In recent years, it has become increasingly clear that California is in the midst of a worsening housing crisis. The demand for housing has increased as Millennials have moved into child bearing years, while the supply of housing has been restricted by the traditional difficulty of getting projects through local entitlement processes plus the accelerating use of CA Environmental Quality Act (CEQA) lawsuits by neighbors to successfully stop home and apartment building. The result has been soaring residential prices and rents, particularly in the San Francisco (SF) Bay Area, Orange, Los Angeles and San Diego counties. In those markets, significant numbers of workers can no longer afford places to live. This has caused a migration of workers inland to the Riverside and San Bernardino counties in Southern California and the Central Valley in Northern California. Even those markets are seeing prices move to higher levels.

**SINGLE FAMILY MEDIAN PRICED HOME AFFORDABILITY**

In late 2018, the median price of single family homes (half of local families could afford; half not) by market was: SF Bay Area ($950,000), San Diego ($650,000), Orange ($830,000), Los Angeles ($629,000), Inland Empire ($362,500) and Central Valley ($300,000). This has created the dynamic where many households are being forced to migrate inland. By county, the CA Real Estate Association found the savings for a coastal family moving to the Inland Empire was: Orange ($467,500), San Diego ($287,500) and Los Angeles ($266,500). Families migrating from the SF Bay Area to the Central Valley could save $650,000 (Exhibit 1).

It was similar for lower priced first time homes. For households moving to the Inland Empire ($308,120) from Orange ($705,500) the sav-
ing was $397,380. Moving from San Diego ($552,500) saved $287,500. Moving from Los Angeles ($534,600) saved $266,500. It was $622,472 for families migrating from the SF Bay Area ($870,500) to the Central Valley ($248,028).

As a result of home prices reaching these levels, the ability of local households in each market to afford local homes has declined dramatically (Exhibit 2):

- In first quarter 2012, 51% of Los Angeles County’s households were able to afford the 50% of homes sold at the county’s median priced home or below, a balanced market. By fourth quarter 2018, just 22% of the county’s families could afford homes sold at the median price ($629,000). That meant that 78% of local households could not afford a significant share of the least expensive 50% of homes sold in the county. Those households could only buy the reduced share of homes selling well under the median price.

- In San Diego County, the first quarter 2012 affordability rate was 46%, a slightly unbalance market. By late 2018, only 23% of local households could afford to buy median priced homes ($650,000). The other 77% of local households could not afford a major share of the least expensive 50% of homes sold in the county. Those households could also only buy the reduced share of dwellings selling well under the median price.

- In Orange County, the share of households that could afford the median priced home was a relatively low 39% in 2012, already an unbalanced market. By late 2018, only 20% of local households could afford to buy median priced homes ($830,000). That meant that 80% of local households could not afford a very large share of the least costly 50% of homes sold in the county. A majority of the county’s households could only afford the small share of homes selling well below the median price.

- In the SF Bay Area, by late 2018, only 18% of local households could afford to buy median priced homes ($950,000). That meant that 82% of local households could not afford a very large share of the least costly 50% of homes sold in the county (not shown). A majority of the county’s households could only afford the small share of homes selling far below the median price.

In each of these cases, in late 2018, only people at the high end of the income distribution could afford the vast share of homes sold in Southern California’s coastal counties. And, the inland counties were no longer total exceptions:

- By late 2018, the ability of Inland Empire households to afford the median home ($362,500) was down to 41%. The other 59% could only afford homes selling for prices below its median of $362,500.

- By late 2018, the ability of Central Valley households to afford the median home ($300,000) was down to 44%. The other 56% could only afford homes selling for prices below its median of $300,000.

In the inland markets, the purchase of homes has often been by families forced to buy at lower inland prices. Some have had no choice, others want upscale homes that they cannot afford in the coastal markets. Thus in the Inland Empire, the cities closest to Orange, Los Angeles and San Diego counties have the highest prices. Also, the inland counties nearest the SF Bay Area now have the highest prices in the Central Valley (San Joaquin, Stanislaus). These factors have contributed to the inland markets leading California in population growth rates.

**INCOME REQUIREMENTS**

The California Real Estate Association maintains two indices measuring the monthly payments by market, including taxes and insurance. They show the payments needed to buy homes as well as the incomes needed to afford those payments. One is for the median priced home; the other is for the lower priced homes for first time buyers. Looking at the median priced homes shown on Exhibit 1, the following are the income needs (Exhibit 3):

- SF Bay Area is the most difficult. Its extremely high median prices required an income of $202,650 to make $5,070 monthly payments for a $950,000 home. The region’s 2017 median income was $103,043.

- Orange County households would need an income of $177,050 to afford the $4,430 in monthly mortgage, tax and insurance payments for a $830,000 median priced home. The county’s 2017 median household income was only $86,217.
San Diego County households would need a income of $138,650 to cover the $3,470 payments for mortgages, taxes and insurance payments for a $650,000 median priced home. The county’s 2017 median household income was just $76,207.

Los Angeles County households would need to earn $134,160 to make monthly payments of $3,350 for a $629,000 median priced home. Its 2017 median income was only $65,006.

Inland Empire households would need an income of $77,330 to make $1,930 in monthly payments for a $362,500 median priced house. Its median income was just $62,303.

Central Valley households would need an income of $64,023 to make $1,602 in monthly payments on a $300,000 median priced home. The area’s 2017 median household income was $54,359.

Together, these figures show why many moderate and low income families are being forced to migrate from California’s coastal counties into its inland counties.

SINGLE FAMILY FIRST TIME HOMES AFFORDABILITY

Assuming a buyer can find access to the affordable first time homes shown on Exhibit 1, the situation is not much better for potential buyers (Exhibit 4):

Los Angeles County households would need to earn $86,690 to make monthly payments of $2,890 on a $534,600 first time home. Its 2017 median home was only $65,006.

Inland Empire households would need an income of $49,970 to pay $1,408 per month on a $248,000 beginning home. Its median income was $54,359. These homes are only available deeper inland in cities like Merced ($244,750) and Madera ($248,000).

Central Valley households would need an income of $41,365 to pay $1,408 per month on a $248,028 beginning home. Its median income was $54,359. These homes are only available deeper inland in cities like Merced ($244,750) and Madera ($248,000).

APARTMENT AFFORDABILITY

A similar dynamic has shown up in apartment markets. In 2018, apartment rents averaged $2,267 in Los Angeles County. It was $2,035 in Orange County, $1,978 in San Diego County and $1,457 in the Inland Empire (see Exhibit 5 on page 4). Average coastal county rents were thus $521 to $810 a month higher than in the inland counties. This represented another incentive for families to migrate inland.

In 2017, the American Community Survey found that in every Southern California market, over 56% of families in apartments were putting in excess of 30% of their incomes into rent payments. It was 51% in the Bay Area (Exhibit 6, page 4). These figures are well above the standard at which rents are found to be reasonable and affordable. It again shows that the lack of housing supply is creating a serious problem for families by taking inordinate amounts of household incomes.

RAMIFICATIONS

Unless modestly educated, less affluent families are already homeowners or have long term rental agreements in the coastal counties, they will ultimately have no choice but to migrate to the Inland Empire or the Central Valley. This will put increasing pressure on inland school systems and public agencies. Long distance commuting will grow as workers are forced away from their jobs, causing increased levels of vehicle pollution. The costs of commuting to workers will reduce the disposable incomes of families already under pressure. It seems ironic that the inability or unwillingness of legislators who declare themselves worried about poverty and environmental issues will not amend CEQA to end its role in this situation.

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.
**Apartment Lease Rates.** Southern California's lack of residential construction has also shown up in rapidly rising rental levels in the apartment market. In 2018, USC has found that the average rent in Los Angeles County has reached $2,267 a month. It is $2,035 in Orange County and $1,978 in San Diego County. While less expensive, the average rent in the Inland Empire is still $1,457 a month. By county, a family migrating inland from Los Angeles would save $810 a month; it would be $578 a month from Orange and $521 a month from San Diego. Coastal rents are thus moving beyond the affordability of local families.

**Rent Share of Income.** A measure of reasonable rent per year for a family is for it not to exceed 30% of income. Looking at California’s major markets, all of them find that over half of families are paying over that threshold. According to the American Community Survey, the share of Inland Empire renters paying over 30% of their incomes was 58.8%. It was 58.3% in Los Angeles, 57.7% in Orange, 57.5% in Ventura and 57.2% in San Diego. In the Bay Area, it was 51.1%. In effect, families are faced with extraordinary housing issues whether they live in apartments or attempt to buy homes.

**Logistics Sector Growth.** Recent work by the Brookings Institute confirmed that the most important sector powering the Inland Empire’s growth has been the logistics sector. This group of companies includes firms operating in wholesale trade, trucking and public warehousing. The inland area’s natural advantages for the sector have made it the center for handling goods that Southern Californians order on-line as well as for consolidating products slated for later national distribution. In 2018, the group added another 11,000 jobs. Since the turnaround began in 2011, the sector has created 82,000 jobs or 23.5% of new direct inland employment opportunities.

**Health Care Sector Growth.** A 2018 disappointment was employment growth in the Inland Empire’s ambulatory care practices, hospitals and care operations. While the Affordable Care Act (ACA) has increased the demand for health services, the sector added only 1,800 jobs in 2018. Partly, this was due to constant assaults on the ACA by the President, Congress and some courts leaving providers unsure of their future revenues and thus reluctant to hire. Also, there has been the fact that much of the growth came from poorer families on Medicaid where the government only pays health care operations 65% of their costs forcing them to try to do more with less staff.
With the twelve monthly estimates of the Inland Empire’s job growth from 2017-2018 completed, the difficulty analysts face is that CA Employment Development Department (EDD) estimates (44,458 new jobs; 3.0%) must now be revised to hard data findings by U.S. Bureau of Labor Statistics (BLS). In 2017, the gain was 49,433 (3.5%) indicating somewhat of a slowing in the inland area’s still strong growth (Exhibit 9). Looking at the period since the Great Recession, the Inland Empire has added 344,783 jobs or 29.6% to its local job base (Exhibit 10). That growth led all metropolitan areas in California.

**CLEAN WORK, GOOD PAY: 5,725; 1.7% growth; 12.9% share**

Job growth from 2017-2018 in sectors that pay a median of over $60,000 is estimated at 5,725, up 1.7% responsible for 12.9% of new jobs. Higher education’s growth rate led, up 1,525 (7.8%). Local government grew by 1,633 positions (2.1%). Federal and state government added 525 workers (1.4%). Health Care was up 1,792 jobs, a weak result for that sector (1.3%). Management and professions added 425 jobs (0.9%). Utilities gained 25 positions (0.5%). Miners contracted (-8; -0.9%). Information was off -192 jobs (-1.7%). This group represented 12.9% of new jobs in 2018 compared to 31.7% for California.

**CLEAN WORK, MODERATE PAY: 176,800; 2.9% growth; 37.5% share**

From 2017-2018, the Inland Empire’s sectors paying moderately ($45,000-$60,000) to office-based workers are estimated to have gained 16,692 workers (2.9%) and 36.0% share of new jobs. The share of growth was only 6.8% of California’s estimated to have gained 6,025 workers (3.4%). Transportation added 10,967 workers as ecommerce led the way ($60,000). K-12 education added 5,617 jobs (4.2%). Other services such as auto shops added 833 (1.6%). Accommodation fell 283 jobs (-1.7%). This group represented 12.9% of new jobs in 2018 compared to 31.7% for California.

**DIRTY WORK, MODERATE PAY: 16,017 Jobs; 4.3% growth; 36.0% share**

Blue collar and technical jobs in the Inland Empire ($45,000-$60,000) grew by 16,017 jobs (4.3%) during 2018. Distribution and transportation added 10,967 workers as ecommerce led the way (6.1%). Construction added 4,308 jobs (4.4%) as infrastructure and industrial projects continued and home building saw some life. Manufacturing gained 742 positions (0.8%) due to the difficulty of doing business in California. For 2018, this group represented 36.0% of new jobs compared to 22.8% for California.

**LOWER PAYING JOBS: 16,692 Jobs; 2.9% growth; 37.5% share**

The Inland Empire’s lower paying sectors ($30,000 or less) added 16,692 jobs (2.9%) in 2018 and 37.5% of overall job growth. California saw these sectors account for 38.7% of the state’s growth. The fastest growth was in employment agencies, up 3,900 jobs (8.8%). Amusement was next, up 1,117 (5.7%). Social assistance ranked third with 3,458 new positions (5.0%). Firms providing services to office firms grew by 1,858 jobs (3.4%) followed by the eating & drinking group which continued its expansion, up 4,117 jobs (3.2%). Other services such as auto shops added 833 (1.6%). Retail trade felt the impact of e-commerce and added only 2,975 workers (1.6%). Accommodation fell 283 jobs (-1.6%). Agriculture also shrank (-1,283; -8.9%).

**COMMENT**

Last year, the QER forecasted that 2018 would see 45,000 more jobs in 2018, up 3.1%. EDD’s preliminary estimate for 2018 has come in at 44,458 new jobs and growth of 3.0%. Unemployment was forecasted at 4.7% for the full year. EDD has estimated it at 4.2%. EDD’s data will be revised in March 2018 to show the actual results. With these new estimates, the Inland Empire has added 344,783 jobs in 2011 through 2018 (Exhibit 10) and exceeds its pre-recession level in 2007 by 204,133 locally employed workers or 15.6%. California stands up 11.0% and the U.S. up 8.6% from 2007.
Industrial Space Net Absorption. For the four quarters ended in December 2018, industrial firms took a net of 22.0 million square feet of Inland Empire space. That was up from 19.4 million for 2017. Absorption is occurring partly due to record growth of imported cargo at the ports of L.A. and Long Beach which reached 9.1 million 20-foot equivalent containers in 2018. Importantly, the surge in large new fulfillment centers in the inland area has continued. They are needed to process and ship goods to families throughout Southern California in the rapidly expanded e-commerce market. Absorption kept the vacancy rate at a very low 3.7%.

Industrial Construction. One reason that the Inland Empire’s construction employment has strengthened has been the strong demand to build new industrial facilities. There was 23.1 million square feet under construction in December 2018 or 72.7% of the space being built in Southern California. That was nearly four times the amount in second placed Los Angeles County (19.0%). Completed facilities (not shown) in L.A. County totaled 951.4 million square feet (54.7%) in December 2018. It was 531.4 million in the Inland Empire (30.5%), and 257.2 million in Orange County (14.8%). The inland facilities are the newest and tallest, better at accommodating e-commerce companies.

Assessed Valuation. An issue faced by the Inland Empire’s local governments was the deep decline in assessed valuation and property taxes during the Great Recession. In 2008, property values peaked at $236.9 billion in Riverside County and $181.8 billion in San Bernardino County. These figures respectively plunged -16.5% and -11.2% in the Great recession. By July 1, 2018, Riverside County was back to $276.9 billion, 16.9% above its peak. Still, that gain was below the 18.2% gain in prices meaning the purchasing power of its property taxes had not fully recovered. San Bernardino County was up to $221.7 billion, a 21.9% gain over 2008. Its property tax inflation adjusted purchasing power is at a record.

Construction Job Growth. Since 2012, the construction sector has been continuously adding jobs as it has climbed back from the disastrous cutbacks that occurred in the Great Recession. In that period, employment fell from 127,500 in 2006 to just 59,100 in 2011, down -68,400 jobs or -53.6%. Reasonably strong job growth since that time have brought it back to 101,300 workers in 2018. It has been the Inland Empire’s second strongest source of job growth for that period, up 42,200 jobs. However, this has still left it 20.5% fewer workers than in 2006. Modest new home development has led to restrained job growth, while industrial and infrastructure projects have boosted the sector.
INLAND EMPIRE: Housing Volumes Some Growth, Home Prices Soaring

Before the Great Recession in 2006, 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 $457,228 in fourth quarter 2018, 4.6% above the earlier peak. Existing homes were at $350,339, but still -10.1% below its peak. With FHA’s new 2019 conforming loan maximum at $484,450, it is again possible for most home buyers to finance new and existing homes in the Inland Empire’s markets (Exhibit 17).

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 settling at 14,789 sales in fourth quarter 2018 (not shown). High prices and recent mortgage rates have been the culprits. Meanwhile, San Bernardino County’s combined median home price ($332,000) is $287,000 to $465,000 below prices in the coastal counties and Riverside County’s combined median ($396,000) is $223,000 to $401,000 lower.

Looking at raw volume data, Riverside County had 6,847 existing home sales in fourth quarter 2018, down -11.3% from 7,717 in 2017 (Exhibit 16). San Bernardino County had 5,434 existing home sales, down -12.1% from 6,179 in fourth quarter 2017. By sub-market, Riverside city had the smallest percentage loss (916; -2.4%) with I-215 South the volume leader (1,496; -7.1%). In San Bernardino County, the Victor Valley had the smallest percentage loss (1,171; -4.6%) while it led in volume.

New home sales were a mixed picture. Riverside County’s fourth quarter 2018 volume was 1,552, up 14.1% from 1,357 in 2017. Its largest percentage gain was in the Coachella Valley (119, 88.9%). The volume leader was I-15 South (453; 35.2%). San Bernardino County’s volume was 818, down -17.3% from fourth quarter 2017’s volume of 989. The area west of the I-15 had the smallest percentage loss (476; -7.0%) and was the volume leader.

Prices. Riverside County’s $441,000 new home price in fourth quarter 2018 was up 4.4% from the prior year’s $422,500 (Exhibit 15). Its $385,000 existing home price was up 5.5% from $365,000 in fourth quarter 2017. San Bernardino County’s new home price of $488,000 was up 5.6% from its fourth quarter 2017 price of $462,000. Its fourth quarter 2018 existing home price of $310,000 was up 3.3% from fourth quarter last year ($300,000).

In Southern California, the fourth quarter 2018 new home median price was up 6.7% from $613,100 in 2017 to $654,200; the existing home median increased 2.6% from $526,100 to $540,000.

Looking Ahead. As was the case in 2017, 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 2018. In addition, the fact that inland affordability is 43% versus 20% to 23% 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 become relatively more expensive.