

The 2013-2018 Annual Update

November 2017

Comprehensive Economic Development Strategy

Presented by

County of Orange Orange County Development Board



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INTRODUCTION

In 2013, the Orange County Development Board (OCDB), then known as the Orange County Workforce Investment Board (OCWIB), created a five-year plan for preserving Orange County's competitive advantages, addressing the county's weaknesses, and making the most of future opportunities. As part of this five-year plan, this report serves to identify census tracts and cities in Orange County currently underperforming economically in comparison to national averages. This information will help local policymakers and stakeholders create better strategies and programs aimed at improving these economically disadvantaged regions and lifting them out of "Red-Zone" status. A Red-Zone is defined as a census tract with an unemployment rate at least 2 percent higher than the national average and a Gross Domestic Product (GDP) of 80 percent or less of the national average.

The 2013-2018 Comprehensive Economic Development Strategy (CEDS) has five overarching goals for Orange County:

- 1. Advancing the lives of its Red-Zone residents by:
 - a. Pursuing policies, projects and programs aimed at creating jobs in Red-Zones;
 - b. Promoting future economic opportunities through increased educational attainment;
 - c. Increasing the reach of programs similar to Latino Educational Attainment Initiative;
 - d. Developing, expanding and upgrading the skills of the existing workforce.
- 2. Providing world-class education and workforce development opportunities by:
 - a. Ensuring businesses have enough skilled workers to meet their workforce needs;
 - b. Supporting education systems at all levels ensuring college- and career-readiness;
 - c. Attracting and retaining highly-skilled graduates, in particular, those in STEM disciplines;
 - d. Supporting collaborative education programs that link academia with the private sector.
- 3. Planning and developing state-of-the-art infrastructure by:
 - a. Developing and improving infrastructure to support economic growth and development;
 - b. Supporting the expansion of communication networks such as broadband and wireless;
 - c. Supporting, protecting and implementing Measure M2 provisions;
 - d. Supporting public-private partnerships to develop and deliver critical infrastructure.
- 4. Promoting competitive and growing Industry Clusters by:
 - a. Conducting ongoing research and analysis on critical drivers of key industry clusters;
 - b. Encouraging the expansion and retention of targeted industry clusters;
 - c. Developing a cluster-based economic development and workforce development culture;
 - d. Expanding customized, cluster-based education and training programs.

- 5. Improving Orange County's competitiveness in a global economy by:
 - a. Promoting a business-friendly environment to sustain economic competitiveness.
 - b. Expanding the existing job base by focusing on attracting new businesses and industries;
 - c. Identifying opportunities to lower the costs of doing business in the area;
 - d. Promoting the area as a national and international center for business, global trade and development.

Developed by the Orange County Business Council (OCBC) with oversight from the Orange County Development Board (OCDB), the Orange County CEDS report is updated on an annual basis in order to track the county's progress towards the 5-year plan goals. The county economy has undergone several significant changes since the 2013-2018 CEDS first took effect and since last year's update: employment growth in several key industry clusters, rising home prices and rental rates, a reduction in bus ridership and corresponding increase in use of toll roads, and the groundwork for a new alternative fuel infrastructure. Furthermore, the county is undergoing several long-term changes both at the local level, such as the transition towards an older and more ethnically diverse population, and at the national level, such as rapid technological advancement that threatens to replace many current jobs.

In last year's CEDS report, 71 "Red-Zone" census tracts were identified based on unemployment rates and per capita incomes which fell significantly below national averages. According to new data sets provided by the U.S. Census Bureau, the number of "Red-Zone" census tracts in the county fell dramatically to 52. By providing an economic analysis at the census tract, city and county level, this report provides Orange County policymakers with the information they need to create strategies for further enhancing the Orange County economy while also continuing to improve the overall quality of life for Orange County residents at all income levels.

RED-ZONE ANALYSIS: 2017 UPDATE

An Orange County census tract has to meet the following criteria to be classified as Red-Zone:

Based on the 2015 U.S. unemployment rate of 8.3 percent and 2015 per capita income of \$28,930, the threshold for Red-Zones included an unemployment rate of 10.3 percent or more and per capita income of \$23,144 or less. This report used the most recent data available at the census tract level from the U.S. Census' 2015 American Community Survey to identify Red-Zones in Orange County. The number of Red-Zones in

Orange County has decreased dramatically, falling from last year's total of 71 to 52 in this 2017 update. This suggests significant local economic improvements as a large number of census tracts were able to reduce their overall unemployment rates while increasing their overall per capita incomes.

RED-ZONES BY CITY

Thanks to drastically improved economic conditions during 2017, a number of Orange County cities were able to significantly reduce the number of Red-Zone census tracts within their borders. Despite being a lagging indicator, the Red-Zone analysis helps to highlight economic improvements at a more granular level which, in turn, allows for more specific, targeted strategies.

Several Orange County cities were able to reduce the number of Red-Zone census tracts including Anaheim, which saw its number of Red-Zone census tracts decrease from 19 to 13, and Santa Ana which saw its number of census tracts drop from 15 to 8. While these two cities were able to reduce their number of Red-Zone census tracts, several cities added Red-Zone census tracts including Costa Mesa, Garden Grove, Irvine, and San Juan Capistrano, a city which had no Red-Zone census tracts last year.

In addition to specific census tracts, several Orange County cities had average per capita incomes below the Red-Zone threshold of \$23,144: Garden Grove (\$21,275), Stanton (\$18,892), and Santa Ana (\$16,335). No Orange County city, however, met both conditions to be identified as Red-Zone census tracts. All Orange County cities have unemployment rates below the Red-Zone threshold of 10.3 percent, indicating significant improvements in their overall labor markets.

RED-ZONES BY TRACT

Orange County has a total of 52 Red-Zone tracts as of 2017, a drastic improvement from last year's total of 71. Costa Mesa and Garden Grove added a combined 4 Red-Zone census tracts while Anaheim and Santa Ana removed a combined 13 Red-Zone census tracts. Overall, 43 census tracts remained on the Red-Zone list while 25 were removed and 9 were added, providing a total of 52 Red-Zone census tracts in Orange County in 2017. Irvine has had a census tract on the list since 2015 and added another census tract this year, despite having a low unemployment rate of 6.4 percent and an average per capita income of \$43,836, almost twice the Red-Zone threshold. One of these census tracts is located near the University of California, Irvine, campus, which suggests that it is primarily composed of students, explaining both its low per capita income and high rate of unemployment. The other census tract is located

within the old Marine Corps Air Station at El Toro currently identified as the Great Parks area. Throughout 2015 and 2016, several construction projects in the area disrupted the local economy; the area is expected to get to normal once these projects are finished. Irvine's two Red-Zone tracts illustrate how Red-Zone status can reflect a number of different issues facing various communities. Red-Zone status can reflect a number of different issues facing various communities. Comprehensive data on Orange County's Red-Zone tracts can be found in the appendix.

Red-Zone Tracts	2013	2014	2015	2016	2017
Anaheim	19	22	18	22	13
Buena Park	1	2	2	0	0
Costa Mesa	1	3	3	2	3
Fullerton	4	6	7	6	6
Garden Grove	14	10	11	9	7
Huntington Beach	1	1	1	1	1
Irvine	0	0	1	1	2
La Habra	0	2	3	4	4
Mission Viejo	0	0	1	0	0
Orange	2	1	1	1	0
Placentia	2	2	1	1	1
Santa Ana	18	18	13	15	8
San Juan Capistrano	0	0	1	0	1
Stanton	4	5	5	5	4
Westminster	5	6	4	4	2
Total	71	78	72	71	52

Source: OCBC Analysis of American Community Survey Data, September 2017

SUMMARY

While the number of Red-Zones in Orange County has significantly decreased, a number of tracts from last year's report remain on this list,

emphasizing the continued need for additional support programs in these disadvantaged communities. Ensuring that cities and census tracts stay off this list is just as important as removing existing Red-Zones from the list, as 9 new census tracts became Red-Zones this year. To this end, local policymakers and stakeholders need to ensure that all areas in Orange County are properly served and, while the focus should be on currently struggling areas, other areas should not be overlooked.

The next section of this report will provide an overview of recent economic and demographic trends in Orange County, a summary intended to provide readers with a detailed picture of the current economic landscape as well as the

foreseeable future. While no Orange County city itself fell into the Red-Zone designation, several cities had higher numbers of Red-Zone census tracts – Anaheim (13 Red-Zone census tracts), Santa Ana (8 Red-Zone census tracts), and Garden Grove (7 Red-Zone census tracts)-- potentially putting them at risk of falling into the Red-Zone designation at some point in the future. With the overall Orange County economy improving in the last year, these cities noticeably reducing the number of Red-Zone census tracts compared to the 2016 CEDS update demonstrates improved economic and workforce development efforts within their borders.

CEDS GOALS AND THE CURRENT ORANGE COUNTY ECONOMIC CLIMATE

Orange County's five overarching goals for the 2013-2018 CEDS focus on the relationship between workforce, infrastructure, industry clusters and low-income residents.

The initial goals put forth by the CEDS are as follows:

- Goal 1: Advance the Lives of Red-Zone Residents
- Goal 2: Provide World-Class Education and Workforce Opportunities
- ➤ Goal 3: Plan and Develop State-of-the-Art Infrastructure
- Goal 4: Promote Competitive and Growing Clusters
- ➤ Goal 5: Improve Orange County's Economic Competitiveness in a Global Economy

While these goals remain the same, Orange County's economic climate has undergone changes since they were first identified. So far, 2017 has been characterized by:

- > Employment improvements for several key industry sectors including Construction, Health Care, and Leisure and Hospitality;
- Housing prices and employment levels surpassing pre-recession levels;
- Increasing concerns of affordability which may impact the region's ability to maintain a talented pool of qualified workers;
- A reduction in bus ridership;
- An increasing number of drivers using toll roads; and
- Continued infrastructure investment that increases the economic viability of alternative fuel vehicles.

Additionally, there are several exciting new developments supporting CEDS implementation that have already launched this year. In this update, we hope to mention these and other changes in brief to summarize how Orange County is able to adapt to the shifting economic climate while remaining on track to achieve the 2013-2018 CEDS goals.

ORANGE COUNTY ECONOMIC OVERVIEW: 2016 TO PRESENT

Orange County remains an economic driver for Southern California and continues to outperform neighboring counties and the state and country as a whole. After experiencing tremendous growth in 2015 and 2016, the county's economy grew at a slower place in 2017. Since the beginning of 2015, Orange County has seen decreasing unemployment, increasing employment in highgrowth, high-wage industries, a surging housing market, and improvements in educational attainment rates. Despite these positive short-

term improvements, a variety of factors – the interest rate, environment, global economic issues, national political uncertainty, major demographic shifts, and the ongoing transformation of the economy by technology – prevent a clear long-term forecast and underscore the need to preserve the county's competitive advantages. This section provides an overview of Orange County's current economic climate, focusing on the economic and demographic trends that may shape the county's future.

DEMOGRAPHICS

Age and Diversity Continue to Increase

Orange County has seen its population grow older and more diverse since the 1990s, a trend expected to continue for the foreseeable future. The county's median age was 37.8 in 2016, 1.5 years older than the median age of 36.3 in 2010 and 4.5 years older than the median age of 33.3 in 2000. This trend is driven by two primary factors: the aging of the Baby Boomers, America's second largest generation, a national trend that will have an especially significant impact on Orange County, and the pricing out of younger families in the county's expensive housing market.

The aging of the county's Baby Boomers has been accompanied by a decrease in the population of younger age groups, as seen in the following chart. County residents aged 15-19, for example, made up only 6.6 percent of the total

population in 2016, 0.5 percent less than in 2012; the percentage of residents aged 20-24 decreased by 0.5 percent during the same period. At the same time, residents aged 65 made up 12.3 percent in 2012 and has since increased to 14.0 percent in 2016. The county's high home and rental prices have played a major role in this shift by encouraging many young people – especially those already burdened by student debt – to move to more affordable areas.

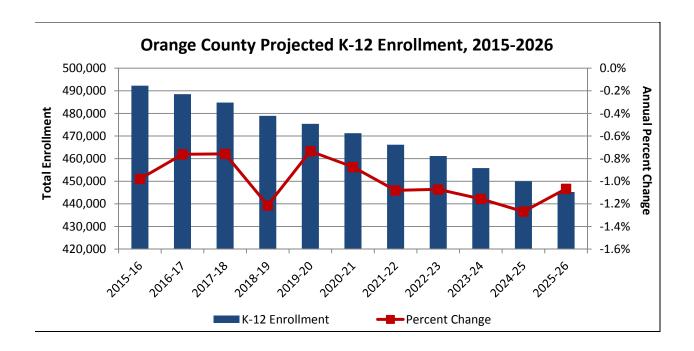
The graph on the following page shows one major impact of this trend, rapid declines in K-12 enrollment. The California Department of Finance estimates that K-12 enrollment will decrease from 492,246 in 2015-2016 to 445,238 in the 2025-2026 school year, a reduction of approximately 47,000 students or 9.5 percent.

This trend of rapid aging in place could have disastrous consequences for Orange County because it threatens one of its main competitive advantages, a deep talent pool. An aging population combined with lower amounts of

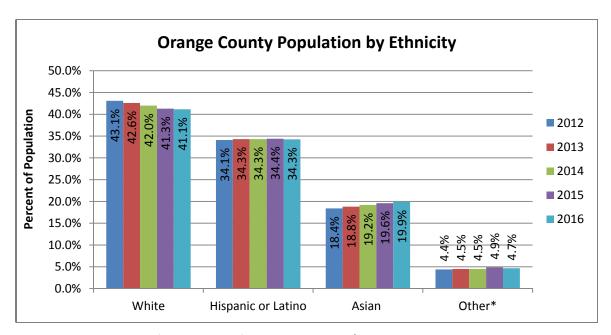
working age residents could have an especially profound impact on the Health Care industry, as aging residents will require Healthcare services that employers may not have enough workers to provide.

Source: U.S. Census - American Community Survey, September 2017

Population by Age	2012	2013	2014	2015	2016
Total	3,084,935	3,112,576	3,134,438	3,156,573	3,172,532
5 and Below	6.2%	6.1%	6.0%	6.0%	6.0%
5-9	6.5%	6.5%	6.3%	6.2%	6.0%
10-14	6.7%	6.6%	6.5%	6.4%	6.5%
15-19	7.1%	6.9%	6.8%	6.7%	6.6%
20-24	7.4%	7.4%	7.3%	7.1%	6.9%
25-29	7.1%	7.1%	7.2%	7.4%	7.5%
30-34	6.7%	6.8%	6.9%	6.8%	6.8%
35-39	6.6%	6.5%	6.4%	6.4%	6.6%
40-44	7.4%	7.3%	7.2%	6.9%	6.4%
45-49	7.4%	7.3%	7.2%	7.2%	7.3%
50-54	7.2%	7.3%	7.3%	7.3%	7.2%
55-59	6.2%	6.4%	6.5%	6.6%	6.6%
60-64	5.0%	5.1%	5.2%	5.4%	5.8%
65-69	4.0%	4.1%	4.3%	4.4%	4.6%
70-74	2.8%	3.0%	3.1%	3.2%	3.3%
75-79	2.1%	2.2%	2.3%	2.3%	2.4%
80-84	1.7%	1.7%	1.7%	1.7%	1.7%
85 and Above	1.8%	1.8%	1.8%	1.9%	2.0%



Source: California Department of Finance, Demographic Research Unit, December 2016



Source: U.S. Census - American Community Survey, September 2017

Orange County's population is also growing more diverse, as seen in the above chart, with

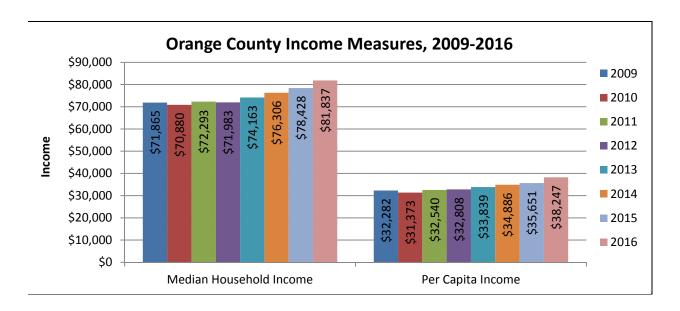
the county's Asian and Hispanic or Latino populations increasing by 1.5 percentage points

and 0.2 percentage points, respectively, between 2012 and 2016.

INCOME GROWTH RECOVERED AND IS ACCELERATING

Orange County's ability to attract and retain first-class businesses has been a major competitive advantage over the past decades; these businesses provide above-average wages and drive industry cluster growth. While median and per capita incomes fell during the Great Recession, between 2008 and 2009, and further in 2010, Orange County's strong economic foundation enabled it to make a strong recovery. In 2011, the return in wage growth has driven consumer spending and, in turn, regional Gross Domestic Product (GDP) growth, as seen in the following chart. The county's median household

income reached \$81,837 in 2016, 4.3 percent higher than in 2015 and 15.5 percent higher than 2010's 5-year low of \$70,880. Per capita income has experienced similar growth, reaching \$38,247 in 2016, which represents year-over-year growth of 7.3 percent and 21.9 percent growth since 2010. The median earnings for Orange County males totaled \$55,574 in 2016, representing a premium of \$5,051 or 9.9 percent over median female earnings for the same year. The wages increases are especially welcome considering Orange County's relatively high cost of living.



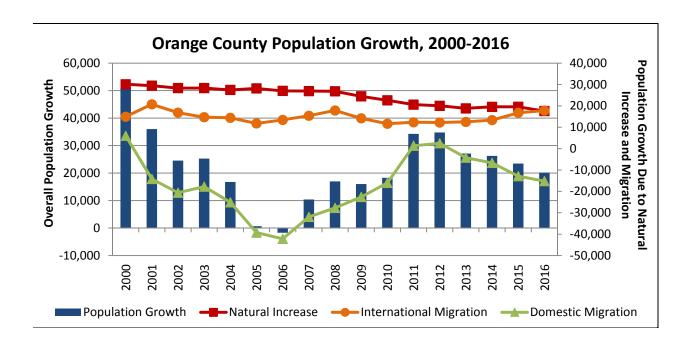
Source: U.S. Census - American Community Survey, September 2017

POPULATION GROWTH PROJECTED TO SLOW

Orange County's population growth during the 1970s and 1980s was primarily driven by migration from other areas rather than natural increase (births minus deaths), a trend that has reversed in

recent years due in part to the county's extremely high cost of living. Orange County's population increased by 166,409 between 2010 and 2016; natural increase accounted for 121,105 new

residents, 72.8 percent of this growth. Orange County gained 20,153 residents from natural increase and only 2,578 from migration in 2016.

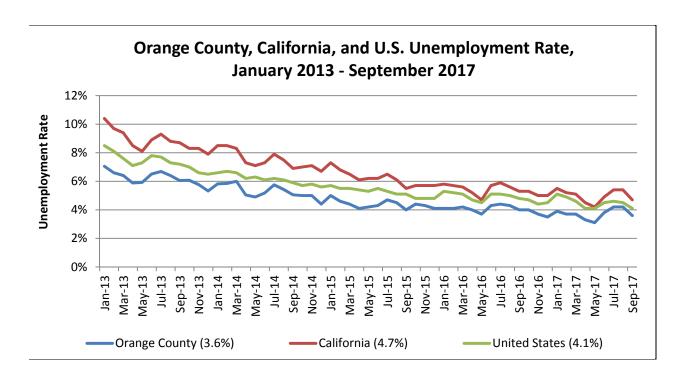


Source: California Department of Finance, Demographic Research Unit, April 2017

Employment Overview

PRE-RECESSION (2007) LEVELS OF EMPLOYMENT SURPASSED

Orange County's unemployment rate was 3.6 percent as of September 2017, significantly and than the state unemployment rates of 4.7 percent and 4.1 percent, respectively. While county unemployment has consistently trended downward throughout 2015 and 2016, it did experience a small jump in June and July 2017 due to a large number of individuals rejoining the workforce rather than a decrease employment; this trend was seen across the nation, reflecting college and university graduations taking place around this time, and is thus not unique to the regional economy. Additionally, many government-related occupations which experience seasonal employment fluctuations saw drastic reductions during summer months. This trend, coupled with an influx of recent college graduates, further shifted recent employment trends at the local, regional, state and national levels. The following graph shows county, state, and national unemployment rates from January 2013 to September 2017.

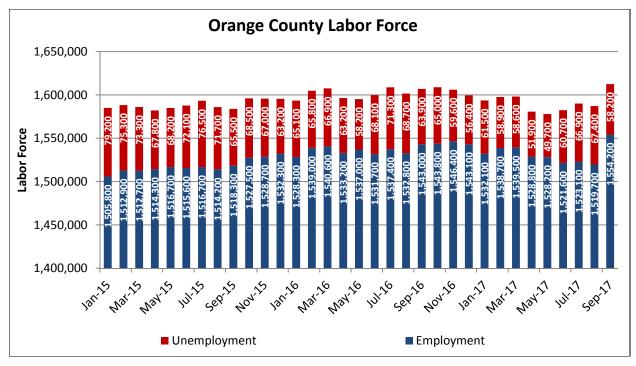


LABOR FORCE PARTICIPATION INCREASING

According to the California Employment Development Department, Orange County's total labor force has grown steadily over the past few years. While it has experienced significant fluctuations in recent months, these fluctuations represent seasonal changes which usually occur every year. As of September 2017, Orange County's total labor force was estimated at 1,612,400; while the county experienced a significant decrease in labor force participants over the summer, as seen in the graph on the next page, a significant increase in the number of employed individuals over the past month erased many of the losses experienced over the summer months.

Unemployment in Orange County dropped by almost 5,700 in between April and May 2017 but

increased dramatically by 11,000 in June 2017, 6,200 in July 2017 and finally by 500 in August 2017. The decreases in the number of unemployed individuals during the summer months in Orange County reflect the seasonality of certain occupations, trends which happened at the state and national level as well. As of September 2017, Orange County was able to reduce unemployment by 5,700, mitigating some of the seasonal affects previously mentioned. In total, 1,554,200 county residents were employed as of September 2017, representing a year-over-year increase of 11,200. The following graph shows county employment and unemployment figures for the past three years.



INDUSTRY EMPLOYMENT CONTINUES STRONG GROWTH TRENDS

As of September 2017, Professional & Business Services, Leisure & Hospitality, and Education & Health Services continue to be the largest employment industries in Orange County, respectively providing 18.8 percent, 13.8 percent, and 12.9 percent of the county's total nonfarm employment; the following graph illustrates changes in county employment by industry since January 2016 and January 2017. Leisure and Hospitality saw the largest absolute growth since January 2016, adding 14,500 jobs, representing growth of 7.1 percent, followed by Construction which added 12,000 jobs during the same time period, an increase of 12.8 percent that surpassed pre-recession construction employment by 2,000 jobs. Professional and Business Services and Financial Activities industries also saw significant job growth over this period. Over the past year,

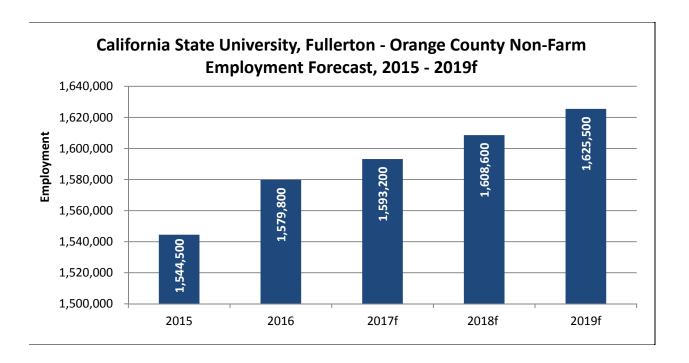
Construction added 7,800 jobs, followed by Leisure and Hospitality which added 4,500 and Other Services which added 1,700 during the same time period.

Several industries lost jobs since January 2016 despite overall economic growth. Significant losses were experienced in Government, which saw total employment decrease by 3,200 since January 2016, most likely a result of seasonal employment, followed by Nondurable Goods Manufacturing which shrunk by 1,900 and Durable Goods Manufacturing and Retail Trade which both shed 1,100 jobs during the same time period. The biggest losses over the past year occurred in Government (-3,200 jobs), Durable Goods Manufacturing (-2,900 jobs) and Nondurable Goods Manufacturing (-2,400 jobs).

Orange County Industry Employment	January 2016	January 2017	September 2017
Mining and Logging	600	500	500
Construction	94,100	94,800	106,100
Durable Goods Manufacturing	113,900	114,500	112,800
Nondurable Goods Manufacturing	41,400	40,200	39,500
Wholesale Trade	80,400	81,200	81,000
Retail Trade	152,400	152,700	151,300
Transportation, Warehousing & Utilities	27,000	28,900	27,400
Information	25,600	25,900	26,000
Financial Activities	115,500	117,200	118,100
Professional & Business Services	291,500	294,700	298,900
Educational & Health Services	202,400	203,000	204,700
Leisure & Hospitality	204,700	208,100	219,200
Other Services	49,100	50,700	52,300
Government	156,900	160,100	153,700

EMPLOYMENT GROWTH PROJECTED TO CONTINUE IN 2018-2019

California State University Fullerton's 2018 Economic Forecast estimates that Orange County's total nonfarm employment will reach 1,593,200 at the end of 2017 and reach 1,608,600 in 2018 followed by 1,625,500 in 2019; the California Employment Development Department (EDD) estimates the county's current nonfarm employment at 1,585,500, suggesting that county employment is growing in line with predictions by CSUF. CSUF's forecast is illustrated in the following table.



Source: OCBC Analysis of California State University, Fullerton - 2018 Economic Forecast

NOT ALL RECOVERIES ARE CREATED EQUALLY

The table on the next page shows changes in employment levels for Orange County's major industries between October 2007, September 2016, and August and September 2017. California EDD data shows that not all of the county's industries have returned to pre-recession levels of employment. A number of industries employ fewer workers than they did in October 2007, including: Nondurable Goods Manufacturing (-14,100), Durable Goods Manufacturing (-12,500), Retail Trade (-10,000), Government (-7,400), Information (-4,800), Financial Activities (-3,000) Transportation, Warehousing and Utilities (-2,100). Despite many industries experiencing employment since October falling 2007, significant job growth in Educational and Health Services (+51,300), Leisure and Hospitality

(+43,800) and Professional and Business Services (+22,300) has helped to offset losses in other industries. These shifts in industry employment reflect general economic, social and political trends. Increased employment in Educational and Health Services, for example, was likely spurred by the implementation of the Affordable Care Act (ACA), while many individuals pursued higher education during and after the recession because of a lack of available jobs.

Leisure and Hospitality has traditionally been a key industry in Orange County and has expanded greatly in recent years due to improving economic conditions which have increased both tourism and visitor spending in the region.

Orange County Ind Employment Cha	•	August 2017 September 2016		October 2007			
Industry	September 2017	Actual Change	% Change	Actual Change	% Change	Actual Change	% Change
Civilian Labor Force	1,612,400	25,300	1.6%	5,500	0.3%	2,000	0.1%
Civilian Employment	1,554,200	34,500	2.3%	11,200	0.7%	10,200	0.7%
Civilian Unemployment	58,200	-9,200	-13.6%	-5,700	-8.9%	-8,200	-12.3%
Unemployment Rate	3.6%	-0.6%	-	-0.4%	-	-0.5%	-
Total, All Industries	1,594,400	14,000	0.9%	5,800	0.4%	61,500	4.0%
Total Nonfarm	1,591,500	13,900	3.6%	5,700	0.4%	63,700	4.2%
Mining and Logging	500	0	0.0%	0	0.0%	-100	-16.7%
Construction	106,100	1,700	1.6%	7,800	7.9%	2,500	2.4%
Durable Goods Manufacturing	112,800	-200	-0.2%	-2,900	-2.5%	-12,500	-10.0%
Nondurable Goods Manufacturing	39,500	-100	-0.3%	-2,400	-5.7%	-14,100	-26.3%
Wholesale Trade	81,000	-500	-0.6%	300	0.4%	-6,600	-7.5%
Retail Trade	151,300	900	0.6%	400	0.3%	-10,000	-6.2%
Transportation, Warehousing & Utilities	27,400	-100	-0.4%	-400	-1.4%	-2,100	-7.1%
Information	26,000	-200	-0.8%	100	0.4%	-4,800	-15.6%
Financial Activities	118,100	-1,300	-1.1%	-100	-0.1%	-3,000	-2.5%
Professional & Business Services	298,900	-800	-0.3%	-600	-0.2%	22,300	8.1%
Educational & Health Services	204,700	4,400	2.2%	500	0.2%	51,300	33.4%
Leisure & Hospitality	219,200	300	0.1%	4,500	2.1%	43,800	25.0%
Other Services	52,300	300	0.6%	1,700	3.4%	4,400	9.2%
Government	153,700	9,500	6.6%	-3,200	-2.0%	-7,400	-4.6%

INCREASING WAGES HELP ADDRESS AFFORDABILITY CONCERNS

Income growth becomes even more important as housing costs continue to increase. Fortunately, Orange County's average salary has increased by \$11,284 since Q1 2007, growth of

21.9 percent. Industries experiencing the highest percentage income growth over this period include Information (62.3 percent), Real Estate (40.3 percent), and Agriculture (39.7 percent.)

Orange County has experienced decent increases in average salaries over the short-term, with the average salary increasing from \$58,188 in Q1 2016 to \$62,816 in Q1 2017, a year-over-year increase of 8.0 percent. Only one industry sector, Mining, saw its average salary decrease from Q1 2016 to Q1 2017; Mining saw a drastic reduction of almost \$50,000, or 37.5 percent, largely due to a significant decrease in Oil and Gas Extraction salaries. The Oil and Gas Extraction sub-sector experienced an equally dramatic wage increase between 2014 and 2015,

suggesting that the recent drop in salaries reflects a normalization rather than a severe decline. All other industry sectors in Orange County saw their average salaries increase both over the past year and the past decade.

The Information and Wholesale Trade industries, on the other hand, experienced the greatest short-term growth in income since 2016. Their average salaries increased by \$15,340 and \$10,660, or by 14.6 percent and 13 percent, respectively.

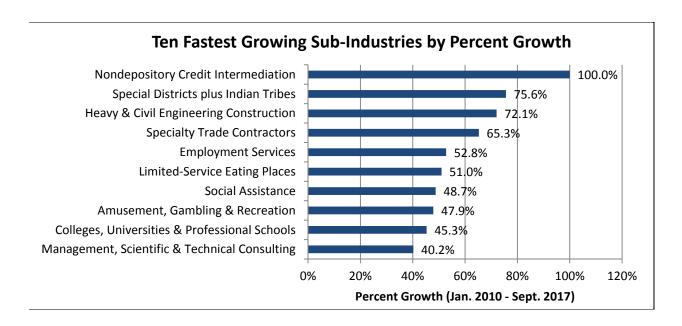
Orange County Industry Salary Change		Since Q1 (Jan-N		Since Q1 2007 (Jan-Mar)	
Industry	Q1 2017	Actual Change	Percent Change	Actual Change	Percent Change
Total, All Industries	\$62,816	\$4,628	8.0%	\$11,284	21.9%
Agriculture, Forestry & Fishing	\$34,216	\$2,444	7.7%	\$9,724	39.7%
Mining	\$83,148	-\$49,972	-37.5%	\$13,312	19.1%
Construction	\$68,432	\$4,212	6.6%	\$12,636	22.6%
Manufacturing	\$82,680	\$9,308	12.7%	\$22,568	37.5%
Wholesale Trade	\$92,716	\$10,660	13.0%	\$18,252	24.5%
Retail Trade	\$36,400	\$1,456	4.2%	\$3,120	9.4%
Transportation and Warehousing	\$53,248	\$3,224	6.4%	\$10,556	24.7%
Information	\$120,172	\$15,340	14.6%	\$46,124	62.3%
Finance and Insurance	\$117,988	\$7,488	6.8%	\$21,216	21.9%

Orange County Industry Salary Change		Since Q1 2016 (Jan-Mar)		Since Q1 2007 (Jan-Mar)	
Real Estate and Rental and Leasing	\$83,564	\$9,620	13.0%	\$24,024	40.3%
Professional and Technical Services	\$91,208	\$3,276	3.7%	\$19,032	26.4%
Management of Companies and Enterprises	\$121,940	\$4,940	4.2%	\$32,500	36.3%
Administrative and Waste Services	\$43,472	\$2,860	7.0%	\$10,972	33.8%
Educational Services	\$39,156	\$2,808	7.7%	\$5,876	17.7%
Health Care and Social Assistance	\$50,388	\$3,120	6.6%	\$4,576	10.0%
Arts, Entertainment, and Recreation	\$35,620	\$5,616	18.7%	\$9,256	35.1%
Accommodation and Food Services	\$23,192	\$1,196	5.4%	\$4,108	21.5%
Other Services, Ex. Public Admin	37,024	\$2,288	6.6%	\$8,008	27.6%

CONSTRUCTION THE CLEAR DRIVER OF EMPLOYMENT GROWTH

Non-Depository Credit Intermediation – a field including establishments that extend credit or lend funds raised by credit market borrowing – saw Orange County's highest percentage employment growth between January 2010 and September 2017, growing by 100 percent. Special Districts plus Indian Tribes and Heavy & Civil Engineering Construction also saw major growth over the same period, increasing by 75.6 and 72.1

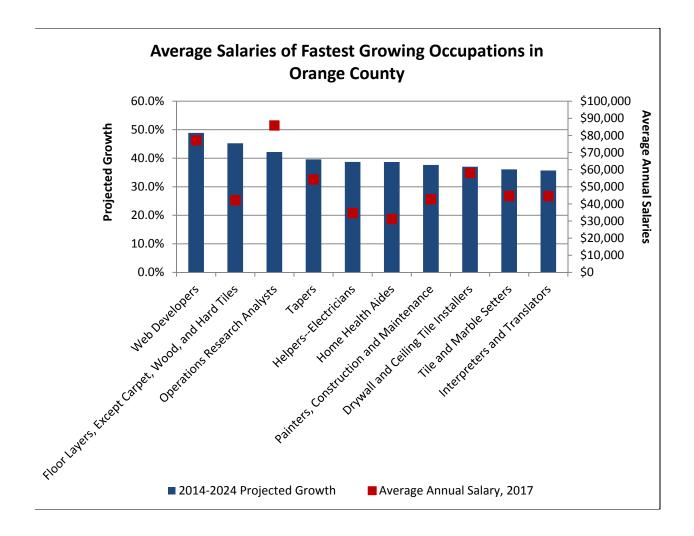
percent, respectively. Another Construction-related industry, Specialty Trade Contractors, also saw a major increase in employment as its workforce grew by 65.3 percent. Like last year, the Construction industry continues to expand as increasing incomes and housing shortages continue to spur high levels of demand for new construction. The following chart shows Orange County's ten fastest-growing industry sub-sectors



HIGH-GROWTH OCCUPATIONS REMAIN ATTRACTIVE CAREER OPPORTUNTIES

The California EDD projections show that Web Developers, Floor Layers, and Operations Research Analysts will experience the highest occupational employment growth between 2014 and 2024, increasing by 48.9 percent, 45.2 percent and 42.2 percent, respectively. These occupations also provide relatively high wages, with Web Developers earning an average salary of \$77,163 and Operations Research Analysts earning \$85,851 in 2017. A number of these occupations are construction-related, which reflects the extremely high demand for Orange County housing. For example, SOC code 47-2082, "Tapers", is a construction occupation of workers that "seal joints between plasterboard or other wallboard to prepare wall surface for painting or papering." Examples include Sheet Rock Tapers, Drywall Tapers, and Wall Tapers.

The fast growth of IT-related occupations, on the other hand, reflects the continued technological transformation of the workplace in a variety of industries. A growing number of Operations Research Analysts, for example, work in Industry 4.0 applications: connecting and automating industrial operational processes to increase overall efficiency. The new technologies driving Industry 4.0 – the Internet of Things (IOT), cloud computing, cognitive computing - will affect a number of other industries in addition to manufacturing, and Operations Research Analysts will be at the forefront of this transformation.

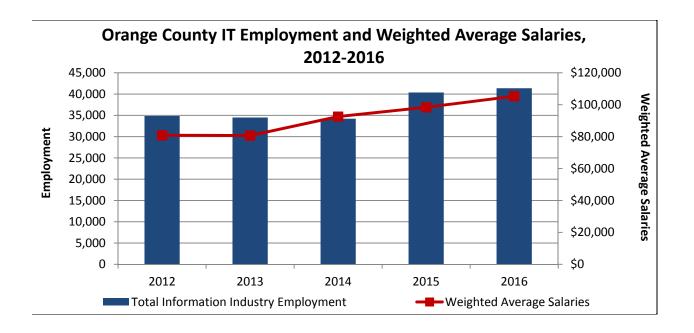


Source: OCBC Analysis of California Employment Development Department Data, March 2017

EconoVue, an intuitive data visualization and business outreach platform, estimates that Information Technology (IT) employment in Orange County totaled 41,362 in 2016, an increase of 2.4 percent over the previous year. Within the IT sector, Cable Distribution made up 16,353 or 39.5 percent of total IT jobs and Software Publishers made up 14,138 or 34.2 percent of total IT employment. These IT occupations had a weighted average salary of

\$105,322 in 2016, an increase of 7.0 percent over the year before.

Technology's constant evolution, as mentioned before, means that this industry's future importance cannot be understated; local policymakers and stakeholders need to anticipate IT's potential to disrupt conventional industries and find ways to ensure that these disruptions provide a net benefit to the local economy.



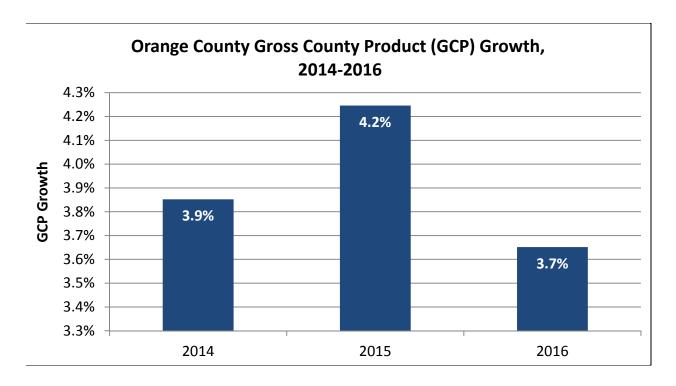
Source: EconoVue, August 2017

ECONOMIC DEVELOPMENT

ORANGE COUNTY'S GROSS DOMESTIC PRODUCT CONTINUES SLOW CLIMB

According to California State University, Fullerton's Center for Demographic Research, Orange County's gross county product, the local equivalent of gross domestic product, grew by 4.2 percent in 2015 and 3.7 percent in 2016, respectively, reflecting the positive job growth and salary growth trends recently experienced in Orange County.

National GPD growth rates as provided by the U.S. Bureau of Economic Analysis (BEA) were 2.6 percent in 2014, 2.9 percent in 2015, and only 1.5 percent in 2016; Orange County's economy continues to outperform national averages.

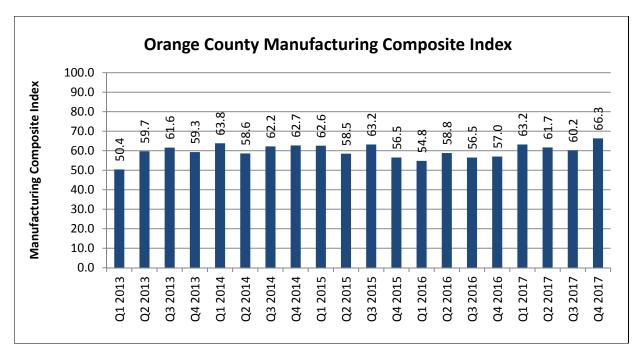


Source: California State University, Fullerton Center for Demographic Research, September 2017

MANUFACTURING AND BUSINESS EXPECTATIONS POSITIVE YET MODERATING

Alongside the GDP projections provided by California State University, Fullerton, Chapman University publishes the Orange County Manufacturing Index based on surveys by local purchasing managers. A score of 50 or above indicates general industry growth, while a score below 50 indicates industry contraction. Like Fullerton's real GCP estimates, this index also predicts slower growth in the short-term future. Despite lower scores throughout 2016, Chapman's Manufacturing Index scores remain above 60, generally positive indicating business expectations. Orange County had a score of 66.3 in Q4 2017, well above the statewide score of 64.9. These positive growth indicators are

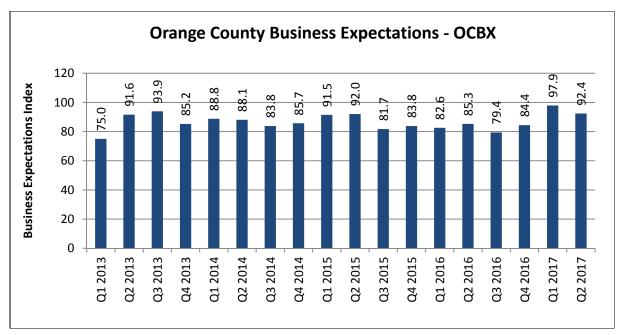
especially important for Orange County's Manufacturing sector and could stagnated potentially indicate future growth in this sector. Manufacturing is currently undergoing technological transformation that potentially impact employment and productivity levels; this disruption may have caused the current lull in employment growth. Manufacturing's significant economic impacts and growth potential means that policymakers and stakeholders should continue to focus on supporting and promoting innovation in this industry.



Source: Chapman University, October 2017

California State University, Fullerton's Orange County Businesses Expectations Survey (OCBX), provides a compliment to Chapman's Orange County Manufacturing Index. The OCBX, based on surveys of local business leaders, uses a similar scoring system with a score of 50 or above indicating growth and a score of less than 50 indicating contraction. The OCBX recently hit a

three-year high of 97.9 in Q1 2017 before dropping to 92.4 in Q2 2017, a score still well above index measures going as far back as Q1 2013. These high scores indicate that the business leaders surveyed by Fullerton are confident that economic conditions will improve in the short-term.



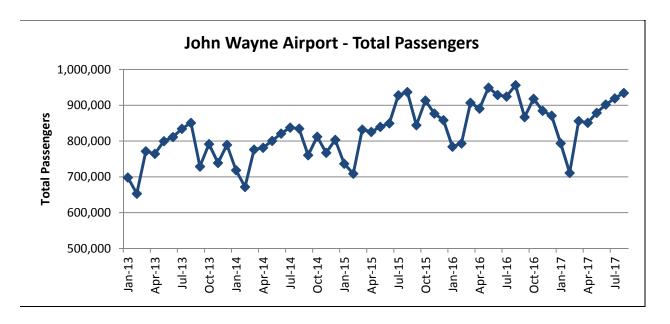
Source: Cal State Fullerton, July 2017

TRAVEL CONTINUES TO BOOST TOURISM INDUSTRY

John Wayne Airport, the only Orange County airport to provide both commercial passenger and air cargo services, serves as a gateway to the county for millions of passengers each year. Total passenger volume, while following seasonal trends, has steadily increased since 2013, reflecting the strength of Orange County's tourism industry; monthly passenger volume has grown from 769,399 in 2013 to 934,515 at the most recent count in August 2017. This increase in travel reflects a strong business climate and increasing disposable income.

Orange County has long been a great tourist destination for both domestic and international travelers, offering 42-miles of coastline, world-renowned shopping centers such as South Coast

Plaza and Fashion Island, several professional sporting teams and amusement parks including Knott's Berry Farm and Disneyland. Disneyland itself continues to be one of the main highlights in the area especially with the recent reveal of a new expansion: *Star Wars: Galaxy's Edge*, a \$1 billion project which will include two new attractions and a Marvel-themed expansion next door at Disney California Adventure. Disneyland's continued expansions and new attractions not only provide a significant number of jobs for the region but help to continually draw visitors into the region serving to boost county tax revenues.



Source: John Wayne Airport, September 2017

Visitors to Orange County spent \$11.6 billion in 2016, a 3.2 increase over the previous year.



Source: VisitCalifornia.com, August 2017

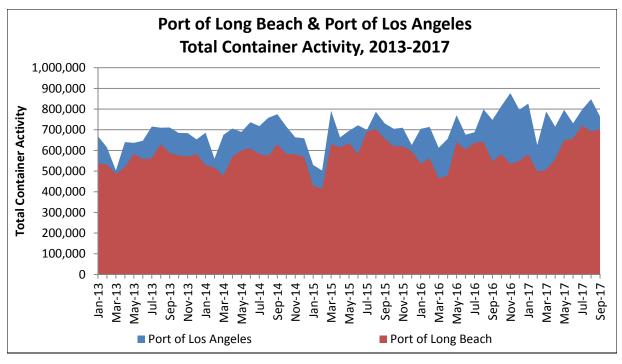
PORT ACTIVITY SHOWS STRENGTH IN LOS ANGELES TRADE AND A SLOWDOWN IN LONG BEACH

The graph below shows total container activity – measured in 20-foot-equivalent units (TEUs), which represents the size of a standard 20x8

shipping container – at the ports of Los Angeles and Long Beach. While the port of Los Angeles saw decreased activity from 2014 to 2015, it may be in

the process of rebounding as monthly container activity has steadily increase, growing from an average of 738,065 TEUs in 2016 to average of 765,666 TEUs in 2017. The port handled 763,785 TEUs in September 2017, a decrease of 9.9 percent over the past month but an increase of 2.2 percent

over the past year. The port of Long Beach saw its average monthly container activity drop from 599,309 TEUs in 2015 to 564,597 TEUs in 2016 but has since experienced a slight resurgence, averaging more than 618,413 TEUs so far in 2017 and reaching 701,619 in September 2017.



Source: Port of Long Beach, Port of Los Angeles, October 2017

COMMERCIAL REAL ESTATE MARKET CONTINUES TO IMPROVE

Orange County's commercial real estate market has historically enjoyed high rents and low vacancies due to the county's successful businesses and high concentration of attractive class-A office buildings. Office vacancy rates have decreased by 2.97 percent over the past year, as seen in the following chart, while office rents have correspondingly increased by 5.74 percent over the same period. This high demand for office space has fueled additional construction as more and more businesses

continue to seek quality office space; total space under construction reached approximately 2.458 million square feet in Q2 2017, a slight year-over-year increase. The industrial real estate market in Orange County has also grown significantly over the past year, driven in large part by the growing e-commerce market which necessitates large warehouse and distribution centers outside of high population centers. Industrial vacancy rates dropped from 2.45 percent in Q2 2016 to 2.32 percent in Q2 2017,

while lease rates increased by 3.7 percent over the same period.

In recent years, e-commerce sales growth has outpaced brick-and-mortar retail sales growth by a large margin, a disruptive trend that contributes to the ongoing "Retail Apocalypse" as retailers from Toys 'R' Us to Macy's to Michael Kors declare bankruptcy or close many of their

stores. While growing demand for new high density residential and mixed use properties has limited new construction for industrial properties in recent months, Orange County had an estimated 1.3 million square feet of new industrial space planned as of Q2 2017, suggesting that demand for local industrial real estate, driven in part by e-commerce, is picking up.

Orange County Office and Industrial Climate	Q2 2016 (July-September)	Q2 2017 (July-September)
Office Vacancy	10.45%	10.14%
Office Rents	\$2.58	\$2.44
Industrial Vacancy	2.45%	2.32%
Industrial Rents	\$0.81	\$0.84

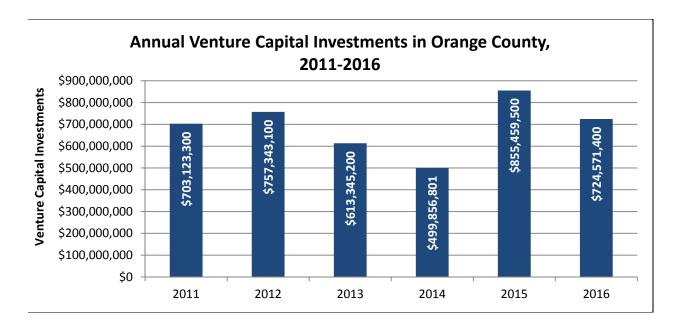
Source: Voit Real Estate Services, August 2017

VENTURE CAPITAL IN ORANGE COUNTY

SOFTWARE AND HEALTHCARE DRIVE INVESTMENTS

Venture capital investments, which provide a tangible measurement of innovation, illustrate potentially emerging sectors of the regional economy while also highlighting high growth sectors. According to PricewaterhouseCoopers (PWC) Money Tree and the National Venture Capital Association, Orange County had a total of \$724.6 million in venture capital investment in 2016; this figure, while well above 2013 and 2014 totals, was more than \$100 million less than in 2015.

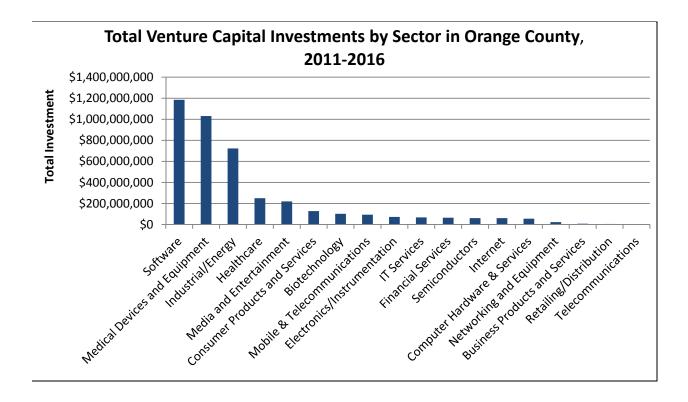
Following with recent labor market trends, 2011-2016 venture capital investment has been largely concentrated in IT and Healthcare. Software, for example, accounts for 29 percent of total venture capital investment in Orange County since 2011, followed by Medical Devices and Equipment with 25 percent and Industrial/Energy with 17 percent. With Healthcare, these sectors represent over 75 percent of total venture capital investments in Orange County since 2011.



Source: PWC Money Tree, National Venture Capital Association

The Software sector in Orange County has seen venture capital investments total approximately \$1.2 billion between 2011 and 2016, the largest of any sector, while Medical Devices and

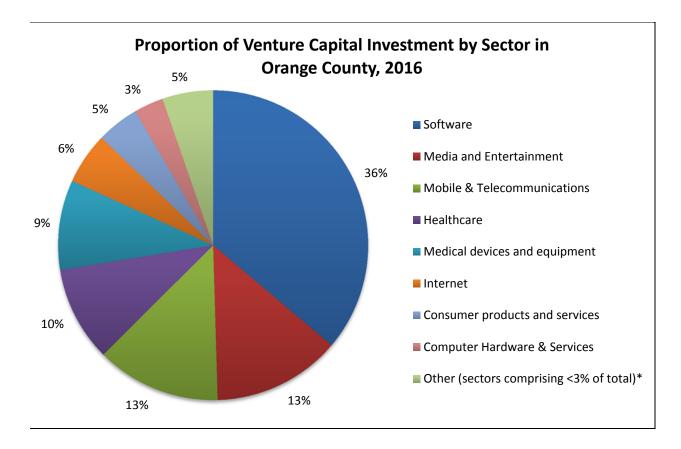
Equipment received \$1 billion, Industrial/Energy received \$723 million and Healthcare related organizations received \$250.5 million over the same time period.



Source: PWC Money Tree, National Venture Capital Association

Orange County's primary investment sectors shifted slightly in 2016, with Software still taking the largest portion of venture capital with 36 percent, followed by Media and Entertainment with 13 percent, Mobile and Telecommunications with 13 percent and

Healthcare with 10 percent. The fact that a large portion of venture capital investments are focused in Healthcare and IT-related sectors reinforces the importance of these industries for regional employment and economic activity.



*Other Sectors Include: Biotechnology, IT Services, Industrial/Energy, Business Products and Services

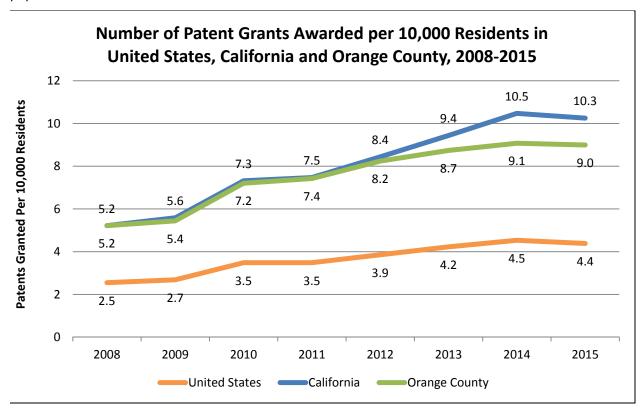
Source: PWC Money Tree, National Venture Capital Association

Another measure of Orange County's innovation, the number of patents granted in the region helps to highlight the technological advancements and originality of Orange County entrepreneurs. In 2015, Orange County saw a total of 2,851 patents awarded, representing 7.1 percent of total patents awarded in the state for the year. The graph shows patents awarded per 10,000 residents in the U.S., California and Orange County.

While well above the national rate, Orange County's 2015 rate of 9 patents for every

10,000 residents was below the state rate of 10.3 percent. Orange County's 2015 patent rate fell, as did rates at the state and national level, suggesting that this is a nationwide trend and not a regional issue. California's higher innovation per capita is primarily driven by less populated northern counties which have

become centers of IT-related innovation in the past decade. In Santa Clara County, home of Silicon Valley, 14,571 patents were awarded to a population of less than two million.



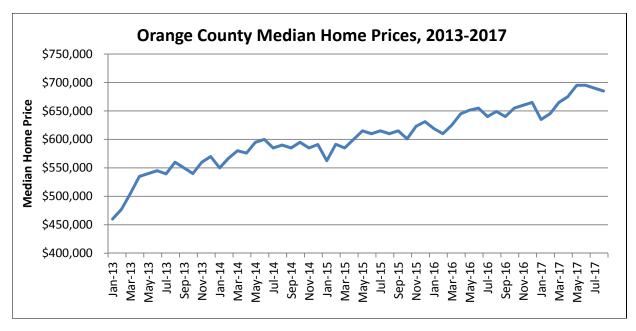
Source: United States Patent and Trademark Office, U.S. Census American Community Survey

ORANGE COUNTY HOUSING MARKET

HOUSING COSTS CONTINUE TO CLIMB

Orange County home prices, as seen in the graph below, have increased dramatically over the past five years. Driven by increasing demand and a low interest rate environment, the county's median home price reached \$685,000 in August 2017, a 5.5 percent year-over-year increase and \$125,000 more than in August 2013. While rising home

prices do reflect a welcome increase in overall economic activity, affordability issues threaten to negatively affect Orange County's economy in the near future, potentially draining the county's talent pool by pricing young talent out of the area.



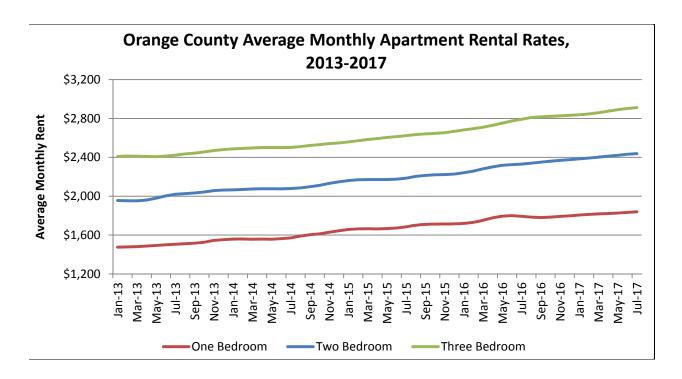
Source: Corelogic, Dataquick, October 2017

RENTAL DEMAND SPURS RENTAL RATE INCREASES

Orange County's high housing costs have, in turn, increased rental prices by driving up demand; student debt and high tuition fees and healthcare costs have prevented many younger residents, in particular, from buying their own homes serving to further drive demand. According to Zillow, Orange County's average monthly two-bedroom apartment rent was \$2,438 in August 2017, a \$163 or 7.1 percent year-over-year increase. Since January 2013, Orange County rental rates for a

two-bedroom apartment have increased by \$655 or by 37.8 percent.

Several Orange County cities saw their average monthly rent increase on par with overall county increases with rents in Rancho Santa Margarita and Aliso Viejo both increasing by \$143 and \$141, respectively, since last year. The graph on the next page illustrates Orange County's average rental rate for a one-, two-, and three-bedroom apartment from January 2013 to August 2017.



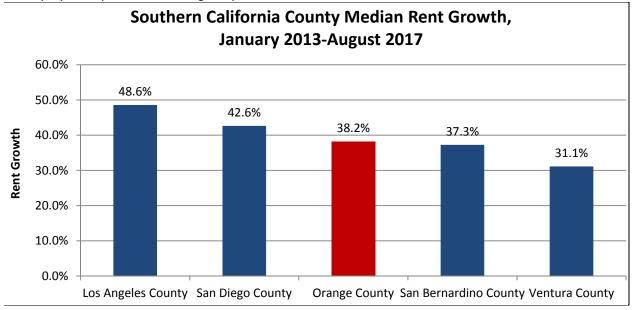
Source: Zillow, August 2017



Source: ApartmentList; Rentbits

According to Zillow, Los Angeles County and San Diego County have seen the largest rent increases between January 2013 and August 2017 at 48.6 percent and 42.6 percent, respectively. Orange County's rent growth was 38.2 percent during the same time period, above San Bernardino County's rent growth of 37.3 percent and well above rent growth in Ventura County by 31.1 percent. CoreLogic reports that

the median Orange County home price has increased by 41 percent since January 2013. Previously mentioned recent wage increases are helping with the affordability situation, but housing affordability still remains a major issue for Orange County.



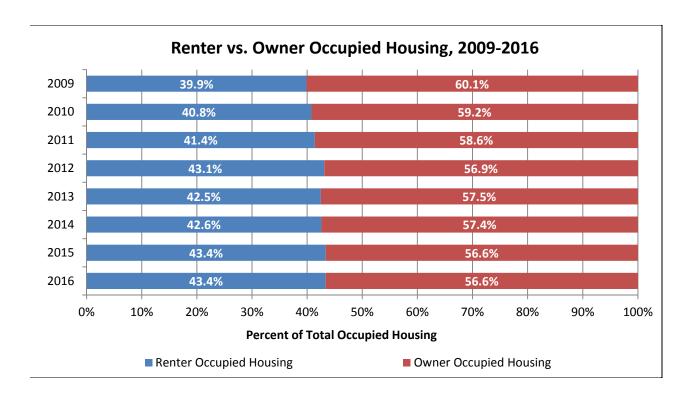
Source: Zillow, August 2017

OWNER-OCCUPIED HOUSING DECLINES AS RENTING INCREASES

Rising home prices and generational housing preferences have changed Orange County's ratio of renters to homeowners. According to the U.S. Census American Community Survey, the county's percentage of owner-occupied housing decreased from 60.1 percent in 2009 to 56.6 percent in 2016, while renter-occupied housing increased from 39.9 percent to 43.4 percent over the same period. These 2016 occupancy rates were

unchanged from the year before which suggests slight improvements in affordability likely due to wage growth in recent years.

Affordable housing will play a key role in ensuring Orange County's continued ability to attract and retain talented young workers; a high cost of living, as mentioned before, has already priced many out of the county.

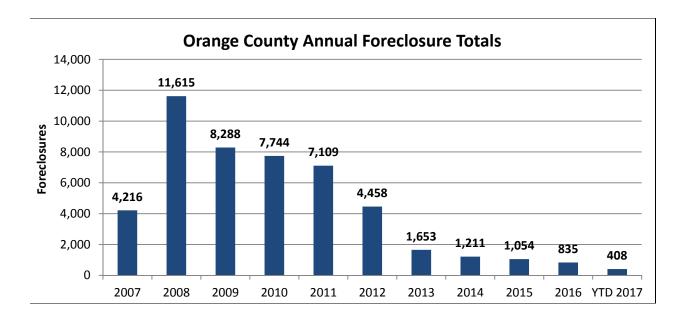


Source: U.S. Census Bureau, American Community Survey, September 2017

FORECLOSURE TRENDS HAVE STABILIZED

The following graph illustrates the steep decline in county foreclosures since 2008; as of July 2017, foreclosures in Orange County totaled 408 and are on track to match last year's foreclosures. The largest drop in annual foreclosures occurred between 2012 and 2013

when foreclosures dropped from 4,458 to 1,653, a year-over-year decline of 63 percent. Since then, foreclosures have continued to drop, suggesting a more healthy housing market than prior to the recession despite rising home prices.

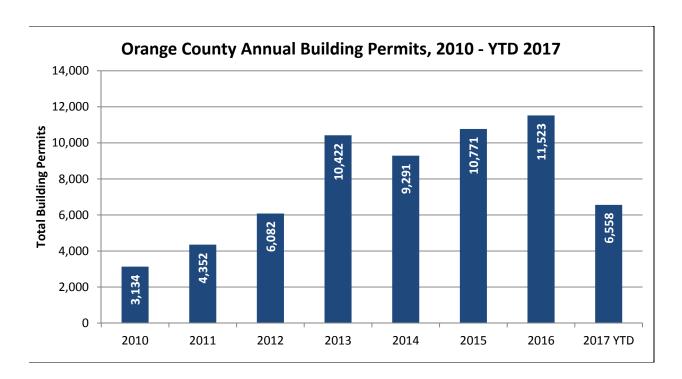


Source: CoreLogic; Provided by DQ News, August 2017

BUILDING PERMIT ISSUANCE PICKING UP SPEED

The number of building permits issued in Orange County increased by almost 2,000 between 2014 and 2015, an upward trend that held throughout 2016 but has stalled slightly in 2017. As of August 2017, the year has averaged 771 building permits issued per month, falling in line with building permit monthly averages measured in 2013 and 2014. May 2016 saw a three-year peak in building permits with a total of 1,917 issued. Overall, building permits have totaled 6,558 year-to-date in 2017 with the city of Irvine representing 1,817 or 27.7 percent of the county total.

Acting as the business hub for Orange County, Irvine is an extremely attractive place to move for many individuals due to its central location, proximity to John Wayne Airport, interconnected freeway system and master planned communities providing a number of amenities to both residents and visitors. Several construction projects are currently underway in Irvine including the Orange County Great Park, a 1,300 acre development which includes approximately 9,500 homes, an arts complex, sports complex, farmers market and mixed-use office and retail properties.

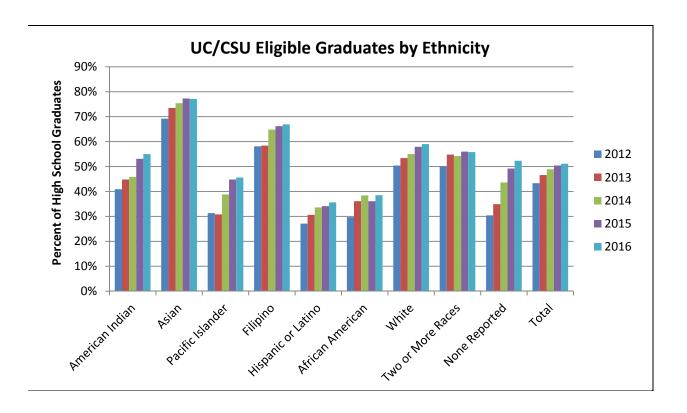


Source: U.S. Census Bureau, Building Permit Survey, September 2017

EDUCATION

EDUCATIONAL ATTAINMENT REMAINS A COMPETITVE ADVANTAGE

Orange County continues to boast a welleducated workforce in 2017; 51.1 percent of its high school graduates are eligible for the University of California (UC) and California State University (CSU) systems, a 0.7 percent increase over the previous year. Increased UC/CSU eligibility rates were measured across all of the county's ethnic groups, as shown in the graph below, with Hispanic and Latino students experiencing particular success.



Source: California Department of Education, DataQuest, April 2017

ENGLISH LANGUAGE LEARNERS DECREASE

Almost 120,000 Orange County high school students, 24.3 percent of the total, were English Language Learners during the 2016-2017 school year; this represents a slight decrease from the previous year. Despite the recent decreases, Orange County's still maintains a relatively high concentration of English Language Learners, almost three percent higher than the state average, making it imperative that state policymakers continue to support programs designed to prepare these students for success in their educations and careers.

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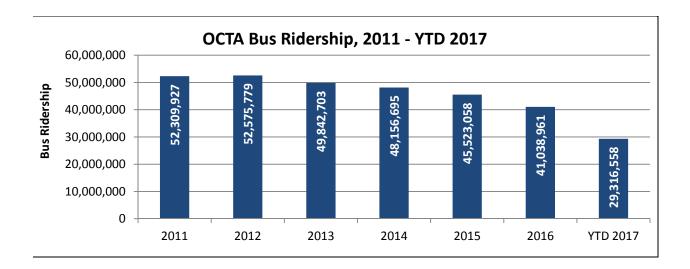
High School English Language Learners				
	Year	Orange County	California	
Total Enrollment	2016	493,030	6,226,737	
	2017	490,430	6,228,235	
Number of English Learners	2016	123,001	1,373,724	
	2017	119,315	1,332,405	
	2016	24.90%	22.10%	
Percent English Language Learners	2017	24.30%	21.40%	

Source: California Department of Education, DataQuest, April 2017

TRANSPORTATION INFRASTRUCTURE

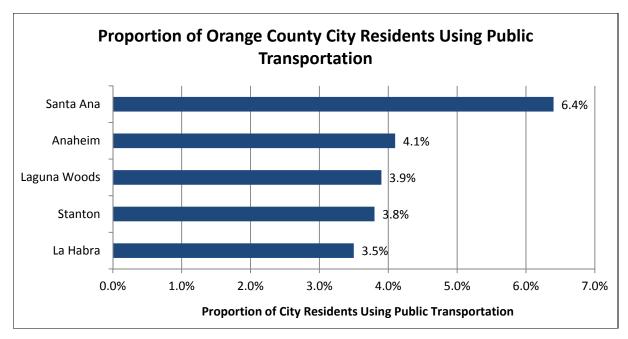
BUS RIDERSHIP CONTINUES TO FALL

Data provided by the Orange County Transportation Authority (OCTA) shows that county bus ridership has continued its recent downward trend in 2017. A total of 3,125,950 passengers rode county buses in July 2017, a 4.4 percent decrease from the previous year. Over the past few years, average monthly bus ridership has fallen from 4.15 million in 2013 to 3.22 million thus far in 2017.



Source: Orange County Transportation Authority, August 2017

Public transportation, while vital for some communities in Orange County such as Santa Ana where 6.4 percent of the population relies on public transportation to get to work, Anaheim where 4.1 percent of the population relies on public transportation, and Laguna Woods where 3.9 percent of the population relies on public transportation; has never gained Southern California popularity in where residents have traditionally preferred using their personal vehicles. In fact, transportation has declined in the last 3 years in all Southern California counties — Orange, Los Angeles, Riverside, San Bernardino, and San Diego. Along with this car culture, new, convenient services such as Uber and Lyft have further reduced the use and reliance on public transportation. Additionally, the increase in part-time employment has also decreased the need for public transportation on a daily basis. OCTA has developed the OC Bus 360 Program, which includes significant route changes and a number of discontinuations, in order to counter this decline in bus ridership.

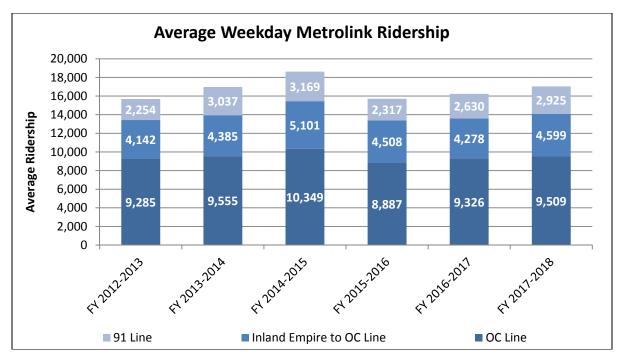


Source: U.S. Census Bureau, 2015 American Community Survey, November 2017

METROLINK USAGE REMAINS STEADY

Orange County Metrolink usage has generally remained steady, as seen in the following chart, experiencing only marginal year-over-year changes. The Orange County line, for example, saw an increase of only 183 average weekday riders between the 2016-2017 and 2017-2018 fiscal years which represents less than two percent. One major exception is the 91 Perris Valley Line, which saw an 11.2 percent increase in ridership, or a total increase of 295 average

weekday riders, during the same time period. Additionally, the Inland Empire (IE) to Orange County (OC) line increased from an average weekday ridership of 4,278 in FY 2016-2017 to 4,599 in FY 2017-2018, a 71.5 percent increase. This increase reflects the aforementioned trend of Orange County workers commuting from less expensive areas in order to take advantage of the county's higher wages, and can be expected to continue in at least the near future.

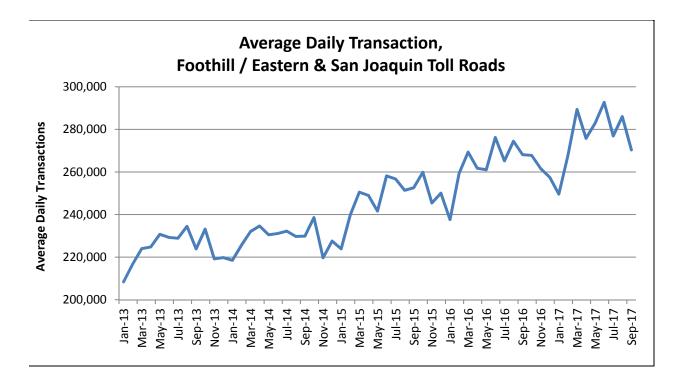


Source: Southern California Regional Rail Authority, Annual Budget Reports, June 2017

TOLL ROADS CONTINUE TO OFFER RESPITE FOR ORANGE COUNTY RESIDENTS

While Orange County has a very well-connected freeway system, its large population and large number of commuting residents put tremendous stress on traffic management, resulting in severely congested roadways. The 405 freeway, for example, has earned notoriety as one of the busiest in the nation. As a result, many residents and commuters have opted to use toll roads to reduce their commute times; as seen in the following graph, toll road use has increased consistently since 2013. The number of drivers using the Foothill and San Joaquin toll roads has averaged 276,797 per month thus far in 2017, an

increase of 5.0 percent over 2016's monthly average; approximately 270,367 drivers used county toll roads during September 2017 for a 0.8 percent year-over-year increase. The consistent growth of toll road usage by county residents and regional commuters, combined with the continuing congestion problems on freeways, highlights the need for additional strategic and efficient transportation infrastructure in Orange County. Not taking into account these forward-looking strategies, Orange County's productive workforce and general quality of life may be put at risk by congestion.



Source: The Toll Roads.com, October 2017

SUMMARY

As seen in the sections above, Orange County continues to make significant progress in driving economic activity and growth in the region. While challenges such as workforce housing still persist, Orange County will remain on an upward trajectory if supported by forward-thinking

policymakers and stakeholders. The next section of this report highlights initiatives to keep the county on track for meeting its CEDS goals.

SUPPORTING RED-ZONE INVESTMENT

A HEALTHIER EMPLOYMENT CLIMATE

The Orange County CEDS' first goal is improving the lives of Red-Zone residents through education, employment, and workforce development. Fortunately, Orange County has significantly reduced unemployment in recent years; only 58,200 county residents were unemployed as of September 2017, compared to 64,300 in 2016, 70,700 in 2015 and more than 100,000 in 2013. Following these greater regional trends, Red-Zone unemployment rates have also decreased year-over-year, falling from an average of 13.6 percent last year to 12.7 percent in this year's report. Alongside falling unemployment rates, per capita

incomes have increased by \$2,596 or by 7.3 percent during the same time period. In order to ensure these trends remain in place and accelerate, local stakeholders and policymakers must be continually educated on successful programs and strategies which have allowed disadvantaged communities to pull themselves out of the Red-Zone designation.

EDA PROJECTS IN THE PIPELINE

The Economic Development Administration (EDA)'s Office of Innovation and Entrepreneurship (OIE) recently launched the Regional Innovation Strategies Program (RIS) which awards grants to organizations which improve the region's ability to turn innovation into employment by (1) proof of concept and commercialization assistance to innovators and entrepreneurs and (2) through operational support for organizations that provide early-stage capital to these individuals. In September 2017, the EDA announced the 2017 Regional Innovation Strategies program awards, which included \$17 million in Federal funding to 42 organizations, including nonprofits, educational institutions, and entrepreneurship-focused organizations in 28 states. Although no new Orange County projects were awarded by the EDA in the past year, a number of new projects were awarded in neighboring counties since the original CEDS submission that may have an impact in Orange County, including:

- \$371,399 in Local Technical Assistance funds to the University of Southern California, Los Angeles, California, to support the development of an investment operations strategy for EDA's Seattle Regional Office. This project will provide a summary of economic trends, opportunities, and challenges within this 8 state region and result in a Knowledge Sharing Training forum for best practices. This investment is part of a \$560,191 project.
- \$200,000 in Economic Adjustment Assistance-IMCP funds to the University of Southern California, Los Angeles, California, to develop a manufacturing strategy for the state of California by assessing the existing industrial ecosystem. This project will identify gaps and opportunities, and leverage existing assets and comparative advantages, while forging new partnerships between the public

and private sector and educational institutions. The resulting state-wide strategy will expand, strengthen and enhance advanced manufacturing. This investment is part of a \$440,578 project.

EDUCATIONAL INVOLVEMENT FOR PARENTS

Programs for minority and low-income communities are also taking new steps in 2016 to motivate parents to become meaningfully involved in educational success for their children. The Latino Educational Attainment (LEA) initiative reports several new accomplishments in 2016 supporting this goal:

- Completed a longitudinal study demonstrating that LEA has made a positive impact in student performance and increased parental knowledge about the California education system. Some highlights included:
 - o Intermediate school students, whose parents participated in the "10 Education Commandments for Parents" training sessions, significantly increased from Basic to Proficient levels in Math, Language Arts and Science.
 - Elementary and intermediate school students in the experimental group achieved higher scores in citizenship grades, demonstrating greater work ethic, attitude, decision-making ability, and preparedness for learning.
- ➤ LEA manual currently being designed that guides how to teach LEA principles and expand outreach to communities of disadvantaged parents with expected release in 2017.
- Updated the "10 Education Commandments for Parents" to include the Common Core State Standards and the Next Generation Science Standards, preparing parents and students to be college and career ready.

CAREER TECHNICAL EDUCATION FOR SKILL-BUILDING IN RED-ZONE REGIONS

Highlighted in last year's report, the Community for Innovation, Entrepreneurship, Leadership and Opportunities (CIELO) continues to make significant strides for local residents, small businesses, and entrepreneurs. This program, a collaborative effort between Golden West Community College and the Oak View Renewal Partnership (OVRP), focuses on improving the lives of residents within Huntington Beach's Oak View community, an area which has struggled with high unemployment and poverty rates. CIELO, based out of a \$500,000 center on Golden West College's campus, acts as an innovative and entrepreneurial hub for the Oak View community and offers a number of services including multiple education and training programs focused on increasing

individual marketability, sustainability and innovation, and community development, and environmental protection.

CIELO's first Annual Showcase of Success, held in June 2017, promoted recently launched small businesses by participants, and a wide variety of other positive impacts resulting from this program. CIELO has served more than 350 low-income community members since 2016, with 150 receiving specialized job training assistance, 75 finding new employment, 48 receiving entrepreneurship coaching and 18 starting their own small businesses. CIELO has also provided access to nearly \$1 million through technical assistance and referrals.

The success of the CIELO program encourages other local economic and workforce development agencies to use it as a model for providing long-term support to disadvantaged areas. While financial assistance programs do provide muchneeded services to low-income areas of Orange County, programs like CIELO provide residents

with the support and resources needed to build a strong foundation for long-term economic success.

EDUCATION AND WORKFORCE OPPORTUNITIES

CAREER PATHWAYS PARTNERSHIP TARGETS THE 21ST CENTURY WORKFORCE

Orange County's skills gap — the discrepancy between the skills possessed by job candidates and those needed by employees — reflects the new reality of the 21st century workplace, which requires both technical and critical thinking skills. A major CEDS goal is developing the education and workforce training programs needed to prepare workers for this new environment. The Orange County Career Pathways Partnership (OCCPP), for example, was awarded \$15 million by the California Department of Education to create K-12 career pathways programs for high-tech, highgrowth occupations. Students will participate in career exploration and on-the-job training in three

target sectors: Healthcare and Biotechnology, Engineering and Advanced Manufacturing and Information Communication Technology and Digital Media. Of the 108 high school pathways programs that received funding, 48 were newly established and 29 focus on information communications technology. OC Pathways also launched the Career Readiness Hub during the 2016-2017 school year; this program has already served 700 educators and almost 2,100 K-12 students and plans to serve up to 60,000 students in 2017 and 2018.

INFRASTRUCTURE AND NEW CAPACITY IN OC

MEASURE M2 HIGHWAY PROJECTS MOVING FORWARD

After the success of M1, 70 percent of county voters approved Measure M2, which uses a half-cent local sales tax to fund transportation investment through 2041. The following table summarizes the 20 projects that have been completed since the implementation of M2, 8 of which have been completed since the previous

CEDS update. The Anaheim Regional Transportation Intermodal Center (ARTIC), as previously mentioned in this report, is a major milestone for this effort. A full list of Measure M2 projects and their estimated completion dates can be found in Appendix B.

Measure M2 Projects and Programs

Project	Description	Stage
D	I-5 Ortega Interchange	Complete
E	SR-22, Access Improvements	Complete
G	SR-57 NB, Katella Avenue to Lincoln Avenue	Complete
G	SR-57 NB, Orangethorpe Avenue to Yorba Linda Boulevard	Complete
G	SR-57 NB, Yorba Linda Boulevard to Lambert Road	Complete
н	SR-91 WB, I-5 to SR-57	Complete
1	SR-91 WB, SR-55 to Tustin Avenue Interchange	Complete
J	SR-91, SR-55 to SR-241	Complete
J	SR-91, SR-241 to SR-71	Complete
O	Kraemer Boulevard Grade Separation (Placentia)	Complete
O	Lakeview Ave. Grade Separation (Anaheim/Placentia)	Complete
O	Orangethorpe Ave. Grade Separation (Anaheim/Placentia)	Complete
O	Placentia Ave. Grade Separation (Placentia)	Complete
0	Tustin Ave/Rose Drive Grade Separation (Anaheim/ Placentia)	Complete
R	Sand Canyon Grade Separation (Irvine)	Complete
R	Rail-Highway Grade Crossing Safety Enhancement	Complete
R	San Clemente Beach Trail Safety Enhancements	Complete
R	San Clemente Pier Station Lighting	Complete
R	Tustin Parking Structure	Complete
R,T	Anaheim Regional Transportation Intermodal Center	Complete

Source: Orange County Transportation Authority

OCTA BUDGET

The Orange County Transportation Authority (OCTA) 2017-2018 budget covers all projects and programs administered by OCTA, including improving bus service through the OC Bus 360 program, continuing Measure M improvements (including to freeways and the OC Streetcar) and operating the 91 Express Lanes.

- > \$349 million for bus operations
- > \$170 million for freeway improvements
- > \$156 million for streets and roads improvements
- > \$10.6 million for environmental programs

DROUGHT MEASURES AND THE STATE OF EMERGENCY

In response to the record-setting dry year of 2013, Governor Brown declared a drought emergency in January 2014 and asked that all Californians voluntarily reduce their water use by 20 percent.

updated its Groundwater Management Plan in 2015, right after the passing of the California Sustainable Groundwater Management Act passed in 2014. Encouragingly, this new law provides authority for agencies, such as OCWD, to develop and implement Groundwater Sustainability Plans with primary goals, including: (1) protecting and enhancing groundwater quality, (2) protecting and increasing the basin's sustainable yield in a cost-effective manner, and (3) increasing the efficiency of District operations.

In order to better assess the current situation, the

Orange County Water District (OCWD) recently

While efforts to conserve remain a major priority, groundwater supplies are improving, indicating that efforts by the OCWD and the general public have been successful in reducing water use. According to OCWD, groundwater storage is approximately 35 percent full as of August 2017, an improvement of 70 percent over last year. Groundwater recharge has improved by 17.3

percent while groundwater pumping has decreased by 24.8 percent during the same time period; all of these are positive indicators suggesting that water conservation strategies were dramatically successful.

While Orange County has made major progress in water conservation, bond revenue has recently been completely depleted adding to potential concerns regarding the state's ability to fund drought measures in the future. Thankfully, the Southern California Metropolitan Water District recently voted on and approved a \$4.3 billion investment into California WaterFix which is currently spearheading a massive water delivery project consisting of building two large tunnels underneath the Sacramento-San Joaquin Delta which would better protect and distribute water to northern and southern California regions.

2016 ORANGE COUNTY INFRASTRUCTURE REPORT CARD

The 2016 Orange County Infrastructure Report Card, the most recent, is a collaborative effort between 12 working committees of infrastructure, public agencies, consulting firms and watchdog groups evaluate the condition, capacity, performance, and resiliency of 12 different Orange County infrastructure sectors. The lead agency, the Orange County Branch of the American Society of Civil Engineers (ASCE), is a professional body founded in 1852 to represent members of the civil engineering profession worldwide.

Overall, Orange County received an aggregate infrastructure grade of C+ which, while higher than the national grade of a D+, has not improved from the 2010 Orange County Infrastructure Report Card. As Orange County's population continues to grow, attracting more and more businesses and jobs into the region, a lack of efficient, well-designed, well-maintained infrastructure could have disastrous consequences, impacting everything from economic competitiveness to quality of life.

ASCE Report Card 2016 www.ascecareportcard.org		
Aviation	A-	
Electric Power	C-	
Flood Control And Levees	C-	
Ground Transportation	С	
Natural Gas	B-	
Oil	B-	
Parks, Recreation, and Environment	C+	
School Facilities	С	
Solid Waste	В	
Surface Water Quality	D+	
Wastewater	В	
Water Supply	В	
OC's Infrastructure GPA	C+	

<u>Aviation – Grade A-</u>

The commercial aviation demand in Orange County will continue to grow with the population. While commercial traffic at John Wayne Airport approaches the current negotiated passenger limit of only 10.8 million annual passengers until 2020, both general aviation and military demand fall short of meeting Orange County's available capacity. One solution for commercial demand may be to develop high-speed rail transportation to underutilized regional airports. The condition of John Wayne Airport is excellent.

Electric Power - Grade C-

The electric power infrastructure system reliability may decline due to limited investment in system upgrades and replacements. Prior rate increases approved by the California Public Utilities Commission for Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) may be adequate to maintain minimum reliability standards, yet be insufficient to fund the pace of work necessary to replace and upgrade the region-wide and county-wide facilities on which we depend for a high degree of reliability. As electric power infrastructure continues to age, the potential exists for less reliable service.

Flood Control and Levees – Grade C-

The backbone flood control and drainage systems serving Orange County, including 380 miles of flood control channels of which 114 miles are levees (non-incised), 34 retarding basins, 15 dams and 13 pump stations, vary widely in condition and capacity to reduce flooding risk from major storms. Generally the condition of the levees is fair and we continue to work with Federal Emergency Management Agency (FEMA) and United States Army Corps of Engineers (USACE) to meet their standards. Funding shortfalls for needed upgrades to bring regional flood control facilities in the County to its standards continue to be in excess of \$2.7 billion. Insufficient funding for capital projects along with maintaining our aging flood channel system presents challenges.

<u>Ground Transportation – Grade C</u>

Orange County provides bus, commuter rail, regional rail, freight movement, local streets and freeway including toll roads and carpool lanes that transport goods and people within the county and provide connectivity for the region. The existing funding sources are inadequate to meet the current and future demand. There is a dire need for additional funding, estimated at \$133 million a year (2015 dollars), from local, state and federal sources to maintain, improve, and expand our transportation network. Deferred maintenance during the recent recession has exacerbated today's need. Infrastructure investment can elevate Orange County's quality of life, spur economic growth and support local jobs. The time is now to evaluate various sources of infrastructure funding including private sources, user fees and bonds, in order to relieve congestion, improve the quality of our transportation systems and continue to maintain them.

Natural Gas - Grade B-

Southern California Gas Company (SoCalGas) is the nation's largest natural gas distribution utility with 21.6 million consumers through 5.9 million meters in more than 500 communities. SoCalGas' service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border. SoCalGas is regulated by the California Public Utilities Commission (CPUC) and follows State and Federal pipeline safety and other regulations to meet the CPUC's requirements. The natural gas system provides the fuel for home heating, cooking, manufacturing, generating electricity, powering trucks and buses throughout Southern California including in Orange County.

Oil – Grade B-

Orange County receives 100% of its transportation fuel needs from three transportation fuel manufacturing centers on the West Coast: Pacific Northwest, San Francisco, and Los Angeles. Orange County's 2.5 million vehicles are consuming about 3 million gallons of transportation fuels a day. While California's 200,000 electric vehicles are the most that any state has, they represent less than 1 percent of total vehicles. The other 99 percent of California's 32 million vehicles that do not run on electricity are consuming more than 40 million gallons of transportation fuels, gasoline and diesel, every day, excluding

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jet fuel for the numerous airports. The reliability of supply to Orange County for transportation fuels and other fossil fuel products has been impacted by the fact that California is an "energy island." This has led to periodic transportation fuel price spikes resulting from significant unplanned refinery outages.

<u>Parks, Recreation, and Environment – Grade C+</u>

The condition and capacity of parks, recreation and environment facilities have been relatively steady in the past five years. The 2016 overall grade of C+ remains the same as it was in 2010. Currently, Orange County operates a total of 22 regional parks. Additionally, each of the 34 cities within Orange County operates and maintains local parks within its jurisdiction. While several new developments and improvements to existing facilities have been completed, challenges such as the current California drought, slow recession recovery, insufficient funding, and growing population prevented improvement to the overall grade. A projected expenditure of \$525 million for the entire Orange County would be required over the next five years in order to raise the overall rating to a grade of B.

School Facilities - Grade C

There are a total of 13 Elementary School Districts, three (3) Union High School Districts, and 12 Unified School Districts in Orange County serving approximately 500,000 students in grades kindergarten through twelfth. Collectively, the districts manage and maintain nearly 600 school facilities. The condition of school facilities that serve the needs of Orange County have declined in the past five years due to lack of facilities funding. The majority of school districts' enrollment has either decreased or remained constant easing near term demand to expand and add new facilities. Deferred maintenance and upgrading of older school buildings continues to be a daunting problem to solve.

Solid Waste - Grade B

Recycling and waste diversion programs have been established and expanded since enactment of the Integrated Waste Management Act of 1989 to significantly reduce the amount of waste disposed in landfills. The solid waste industry will be faced with new challenges to develop programs to further enhance recycling of commercial and organic waste to meet state mandates. This will require expanding existing infrastructure and innovation of new technologies in a highly regulated environment. The statewide diversion rate has continued to steadily increase from 10% in 1989 to 66% in 2014 as compared to the national average of 34.3% as reported by the Environmental Protection Agency in 2013. Orange County's per resident disposal rate is comparable to the national average at 4.5 pounds/resident/day. Public education and awareness has greatly increased recycling efforts and will be essential towards reaching the State's goal of 75% recycling.

Surface Water Quality - Grade D+

Good surface water quality is critical to ensuring safe recreation in our coastal waters and is vital to the overall health of Orange County's watersheds which provide wildlife habitat and replenish drinking water sources among other beneficial uses. Surface water quality infrastructure generally includes devices,

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systems, structures, facilities, and areas designed and engineered to filter, treat, divert, infiltrate, and/or capture, stormwater and non-stormwater runoff. Due to increased volume of stormwater runoff during storm events, existing surface water quality infrastructure in Orange County does not have nearly the capacity to meet wet weather demands. Although currently operations and maintenance of stormwater quality infrastructure is manageable additional infrastructure to increase capacity will make operations and maintenance challenging in the future. Also, unlike water supply and wastewater treatment, stormwater management is not considered a utility. Projects, programs, and services that protect and improve surface water quality must compete for general fund dollars. A shift to an innovative, integrated approach for water supply, wastewater treatment, and stormwater management is needed in order to raise the grade in this category

Wastewater - Grade B

Assets and workforce are well managed. Sustainability has improved by providing more reclaimed water for aquifer recharge. Upgrades to comply with state and federal requirements are ongoing. All infrastructure must continue to be inspected, rehabilitated, and replaced to meet performance and asset management criteria. Additional stressors will emerge and need to be managed.

Water Supply - Grade B

The overall condition level of the infrastructure (pipelines, pumping stations, and reservoirs) in Orange County is good. Most agencies are planning on significant capital improvement projects to enhance the water supply infrastructure over the next three to five years. Water quality continues to be an issue with public concern heightened by news stories such as water contaminated by lead leaching from pipes in Flint, Michigan, to news about contaminated groundwater in the Central Valley of California. The groundwater basin that serves the northern two-thirds of Orange County has two areas that present an ongoing concern. The Orange County Water District is working with regulatory agencies for a long term cleanup solution. Finally, water conservation is essential to the long term interests of not only Orange County, but also California. With the recent impacts from the latest drought, water is becoming a more vital and precious resource. We have been mired in an ongoing five year drought in Southern California. We have fallen short, as a state, of meeting the Governor's goal of a 25% reduction in our water usage as compared to usage in 2013.

ADVANCEMENTS IN GLOBAL COMPETITIVENESS

NEW STATE-LEVEL INCENTIVES PLAY TO ORANGE COUNTY'S STRENGTHS

The CEDS calls for Orange County to draw on its unique strengths in order to create a highly competitive business environment. California's Sales Tax Exemption law, which came into effect

in July 2014, allows businesses engaged in manufacturing and biotechnology research and development to obtain a partial sales and use tax exemption on equipment; this statewide initiative particularly benefits core Orange County industries critical to economic competitiveness and long-term economic growth. Businesses can exclude the first \$200 million in equipment purchases from the state sales tax.

The New Employment Credit (NEC) supports county Red-Zone employment efforts by granting incentives to employers who hire full-time employees from low-income neighborhoods. In order to receive this credit, available from 2014 to 2021, employers must have a net increase in full-time California employees, determined on an annual full-time equivalent basis.

The California Competes Tax Credit is a program created by GO-Biz designed to improve business attraction and retention in the state by providing

a tax credit to businesses that make a commitment to stay in the region. A number of local businesses received substantial credits between January and June 2017: the Montrose Environmental Group (\$750,000) which provides emission testing services, Qmerit (\$500,000) a software development company, HealthQuest Laboratories (\$400,000), medical laboratories in Santa Ana, and Critical Structures (\$225,000) located in Anaheim which provide architectural and engineering services. The companies highlighted above are just a few of the Orange County companies who received substantial tax credits, and the fact that they are focused in IT, Healthcare, and Engineering suggest that they will contribute to further growth in these industries.

EMERGING ALTERNATIVE FUEL OPPORTUNITIES DEVELOPING IN ORANGE COUNTY

In 2013, the California Workforce Investment Board awarded the Orange County Workforce Investment Board (OCWIB) a \$248,000 grant for developing a greater presence in the alternative fuels and advanced transportation cluster through California's Regional Industry Cluster of Opportunity (RICO) program. the California

Governor's Office of Business and Economic Development (GO-Biz)'s Zero-Emission Vehicles (ZEV) Infrastructure Unit has also created a number of programs and funding opportunities in order to reach a goal of 1.5 million Zero Emissions Vehicles (ZEVs) on the road in California by 2025. Local programs include:

- ➤ The Los Angeles Department of Water and Power's Charge Up L.A. program, which provides an up to \$4,000 rebate to commercial customers who install hardwired or pedestal Level 2 EV chargers.
- South Coast Air Quality Management District's Rebate for Electric Vehicle Charging Infrastructure at Government and Non-Profit Organizations, which provides up to \$7,500 in rebates per EV charger and an additional \$5,000 rebate for solar panels.
- > South Coast Air Quality Management District's Monetary Incentive for Residential Electric Vehicle Charging Station, which provides an incentive between \$400 and \$800 to reduce the cost of

installing level 2 residential EV chargers. It also provides up to \$250 for the cost of a level 2 residential charger as well as up to \$250 for low-income residents.

- Anaheim Public Utilities Residential Electric Vehicle Charger Rebate which provides up to \$500 in rebates for a current Anaheim Public Utilities customer who installs a level 2 EV charger.
- Southern California Edison's Charge Ready Program (Pilot) which plans to install as many as 1,500 level 1 or level 2 EV chargers within its service territory between 2016 and 2021, with at least 150 chargers or 10 percent of the total located in disadvantaged communities.

RICO II PROGRAM SUMMARY AND ACTIVITY UPDATE

The original RICO program was a partnership between several major county organizations - the Orange County Workforce Investment Board (OCWIB), Pacific Gateway Workforce Investment Network (PGWIN) and the Orange County Business Council (OCBC) – to further advance the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology (ARFVT) initiative. Four years later, the Talent Pipeline and Sustainability projects continue this initiative.

RICO continues through two extension projects, Talent Pipeline and Sustainability, which are highlighted below. The OCWIB submitted the final deliverable in March 2016, a cluster investment diagnosis and strategic action plan identifying fruitful areas of investment to improve alternative fuel infrastructure and workforce training.

This final report also highlights the various outcomes of several project partnerships, outreach services and events which occurred as a result of this grant. As mentioned above, two projects still driving RICO grant activity include the Talent Pipeline and Sustainability projects, both of which continually advanced alternative fuel and vehicle awareness and adoption. Orange and Los Angeles counties are the hub of the hydrogen fuel cell vehicle industry in California, boasting well-educated "Green" workforces and a supportive educational environment with programs aimed at encouraging industry participation. Together, the Talent Pipeline and Sustainability have dramatically increased awareness of this important industry and its economic and environmental benefits.

Focus Area #1 - Sustainability

RICO activities have encouraged partnerships between several key players in this space, including First Element Fuel, the California Fuel Cell Partnership, UC Irvine's Advanced Power and Energy Program (APEP), the OCDB (previously the OCWIB), PGWIN and SCAQMD. These partnerships have focused on infrastructure development, promoting awareness of hydrogen fuel cell technologies, increasing

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awareness of educational programs and highlighting employment opportunities for local residents. Notable successes include:

- OCBC members and partners marketed Cleantech at OC's 2015 conference and worked with them to make Orange County the hub of the Advanced Transportation Center of Southern California. OCBC members and partners also marketed the Solar Decathlon extensively prior to and during the event through committee meetings, board and committee reports and email blasts whose recipients included nearly 15,000 local business leaders.
- Increased outreach to educational institutions such as Long Beach City College and other
 regional educators to develop new pathways in the alternative fuel and vehicle technology
 clusters. Additional outreach was done in the form of presentation to colleges, including
 Saddleback College, Golden West College, Irvine Valley College, South OC Community College
 District, Cypress College, Santa Ana College, Fullerton College and UC Irvine.
- The development of LocationOC industry cluster mapping by OCBC, which will include alternative fuel and vehicle technology and other advanced transportation companies.

Focus Area #2 – Talent Pipeline

The Talent Pipeline project is geared towards increasing student and general public awareness of alternative fuel and vehicle technologies' financial and environmental benefits through partnerships with workforce and education development institutions. Increasing awareness and education of this industry will contribute to the overarching goal of sustained and increasing workforce development skills that will allow it to continue to grow. This project's major accomplishments include:

- Leveraging and building upon partnerships with local educational institutions and employers.
 - Educational partners include Saddleback College, which mentioned creating a dedicated hybrid specialist training program, Cypress College, which plans to maintain and reinforce an introduction to alternative fuels class. Major regional employers include Hyundai Motors, which recently become the leading producer of hydrogen vehicles efforts which are local to Orange County and the International Brotherhood of Electric Workers (IBEW) which is currently preparing its workforce for the implementation and commercial rollout of electric vehicle infrastructure.
- Encouraging the creation and implementation of awareness campaigns, training programs, internships, mentorships and career development programs.
 - Various local organizations have greatly contributed to spreading awareness regarding the benefits of alternative fuel technologies: the Orange County Sanitation Department, whose fueling local serves as a model for other fueling sites, CleantechOC, which hosted the Clean Transportation Conference Panel connecting industry research with potential

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industry participants; and South Coast Air Quality Management District (SCAQMD) which has planned events for safety, awareness and other best practices for city planners.

Programs geared specifically towards Orange County students include the Orange County Green Champions of Tomorrow program, 2015 Solar Decathlon and Vital Link which promotes STEM and the Arts Career Showcase for alternative fuel vehicles. Two new internship programs with ARFVT RICO II components for 2016-2017 have also been developed by Orange County United Way and Cal State Fullerton.

 Promoting transfer readiness and postsecondary enrollment along with further transitory pathways toward relevant employment, apprenticeships or job training.

An Orange County Department of Education Initiative has resulted in the development and incorporation of new and expanded curricula in twenty-seven Orange County School Districts. Support organizations, in partnership with local educational institutions, provide graduates of these programs with career pathways towards "Green" employment. These programs include a fuel training program focused on incumbent training opportunities provided by Long Beach City College; the UC Irvine Graduate Division's Graduate Professional Success Program (GPS) which helps graduate students develop strong professional identities and career plans; and The Community for Innovation, Entrepreneurship, Leadership and Opportunities (CIELO), a partnership between Golden West Community College and Oak View Renewal Partnership which provides young professionals with services such as coaching, mentoring, training and networking.

• Continued efforts toward employer engagement and education partnerships.

Employer and education engagement mirrors similar outreach efforts highlighted above (networking, industry association, meetings, conferences) and also includes: tracking of development and implementation of new and emerging alternative fuel and vehicle technologies; weaving RICO into future Workforce and Economic Development initiatives; researching and distributing industry-related labor market information; encouraging employer internships related to alternative fuel and vehicle technologies; and identifying potential future partners.

The OCDB, meanwhile, continually supports educational institutions by providing them with labor market information through the annual Workforce Indicators Report and other resources; this information allows educators to update advanced fuel and vehicle technology courses, certifications and degrees in order to fill current and future employer needs.

PROGRESS TOWARD PERFORMANCE STANDARDS

The 2013-2018 CEDS identified four progress benchmarks for Orange County to meet by 2018: jobs created after implementation of the five-year CEDS plan, number of investments undertaken in the region, number of jobs

retained in the region, and private sector investments made post-implementation. Orange County has made significant progress towards each benchmark in the past four years.

JOBS CREATED AFTER IMPLEMENTATION FROM 5-YEAR OC CEDS PLAN

Orange County has already surpassed its goal of creating 50,000 cumulative new jobs between June 2013 and June 2018. The county's total labor force has grown to 1,612,400, as seen in the

following table, while employment has reached 1,554,200, an increase of 92,400 jobs.

Orange County Population	June 2013	September 2017
Civilian Labor Force	1,569,500	1,612,400
Civilian Employment	1,461,800	1,554,200

Source: California Employment Development Department

RED-ZONE INVESTMENTS FROM 5-YEAR OC CEDS PLAN

During CEDS implementation, Orange County must undertake at least two Red-Zone specific economic investment projects involving infrastructure and transit-transportation centers. Fortunately, the county already has several new programs aimed at improving transit access among low-income residents. Launched in 2014 and recently completed, Anaheim's Regional Trans Intermodal Center (ARTIC) is a 16-acre transportation hub with freeway, rail, bus, taxi and bike lines as well as parking and dining options. ARTIC is located in central Anaheim, which enables it to serve both the city as a whole and its Red-Zone areas; Anaheim has more Red-Zones than any other Orange County city, and increased

access to transportation will help residents of these areas find gainful employment and access needed resources. Due to its innovative design, the center has quickly become an Orange County landmark and was featured in the second season finale of HBO's *True Detective*.

The Santa Ana/Garden Grove fixed guideway project, expected to be completed by 2020, will provide a new streetcar line, OC Streetcar, between the Santa Ana Regional Transportation Center (SARTC) and a new multi-modal transit hub on Harbor Boulevard in Garden Grove; OC Streetcar will also connect 18 pre-existing OCTA bus routes. This project, which has been awarded

approximately \$12 million in Project S and additional funds, will begin construction in 2018 and when completed will provide much-needed public transportation in central Orange County.

Finally, the Orange County Transportation Authority Board of Directors launched the OC Bus 360 program in 2015. This program focuses on providing better service and bus routes in high-demand areas by reallocating existing resources, changing prices, and improving branding to attract new riders. While ridership continues to decline across the county, areas in which the OC Bus 360 system were implemented saw ridership increase

by 10.4 percent year-over-year. This highlights the success already experienced by the program and demonstrates that infrastructure programs, especially those serving Red-Zone areas of the county, can be improved through strategic planning. These three projects, all partially funded by Measure M2 funds, will better position Orange County to meet the various CEDS goals highlighted in this report.

CONSTRUCTION, MANUFACTURING AND FINANCE EMPLOYMENT GOAL FROM OC 5-YEAR CEDS PLAN

The 2013-2018 Orange County CEDS aims to create 5,000 new jobs in Construction, Manufacturing, and Financial Services by June 2018. Construction employment has increased by over 27,300 since June 2013 and Financial Activities jobs increased by 4,300 while Manufacturing actually shrunk by 5,700 jobs. The high level of growth in the Construction industry has been driven by the surging housing market and the demand for additional housing at nearly all price levels. Employment within the Financial Activities industry has remained fairly steady in recent years, but still trails behind pre-recession levels. Meanwhile, Manufacturing employment in Orange County has been steadily decreasing since 2000 and has continued on this downward trend in recent months. Considering the Manufacturing industry provides a large number of entry-level positions with valuable pathways to vertical career

progression while also providing high multiplier effects across the regional economy, it is imperative that regional stakeholders create programs to promote the benefits associated with Manufacturing employment. Additionally, traditional manufacturing operations are currently undergoing a significant shift into what many have identified as Industry 4.0 or the fourth industrial revolution, which is characterized by digitization, automation and increased connectivity of nearly all manufacturing processes. This shift has served to disrupt traditional manufacturing labor pools where operations are less reliant on low-skilled positions - which have been filled by automated processes - while also requiring a much higher degree of IT workers who manage the increasing number of technological programs and systems required in these digital factories.

Orange County Employment	June 2013	September 2017
Construction	77,400	106,100
Manufacturing	158,000	152,300
Financial Activities	113,800	118,100

Source: California Employment Development Department

THE END RESULT: NEW PRIVATE-SECTOR INVESTMENT IN TRANSPORTATION-TRANSIT

The CEDS anticipates that private investment in Orange County will be at least \$50 million after the CEDS is successfully implemented. Several projects, such as ARTIC, OC Streetcar Project, and

the OC Bus 360 Program are expediting the successful implementation of CEDS by increasing mobility in low-income regions.

CONCLUSION

Orange County has continued to make significant progress towards all of its 2013-2018 CEDS goals in 2017. While the county's thriving economy has allowed it to already meet and surpass several of these goals, others, such Manufacturing employment growth, remain something to strive for. As the national economy continues to improve, Orange County should follow suit with infrastructure projects coming online, a strong housing market, continued job and wage growth, and innovative industry clusters that maintain the area's global economic competitiveness.

These trends, supported by strategic, actionable policies, will better prepare the county to combat any potential increases in the number of Red-Zones at the tract-level and allow policymakers to make concerted efforts to improve the quality-of-life of many residents currently in Red-Zone areas. The Information Technology cluster is a bright spot for such opportunities, and Orange County has made great strides in bridging the gap between educators and employers through its IT Cluster Competitiveness Project. In short, a solid baseline of strategies, goals and action projects are in place to capitalize on Orange County's economic assets in this successful year of rapid expansion.

APPENDIX A: RED-ZONE DATA TABLES

Red-Zone Census Tracts by City				
City	Census Tract(s)	Unemployment	Per Capita	
	864.02	12.0	\$21,252	
	865.02	11.9	\$12,402	
	866.01	14.7	\$11,890	
	866.02	11.3	\$17,302	
	868.02	12.0	\$16,872	
	869.01	13.6	\$15,147	
Anaheim	870.01	12.3	\$18,947	
	870.02	16.1	\$21,214	
	871.02	11.4	\$16,774	
	871.06	13.5	\$18,997	
	874.03	12.5	\$11,307	
	874.05	19.1	\$10,895	
	877.03	11.6	\$18,942	
	636.05	12.9	\$15,937	
Costa Mesa	637.01	11.8	\$13,408	
	638.08	12.3	\$17,713	
	18.01	14.1	\$16,485	
	18.02	16.7	\$14,211	
	19.02	14.3	\$22,771	
Fullerton	111.02	14.7	\$19,989	
	115.04	10.3	\$17,099	
	116.01	12.5	\$16,432	
	882.01	15.5	\$17,695	
	882.03	11.8	\$19,742	
	884.02	10.6	\$15,070	
Garden Grove	886.01	11.7	\$22,791	
	889.01	12.8	\$17,431	
	890.03	13.0	\$14,555	
	891.07	11.1	\$21,471	
Huntington Beach	994.02	10.6	\$11,395	
	524.04	20.5	\$18,517	
Irvine	626.26	11.7	\$13,334	
	11.03	11.7	\$21,770	
	12.02	10.4	\$16,548	
La Habra	13.04	11.8	\$18,052	
	14.02	14.5	\$21,195	
Placentia	117.20	10.6	\$10,121	
raserra			Ţ-0,122	

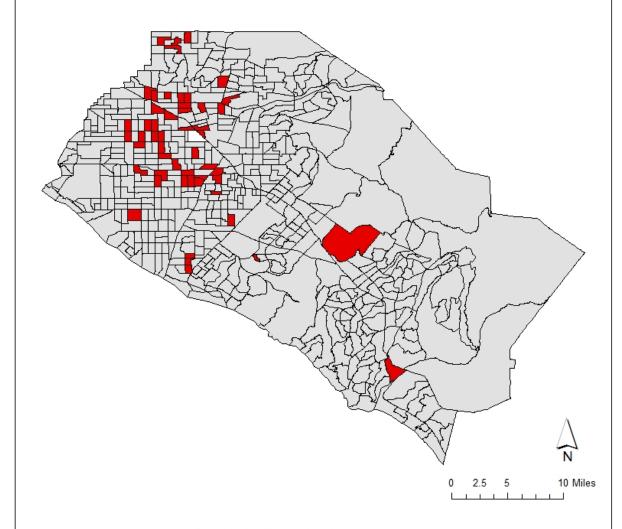
San Juan Capistrano	423.12	10.6	\$19,527
	740.04	11.3	\$19,702
	748.06	12.9	\$11,136
	752.02	12.6	\$17,438
Santa Ana	753.02	14.7	\$19,295
Salita Alia	890.01	11.1	\$15,541
	890.04	11.6	\$13,765
	891.04	10.9	\$13,033
	891.05	10.4	\$12,722
	878.01	10.4	\$21,938
Stanton	878.03	13.6	\$11,847
Stanton	878.06	10.7	\$15,492
	879.01	14.1	\$19,522
Westminster	889.05	12.7	\$19,517
	998.01	12.4	\$20,279

Tracts Moved Into Red-Zone Status				
City	Census Tract	Unemployment	Per Capita Income	
Anaheim	871.02	11.4	\$16,774	
Costa Mesa	637.01	11.8	\$13,408	
Costa Mesa	638.08	12.3	\$17,713	
Fullerton	116.01	12.5	\$16,432	
Garden Grove	886.01	11.7	\$22,791	
	891.07	11.1	\$21,471	
Irvine	524.04	20.5	\$18,517	
La Habra	13.04	11.8	\$18,052	
San Juan Capistrano	423.12	10.6	\$19,527	

Tracts Moved Out of Red-Zone Status				
City	Census Tract	Unemployment	Per Capita Income	
	863.01	11.3	\$29,825	
	864.04	9.2	\$16,690	
	867.01	10.5	\$23,476	
Anaheim	867.02	9.4	\$17,874	
	873	8.3	\$20,034	
	874.04	9.9	13,087	
	875.05	10.0	\$16,895	
Costa Mesa	637.02	8.9	\$23,254	
Fullerton	19.03	10.2	\$22,578	
	880.01	9.4	\$20,186	
	885.01	10.0	\$19,404	
Garden Grove	887.01	9.9	\$18,445	
	889.02	6.7	\$16,817	
La Habra	14.04	9.8	\$17,314	
Orange	762.05	9.0	\$18,420	
	741.09	9.9	\$13,952	
	744.03	7.6	\$8,740	
	745.01	8.2	\$9,584	
Santa Ana	745.02	9.2	\$12,860	
	746.01	8.6	\$14,205	
	748.02	5.2	\$11,760	
	992.47	9.0	\$15,586	
Stanton	879.02	10.1	\$14,464	
Machinington	998.02	7.0	\$17,121	
Westminster	999.03	9.3	\$18,784	

Orange County Red-Zone Census Tracts, 2017

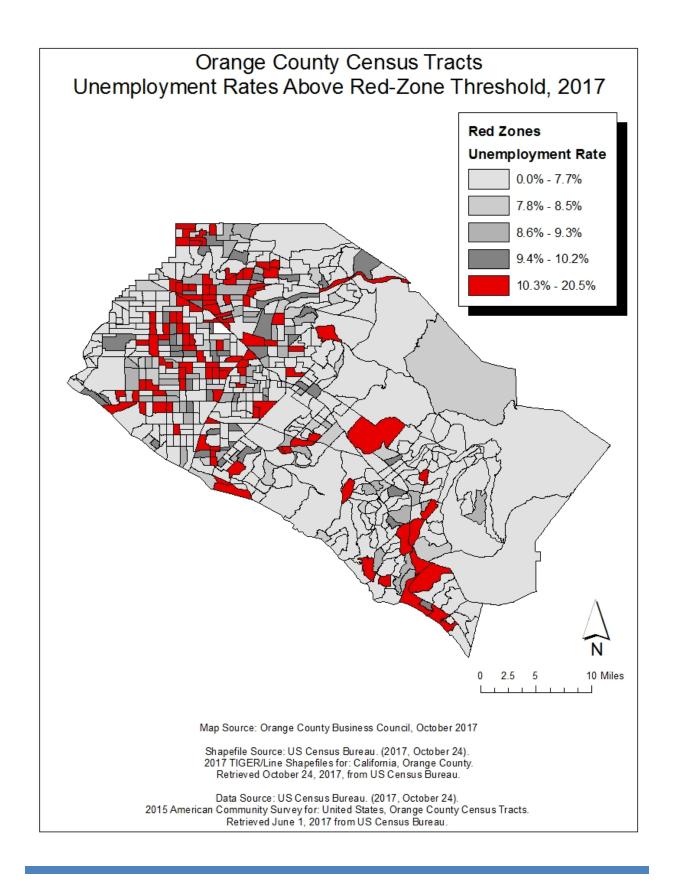
Red-Zones (Highlighted Below in Red) are Defined as: Having Unemployment Rates At or Above 10.3% AND Per Capita Incomes At or Below \$23,144.

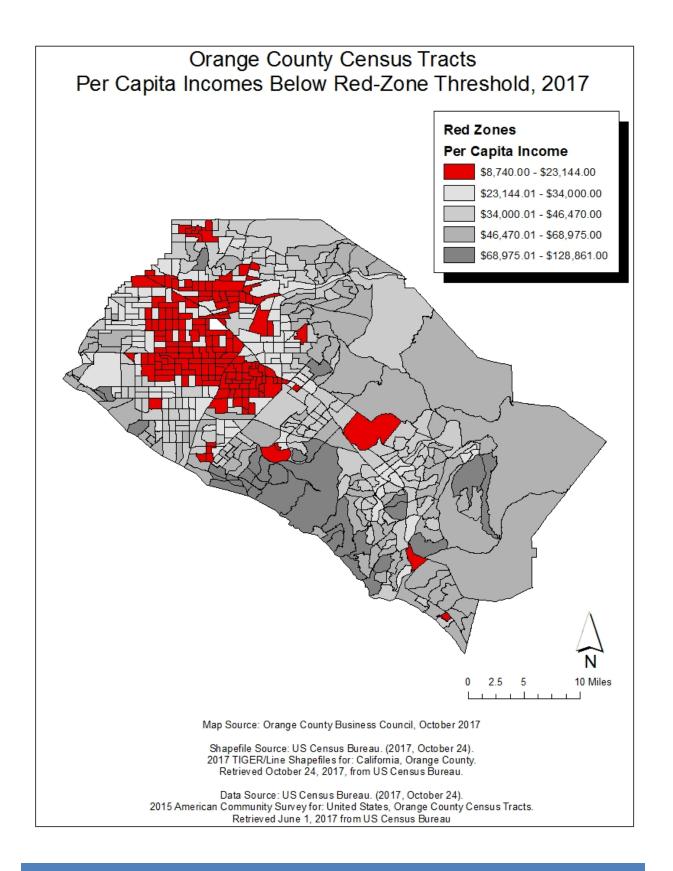


Map Source: Orange County Business Council, October 2017

Shapefile Source: US Census Bureau. (2017, October 24). 2017 TIGER/Line Shapefiles for: California, Orange County. Retrieved October 24, 2017, from US Census Bureau

Data Source: US Census Bureau. (2017, October 24) 2015 American Community Survey for: United States, Orange County Census Tracts Retrieved June 1, 2017 from US Census Bureau





APPENDIX B: MEASURE M2 PROJECT SCHEDULE

Measure M2 Projects Expected Stage in **Description** Completion **Project Construction Process** Date Complete I-5 Ortega Interchange D Complete Ε Complete SR-22, Access Improvements Complete G SR-57 NB, Katella Avenue to Lincoln Avenue Complete Complete SR-57 NB, Orangethorpe Avenue to Yorba G Complete Complete Linda Boulevard SR-57 NB, Yorba Linda Boulevard to Lambert G Complete Complete Road Complete SR-91 WB, I-5 to SR-57 Complete SR-91 WB, SR-55 to Tustin Avenue Complete Complete Interchange J Complete SR-91, SR-55 to SR-241 Complete J Complete SR-91, SR-241 to SR-71 Complete Kraemer Boulevard Grade Separation 0 Complete Complete (Placentia) Lakeview Avenue Grade Separation 0 Complete Complete (Anaheim/Placentia) Orangethorpe Avenue Grade Separation 0 Complete Complete (Anaheim/Placentia) 0 Complete Placentia Avenue Grade Separation (Placentia) Complete Tustin Ave/Rose Drive Grade Separation Complete 0 Complete (Anaheim/Placentia) R Complete Sand Canyon Grade Separation (Irvine) Complete Rail-Highway Grade Crossing Safety R Complete Complete Enhancement San Clemente Beach Trail Safety R Complete Complete **Enhancements** R Complete San Clemente Pier Station Lighting Complete R Complete Complete **Tustin Parking Structure** Anaheim Regional Transportation Intermodal R,T Complete Complete Center SR-91, SR-241 to I-15 (Env. Cleared/Further J Environmental TBD Schedule TBD) I-5, Avenida Vista Hermosa to Pacific Coast C Construction 2017 Highway

R	Environmental	17th Street Railroad Grade Separation	2017
R	Construction	Laguna Niguel/Mission Viejo Station	2017
В	Environmental	I-5, I-405 to SR-55 (Further Schedule TBD)	2018
C,D	Construction	I-5, Avenida Pico to Avenida Vista Hermosa/Avenida Pico Interchange	2018
С	Construction	I-5, Pacific Coast Highway to San Juan Creek Road	2018
G	Environmental	SR-57, Orangewood Avenue to Katella Avenue	2018
L	Environmental	I-405, I-5 to SR-55 (Further Schedule TBD)	2018
M	Environmental	I-605, Katella Interchange (Further Schedule TBD)	2018
0	Construction	Raymond Avenue Grade Separation (Fullerton)	2018
0	Construction	State College Blvd Grade Separation (Fullerton)	2018
R	Construction	Fullerton Transportation Center Improvements	2018
D	Environmental	I-5, El Toro Interchange (Further Schedule TBD)	2019
1	Environmental	SR-91, SR-55 to SR-57	2019
R	Design, Advertise & Award	Orange Metrolink Station & Parking Structure	2019
R	Design, Advertise & Award	Placentia Metrolink Station & Parking Structure	2019
Α	Design, Advertise & Award	I-5, SR-55 to SR-57	2020
F	Environmental	SR-55, I-5 to SR-91 (Further Schedule TBD)	2020
R	Environmental	Anaheim Canyon Metrolink Station	2020
R	Design, Advertise & Award	San Juan Capistrano/Laguna Niguel Passing Siding Project	2020
S	Design, Advertise & Award	OC Streetcar	2020
G	Conceptual	SR-57 NB, Lambert Road to Tonner Canyon Road	2021
C,D	Design, Advertise & Award	I-5, SR-73 to Oso Parkway/Avery Parkway Interchange	2023
C,D	Design, Advertise & Award	I-5, Oso Parkway to Alicia Parkway/La Paz Road Interchange	2023
С	Design, Advertise & Award	I-5, Alicia Parkway to El Toro Road	2023
F	Environmental	SR-55, I-405 to I-5	2023
K	Design-Build	I-405, SR-55 to I-605	2023

City of Buena Park Project Summary

Project Name: Relocation of the Buena Park Women's Club

Project Dates: TBD

Description: In 2014, the former Buena Park Woman's Club (BPWC) building was donated to the City. The building was built in 1931, and was used exclusively by the BPWC for meetings and social events. In its current location, the building has virtually no parking, which limits new uses that could occupy the building. The proposed project would relocate the building on Beach Boulevard to a rose garden area currently owned by the First Congregational Church of Buena Park. The City proposes to purchase a portion of the property from the Church for this purpose. The building would then need to be relocated and associated site work would need to be done, including foundation, landscaping, and other flatwork. With this location, the City hopes that this building can find reuse as a banquet hall, reception area, or meeting space for residents.

Purpose / Justification: To preserve the former Buena Park Women's Club as a historic asset as well as enhance the City's current historic inventory.

Other Agencies Involved: None.

Operating Budget Impact: TBD

Cost Estimate: \$2.2 Million for acquisition of property, relocation of building, and associated site work.

Example Drawing or Photo if available:





BUENA PARK WOMEN'S CLUB AT ROSE GARDEN BUENA PARK, CALIFORNIA

7 NOVEMBER 2016

100



70

City of Buena Park Project Summary

Project Name: Crescent Avenue Sewer Project

Project Dates: TBD

Description: This project will construct a new sewer line in Crescent Avenue from Western Avenue to Stanton Avenue, and install a sewer line in Stanton Avenue for 350 feet south of Crescent Avenue. The project consists of 350 feet of 12" vitrified clay pipe (VCP), 1250 feet of 15" VCP, 1400 feet of 18" VCP, and 10 sewer manholes.

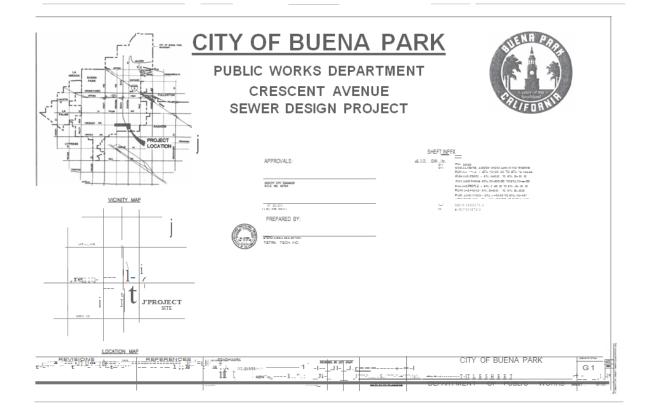
Purpose / Justification: To alleviate the lack of sewer capacity in a stretch of Crescent Avenue from just west of Western Avenue, going east to Stanton Avenue, and continuing south down Stanton Avenue to its terminus that has inhibited potential housing, retail, and hotel development in the immediate area.

Other Agencies Involved: None.

Operating Budget Impact: \$2.6 million. This was originally slated to be a Redevelopment Agency funded project in FY 11-12, but was not funded due to the elimination of redevelopment agencies in 2012.

Cost Estimate: \$2.6 Million

Example Drawing or Photo if available: See next page.



Project Name: Doheny Village Improvements Phase II

Project Dates: TBD

Description: The Doheny Village area of Dana Point is in need of revitalization efforts. Infrastructure improvements are critical to spur new investment and redevelopment. These improvements include, various street scape elements and lighting to make the area more inviting.

Purpose / Justification: The purpose of the project is to improve safety, manage traffic and beautify the area. Doheny Village is directly accessed by the I-5 FWY and adjacent to Doheny State Beach, making investment in this strategic location is important to the area's ability to redevelop. The infrastructure improvements will enhance the area, encouraging new business uses and generate increased visitor traffic.

Other Agencies Involved: Caltrans, City of San Juan Capistrano, Orange County Transportation Authority

Operating Budget Impact: Unknown

Cost Estimates: TBD

Project Name: Doheny Village Connectivity Study: Construction

Project Dates: TBD

Description: The Doheny Village area of Dana Point is in need of revitalization efforts. As part of this effort it is critical to connect Doheny Village with Doheny State Beach, as well as other parts of town. This is essential to provide safe routes for pedestrians, given the current rail and highway infrastructure. Currently highway on- and off-ramps conflict, high-speed roadways and the lack of pedestrian and bicycle facilities have been a deterrent to increased non-motorized use in the area. The goal of this project is to improve access for all non-motorized uses and reduce pedestrian and bicycle conflicts, to provide a safe and viable connection to Doheny Village, the Dana Point Harbor, Town Center and the Doheny State Beach camp ground.

Purpose / Justification: The purpose is to improve accessibility throughout the Doheny Village area, creating connections to multiple areas throughout the City of Dana Point, including beach access. Doheny Village has a large economic potential, as there is a desire to encourage investment and redevelopment of blighted and underutilized lots.

Other Agencies: Caltrans, City of San Juan Capistrano, Orange County Transportation Authority

Operating Budget Impact: Unknown

Cost Estimates: TBD



Project Name: Doheny Village: Doheny Park Road Improvements

Project Dates: TBD

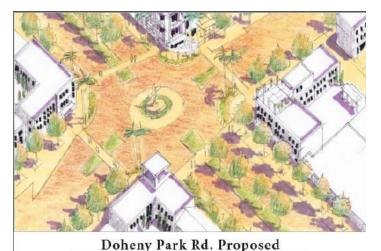
Description: The Doheny Village area of Dana Point is in need of revitalization efforts. There is a need to calm traffic on Doheny Park Road, a 4 lane road located parallel to the I-5 Freeway. The Goal of traffic calming on Doheny Park Road is to create a pedestrian friendly, walkable, "Park Once" district. This will allow visitors to experience multiple businesses on a trip to Doheny Village, without experiencing traffic at high speeds and a lack of safe pedestrian street crossing.

Purpose / Justification: Doheny Village has a large economic potential, as there is a desire to attract investment and redevelopment to create a thriving commercial and residential district.

Other Agencies Involved: Caltrans, City of San Juan Capistrano, Orange County Transportation Authority

Operating Budget Impact: Unknown

Cost Estimates: TBD



Project Name: Underground Electrical Utilities City Wide

Project Dates: TBD

Description: Moving the electrical lines from above ground to below ground.

Purpose / Justification: Currently there are a large number of electrical lines above ground. By undergrounding electrical utilities, there is an opportunity to better serve our business community and residents by beautifying our streets and making it more economically feasible to build on the many empty lots in the business districts throughout the City.

Other Agencies Involved: SDG&E

Operating Budget Impact: \$0

Cost Estimates: \$200 Million

Project Name: Investel Garden Resorts, LLC

Projected Dates: 2018-2021

Description: Investel Garden Resorts, LLC has an agreement with the City of Garden Grove for the construction of an upper upscale service hotel and two (2) upscale service hotels with a maximum of 769 rooms, 39,000 square feet of conference space, 45,000 square feet of restaurant space, a parking structure, and a resort pool on the 4.3 acre site.

Purpose / Justification: The project is expected to create 750 permanent jobs.

Other Agencies Involved: None

Operating Budget Impact: \$800,000

Cost Estimate: The total cost of the development is approximately \$250 - \$300 M



Project Name: BN Group Hotel

Projected Dates: 2018 - 2019

Description: BN Group has purchased City owned property at 13650 Harbor Boulevard for the development of a limited service hotel, south of the SR-22 Freeway. The hotel will be a national brand, with 124 rooms, 100 parking spaces and is projected to generate approximately \$400,000 in tax revenue to the City of Garden Grove.

Purpose/Justification: The project is expected to create approximately 30 new and permanent jobs.

Other Agencies Involved: None

Operating Budget Impact: TBD

Cost Estimate: The total cost of this development is approximately \$35 - \$40 M



Project Name: New Age Garden Grove B2

Projected Dates: 2019 – 2021

Description: New Age Garden Grove B2 has an agreement with the City of Garden Grove to develop a limited service hotel with approximately 180 rooms. The project is expected to create approximately 45 new permanent jobs. The project is located on the west side of Harbor Boulevard and north of Twintree Lane.

Purpose / Justification: The project is expected to create 45 new and permanent jobs.

Other Agencies Involved: None

Operating Budget Impact: TBD

Cost Estimate: TBD



Project Name: Grove District Street Improvements

Projected Dates: 2018 – 2021

Description: Cost for design plans and development of street improvements on Harbor Boulevard still need to be determined but will include roads, relocation of water mains, sewer line improvements, removal of utility pipes, installation of new traffic signals, construction of way finding and monument signs, construction of new curb and gutter, median improvements and landscaping, construction of bus stop/pedestrian areas, street lighting, installation of street furniture, and creation of area monuments and entrance sign(s). Jobs will be created in connection with the aforementioned hotel development of Site C, Site B2 and BN Hotel Group. Connecting the southern resort from Harbor Boulevard and Westminster Avenue to the northern resort from Harbor Boulevard to Palm Street.

Purpose / Justification: The project is expected to create new permanent jobs.

Other Agencies Involved: None

Operating Budget Impact: TBD

Cost Estimate: TBD



Project Name: New Age Brookhurst Triangle, LLC

Projected Dates: 2017 – 2021

Description: New Age Brookhurst Triangle, LLC currently has a Development Agreement for a residential, retail and mixed-use component that will include up to 600 residential units, with up to 120 affordable units along, and with up to 80,000 square feet of commercial retail space. The project is estimate to generate an additional \$3,100,000 in gross tax increment annually.

Purpose / Justification: The project is expected to create approximately 200-400 new and permanent jobs.

Other Agencies Involved: None

Operating Budget Impact: TBD

Cost Estimate: TBD



Project Name: OC Streetcar

Project Dates: 2018-2020

Description: The cities of Santa Ana and Garden Grove in cooperation with the Orange County Transportation Authority (OCTA) are working to build a Fixed Guideway (OC Streetcar) Transportation system between the Santa Ana Regional Transportation Center (SARTC) and a new transportation center in Garden Grove. The system would provide transit service for commuters traveling from the train station to employment and activity centers in the heart of Orange County and to residents and visitors wanting to circulate throughout the area.

Purpose / Justification: The streetcar project would service Santa Ana's historic downtown which includes government offices, federal, state and local courthouses, unique businesses, and artists' village, several colleges and a variety of organizations that cater to the community's needs.

Other Agencies Involved: City of Garden Grove, Orange County Transportation Authority (OCTA), Federal Transit Administration (FTA)

Operating Budget Impact: TBD – Annual maintenance and operational cost for City

Cost Estimates: The preliminary cost estimate for the OC Streetcar is \$298 million (year of expenditure). Funding sources identified for this project, including capital and operations and maintenance, include Measure M as well as Federal Transit Administration New Starts, Federal Congestion Mitigation and Air Quality Improvement, and State Cap-and-Trade.



Project Name: 3rd and Broadway Development Opportunity

Project Dates: 2018-2021

Description: The City constructed the 440-space parking garage located on 3rd Street and Broadway in the early 1980s. The three-level garage is situated on approximately 61,243 square feet of land area and encompasses approximately 146,000 square feet of building area. The 3rd Street Garage is not currently encumbered by any debt. The construction costs for this public parking garage were funded by a tax-exempt bond. A portion of the bond debt service payment obligations on the bond were funded with assessments imposed on property owners within a defined district.

Purpose / Justification: The City has determined that the parking garage is at the point of functional obsolescence. The City has entered into an exclusive negotiation agreement with Caribou Industries to develop the site as mixed use and a hotel. The developer is requesting city assistance and incentives to build the project.

Other Agencies Involved: N/A

Operating Budget Impact: \$10-13 million in City contributed public improvements to ready site for development and build out of public parking. Plus potential sales, property, and hotel tax abatements.

Cost Estimates: TBD



Project Name: Santa Ana Blvd. Grade Separation

Project Dates: TBD

Description: The project proposes to grade separate the existing Santa Ana Boulevard/OCTA Metrolink at-grade railroad crossing. The grade separation will eliminate the at-grade crossing of Santa Ana Boulevard and the OCTA Metrolink tracks to improve pedestrian and bicycle user safety, enhance traffic operations, improve emergency response times, reduce existing traffic congestion and reduce greenhouse gas emissions to improve air quality along Santa Ana Boulevard.

Purpose / Justification: Continue to support regional and local transportation infrastructure and to reduce carbon footprint by providing enhancements to alternative transportation modes. This project also helps to physically separate train and vehicular/bicycle/pedestrian modes which will help facilitate each transportation mode and should enhance safety.

Other Agencies Involved: OCTA/Metrolink

Operating Budget Impact: TBD - Annual maintenance and operational cost for City

Cost Estimates: The preliminary cost estimate for the Santa Ana Blvd. Grade Separation is \$73.3 million. Funding sources TBD.



Project Name: 17th Street Grade Separation (OCTA Lead)

Project Dates: TBD

Description: The project proposes to grade separate the existing 17th St. and Lincoln intersection from the OCTA Metrolink at-grade railroad crossing. The grade separation will eliminate the at-grade crossing of 17th Street and the OCTA Metrolink tracks to improve pedestrian and bicycle user safety, enhance traffic operations, improve emergency response times, reduce existing traffic congestion and reduce greenhouse gas emissions to improve air quality along 17th Street.

Purpose / Justification: Continue to support regional and local transportation infrastructure and to reduce carbon footprint by providing enhancements to alternative transportation modes. This project also helps to physically separate train and vehicular/bicycle/pedestrian modes which will help better facilitate each transportation mode and enhance safety.

Other Agencies Involved: OCTA/Metrolink

Operating Budget Impact: TBD – Annual maintenance and operational cost for City.

Cost Estimates: The preliminary cost estimate for the 17th Street Grade Separation is \$133 million. Funding sources TBD.



Project Name: Grand Avenue Grade Separation (OCTA Lead)

Project Dates: TBD

Description: The project proposes to grade separate the existing Grand Avenue from the OCTA Metrolink at-grade railroad crossing. The grade separation will eliminate the at-grade crossing of Grand Avenue and the OCTA Metrolink tracks to improve pedestrian and bicycle user safety, enhance traffic operations, improve emergency response times, reduce existing traffic congestion and reduce greenhouse gas emissions to improve air quality along 17th Street.

Purpose / Justification: Continue to support regional and local transportation infrastructure and to reduce carbon footprint by providing enhancements to alternative transportation modes. This project also helps to physically separate train and vehicular/bicycle/pedestrian modes which will help better facilitate each transportation mode and enhance safety.

Other Agencies Involved: OCTA/Metrolink

Operating Budget Impact: TBD – Annual maintenance and operational cost for City.

Cost Estimates: The preliminary cost estimate for the Grand Avenue Grade Separation is \$77 million. Funding sources TBD.



Project Name: Bristol Street Improvements – 17th to Santa Clara

Project Dates: TBD

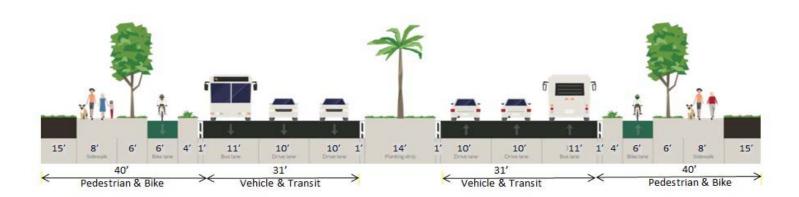
Description: Improvements include landscaped medians; landscaped buffers for pedestrians in the parkways; protected bike lanes; storm drain improvements; undergrounding overhead utilities; upgrade of street lighting and the building of sound walls where necessary. The street will also be widened from two to three lanes in each direction.

Purpose / Justification: Bristol Street Improvements from 17th Street to Santa Clara Avenue is part of the City's plan to improve the Bristol Street Corridor from Warner Avenue to Memory Lane. The project will provide complete streets features and safe accessible travel for bicyclist, pedestrians, and wheelchairs through new bike lanes, wider parkways, and wider sidewalks. Alleviate current traffic congestion and provide roadway capacity to accommodate future traffic volumes for all transportation modes.

Other Agencies Involved: OCTA

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the Bristol Street Improvements is \$40 million. Funding sources TBD.



Project Name: Warner Avenue Improvements – Main Street to Grand Avenue

Project Dates: 2009 – 2021

Description: The City of Santa Ana is proposing to improve Warner Avenue from Main Street to Grand Avenue with the addition of landscaped medians; landscaped buffers for pedestrians in the parkways, protected bike lanes; storm drain improvements; undergrounding overhead utilities; upgrade of street lighting and the building of sound walls where necessary. The street will also be widened to accommodate three lanes in each direction.

Purpose / Justification: The purpose of the Warner Avenue Improvements project from Main Street to Grand Avenue includes: increasing safety for pedestrians, bicyclists, and motorist; providing greater public access with ADA improvements and dedicated bike lanes; reducing traffic congestion and providing traffic calming; improving storm water drainage, water quality, and air quality; and enhancing community beautification with significant public investment.

Other Agencies Involved: N/A

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the total project is \$55 million. Funding sources for the design and right of way of Phase 1 from Main Street to Oak Street and the design of Phase 2 from Oak Street to Grand Avenue are from Measure M as well as traffic impact fees. There is no current funding for the right of way or construction phases.



Project Name: Fairview Street Improvements – 9th Street to 16th Street

Project Dates: 2015 – 2023

Description: The City of Santa Ana is proposing to improve the segment of Fairview Street from 9th Street to 16th Street with replacement of the existing bridge to accommodate bikes and pedestrians. Additionally, sidewalks, protected bike lanes, landscaped medians, and landscaped buffers for pedestrians in the parkways will be added. The street will also be widened from two to three lanes in each direction.

Purpose / Justification: Fairview Street is currently a four-lane undivided arterial between 9th Street and 16th Street. The bridge over the Santa Ana River does not currently accommodate pedestrians or bicyclists. The project will provide complete street features and safe accessible travel for bicyclists, pedestrians, and wheelchairs through new bike lanes and wider sidewalks. Alleviate current traffic congestion and provide roadway capacity to accommodate future traffic volumes for all transportation modes.

Other Agencies Involved: OCTA/Caltrans

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the total project is \$20 million. Funding sources for the design and preparation of environmental clearance documents for this project include Measure M as well as Federal Highway Bridge Program (HBP). The City will apply for right of way and construction funding once the environmental clearance documents are completed.



Project Name: Dyer Road Improvements – SR-55 to RR Crossing e/o Pullman Ave

Project Dates: TBD

Description: Improvements include landscaped medians; landscaped buffers for pedestrians in the parkways; bike lanes; storm drain improvements and upgrade of street lighting. The street will also be widened from three to four lanes in each direction.

Purpose / Justification: Dyer Road Improvements from the SR-55 Freeway to the Railroad Crossing east of Pullman Avenue is a required mitigation measure in the 1992 Irvine Business Complex (IBC) Re-zone Environmental Impact Report (EIR). The project will provide complete street features and safe accessible travel for bicyclists, pedestrians, and wheelchairs through new bike lanes and wider sidewalks. Alleviate current traffic congestion and provide roadway capacity to accommodate future traffic volumes for all transportation modes.

Other Agencies Involved: City of Irvine

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the Dyer Road Improvements is \$22 million. Funding sources TBD.

Project Name: Grand Avenue Improvements - 4th to 17th

Project Dates: TBD

Description: Improvements include landscaped medians; landscaped buffers for pedestrians in the parkways; bike lanes; storm drain improvements; undergrounding overhead utilities; upgrade of street lighting and the building of sound walls where necessary. The street will also be widened from two to three lanes in each direction.

Purpose / Justification: Grand Avenue Improvements from 4th Street to 17th Street to Santa Clara Avenue is part of the City's plan to improve the Grand Avenue Corridor from 1st Street to 17th Street. The project will provide complete streets features and safe accessible travel for bicyclist, pedestrians, and wheelchairs through new bike lanes, wider parkways, and wider sidewalks. Alleviate current traffic congestion and provide roadway capacity to accommodate future traffic volumes for all transportation modes.

Other Agencies Involved: OCTA/Caltrans

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the Grand Avenue Improvements is \$63 million.

Funding sources TBD.



Project Name: Alton Avenue Overcrossing at SR-55

Project Dates: TBD

Description: The cities of Santa Ana and Irvine, in corporation with California Department of Transportation (Caltrans), propose to build an overcrossing structure over SR-55, the Costa Mesa Freeway, between the western terminus of Alton Avenue in the City of Santa Ana and the eastern terminus of Alton Parkway in the City of Irvine, Orange County. The proposed project will include the construction of an overcrossing on Alton Avenue/Parkway over SR-55, the widening Alton Avenue between Main Street to Standard Avenue in the City of Santa Ana, the addition of bike lanes, and the relocation of an existing drainage channel.

Purpose / Justification: The purpose of this project is to provide a roadway link across SR-55; support circulation between the cities of Santa Ana and Irvine and provide mobility for pedestrians; relieve traffic on MacArthur Boulevard and Dyer Road; and accommodate projected traffic between, and planned development in, the Irvine Business Complex (IBC) in Irvine and MacArthur Place in Santa Ana to bolster future economic growth and stability within the project vicinity.

Other Agencies Involved: City of Irvine/Caltrans

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the Alton Overcrossing Project is \$60 million. Funding sources TBD.



Project Name: Safe Mobility Santa Ana

Project Dates: 2016 – 2025

Description: The City of Santa Ana is joining an emerging nationwide trend where cities are increasingly deciding to reject severe and fatal injuries as a necessary byproduct of multimodal transportation. Santa Ana is taking a hard look at traffic collision patterns citywide and setting the goal to reduce the number of severe and fatal injuries to zero.

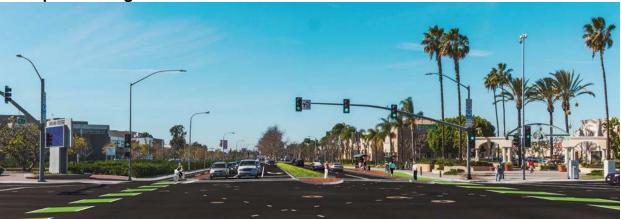
The Safe Mobility Santa Ana plan takes a new approach to addressing these patterns. The plan utilizes a detailed collision analysis to identify specific hot spot locations, citywide trends, and best practices in traffic safety to identify solutions that will evolve the roadway network in Santa Ana into one where roadway users can make transportation decisions and unanticipated mistakes without risk of severe injury or death. The recommendations of this plan recognize the need to balance the many objectives of the local transport system, including travel time reliability, safety, and meeting the mobility needs of a variety of roadway users, including personal and freight vehicles on regionally significant streets.

Purpose / Justification: For almost twenty years, Santa Ana has addressed serious and fatal traffic collisions with education and enforcement strategies to support safer walking and bicycling along and across our city streets. Despite past and current efforts, vulnerable roadway user collisions are not going down. In fact, bicycle collisions are on a long term upward trend, because ridership has increased while on-street bikeways remain uncommon. Because more than half of our residents (55%) do not have access to their own personal vehicles, we are much more reliant on walking, bicycling, and public transit than other cities in the region. Normal activities such as going to school, visiting places of worship, and conducting business are challenging because our roadway network was built to support large numbers of personal vehicles traveling through the city. Wide street designs with long distances between intersections that favor through traffic and speed at the expense of safety are no longer supportable. Transportation safety is a social issue impacting individuals and families throughout the community. Within Santa Ana, there are more collisions in places with higher proportions of low income households lower education levels, youth, and Hispanic/Latino residents. This plan recognizes that people should not face additional hazards when traveling simply because they cannot afford to drive or are not old enough to do so. This plan was undertaken to take back the streets for our community.

Other Agencies Involved: OCTA, CalTrans

Operating Budget Impact: N/A

Cost Estimates: \$43 million for full implementation



Project Name: "Fill It From The Tap"

Project Dates: 2018-2020

Description: The City of Santa Ana approved a "Fill It From The Tap" policy to improve access to and encourage the consumption of tap water at all City facilities, public venues, and community events. This policy also encourages residents to bring reusable water bottles or healthy beverages to community events and discourages outside vendors from bringing bottled water at these events where the Water Resources Division is present and providing tap water for public consumption. A key component to this program is a public outreach campaign to educate children and families about the health benefits of drinking water over sugary beverages, as well as the safety, cost savings and environmental stewardship of drinking tap water over unrecyclable plastic water bottles.

Purpose / Justification: The City of Santa Ana has a long history of environmental stewardship and commitment to the health and quality of life of its community. Drinking tap water over bottled water is proven to be more affordable, safer and better for the environment. Improving public access to water at community events and public venues promotes consumption of tap water, reduces the community's carbon footprint, and encourages healthier beverage choices for residents while saving them money.

Other Agencies Involved: N/A

Operating Budget Impact: \$25,000 outreach material and \$30,000 staff time.

Cost Estimates: The cost estimate to support the Fill It From The Tap policy is \$55,000.

Example Drawing or Photo if available:



Water Pitcher Giveaways + Insert Card





Newsletter





T-Shirt Giveaways

City of Westminster Project Summary

Project Name: Rehabilitation of Congested Arterial Streets within Westminster

Projects Dates: 2018-2020

Description: The \$30 million requested rehabilitation project includes renovation of 20 miles of the city's Major Arterials shared with other surrounding agencies. Such rehabilitated arterials will serve the adjacent businesses and commercial sites for better and more efficient access. Specifically, pavement within Little Saigon (see photo) serving businesses and commercial sites in Garden Grove, Westminster, and County of Orange areas, are in dire need of rehabilitation. With the loss of Redevelopment Agency (RDA) funds, such arterials will have to wait a long time before rehabilitation funds become available from our traditional sources.

Purpose / Justification: To improve safety, accessibility, and increase mobility for local and pass through traffic, as well as those accessing businesses in these active commercial areas.

Other Agencies Involved: County of Orange, City of Garden Grove, City of Fountain Valley, City of Huntington Beach, and CalTrans

Operating Budget Impact: TBD

Cost Estimates: TBD



Bolsa Ave within Little Saigon Area

City of Westminster Project Summary

Project Name: Civic Center Specific Plan

Projects Dates: 2017 - 2018

Description: The City of Westminster's 2016 General Plan Update identified the existing Civic Center as a prime redevelopment opportunity site. The citizens and City Council envisioned a mixed use environment that capitalizes on established amenities while strengthening community options for jobs and housing. The greater Civic Center campus is centrally located on a major arterial, and home not only to City Hall, but to the Senior Center, a library, a performing arts theater, Coastline Community College, a park and open space, and the West County Justice Center. A public-private partnership with a developer has been initiated, and the creation of a Specific Plan for the site is an important milestone in this long-term project.

Purpose / Justification: The City of Westminster's 2016 General Plan recognizes the need for creating more modern spaces that can compete for jobs and residents. Additionally, the community is seeking unique and enjoyable places where residents truly want to live, play, shop, etc. By leveraging property it owns, the City has an opportunity to lead the transformation intended by the General Plan, and propel that vision forward.

Other Agencies Involved: Roles may be played by the County of Orange and Coastline Community College due to their location in the greater Civic Center campus, but participation levels are unknown at this time.

Operating Budget Impact: P3 project. City intends to fund public improvements through sale of

property, with the balance privately financed.

Cost Estimates: TBD



City of Westminster Project Summary

Project Name: Commercial Corridor Enhancement

Projects Dates: 2018 - 2020

Description: Multi-pronged program to improve the commercial corridors that have suffered from age and obsolescence. Citizen advisory committee will be involved in final program recommendations, and act as public ambassadors to encourage local residents and businesses to take pride in their properties. City efforts will focus on community outreach; grants for façade updates and ADA compliance; affordable business loans for expansion, equipment, or other improvements that will result in the retention and growth of jobs; as well as code compliance support where needed.

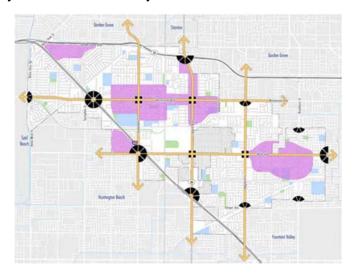
Purpose / Justification: The Westminster small business community - particularly in some of the city's oldest areas - is family driven and locally owned. The community relies heavily on these jobs, which provide critical pathways for lifting families out of poverty. The City is seeking to help its businesses thrive.

Other Agencies Involved: Program is still in design phase, but potentially Orange County Fire Authority (OCFA) and Small Business Administration (SBA).

Operating Budget Impact: TBD. Costs to be offset by sale of City-owned assets.

Cost Estimates: TBD

Example Drawing or Photo if available: Image identifies the city's "enhanced corridors" that will be prioritized for this program by a citizen's advisory committee.



APPENDIX D: TOP 5 LOCATION QUOTIENTS BY CITY

	Top 5 Location Quotients, Orange County Cities, 2017	<u> </u>
City	Industry	2017
	Real Estate	2.18
	Professional Services	2.02
Aliso Viejo	Insurance Carriers and Related Activities	1.80
	Administrative and Support Services	1.75
	Hotels and Accommodations	1.59
	Hotels and Accommodations	3.53
	Construction	1.78
Anaheim	Manufacturing	1.67
	Management of Companies	1.67
	Wholesale	1.58
	Insurance Carriers and Related Activities	3.72
	Warehousing and Delivery	3.20
Brea	Manufacturing	1.93
	Wholesale	1.79
	Construction	1.77
	Warehousing and Delivery	3.26
	Manufacturing	2.34
Buena Park	Wholesale	2.19
	Rental and Leasing Services	1.65
	Eating and Drinking	1.35
	Warehousing and Delivery	2.62
	Administrative and Support Services	2.42
Costa Mesa	Legal Services	1.65
	Insurance Carriers and Related Activities	1.57
	Eating and Drinking	1.47
	Insurance Carriers and Related Activities	5.12
	Finance	3.65
Cypress	Wholesale	2.15
	Manufacturing	1.57
	Eating and Drinking	1.50
	Hotels and Accommodations	10.07
	Real Estate	2.64
Dana Point	Eating and Drinking	1.80
	Arts, Entertainment, Recreation, Fitness	1.64
	Administrative and Support Services	1.25
	Waste Management and Remediation	3.29
	Transportation	1.73
Fountain Valley	Health Care	1.45
	Finance	1.25
	Manufacturing	1.19
	Warehousing and Delivery	2.02
	Manufacturing	1.53
Fullerton	Health Care	1.41
	Wholesale	1.37
	Retail Stores	1.16

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	Transportation	1.63
	Rental and Leasing Services	1.54
Garden Grove	Services	1.38
Saldell Glove		1.33
	Manufacturing Fating and Printing	1.33
	Eating and Drinking	
	Manufacturing	1.98
Huntington Booch	Real Estate	1.45
Huntington Beach	Eating and Drinking	1.35
	Insurance Carriers and Related Activities	1.30
	Waste Management and Remediation	1.27
	Legal Services	2.21
	Professional Services	2.11
Irvine	Management of Companies	1.97
	Finance	1.87
	Manufacturing	1.76
	Retail Stores	1.92
	Manufacturing	1.69
La Habra	Mining	1.63
	Eating and Drinking	1.52
	Warehousing and Delivery	1.48
	Mining	21.14
	Retail Stores	2.79
La Palma	Construction	2.15
	Wholesale	1.36
	Manufacturing	1.12
	Arts, Entertainment, Recreation, Fitness	2.91
	Real Estate	2.37
Laguna Beach	Hotels and Accommodations	2.20
	Eating and Drinking	1.71
	Professional Services	1.68
	Professional Services	1.99
	Construction	1.68
Laguna Hills	Health Care	1.59
	Real Estate	1.51
	Rental and Leasing Services	1.40
	Real Estate	2.05
	Arts, Entertainment, Recreation, Fitness	1.77
Laguna Niguel	Professional Services	1.71
Lagaria Migder	Finance	1.71
	Retail Stores	1.70
	Real Estate	
	Management of Companies	13.90
Laguna Woods		1.95
Laguna Woods	Health Care	1.92
	Rental and Leasing Services	1.34
	Finance	1.34
	Mining	2.48
Laka Farast	Manufacturing	2.12
Lake Forest	Finance	1.68
	Professional Services	1.53
	Wholesale	1.51
	Management of Companies	9.15
Las Alauritas	Manufacturing	2.25
Los Alamitos	Insurance Carriers and Related Activities	1.51
	Construction	1.50
	Health Care	1.47

Mission Viejo	Real Estate	1.55
	Health Care	1.55
	Rental and Leasing Services	1.30
	Pub Admin/Educational Services	1.25
	Retail Stores	1.24
	Real Estate	4.53
	Finance	3.25
Newport Beach	Legal Services	2.55
	Utilities	2.04
	Arts, Entertainment, Recreation, Fitness	1.55
	Health Care	1.90
	Wholesale	1.74
Orange	Construction	1.69
	Insurance Carriers and Related Activities	1.31
	Finance	1.15
	Construction	2.21
	Wholesale	2.09
Placentia	Eating and Drinking	1.29
	Manufacturing	1.26
	Retail Stores	1.15
	Administrative and Support Services	2.59
	Services	1.68
Rancho Santa Margarita	Manufacturing	1.45
	Retail Stores	1.36
	Arts, Entertainment, Recreation, Fitness	1.33
	Utilities	12.82
	Construction	1.61
San Clemente	Real Estate	1.57
	Arts, Entertainment, Recreation, Fitness	1.45
	Eating and Drinking	1.26
	Transportation	2.35
	Administrative and Support Services	1.79
San Juan Capistrano	Arts, Entertainment, Recreation, Fitness	1.64
	Eating and Drinking	1.27
	Professional Services	1.05
	Insurance Carriers and Related Activities	2.07
	Rental and Leasing Services	1.69
Santa Ana	Wholesale	1.69
	Manufacturing	1.62
	Management of Companies	1.60
	Mining	16.55
	Manufacturing	2.54
Seal Beach	Real Estate	1.94
	Finance	1.78
	Rental and Leasing Services	1.78
	Warehousing and Delivery	14.12
	Waste Management and Remediation	2.76
Stanton	Rental and Leasing Services	1.76
	Construction	1.73
	Eating and Drinking	1.51
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	Wholesale	3.74
	Information-Based Industries	2.11
Tustin	Agriculture, Forestry, Fishing, Hunting	1.31
	Legal Services	1.22
	Professional Services	1.19
	Administrative and Support Services	2.43
	Professional Services	1.76
Villa Park	Insurance Carriers and Related Activities	1.61
	Finance	1.41
	Construction	1.32
	Utilities	4.20
	Retail Stores	1.78
Westminster	Eating and Drinking	1.44
	Pub Admin/Educational Services	1.20
	Services	1.17
	Construction	1.66
	Real Estate	1.50
Yorba Linda	Administrative and Support Services	1.40
	Mining	1.40
	Wholesale	1.37

Source: EconoVue, Dun & Bradstreet, 2017