
Federal & State	38,500	38,983	483	1.3%	1.5%	417	1.1%	0.8%
Utilities	5,000	4,817	(183)	-3.7%	-0.6%	(75)	-1.5%	-0.2%
Clean Work, Good Pay	**349,533**	**361,367**	**11,833**	**3.4%**	**36.2%**	**11,117**	**3.3%**	**22.5%**
K-12 Education	138,067	141,475	3,408	2.5%	10.4%	4,542	3.4%	9.2%
Financial Activities	43,658	42,450	(1,208)	-2.8%	-3.7%	(567)	-1.3%	-1.1%
Clean Work, Moderate Pay	**181,725**	**183,925**	**2,200**	**1.2%**	**6.7%**	**3,975**	**2.2%**	**8.1%**
Logistics	192,467	199,267	6,800	3.5%	20.8%	12,917	7.2%	26.2%
Manufacturing	101,283	101,992	708	0.7%	2.2%	2,050	2.1%	4.2%
Construction	104,842	104,642	(200)	-0.2%	-0.6%	7,442	7.6%	15.1%
Dirty Work, Moderate Pay	**398,592**	**405,900**	**7,308**	**1.8%**	**22.3%**	**22,408**	**6.0%**	**45.4%**
Social Assistance	77,750	83,033	5,283	6.8%	16.2%	6,258	8.8%	12.7%
Admin. Support	57,708	60,458	2,750	4.8%	8.4%	3,033	5.5%	6.2%
Amusement	19,383	20,317	933	4.8%	2.9%	(267)	-1.4%	-0.5%
Eating & Drinking	132,158	136,850	4,692	3.6%	14.3%	3,867	3.0%	7.8%
Agriculture	14,517	14,908	392	2.7%	1.2%	58	0.4%	0.1%
Employment Agcy	42,467	42,717	250	0.6%	0.8%	(1,292)	-3.0%	-2.6%
Retail Trade	180,842	181,475	633	0.4%	1.9%	(42)	-0.0%	-0.1%
Accommodation	18,433	18,275	(158)	-0.9%	-0.5%	50	0.3%	0.1%
Other Services	45,558	42,150	(3,408)	-7.5%	-10.4%	142	0.3%	0.3%
Lower Paying Jobs	**588,817**	**600,183**	**11,367**	**1.9%**	**34.8%**	**11,808**	**2.0%**	**23.9%**
Total, All Industries	**1,518,667**	**1,551,375**	**32,708**	**2.2%**	**100.0%**	**49,308**	**3.4%**	**100.0%**
Civilian Labor Force	2,053,392	2,045,313	2,450	0.1%		30,142	1.5%	
Employment	1,966,800	1,958,013	3,625	0.2%		46,392	2.4%	
Unemployment	86,567	87,275	(1,200)	-1.4%		(16,267)	-15.8%	
Unemployment Rate	**4.2%**	**4.3%**	**-0.1%**	**-1.5%**		**-0.9%**	**-17.1%**	

Source: U.S. Bureau of Labor Statistics, Economics & Politics, Inc

CLEAN WORK, GOOD PAY: 11,833; 3.4% GROWTH; 36.2% SHARE

Job growth from 2018-2019 in sectors that pay a median of over $62,500 is estimated at 11,833, up a strong 3.4% responsible for 36.2% of new jobs. Higher education's growth rate led, up 2,425 jobs (*12.3%; a 7.4% share*). Health Care added 5,550 jobs, a good result for that sector (*3.9%; 17.0% share*). Mining added a few jobs (*33 positions; 2.9%; 0.1% share*). Local government increased by 2,150 positions (*2.7%; 6.6% share*). Information finally grew a little (*258 jobs; 2.3%; 0.8% share*). Management and professions added 1,117 jobs (*2.2%; 3.4% share*). Federal and state government added 483 workers (*1.3%; 1.5% share*). Utilities continued declining (*-183; -3.7%*). This group represented 22.5% of growth in 2018 largely thanks to the expansion of health care.

CLEAN WORK, MODERATE PAY: 2,200 JOBS; 1.2% GROWTH; 6.7% SHARE

From 2018-2019, the Inland Empire's sectors paying moderate incomes (*$45,000-$62,499*) to office-based and K-12 workers are estimated to have gained 2,200 workers (*1.2%*) and a 6.7% share of new jobs. That was down from an 8.1% share in 2018. K-12 education added 3,408 jobs (*2.5%; 10.4% share*) down from 4,542 the prior year. Finance, insurance and real estate groups shrank by 1,208 jobs (*-2.8%*) as banks consolidated and home sales continued to be weak.

DIRTY WORK, MODERATE PAY: 7,308 JOBS; 1.8% GROWTH; 22.3% SHARE

Blue collar and technical jobs in the Inland Empire (*$45,000-$62,499*) grew by a relatively weak 7,308 jobs (*1.8%; 22.3% share*) during 2019. Logistics (*distribution & transportation*) added only 6,800 workers, down from 12,917 in 2018, as imports slowed in Southern California (*3.5%; 20.8% share*). Manufacturing gained a slight 708 positions (*0.7%; 2.2% share*) due to the continued difficulty of doing business in California. Construction lost -200 jobs (*-0.2%*) as home building continued to lag. For 2018, this group had represented a powerful 45.4% of new jobs.

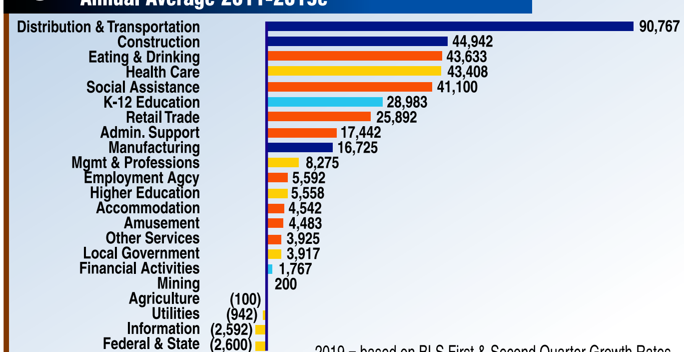
LOWER PAYING JOBS: 11,367 JOBS; 1.9% GROWTH; 34.8% SHARE

The Inland Empire's lower paying sectors (*$32,500 or less*) added 11,367 jobs (*1.9%*) in 2019 and 34.8% share of overall job growth. These sectors accounted for 23.9% of the area's growth in 2018. The fastest growth was in social assistance with 5,283 new positions (*6.8%; 16.2% share*). Firms providing services to office firms grew by 2,750 jobs (*4.8%, 8.4% share*) followed by the amusement group, up 933 jobs (*4.8%; 2.9% share*). Eating & drinking continued its expansion adding 4,692 jobs (*3.6%; 14.3% share*). Agriculture grew a little (*392 jobs; 2.7%; 1.2% share*) as did employment agencies (*250 jobs; 0.6%; 0.8% share*). Retail trade stalled due to e-commerce, up only 633 jobs (*0.4%; 1.9% share*). Accommodation shrank (*-158 jobs; -0.9%*) as did other services like auto shops which fell -3,408 (*-7.5%*).

COMMENT

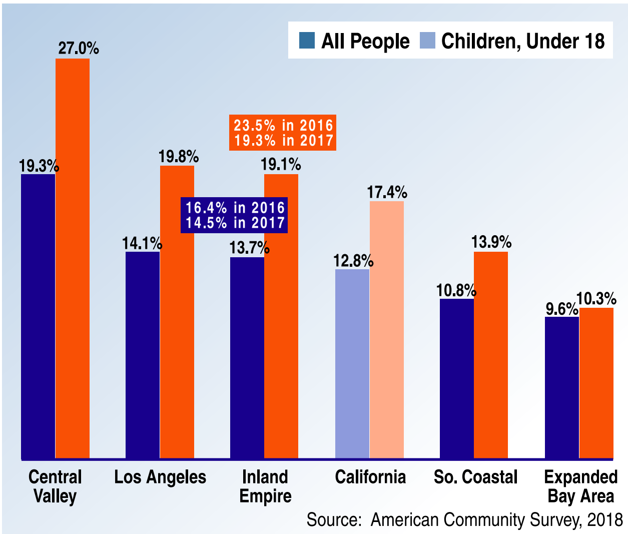
Last year, the QER forecasted that 2019 would see 38,200 more jobs, up 2.5%. the preliminary estimates here show that only 32,708 were created with a growth rate of 2.2%. Unemployment was forecasted at 4.2% for the full year. EDD has estimated it at 4.3%. The main difference between the forecast and the result was the lack of job growth in construction which fell from a gain of 7,442 in 2018 to a loss of -200 in 2019 and the U.S. up 8.6% from 2007.

8 INLAND EMPIRE GROWING & DECLINING SECTORS Annual Average 2011-2019e



Source: CA Employment Development Department, U.S. Bureau of Labor Statistics, Economics & Politics, Inc.

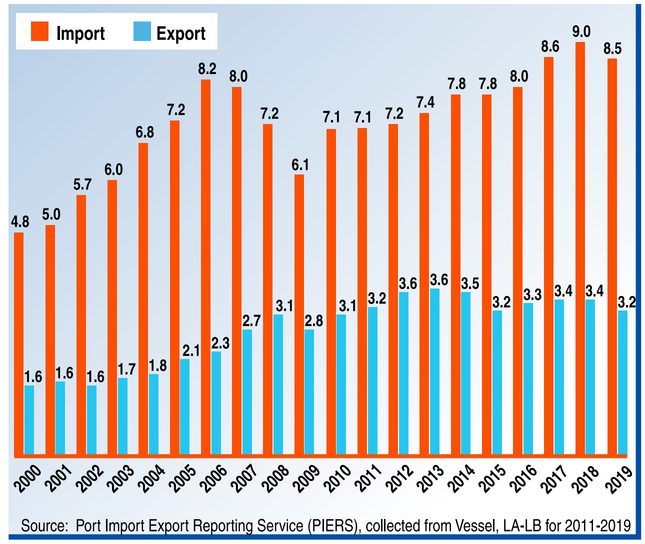
9 SHARE OF POPULATION LIVING IN POVERTY
California Regions, 2018



Source: American Community Survey, 2018

Declining Poverty Levels. With strong employment growth occurring in the Inland Empire, a fortunate side effect has been for poverty levels to fall. In 2016, 23.5% of children under 18 in the area were living below the poverty level. This fell to 19.3% in 2017 and to 19.1% in 2018. While still high, these levels are a great improvement. Similarly, poverty for all persons fell from 16.4% in 2016 to 14.5% in 2017 and dropped to 13.7% in 2018. The region's poverty level is now consistent with California where the overall rate was down to 12.8%. It was below Los Angeles County's 14.1% level.

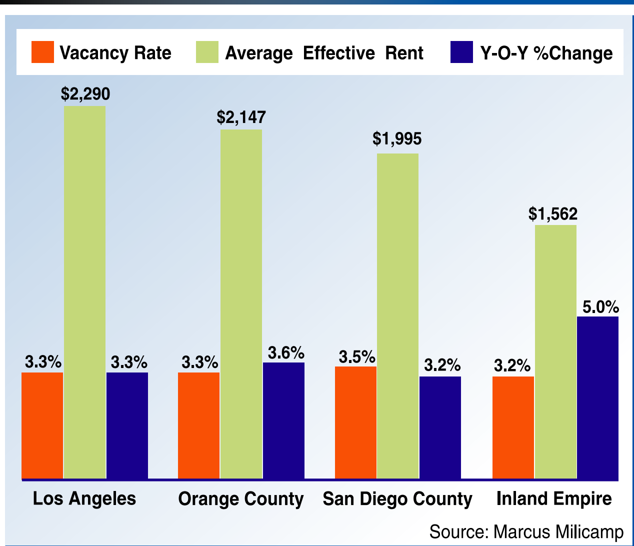
10 IMPORT & EXPORT VOLUME, 2000-2019
Ports of Los Angeles & Long Beach (mil. teus)



Source: Port Import Export Reporting Service (PIERS), collected from Vessel, LA-LB for 2011-2019

Imports & Exports. One side effect of the President's tariff policies has been to lower the level of international trade through the ports of Los Angeles and Long Beach. A tariff is essentially a tax on the buyers of imports. In 2019, imported full containers reach a record 9.0 million twenty foot equivalent containers (*teus*). However, this fell by 500,000 teus to 8.5 million in 2019 when the tariffs truly hit and buyers cut back. Similarly, exported full containers fell from 3.4 million to 3.2 million teus from 2018 to 2019 due to retaliatory tariffs by China. This behavior affects the Inland Empire in that a substantial share of imported containers end up being processed by workers in its trucking and supply chain facilities.

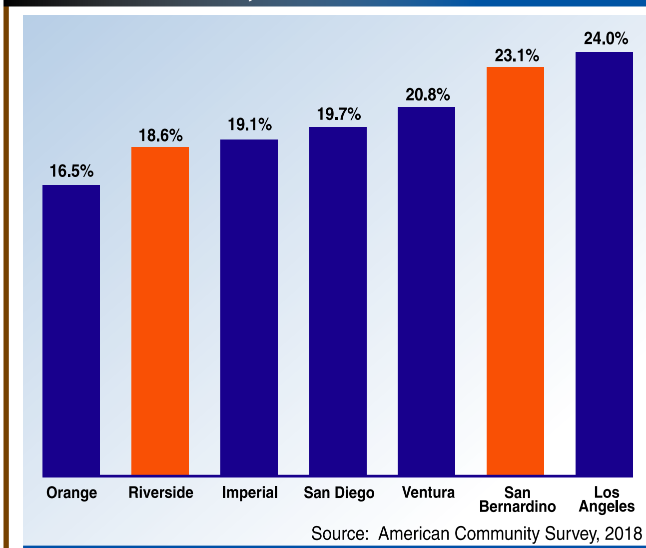
11 APARTMENT VACANCIES, RENTS, RENTAL INCREASE
Southern California, Third Quarter 2019



Source: Marcus Milicamp

Apartments. In third quarter 2019, apartment rents in the Inland Empire reached $1,562 a month. This was below the levels in the coastal counties by $433 to $728 a month: San Diego (*$1,995*), Orange (*$2,147*), Los Angeles (*$2,290*). It is an important reason for the migration of renters to the inland area seeking places they can afford. These rates have been rising with gains of 3.2% to 3.6% in coastal areas but 5.0% in the inland region. Vacancy rates are quite uniform in each market ranging from a low of 3.2% in the Inland Empire to 3.5% in San Diego County. It is also a reason why attached unit construction has been rising in inland communities.

12 SHARE OF SINGLE FAMILY RENTALS
Southern California, 2018



Source: American Community Survey, 2018

Single Family Rentals. With housing prices soaring to unaffordable levels throughout Southern California, more and more single family homes have been bought by investors and turned into rentals. This is particularly prevalent in Los Angeles County where 24.0% of these homes are occupied by renters. In San Bernardino County, the share was 23.1%. Riverside County's single family homes are less likely to be rentals at 18.6%. To an extent, this phenomenon has been a product of the Great Recession and the mortgage crisis where many homeowners lost their homes which became investment properties for renters. Some markets were particularly affected like the High Desert where 29.5% of single family homes were rentals led by Bartow (*36.7%*) and Victorville (*36.3%*).

13 HOME PRICES
4th Quarter, 2018-2019

County	4th Qtr-18	4th Qtr-19	% Chg.
NEW HOMES			
Riverside	$441,000	$440,500	-0.1%
San Bernardino	$488,000	$488,000	0.0%
Los Angeles	$671,500	$656,000	-2.3%
Orange	$940,750	$939,000	-0.2%
San Diego	$736,500	$645,000	-12.4%
Ventura	$664,750	$604,000	-9.1%
So. California	$654,200	$626,200	-4.3%
EXISTING HOMES			
Riverside	$385,000	$404,000	4.9%
San Bernardino	310,000	330,000	6.5%
Los Angeles	615,000	650,000	5.7%
Orange	755,000	780,000	3.3%
San Diego	602,250	630,000	4.6%
Ventura	635,000	630,000	-0.8%
So. California	$540,000	$568,400	5.3%

Source: Dataquick

14 HOME DEED RECORDINGS
Inland Empire, 4th Quarter, 2018-2019

NEW HOMES				EXISTING HOMES			
Area	4th-2018	4th-2019	% Chg.	Area	4th-2018	4th-2019	% Chg.
East of I-215	16	50	212.5%	SB Mountains	759	935	23.2%
SB Desert	2	5	150.0%	SB Desert	508	607	19.5%
SB Mountains	5	11	120.0%	West of I-15	1,085	1,207	11.2%
I-15 to I-215	93	166	78.5%	East of I-215	410	439	7.1%
Victor Valley	118	154	30.5%	I-15 to I-215	814	865	6.3%
West of I-15	476	522	9.7%	Victor Valley	1,171	1,171	0.0%
San Bdno-Highland	108	74	-31.5%	San Bdno-Highland	687	679	-1.2%
SAN BDNO COUNTY	818	982	20.0%	SAN BDNO COUNTY	5,434	5,903	8.6%
Corona, Norco, Eastvale	174	291	67.2%	Pass Area	322	394	22.4%
Riverside	145	183	26.2%	Southwest Co.	1,720	2,100	22.1%
Pass Area	231	282	22.1%	Corona, Norco, Eastvale	728	830	14.0%
Coachella Valley	119	132	10.9%	Moreno Valley	459	506	10.2%
Southwest Co.	504	522	3.6%	Perris, Hemet, S.Jacinto	1,087	1,164	7.1%
Moreno Valley	96	98	2.1%	Rural Desert	487	519	6.6%
Rural Desert	66	67	1.5%	Coachella Valley	1,128	1,191	5.6%
Perris, Hemet, S.Jacinto	217	212	-2.3%	Riverside	916	924	0.9%
RIVERSIDE COUNTY	1,552	1,787	15.1%	RIVERSIDE COUNTY	6,847	6,891	0.6%
INLAND EMPIRE	2,370	2,769	16.8%	INLAND EMPIRE	12,281	14,613	19.0%

Source: Dataquick

INLAND EMPIRE: Housing Volumes Remains Flat, Home Prices Continue Rising

In 2006, before the Great Recession, the Inland Empire's median new home price peaked at $437,200; existing homes reached $389,924 in early 2007. Prices then plunged with new homes reaching a low of $268,155 in early 2010 (*-38.7%; not shown*) and existing homes hitting $155,319 in early 2009 (*-60.2%*). Both prices have since gained significant ground. New homes were at a record $457,348 in fourth quarter 2019, 4.6% above the earlier peak. Existing homes were at $370,206, but still -5.1% below its peak (*Exhibit 15*). With FHA's new 2019 conforming loan maximum at $442,750, it is again possible for most existing home buyers to finance homes in the Inland Empire's markets but this creates difficulties for new home buyers.

Volume. While home prices have increased significantly, sales volumes have essentially remained stuck in a 15,000-16,500 range for the past nine years with 16,488 sales in fourth quarter 2019 (*Exhibit 16*). High prices and recent mortgage rates have been the culprits. Meanwhile, San Bernardino County's new and existing median home price (*$352,000*) is $280,000 to $460,000 below prices in the coastal counties. Riverside County's combined median (*$411,000*) is $221,000 to $401,000 lower. This has encouraged families to migrate inland.

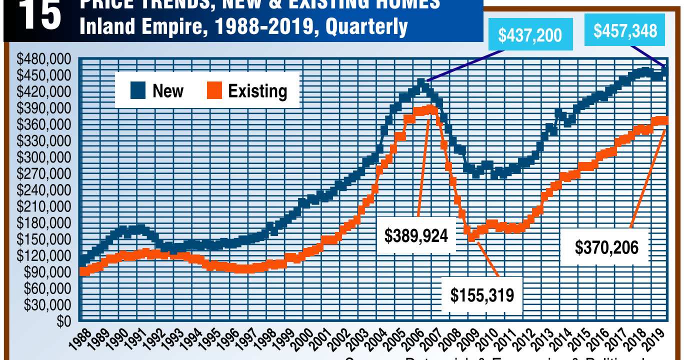
Looking at raw volume data, Riverside County had 6,891 existing home sales in fourth quarter 2019, up 0.6% from 6,847 in 2018 (*Exhibit 14*). San Bernardino County had 5,903 existing home sales, up 8.6% from 5,434 in fourth quarter 2018. By sub-market, Riverside's Pass Area city had the larges percentage gain (*394; 22.4%*) with Southwest County the volume leader (*2,100; 22.1%*). In San Bernardino County, the mountains had the largest percentage gain (*935; 23.2%*) while the High Desert led in volume (*1,171, no gain*).

New home sales were stronger. Riverside County's fourth quarter 2019 volume was 1,787, up 15.1% from 1,552 in 2018. Its largest percentage gain was in the Corona-Norco-Eastvale area (*291, 67.2%*). The volume leader was Southwest County (*522; 3.6%*). San Bernardino County's volume was 982, up 20.0% from fourth quarter 2018's volume of 818. The area east of the I-215 had the largest percentage gain (*50; 212.5%*). The volume leader remained the area west of the I-15 (*522; 9.7%*).

Prices. Riverside County's $440,500 new home price in fourth quarter 2019 was off -0.1% from the prior year's $441,000 (*Exhibit 13*). Its $404,000 existing home price was up 4.9% from $385,000 in fourth quarter 2018. San Bernardino County's new home price of $488,000 was unchanged from its fourth quarter 2018 price. Its fourth quarter 2019 existing home price of $330,000 was up 6.5% from fourth quarter last year (*$310,000*). In Southern California, the fourth quarter 2019 new home median price was down -4.3% from $654,200 in 2018 to $626,200; the existing home median increased 5.3% from $540,000 to $568,400.

Looking Ahead. As was the case in 2018, the enormous difference in price between new and existing homes in the inland counties versus that in the coastal counties did not cause buyers to aggressively migrate inland in 2019. In addition, the fact that inland affordability is 44% versus 25% to 29% in the coastal counties has not yet overcome buyers' fears of large purchases, long commutes or the lack of millennial housing formation and demand. This relatively static situation does not appear ready to change because even the Inland Empire's homes have themselves become relatively expensive.

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



Source: Dataquick & Economics & Politics, Inc.

Continued from front page

Redlands, Colton, Highland, Loma Linda, Grand Terrace and Yucaipa. Here, employers are using 240,875 workers but the local housing market has only 174,797 occupied homes. It is a job center with 1.38 jobs for each occupied dwelling. That makes this sub-market a job node primarily for people living deeper in the Inland Empire.

These data underscore the fact that California and Southern California lawmakers and planners should get rid of the notion that just because areas other than the old coastal county job hubs grow rapidly, that does not inevitably mean more commuting to those historic job centers. Once the San Fernando Valley, Contra Costa County, the San Francisco Peninsula and Orange County were sources of commuters and today they are major job hubs. The data show that this has now happened in the Inland Empire's urban valleys.

Planners and lawmakers should refrain from simply trying to stop inland housing and population growth and recognize that as inland areas mature, they too create their own important regional job centers. It would be a greater service to inland residents if these policy makers made a concerted effort to convince and assist employers to locate inland rather than to try and squelch the natural instinct of people to live in the kinds of homes they want in communities where housing is affordable.

John Husing, Ph.D.
Economics & Politics, Inc.

ECONOMICS
& POLITICS, inc.
www.johnhusing.com

What Economics & Politics, Inc. offers:

- **Speeches and Powerpoint presentations explaining the state of the economy, specifically tailored to local business, governmental and service groups**
- **Analytical work explaining the financial and employment impact of development projects on local jurisdictions**
- **Explanations of the state of the economy in each sub-region of the Inland Empire**
- **Economic development strategies designed to raise the standard of living in specific cities and counties**
- **Explanation of the importance to the local economy of major infrastructure projects**
- **Local economic justifications for good ratings for municipal bond issues**
- **Budgetary forecasts for Inland Empire governments based upon the directions of the economy and the key metrics driving their budgets**
- **Analysis of the impact of regulatory impacts on sectors of importance to sectors supporting blue collar/ technical workers**