

OC COMMUNITY INDICATORS 2020-2021



ORANGE COUNTY
BUSINESS COUNCIL



CalOptima
Better. Together.



Orange County United Way



TABLE OF CONTENTS

07 ORANGE COUNTY PROFILE

Place/Land Use.....	8
People/Demographics/Diversity	10
International Residents	12
Education/STEM/Colleges	14
Economy/Business Community	15
International Marketplace	24
Quality of Life	28

31 COVID-19 SPECIAL

2020 Census Update	32
Introduction - 2020, Covid-19	33
Impacts on K-12 Education	62
Impacts on Childcare	68
Conclusion - Moving Through	77

79 ECONOMY

Employment	80
Diversity in Business	80
High-tech Diversity and Growth	87

91 HOUSING

Housing Landscape	92
Housing Affordability	95
Rental Affordability	98
Housing Security	102

105 INCOME

Household Income	106
Family Financial Stability	110

115 EDUCATION

Kindergarten Readiness	116
Social Emotional Development	117
Academic Performance: Literacy	118

Academic Performance: Math	120
High School Graduation Rate	122
College and Career Readiness	125
STEM-related Degrees	129

133 HEALTH

Health Care Access	134
Health & Fitness	137
Chronic Disease	141
Mental Health & Substance Abuse ..	145

149 SAFETY

Crime Rate	150
------------------	-----

153 INFRASTRUCTURE

Transportation	154
Water Use and Supply	159
Drought Status	161
Broadband Internet Access	162
Major OC Broadband Providers	165

167 GOVERNANCE & CIVIC ENGAGEMENT

Voter Participation	168
---------------------------	-----

DEAR COMMUNITY PARTNER,

Orange County Business Council, First 5 Orange County, Orange County United Way, CalOptima and the Orange County Community Foundation, are pleased to present the *2020-21 Orange County Community Indicators* report.

A good indicator reflects a region's performance, showing whether key areas are improving, worsening or remaining constant. The indicators in this report track a broad range of issues important to the county's long-term health and prosperity, highlighting areas where the county is performing well and making progress as well as those areas where improvement is needed and community efforts could positively impact the future. We also compare Orange County to "peer" counties within California and across the nation based on the many characteristics we have in common. While this structure worked well since the first annual report was released 2010, the structure has changed to address the unprecedented impacts of COVID-19.

This year's report features a detailed look at the impacts of the COVID-19 pandemic in Orange County, exploring the rapidly changing landscape of nearly every sector including health care, employment, education, government and infrastructure. The insights of the report can help guide ongoing pandemic response and highlight areas where Orange County can focus resources and efforts during recovery.

In addition to the COVID-19 pandemic, Orange County is facing another critical challenge, creating an equitable future for all residents. The social unrest caused by the killing of George Floyd has brought to light the disparities that still exist within Orange County communities. It is critical that Orange County work to address the inequality that persists in education, our economy, housing, and other important areas.

With Infinite Possibilities and Innovative Solutions, Orange County is positioned to be a national leader in addressing the challenges facing communities across the country.

As always, the findings in the report are intended to serve as a starting point for further dialogue and collaboration. We hope you will use the *2020-21 Orange County Community Indicators* report as a thought-provoking resource and guide that sets the stage for regional leaders to work together toward ensuring a promising future for all who call Orange County home. Please share the report with others interested in sustaining the county's long-term health and quality of life.

Sincerely,



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JOINT COMMITMENT TO EQUITY

The key report partners stand together in our shared commitment to social justice and racial equity for the Orange County community. One of our key partners, OC Grantmakers, authored the following statement regarding an equitable Orange County based upon their important work in their recently released *An Equity Profile of Orange County*.

WHY EQUITY MATTERS

Equity is a buzzword heard seemingly everywhere these days. For some, it is about opportunity. For others, it is about the full inclusion of an entire region's residents in the economic, social and political life of the area. In the nonprofit and philanthropic space, equity is undeniably central to our mission despite its varying definitions. Regardless of how it is framed and defined for the textbooks, equity will clearly remain a primary focus with real-world economic impacts.

In 2019, Orange County Grantmakers commissioned the OC Equity Profile – the first report of its kind in Orange County that assessed traditional economic indicators through an equity lens. The report highlights strengths and areas of vulnerability in relation to the goal of building a strong, resilient economy. At its conclusion, the OC Equity Profile found that despite Orange County leading the nation in demographic change, rising inequality within the county threatens the region's long-term economic prosperity.

“Despite Orange County leading the nation in demographic change, rising inequality within the county threatens the region's long-term economic prosperity.”

—OC Equity Profile

This year has challenged our community in ways never before seen. COVID-19 has laid bare the inequities we knew existed, and community health and safety risks continue to affect people of color at higher rates than white communities. Black, Indigenous, and people of color (BIPOC) have been hit especially hard, all while confronting the long-term effects of systematic racism, injustice and inequality. The national movement in support of racial justice that has swept across our nation demonstrates our society is at a critical juncture. Community, business, and government leaders must not only acknowledge the long-term impact of systematic inequity and racism, but also take action.

The data included in the Community Indicators report gives insight into our region's performance. Since racial and economic inclusion is proven to strengthen a region's health and quality of life, we encourage you to apply an equity lens as you review the information. How do the indicators support a diverse and inclusive county, one that provides opportunity for all residents to engage in the full economic and civic life of our region? Because, simply put, an engaged community is a thriving community.

The philanthropic sector is working closely to design actionable strategies to move the needle on equity. Through alignment with the recommendations of the OC Equity Profile, Orange County Grantmakers and its members are devising specific initiatives and programs focused on combating deeply ingrained biases that manifest in actions, policies, laws and ourselves.

Equity is no longer an option. Together, we must embrace diversity and work towards a just and equitable community, to ensure a strong and thriving Orange County for all.

To see the full report please visit:

https://www.ocgrantmakers.org/wp-content/uploads/2019/03/Orange_County_Profile_20_final.pdf

Orange County Grantmakers is a community of philanthropists committed to improving outcomes for Orange County and beyond. Our mission is to advance social impact by supporting, strengthening and building adaptive leadership across our nonprofit and philanthropic community.



**ORANGE COUNTY
GRANTMAKERS**

An Equity Profile of Orange County: Summary

PolicyLink

USC
Dornsife
*Program for
Environmental and
Regional Equity*

March 2019





ORANGE COUNTY PROFILE

SOUTHERN
CALIFORNIA
REMAINS A
**GLOBAL TRAVEL
AND BUSINESS
DESTINATION**



ORANGE COUNTY PROFILE

PLACE/LAND USE



799

LAND AREA
(SQ MILES)



4,040

PERSONS
PER SQ MILE



42

MILES OF
COASTLINE



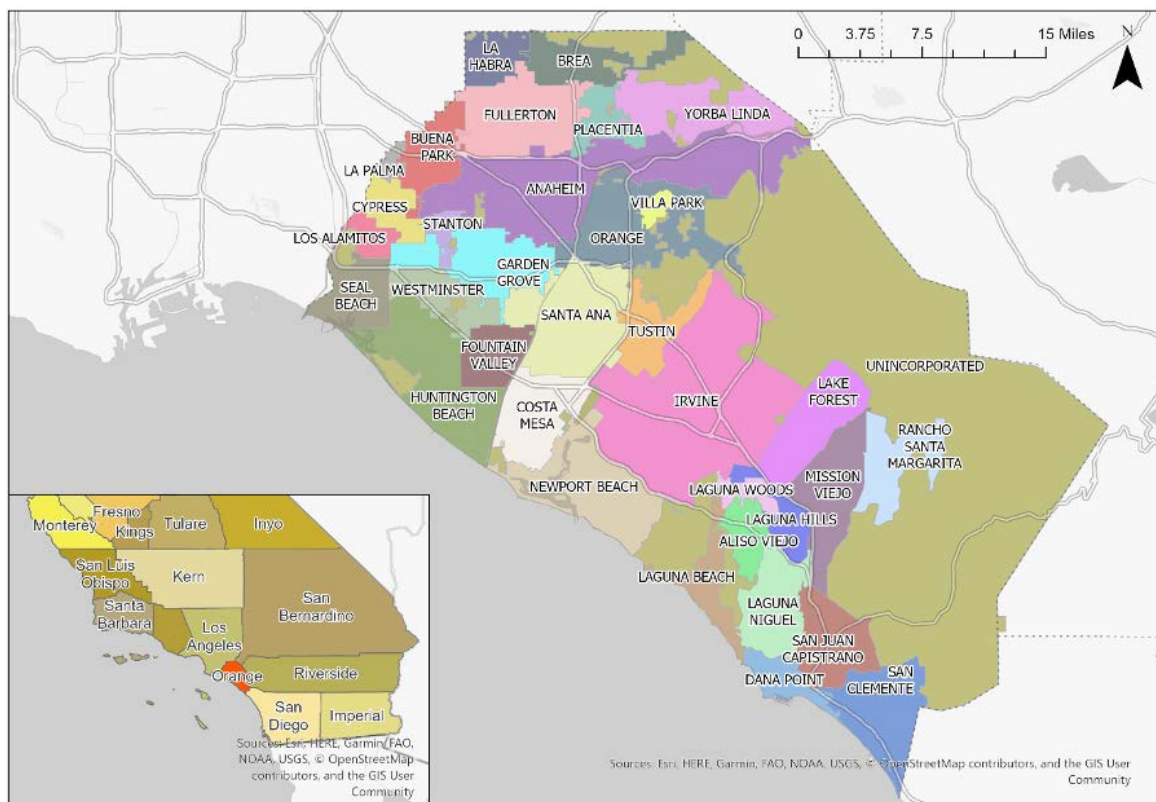
34

CITIES
& SEVERAL LARGE
UNINCORPORATED
AREAS

ORANGE COUNTY HAS **8%** OF CALIFORNIA'S POPULATION
BUT ONLY **0.5%** OF ITS LAND AREA

Southern California, which spans over 42,000 square miles with 209 cities and a population of over 22 million people, remains a global travel and business destination with a diverse culture and economy. Located in the heart of Southern California, Orange County neighbors nearly every county in the region, allowing access to the region's lucrative job market and entrepreneurial business environment.

SOUTHERN CALIFORNIA AND ORANGE COUNTY, 2020



Orange County had a population of 3,228,519 in 2020, making it the sixth-largest county in the nation. After growing from a bedroom community into an economic powerhouse and then dramatically recovering from the Great Recession, Orange County faces perhaps its greatest economic challenge. While the COVID-19 pandemic may rival the Great Recession in its economic impact, Orange County's demonstrated economic resilience, combined with its broad range of competitive advantages and industry clusters, suggests the region is well-positioned to weather these disruptions.

POPULATION DENSITY

Orange County had an average population density of 4,040 residents per square mile, 6.0 percent more than in 2010. Orange County is significantly denser than neighboring counties.

ORANGE COUNTY POPULATION PER SQUARE MILE, 2020

COUNTY	POPULATION PER SQUARE MILE
Orange	4,040
Los Angeles	2,527
Riverside	339
San Bernardino	109
San Diego	797
California (Statewide)	163

Source: California Department of Finance, Demographic Research Unit





ORANGE COUNTY PROFILE

PEOPLE/DEMOGRAPHICS/DIVERSITY



3,222,498

**CURRENT
POPULATION**
(2020)



3,696,326

**PROJECTED
POPULATION**
(2060)



**PERCENT GROWTH IN
POPULATION**

ORANGE COUNTY – 6TH LARGEST COUNTY IN THE U.S.

Orange County's population is large and growing; it is the third-largest county in California and the sixth-largest in the nation. It has more residents than 21 states, including Utah, Iowa, Nevada, Arkansas, and Mississippi.

BECOMING OLDER

Orange County's average age continues to increase as younger populations shrink, and older populations increase in overall size. The county had a median age of 38.3 years in 2018, higher than the national average (38.2 years), which it lagged the previous year, and well above the state average (36.7 years).

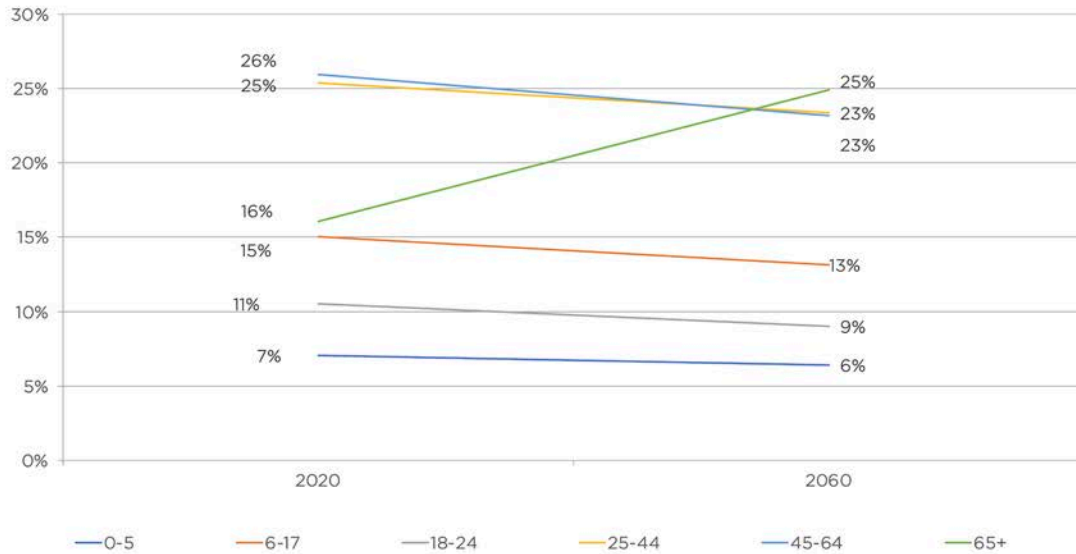
NEW BIRTHS, INTERNATIONAL MIGRATION FUELING GROWTH

Natural increase – births minus deaths – has driven population growth in Orange County for decades, with population growth averaging 22,656 since 2010. While foreign immigration remains strong, averaging 15,169 annually since 2010, net migration, on the other hand, has turned increasingly negative due in large part to high housing costs. Orange County's strong labor market, research universities, and high quality of life continue to attract immigrants from around the world. 30 percent of the county's population was foreign-born in 2018, compared to only 6 percent in 1970.

OLDER POPULATION SET TO EXPAND

Residents aged 65 and older are the only segment of the population expected to see growth between 2020 and 2060, at which point they are projected to represent 25 percent of the county's population.

PROJECTED CHANGE IN AGE GROUP PROPORTIONS OF TOTAL ORANGE COUNTY POPULATION, 2020 TO 2060

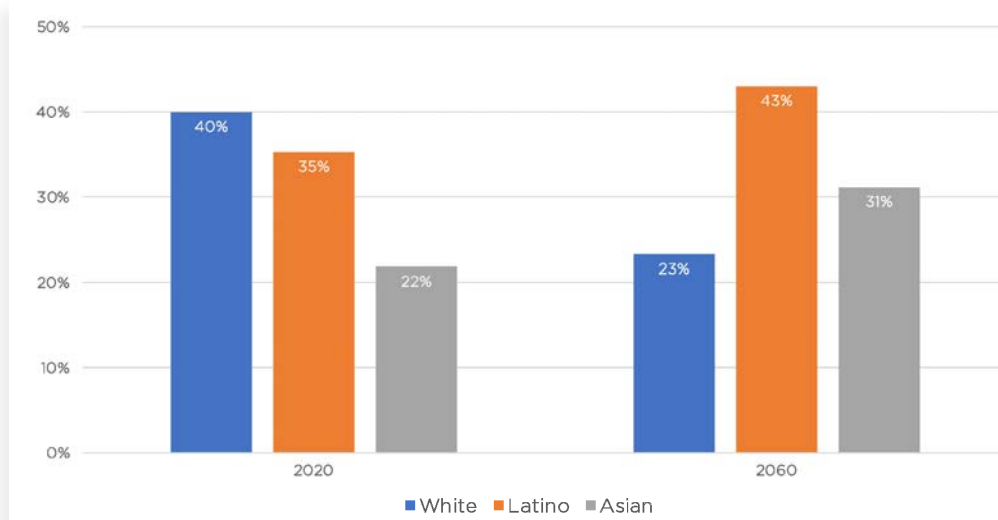


Source: Projections Prepared by Demographic Research Unit, California Department of Finance, January 2020

ORANGE COUNTY'S DIVERSE COMMUNITIES ARE KEY

Orange County's population is becoming increasingly diverse, with both Latino and Asian residents expected to overtake White residents as a percentage of the total population. By 2060, Latino and Asian residents will account for 43 percent and 31 percent, respectively, of the county population.

PROJECTED CHANGE BY RACIAL & ETHNIC GROUPS AS PROPORTIONS OF THE TOTAL ORANGE COUNTY POPULATION, 2020 TO 2060



Source: Projections Prepared by Demographic Research Unit, California Department of Finance, January 2020

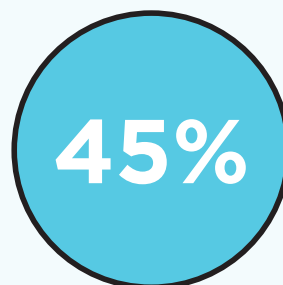


ORANGE COUNTY PROFILE

INTERNATIONAL RESIDENTS



PERCENTAGE OF
COUNTY RESIDENTS WHO WERE
**BORN IN
OTHER COUNTRIES**



PERCENTAGE OF RESIDENTS
OVER AGE 5 THAT
**SPEAK A LANGUAGE
OTHER THAN
ENGLISH AT HOME**

Orange County has the nation's fourth-largest international population, with approximately 944,709 foreign-born residents, and is home to 2.1 percent of the nation's international population and 8.9 percent of the state's international population.

ORANGE COUNTY CONTINUES TO ENJOY INTERNATIONAL DIVERSITY

FOREIGN-BORN POPULATION METRICS BY SOUTHERN CALIFORNIA, 2018

COUNTY	FOREIGN-BORN POPULATION	% FOREIGN-BORN POPULATION
Los Angeles	3,440,011	34.0%
Orange	944,709	29.7%
Riverside	523,556	21.4%
San Bernardino	464,422	21.4%
San Diego	790,023	23.6%

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table B05006

TOP 10 COUNTRIES OF ORIGIN, 2018

COUNTRY	FOREIGN-BORN POPULATION
Mexico	303,392
Vietnam	157,670
Korea	75,793
China	61,238
Philippines	52,954
India	36,507
Iran	24,147
Taiwan	23,142
El Salvador	22,023
Canada	13,913

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table B05006

ORANGE COUNTY REMAINS A STANDOUT IN SOUTHERN CALIFORNIA

BY THE NUMBERS SNAPSHOT: ORANGE COUNTY CHARACTERISTICS COMPARED TO REGIONAL PEERS, 2020

COUNTY	MEDIAN HOUSEHOLD INCOME	MEDIAN AGE	POVERTY LEVEL (%)	MEAN COMMUTE TIME (IN MINUTES)
Orange	\$89,759	38.3	10.5%	28.3
San Diego	\$79,079	36.1	11.4%	26.6
Los Angeles	\$68,093	36.7	14.1%	32.2
Riverside	\$66,964	35.8	12.7%	33.6
San Bernardino	\$63,857	33.6	14.9%	31.7
California (Statewide)	\$75,277	36.7	12.8%	30.2

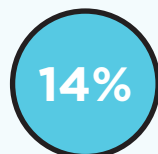
Source: Economic Modeling Specialists International; U.S. Census Bureau, American Community Survey, 1-year Estimates



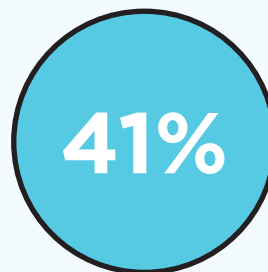
ORANGE COUNTY PROFILE

EDUCATION/STEM/COLLEGES & UNIVERSITIES

ORANGE COUNTY IS HIGHLY EDUCATED



PERCENTAGE OF ADULTS
OVER AGE 25 WITH
**LESS THAN A
HIGH SCHOOL DIPLOMA**



PERCENTAGE OF ADULTS
OVER AGE 25 WITH
**A BACHELOR'S
OR HIGHER**

28 percent of Orange County Bachelor's degrees were STEM-related in 2018, a number that rises to 38 percent at the graduate or professional degree level. Orange County's high levels of educational attainment, as seen in the chart below, will be a major asset in the economic recovery from COVID-19.

ORANGE COUNTY EDUCATIONAL ATTAINMENT
COMPARED TO PEER REGIONS, 2018

	BACHELOR'S DEGREE OR HIGHER	GRADUATE OR PROFESSIONAL DEGREE
Orange County	41.1%	14.7%
Los Angeles County	32.5%	11.2%
San Diego County	38.4%	15.3%
San Bernardino County	21.4%	7.5%
Riverside County	22.3%	8.1%
California	33.8%	13.1%
United States	32.6%	12.6%

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table S1501

ECONOMY/BUSINESS COMMUNITY/LABOR MARKET

ORANGE COUNTY'S ECONOMY DEMONSTRATING RESILIENCE IN THE FACE OF UNCERTAINTY



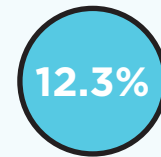
\$89,759

**MEDIAN
HOUSEHOLD
INCOME**
(2018)



\$870,000

**MEDIAN EXISTING
SINGLE-FAMILY
HOME PRICE**
(JUNE 2020)



**UNEMPLOYMENT
RATE**
(JULY 2020)

EVEN DURING COVID-19, OC'S UNEMPLOYMENT RATE OUTPERFORMING REGIONAL PEERS

ORANGE COUNTY INCOME AND UNEMPLOYMENT
RATE REGIONAL COMPARISON

	MEDIAN HOUSEHOLD INCOME	UNEMPLOYMENT RATE (JULY 2020)
Orange	\$89,759	12.3%
Los Angeles	\$68,093	18.2%
Riverside	\$66,964	13.7%
San Bernardino	\$63,857	13.1%
San Diego	\$79,079	12.3%
California	\$75,277	13.7%
United States	\$61,937	10.5%

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table B19013; California Employment Development Department



ORANGE COUNTY PROFILE

NUMBER OF NET COMMUTERS INTO ORANGE COUNTY GROWS FROM 167,000 TO 192,000 IN TWO YEARS



Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics

ORANGE COUNTY'S LARGEST EMPLOYERS WILL PLAY KEY ROLE IN RECOVERY

LARGEST EMPLOYERS IN ORANGE COUNTY, 2020

COMPANY	EMPLOYMENT IN ORANGE COUNTY
The Walt Disney Co.	32,000
University of California, Irvine	24,174
County of Orange	17,365
St. Joseph Health	14,000
Kaiser Permanente	8,200
Albertsons Southern California Division	7,535
Boeing Co.	6,500
Hoag Memorial Hospital Presbyterian	6,500
Walmart Inc.	6,200
Target Corp.	6,000
MemorialCare Health System	5,400
Bank of American Corp.	5,000
Edwards Lifesciences Corp.	4,998
California State University-Fullerton	4,349
Irvine Company	4,120
Home Depot Inc.	4,100
Cedar Fair LP	4,000
Children's Hospital of Orange County	3,938
Costco Wholesale Corp.	3,915
UnitedHealth Group Inc.	3,900



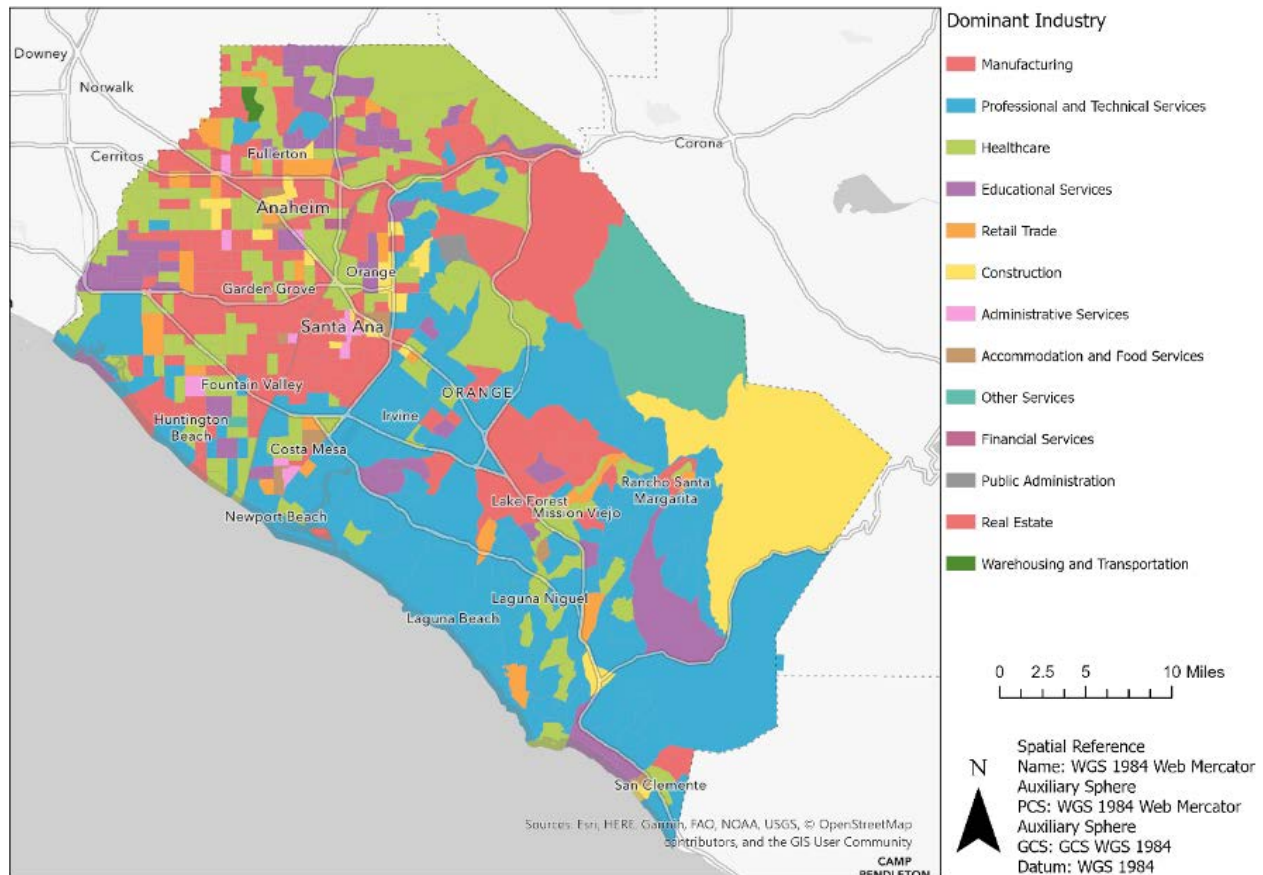
Source: Orange County Business Journal, 2020 Book of Lists



ORANGE COUNTY PROFILE

ORANGE COUNTY'S DIVERSE INDUSTRY SECTORS: MANUFACTURING AND HEALTHCARE IN CENTRAL OC, PROFESSIONAL AND TECHNICAL DOMINATE IN SOUTH AND ALONG COAST

DOMINANT INDUSTRY BY CENSUS TRACT IN ORANGE COUNTY, 2020



Tied for second place nationally for its diversity of high-tech sectors, Orange County maintains a diverse mix of industry clusters, ranging from tourism and real estate to medical devices and aerospace equipment. The following table highlights industry location quotients in Orange County. Location quotients highlight how concentrated an industry is compared to the national average; a quotient of 2.5 means industry is two and a half times more concentrated in a particular region than the national average.



TOP ORANGE COUNTY INDUSTRIES BY LOCATION QUOTIENT, 2020

	LOCATION QUOTIENT
Amusement Parks and Arcades	12.60
Apparel Knitting Mills	5.57
Medical Equipment and Supplies Manufacturing	5.47
Audio and Video Equipment Manufacturing	4.92
Land Subdivision	4.82
Cut and Sew Apparel Manufacturing	3.99
Semiconductor and Other Electronic Component Manufacturing	3.20
Manufacturing and Reproducing Magnetic and Optical Media	3.11
Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	2.99
Electric Lighting Equipment Manufacturing	2.63
Computer and Peripheral Equipment Manufacturing	2.56
Nondepository Credit Intermediation	2.47
Offices of Real Estate Agents and Brokers	2.37
Drugs and Druggists' Sundries Merchant Wholesalers	2.34
Other Investment Pools and Funds	2.30
Activities Related to Real Estate	2.24
Building Finishing Contractors	2.22
Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	2.19
Apparel, Piece Goods, and Notions Merchant Wholesalers	2.18
Other Schools and Instruction	2.17
Coating, Engraving, Heat Treating, and Allied Activities	2.17
Activities Related to Credit Intermediation	2.13
Other Transportation Equipment Manufacturing	2.10
Aerospace Product and Parts Manufacturing	2.07
Medical and Diagnostic Laboratories	2.01

Source: Economic Modeling Specialists International



U.S. CLUSTER MAPPING PROJECT - A DIFFERENT LOOK AT ORANGE COUNTY INDUSTRY CLUSTERS

The U.S. Cluster Mapping Project provides another viewpoint on Orange County's economy. A collaboration between the Institute for Strategy and Competitiveness at Harvard Business School and the U.S. Economic Development Administration, the project aggregates and analyzes several economic metrics, including labor productivity, job growth, specializations (location quotients), among others. These metrics indicate which industries are most concentrated in various geographic regions and clusters throughout the nation.

ORANGE COUNTY'S MOST CONCENTRATED INDUSTRY CLUSTERS INCLUDED:

MEDICAL DEVICE (5.66)

APPAREL MANUFACTURING (2.29)

BIOPHARMACEUTICALS (2.08)

LIGHTING & ELECTRICAL EQUIPMENT (1.81)

FINANCIAL SERVICES (1.61)

ORANGE COUNTY'S NATIONALLY LEADING INDUSTRY CLUSTERS

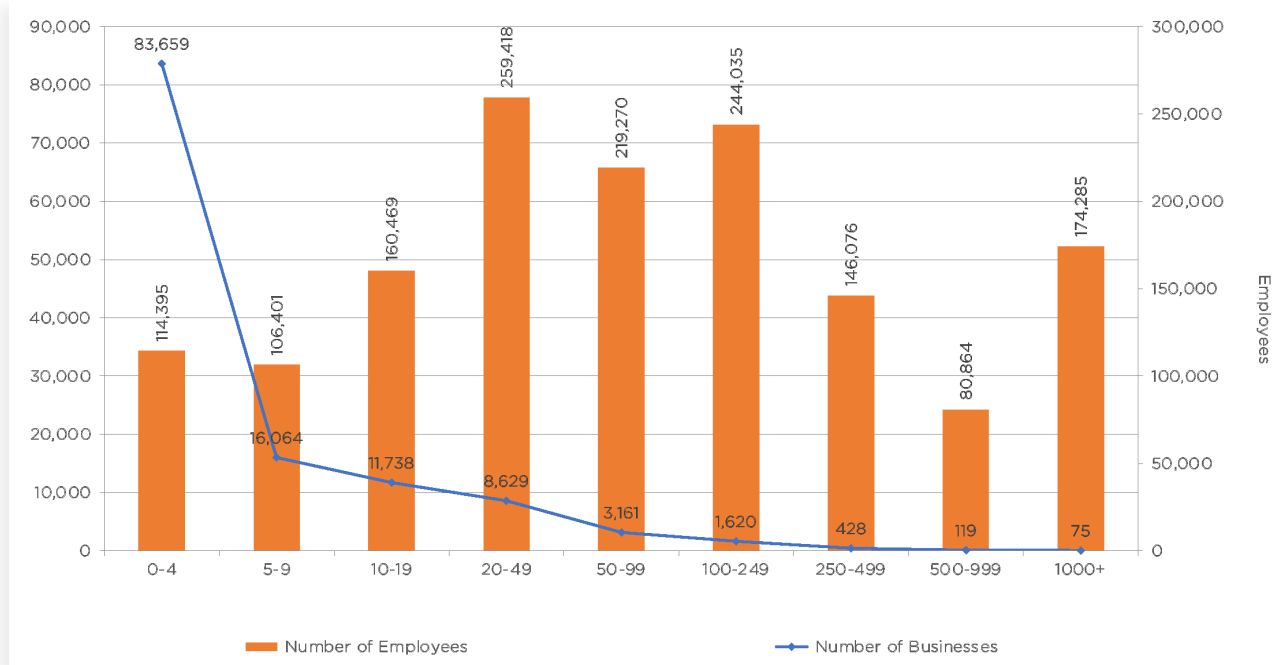
	EMPLOYMENT	NATIONAL RANK	LOCATION QUOTIENT
Medical Devices	18,300	1	5.66
Apparel	3,284	3	2.29
Biopharmaceuticals	6,678	6	2.08
Lighting	7,159	2	1.97
Information Technology	28,973	5	1.81
Financial Services	40,874	6	1.61

Source: U.S. Cluster Mapping, U.S. Department of Commerce, Economic Development Administration, Harvard Business School

95 PERCENT OF ALL OC BUSINESSES ARE CONSIDERED SMALL BUSINESSES

Small businesses with less than 50 employees continue to drive Orange County employment, accounting for over 95 percent of all jobs. Nearly 200 county businesses employed over 500 people in 2019, with 75 businesses employing over 1,000 workers.

NUMBER OF BUSINESSES AND EMPLOYEES, BY SIZE OF BUSINESS, 2019



Source: California Employment Development Department, Size of Business Data 2019

ORANGE COUNTY EXECUTIVES' CONFIDENCE REBOUNDS DURING THE COVID-19 ERA

Gross Regional Product Growing Strongly in Recent Years

Orange County's gross regional product (GRP), a regional-level version of GDP, was \$296 billion in 2018. This number is expected to total \$309 billion in 2019, representing an increase of 5.2 percent.

If Orange County was a state, it would be the 23rd largest state by GRP output, just behind Arizona, Wisconsin, and Missouri, while ahead of 27 other states, including Connecticut, Louisiana, Oregon, and South Carolina.





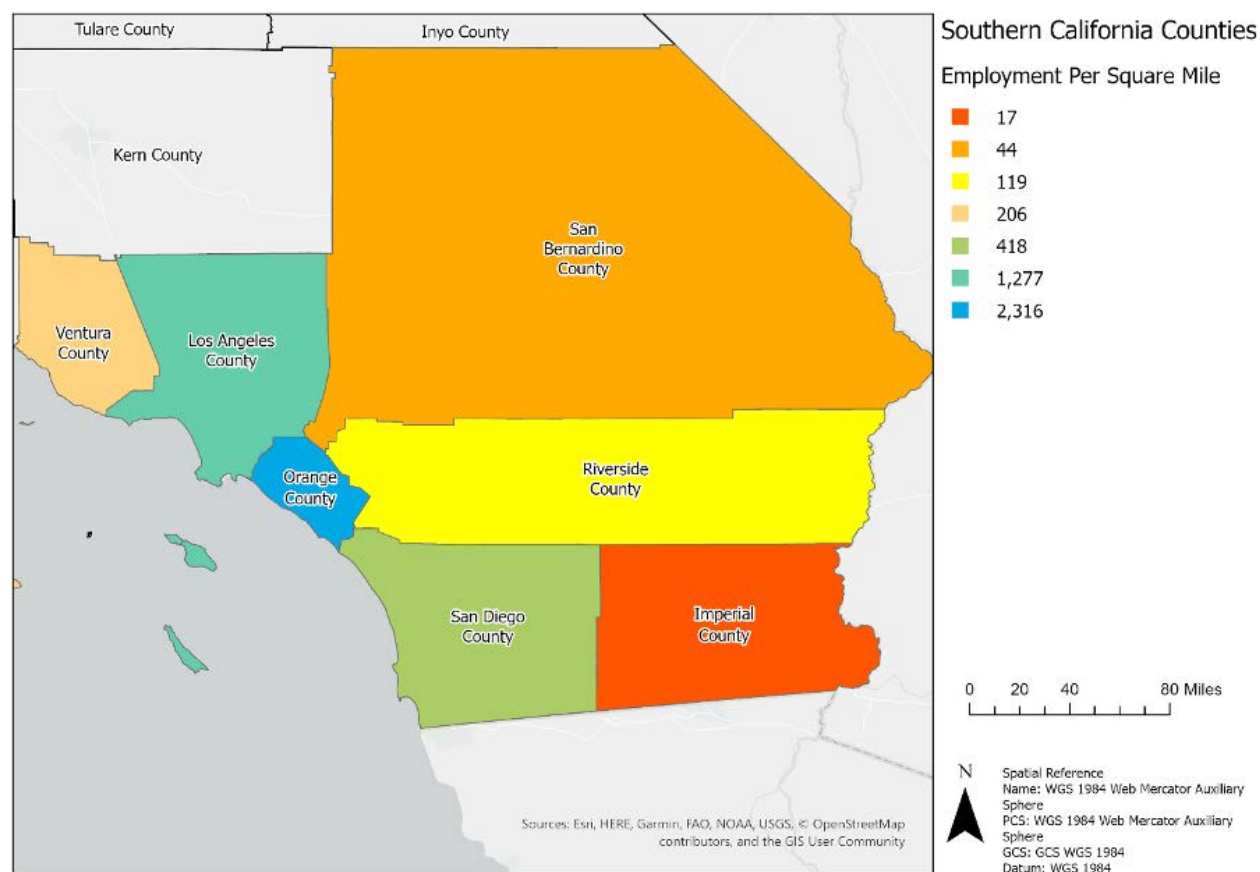
ORANGE COUNTY PROFILE

GROSS REGIONAL PRODUCT AND EMPLOYMENT COMPARISON BY SOUTHERN CALIFORNIA COUNTY, 2019

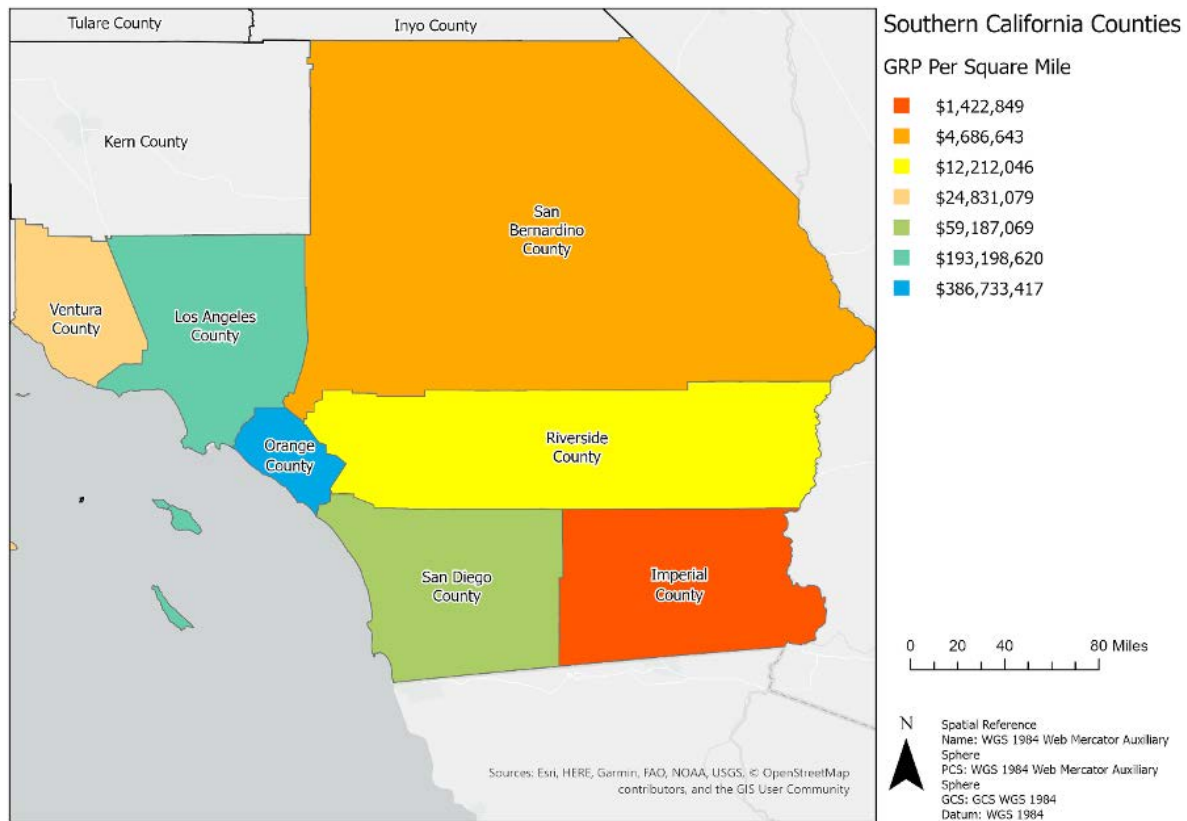
COUNTY	TOTAL POPULATION	TOTAL EMPLOYMENT	TOTAL REGIONAL PRODUCT (\$ IN B)	EMPLOYMENT PER CAPITA	GRP PER CAPITA	GRP PER SQUARE MILE	EMPLOYMENT PER SQUARE MILE	MEDIAN HOUSEHOLD INCOME
Orange	3,222,498	1,850,669	\$309	0.57	\$95,888	\$386,733,417	2,316	\$89,759
Los Angeles	10,253,716	5,180,777	\$784	0.51	\$76,435	\$193,198,620	1,277	\$68,093
San Diego	3,351,786	1,757,819	\$249	0.52	\$74,381	\$59,187,069	418	\$79,079
San Bernardino	2,192,203	875,106	\$94	0.40	\$42,887	\$4,686,643	44	\$63,857
Riverside	2,440,124	860,924	\$88	0.35	\$36,137	\$12,212,046	119	\$66,964

Source: Economic Modeling Specialists International; California State University, Fullerton

EMPLOYMENT PER SQUARE MILE BY SOUTHERN CALIFORNIA COUNTY, 2020



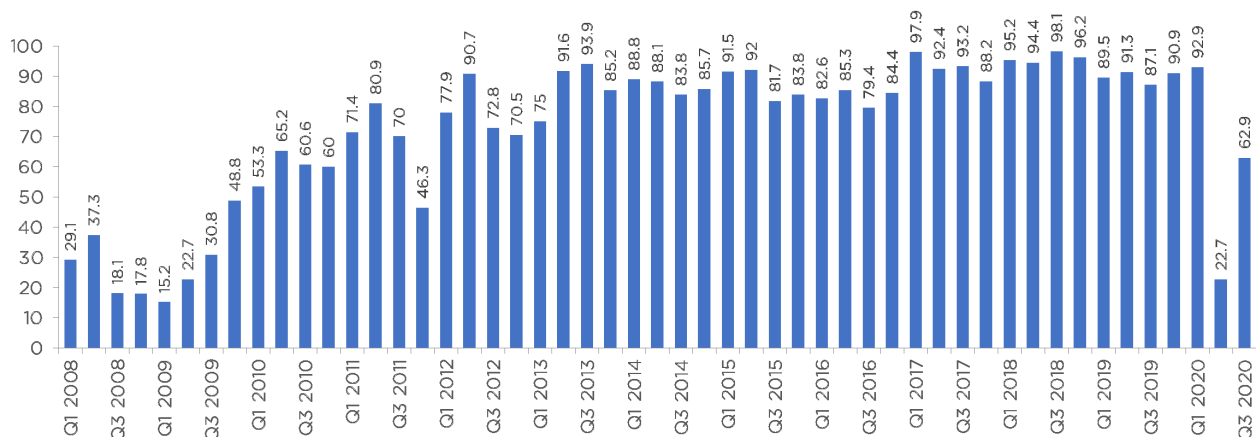
GROSS REGIONAL PRODUCT PER SQUARE MILE BY SOUTHERN CALIFORNIA COUNTY, 2020



AFTER COVID PLUNGE, OCBX SEES LARGEST IMPROVEMENT SINCE GREAT RECESSION

The Orange County Business Expectations Index (OCBX) provides the results of a survey of Orange County business executives regarding their projected future business activity. After hitting 92.9 at the start of the year, the OCBX sank to 22.7 as stay-at-home orders resulted in massive business disruptions and painted a bleak outlook. However, it jumped back to 62.9 by the third quarter of 2020; 24.3 percent of surveyed businesses expected to get back to pre-pandemic activity levels by the end of the year, while 20 percent put the recovery further out until after 2021.

ORANGE COUNTY BUSINESS EXPECTATIONS INDEX, Q1 2008 - Q3 2020 AN INDEX ABOVE 50 INDICATES EXPANSION



Source: California State University, Fullerton



ORANGE COUNTY PROFILE

INTERNATIONAL MARKETPLACE

Thanks to its prime location on the Pacific Rim at the heart of the Southern California market, including strong global transportation and logistical links due to its central location near major trade ports such as the Port of Los Angeles and Port of Long Beach, Orange County has long attracted workers and businesses from around the world. International trade also thrives in Orange County.

THE REGION'S LARGEST TRADE PARTNERS INCLUDE:

MEXICO
CANADA
CHINA
JAPAN
SOUTH KOREA

THE LARGEST EXPORTS FROM ORANGE COUNTY INCLUDE:

COMPUTER & ELECTRONIC
PRODUCT MANUFACTURING
TRANSPORTATION
EQUIPMENT
MANUFACTURING
CHEMICAL MANUFACTURING

The table on the next page highlights the county's largest foreign-owned companies, showing their sector and total county employment. These companies represent a wide variety of sectors, from aerospace to banking to consumer electronics.



ORANGE COUNTY DRAWS BROAD RANGE OF FOREIGN COMPANIES

FOREIGN-OWNED COMPANIES IN ORANGE COUNTY BY EMPLOYMENT

COMPANY	SECTOR	EMPLOYMENT IN ORANGE COUNTY	PARENT COMPANY	COUNTRY OF ORIGIN
Panasonic Avionics Corp.	Inflight Entertainment Systems	2,306	Panasonic Corp.	Japan
B. Braun Medical Inc.	Medical Product Manufacturing	1,709	B. Braun Holding GmbH	Germany
Oakley Inc.	Eyewear and Apparel	1,700	Luxottica Group SpA	Italy
Zodiac Aerospace	Aircraft Interiors	1,650	Safran	France
Broadcom Inc.	Semiconductor Products	1,630	Avago Technologies	Singapore
Pacific Investment Management Company	Investment Management	1,380	Allianz SE	Germany
Experian	Information Services	1,300	Experian PLC	Ireland
Thales Avionics Inc.	In-Flight Entertainment Systems	1,300	Thales Group	France
MUFG Union Bank	Bank	1,225	MUFG	Japan
Alcon Research Ltd.	R&D	1,100	Novartis	Switzerland
Canon U.S.A. Inc.	Office Products	1,032	Canon	Japan
MicroVention Inc.	Medical Device Manufacturer	1,000	Terumo Corp.	Japan
Schneider Electric	Energy Management	976	Schneider Electric SE	France
Ingram Micro Inc.	Technology Products	900	HNA Technology	China
Medtronic Neurovascular	Medical Device Manufacturer	900	Medtronic PLC	Ireland
T-Mobile USA Inc.	Cellphones	900	Deutsche Telekom	Germany
Karma Automotive	Electric Plug-In Vehicles	878	Wanxiang Group	China
TowerJazz	Water Foundry	820	Tower Semiconductor	Israel
Toshiba	Consumer Electronics	700	Toshiba Corporation	Japan
Meggitt PLC	Defense Services	681	Meggitt PLC	United Kingdom



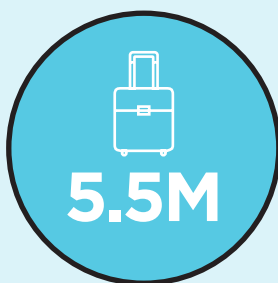
ORANGE COUNTY PROFILE

ONT: SOUTHERN CALIFORNIA'S UNDENIABLE ECONOMIC DRIVER

Ontario International Airport's role as an economic driver for the region can be measured in any number of ways:



Southern Californians who live or work closer to ONT than any other airport, when you factor in drive time.



Passengers who traveled through ONT in 2019 – up a staggering 40 percent from six years earlier, making it the fastest-growing airport in the United States two years running.



Cargo hubs that operate within ONT's 1,741 acres, making Ontario the busiest market in the U.S. for outgoing shipments.

Even in the midst of a global pandemic, Ontario Airport has shown not just amazing resiliency, but an ability to uplift the region's profile as a supply chain hub, innovation magnet and place to invest. Tangible examples of this include the airport's 20 percent-plus year-over-year increase in freight shipments due to the surge in shop-from-home retailing, FedEx's aggressive expansion of its cargo facilities, and privately backed proposals to bring innovative, zero-emission transit to the Inland Empire with the goal of connecting to ONT.

And while COVID-19 has reduced passenger traffic in Ontario, the 48 percent drop through the first six months of 2020 compares favorably to other airports in Southern California, including Los Angeles International (down 58.89 percent) and John Wayne (down 58.5 percent). Part of this is due to ONT's convenience, accessibility, and location in the heart of one of the most robust population centers in the United States. Its ability to attract passengers from Los Angeles and Orange counties, in addition to the Inland Empire, puts it on a level of its own among SoCal airports and has allowed ONT to forge strong partnerships with a diverse lineup of air carriers.

Before the pandemic struck, ONT offered nonstop commercial jet service to 26 major airports in the U.S., Mexico, and Taiwan. The latter represented the only transpacific service from a Southern California airport other than LAX and has opened up promising new opportunities for Asian and U.S. businesses.

Airlines already have indicated an eagerness to return to full and expanded status as the recovery settles in, and with the infrastructure, facilities, and customer base all in place, ONT is well positioned to reach its eventual projected capacity of 30 million annual passengers.

Helping to ensure that continued growth is millions of dollars in investments in new, upgraded restaurants, retail concessions, high-end lounges, parking improvements, and expanded transit options.

Getting to the airport should become easier too. Elon Musk’s Boring Company has proposed building a tunnel from the Rancho Cucamonga Metrolink Station to ONT for zero-emission vehicles to transport passengers. In addition, Xpress West has proposed extending a high-speed rail line from Las Vegas through the High Desert and into the same Rancho Cucamonga station. The zero-emission Redlands Rail Service, set to begin in 2022, also is expected to connect into Rancho, creating an opportunity – if the tunnel proposal were to go through – to create multimodal access into ONT.

In addition, Omnitrans offers bus service to and from ONT every 15 minutes, and a relatively new public-private partnership provides for free and discounted Lyft rides from local Metrolink stations to the airport.

All of which underscores the confidence private enterprise and other agencies have in ONT to create economic opportunities and improve quality of life throughout Southern California.

Other examples include a 15-year lease extension with long-time tenant Guardian Air Services which will produce more than \$5 million in rent payments and significant capital investments; FedEx’s expansion to 51 acres – tripling its current operations; and continued investments by Amazon and UPS in their ONT freight facilities.

So what does the future hold?

On the passenger side, the 10 percent annual gains ONT experienced in 2017, 2018, and 2019 – along with continued population growth and business expansion – suggest the sky is the limit when it comes to Ontario’s role as an aviation gateway.

On the cargo side, the shift to online retailing would certainly suggest continued strong growth for our freight partners and bolster our region’s role as an international trade and supply chain hub. ONT has a leadership voice in cross-sector partnerships that are working to attract innovators to the region’s logistics and manufacturing sectors, with the ultimate goal of bringing higher-paying jobs to the Inland Empire and surrounding counties.

As Southern California moves toward post-pandemic recovery mode, ONT has emerged as an undeniable economic driver.





ORANGE COUNTY PROFILE

QUALITY OF LIFE

ORANGE COUNTY CRIME RATES REMAIN AMONG LOWEST AMONGST PEER METRO AREAS

Irvine: Safest Major City in America

Orange County Falls Behind San Diego in the Total Crime Index

Orange County once again ranks as one of the safest regions in the nation with a total crime index of only 80, just behind San Diego County's index of 77. While San Diego inched ahead of Orange County in total crime and property crime, Orange County performed dramatically better in the assault crime index with a score of only 53.

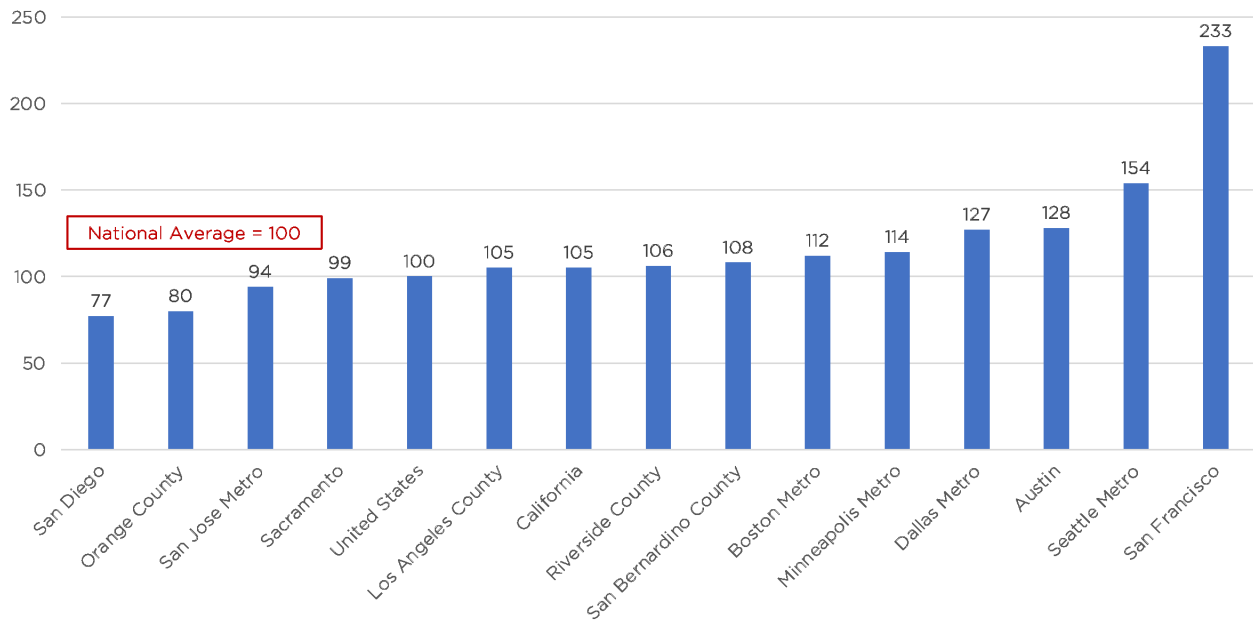
ORANGE COUNTY AND REGIONAL CRIME INDEXES, 2020

	TOTAL CRIME INDEX	ASSAULT CRIME INDEX	PROPERTY CRIME INDEX
San Diego	77	84	76
Orange County	80	53	83
San Jose Metro	94	66	97
Sacramento	99	123	97
United States	100	100	100
Los Angeles County	105	118	100
California	105	106	103
Riverside County	106	86	109
San Bernardino County	108	118	106
Boston Metro	112	190	99
Minneapolis Metro	114	82	115
Dallas Metro	127	93	127
Austin	128	84	134
Seattle Metro	154	77	164
San Francisco	233	127	228

NOTE: An index value of 100 represents the national average.

Source: Esri Crime Index Data

ORANGE COUNTY PEER REGION CRIME INDEX COMPARISON, 2020



Source: Esri Crime Index Data



DATA NOTES:

The racial and ethnic categories presented are the three largest in Orange County and are not mutually exclusive. Latino includes children of any race who are of Hispanic or Latino ethnicity. Asian includes the race Asian alone and includes both Hispanic and non-Hispanic. White, non-Hispanic includes only White alone and non-Hispanic. Projection data by race/ethnicity and age have been updated by the source.

Sources:

Place - Land Area: County of Orange Public Works; *Density:* U.S. Census Bureau, GHT-PH1-R: Population, Housing Units, Area, and Density, Census 2010 (land area) and State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State - January 1, 2011-2020. Sacramento, California, May 2020.

People - Population 2020 and 2060: California Department of Finance, Table P-2; *Race/Ethnicity and Age:* California Department of Finance, Table P-2; *Foreign Born, Language:* U.S. Census Bureau, 2018 American Community Survey, 1-Year Estimates, Table DP02;

Education - Educational Attainment: U.S. Census Bureau, 2018 American Community Survey, 1-Year Estimates, Table S1501

Economy - Median Household Income: U.S. Census Bureau, 2018 American Community Survey, 1-Year Estimates, Table B19013; *Unemployment Rate:* California Employment Development Department Labor Market Information, May 2020; *Median Existing Single-Family Home Price:* California Association of Realtors, Current Sales and Price Statistics

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COVID-19

SPECIAL REPORT

2020, THE YEAR
OF COVID-19



2020 CENSUS UPDATE

Following up on last year's Special Feature, the 2020 Census launched just as COVID-19 was declared a global pandemic. Overnight, carefully curated, two-years-in-the-making plans for Census outreach became obsolete amid shelter-in-place orders.

In mid-March, Orange County organizations leading Census outreach ceased canvassing and in-person activities and immediately pivoted to phone banking, digital outreach strategies, and posting flyers at essential locations.

Innovation became the order of the day for Census outreach. Census Caravan car parades wound through neighborhoods with low response rates and high hard-to-count indexes. Virtual Census Town Halls, online concerts and Twitter Chats became the norm. Youth art contests, Census flyering at food distribution sites, and geotargeting all proved successful.

And the result? As of early September, Orange County's Self-Response Rate (SRR) stood at 74.8 percent, an impressive achievement in the face of unprecedented COVID-19 challenges, and already besting our self-response of 71.7 percent in 2010.

Census data determine how more than \$800 billion annually in vital federal assistance is distributed to states, localities, and families. Stay tuned for the final tally in next year's OC Indicator's Report!



INTRODUCTION – 2020, THE YEAR OF COVID-19

The COVID-19 pandemic has upended nearly every aspect of public and private life, ravaging lives and livelihoods, causing economic devastation, and impacting everything from the personal (how people live, work and learn) to the professional (how companies interact with their customers). The pandemic's unprecedented speed and scale has created combined public health, education and economic challenges that have never before been faced in U.S. history.

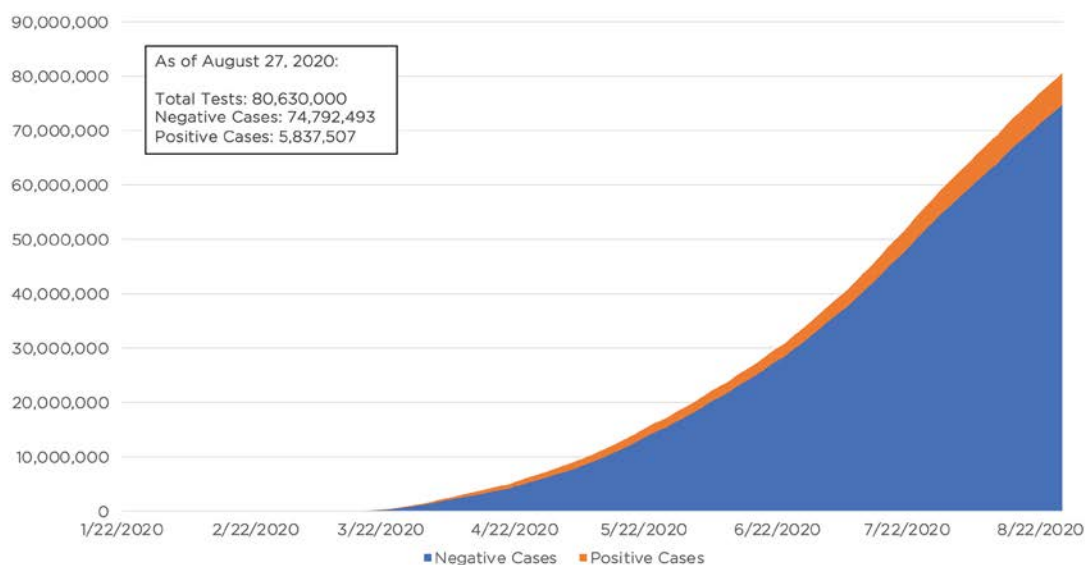
Nearly six months into the COVID-19 crisis, it is clear we are living while history is being made, both globally and in Orange County. How fast is the world changing? Consider how quickly digital has replaced physical channels in just the last few months, not only via e-commerce but also in-person meetings and events. The public and private sectors have responded with unprecedented levels of relief that are providing lifelines for families and businesses, while also addressing the complex choreography required to reopen economies safely while minimizing resurgence of the virus. Even in the midst of the pandemic, however, foundations are being laid for a stronger, healthier future Orange County after the “great reset.”

COVID-19 AND PUBLIC HEALTH

COVID-19, or the SARS-CoV-2 (coronavirus), is a novel respiratory illness that originated in China before rapidly spreading throughout Europe, the Americas, and all but a handful of countries around the world. COVID-19 is spread through the air by coughing or sneezing and through close contact with others. Serious and sometimes severe symptoms develop in 2 to 14 days and include — but are not limited to — fever, cough, chills, difficulty breathing, headaches, loss of taste or smell, muscle pain, nausea, and vomiting.

The United States had a total of 5,837,507 cumulative COVID-19 cases as of August 27, 2020, with approximately 43,984 new cases that day. Total deaths had reached 172,731, with 1,129 new deaths occurring on August 27. Americans had taken a total of 80,630,000 tests, with “positive” rates of approximately 7 percent.

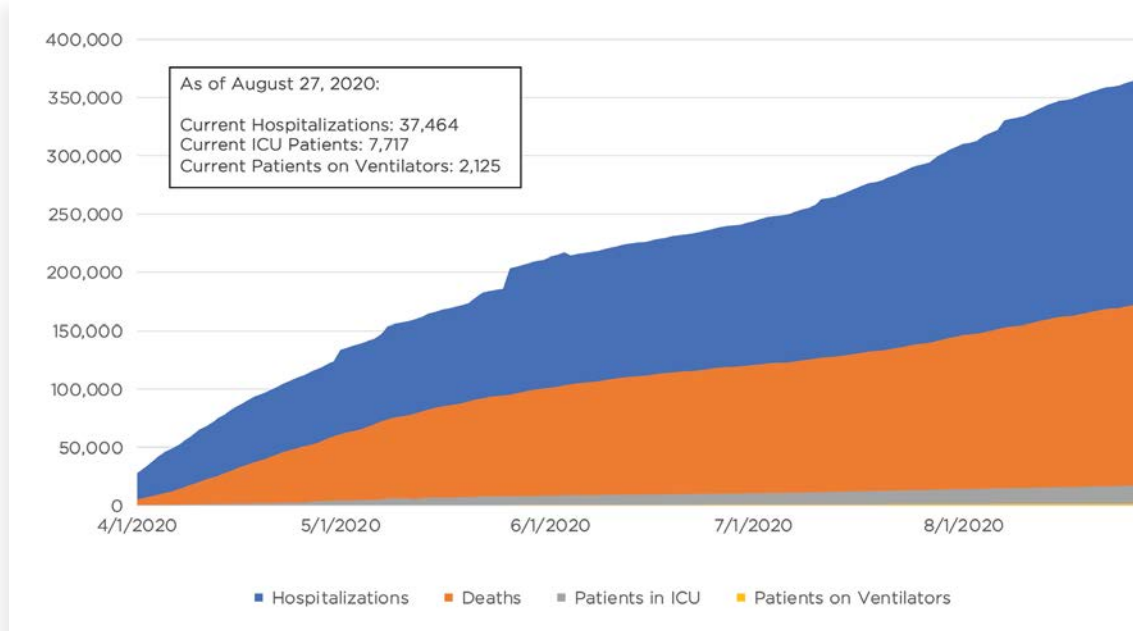
CUMULATIVE COVID-19 CASES IN THE U.S., JANUARY 2020 – AUGUST 2020



Source: Center for Disease Control and Prevention. Data released August 28, 2020



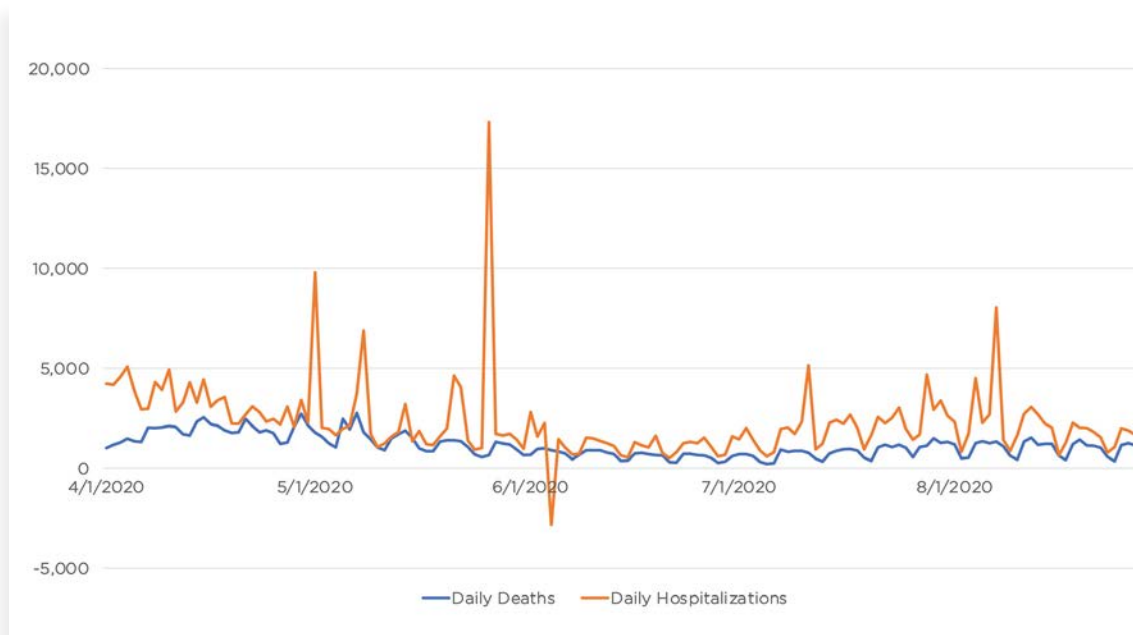
CUMULATIVE HOSPITALIZATIONS, DEATHS, ICU PATIENTS AND VENTILATOR PATIENTS IN THE U.S., APRIL 2020 - AUGUST 2020



Source: Center for Disease Control and Prevention. Data released August 28, 2020

During the month of March, average daily deaths from COVID-19 totaled 136 nationwide before skyrocketing to 1,798 in the month of April 2020. Average daily hospitalizations followed a similar trend, increasing from 765 in March 2020 to 3,335 by April 2020. Daily deaths fell to an average of 1,012 in August while daily hospitalizations averaged 2,145 during the same time period.

DAILY COVID-19 HOSPITALIZATIONS AND DEATHS IN THE U.S., APRIL 2020 - AUGUST 2020

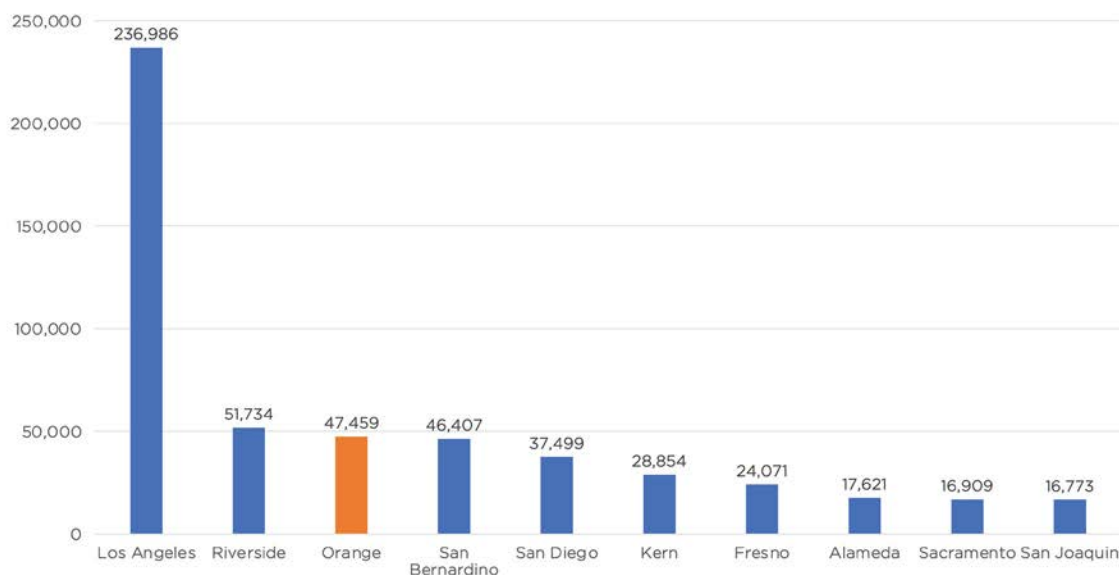


Source: Center for Disease Control and Prevention. Data released August 28, 2020

California has experienced the most confirmed COVID-19 cases (683,259) among U.S. states, with daily cases at 4,430, daily deaths at 143, and total deaths at 12,550, as of August 27, 2020. Florida had the second-highest total cases (605,342) followed by Texas (597,737) and Georgia (263,074). California ranked third in total deaths, behind New York (32,619) and New Jersey (15,921).

The majority of California's cases have been in large population centers such as Los Angeles County, which had 236,986 cases, as of August 27, 2020. The pandemic's epicenter has shifted from the Bay Area to Southern California in terms of total number of cases, as seen in the graph below.

**TOP 10 CALIFORNIA COUNTIES BY THE TOTAL NUMBER OF COVID-19 CASES,
AS OF AUGUST 28, 2020**



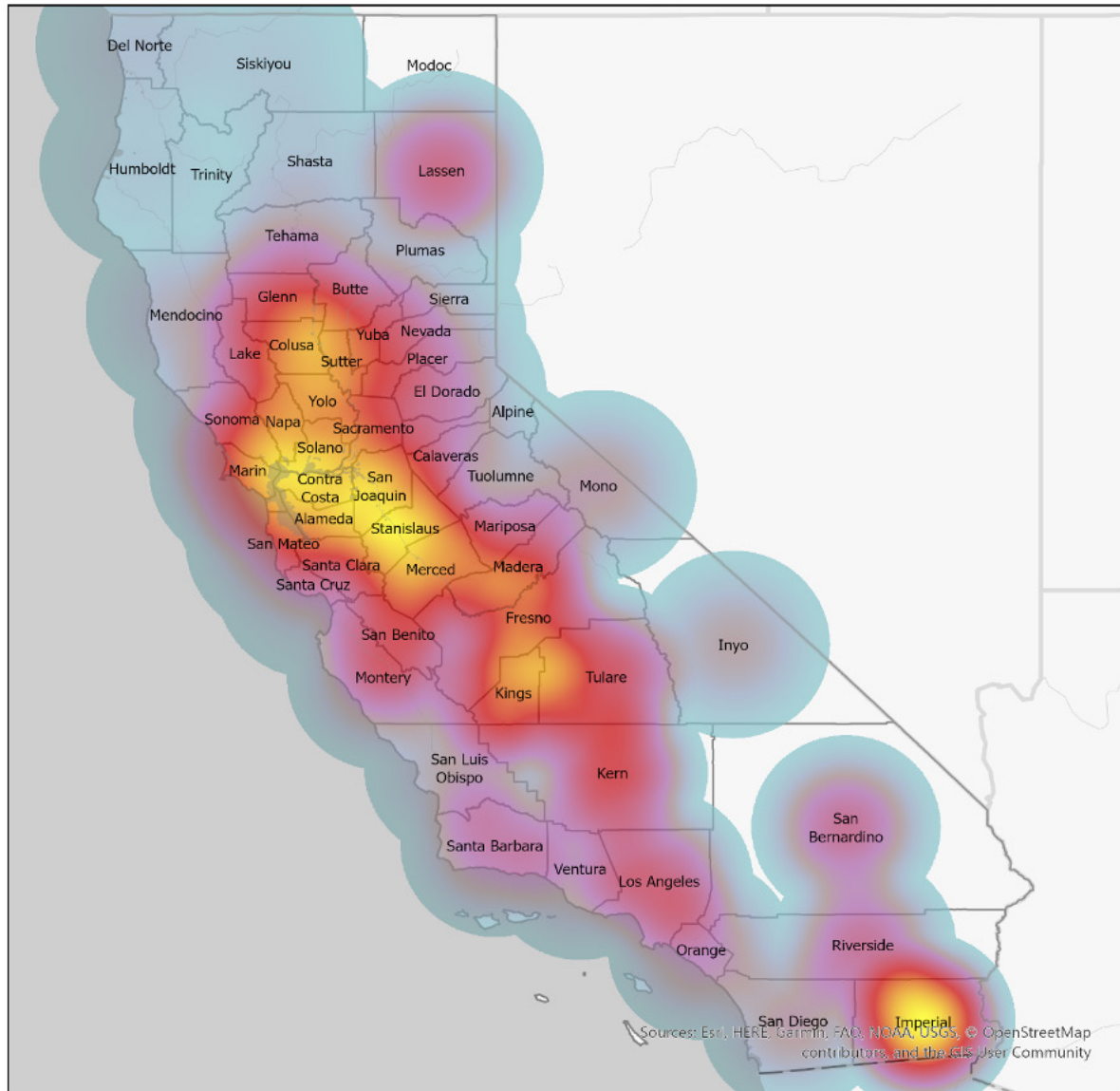
Source: Center for Disease Control and Prevention. Data released August 28, 2020

While Southern California has a higher absolute number of cases, the heat map below shows that the Bay Area counties, Central Valley, and Imperial County had the highest per capita infection rates, as of August 27, 2020. This indicates that, while Southern California counties may have higher total cases, that is largely a reflection of their higher overall populations. Among California counties, Orange County ranked 20th in cumulative cases per 100,000 people with 1,494 per 100,000 people.

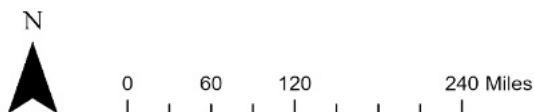
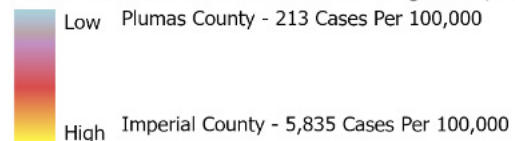


COVID-19 SPECIAL

CALIFORNIA COUNTY HEAT MAP OF TOTAL COVID-19 CASES PER 100,000 RESIDENTS AS OF AUGUST 27, 2020



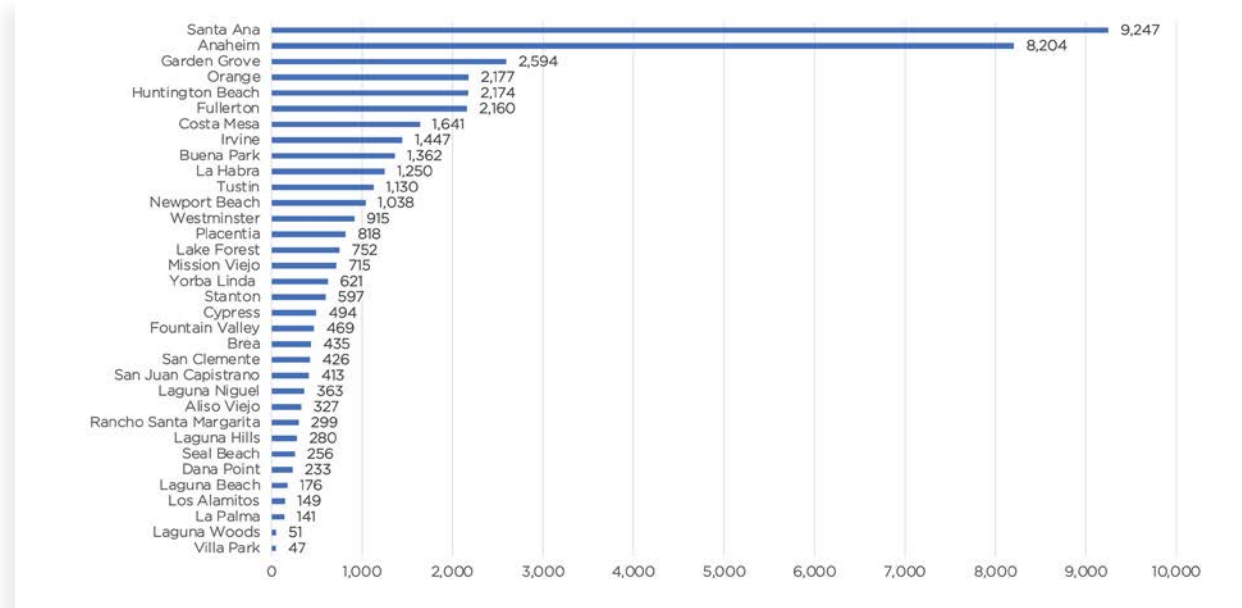
COVID Cases Per 100,000 Residents
Cumulative COVID-19 Cases as of August 27, 2020



*Data not available for Alpine, Modoc, Sierra, and Trinity Counties.

Orange County had 47,459 total COVID-19 cases as of August 27, 2020, with 956 deaths and 40,277 recoveries. Santa Ana had the largest number of cases at 9,247, followed by Anaheim (8,204) and Garden Grove (2,594). All three cities have higher population density than other parts of the county, which may have played a major role in COVID-19 spread.

TOTAL COVID-19 CASES BY ORANGE COUNTY CITY, DATA AS OF AUGUST 28, 2020



Source: Center for Disease Control and Prevention, County of Orange. Data released August 28, 2020

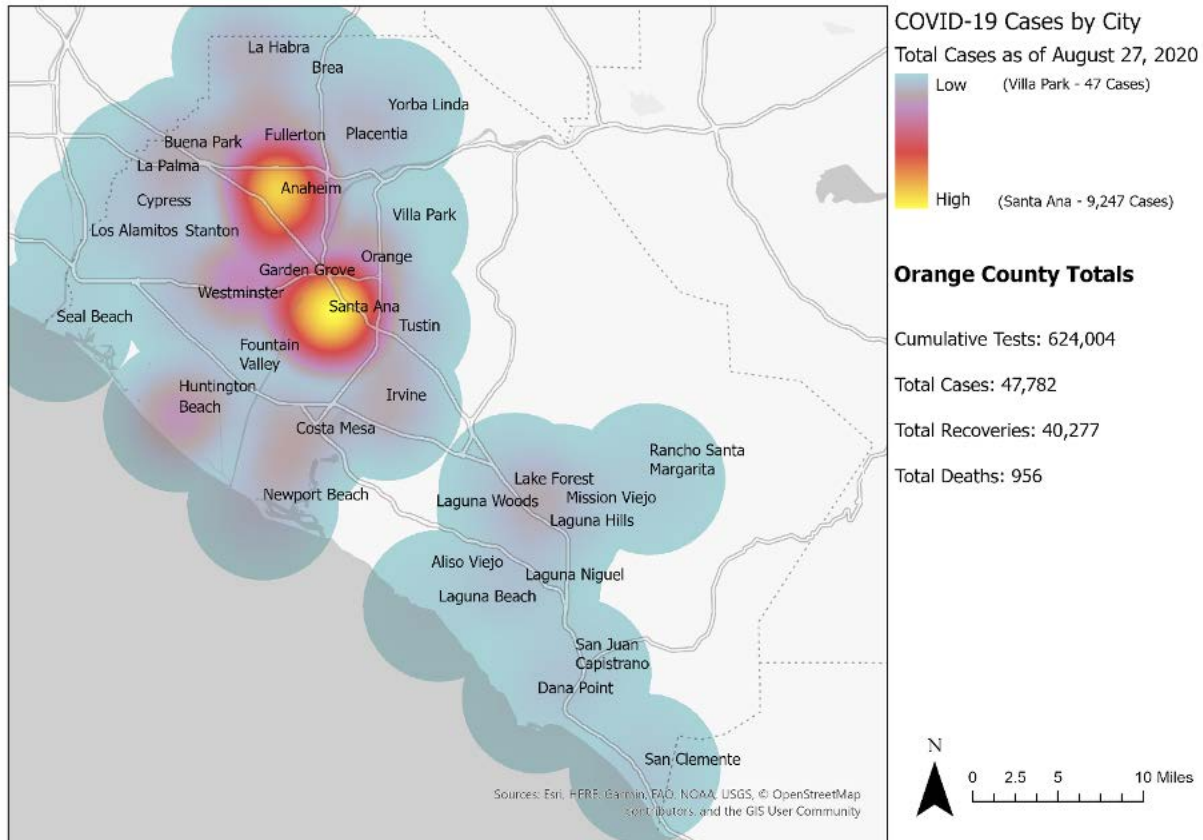




COVID-19 SPECIAL

The heat map below provides a snapshot of total COVID-19 cases by Orange County city as of August 27, 2020.

ORANGE COUNTY HEAT MAP OF CUMULATIVE COVID-19 CASES BY CITY

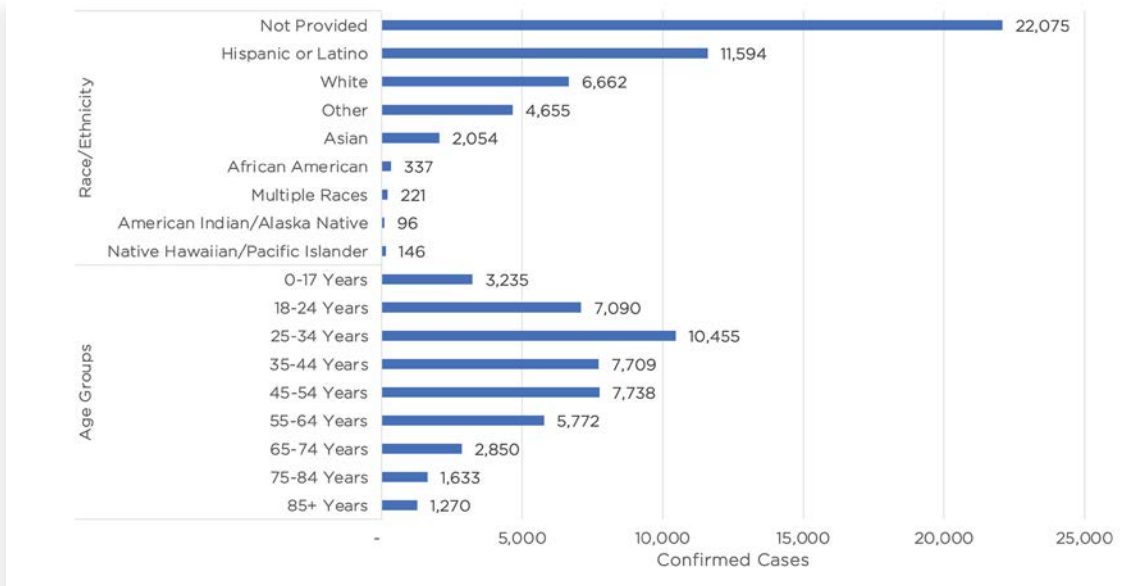


Source: Center for Disease Control and Prevention, County of Orange

In terms of demographic impacts, Latinos have accounted for approximately 24 percent of Orange County's confirmed COVID-19 cases. Whites accounted for 14 percent, Asians 4 percent and African Americans 0.2 percent. As seen on the next page, race/ethnicity data has not been provided for a significant number of recorded COVID-19 cases.

In terms of age groups, residents under the age of 25 accounted for 22 percent of confirmed cases, or 10,325 cases, while the at-risk 65+ population accounted for 12 percent, or 5,753 cases. Orange County's working age population (25-64) represented 66 percent of total cases with 31,674 cases.

CONFIRMED COVID-19 CASES IN ORANGE COUNTY BY AGE GROUP AND RACE/ETHNICITY, DATA AS OF AUGUST 28, 2020

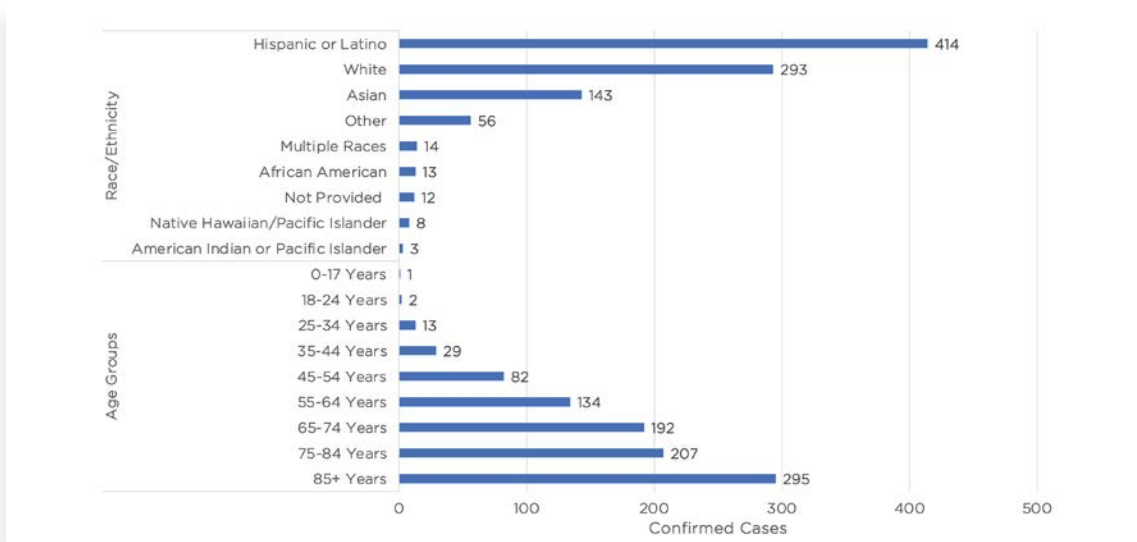


Source: Center for Disease Control and Prevention, County of Orange. Data released August 28, 2020

In terms of deaths by ethnicity or race resulting from COVID-19, Latinos accounted for 43.3 percent of Orange County deaths, a total of 414. Deaths in White communities represented 30.6 percent of total deaths, or 293 deaths, while Asian communities saw 143 deaths and African American communities saw 13.

The resilience of younger age groups to COVID-19 is seen in only 1 death in the 0-17 age group and only 2 deaths in the 18-24 age group as of August 28, 2020. Working age populations (25-64) saw 258 deaths while 694 Seniors died, 73 percent of the total. This highlights the significant risk to older residents.

CONFIRMED COVID-19 DEATHS IN ORANGE COUNTY BY AGE GROUP AND RACE/ETHNICITY, DATA AS OF AUGUST 28, 2020



Source: Center for Disease Control and Prevention, County of Orange. Data released August 28, 2020



PUBLIC HEALTH IMPACTS

The coronavirus pandemic has had a myriad of public health effects beyond the disease itself. Multiple publications, including the *Atlantic*¹, *Washington Post*², and *Harvard Business Journal*³ have noted a rise in mental health symptoms. Recent Kaiser Family Foundation research shows that the pandemic has had major consequences for mental health, with 36.5 percent of U.S. adults reporting signs of anxiety or depression in June 2020, compared with only 11 percent in 2019.⁴ Nearly half of Kaiser survey respondents report negative mental health symptoms due to stress related to COVID-19,⁵ a figure that rises to 54 percent for those who have lost jobs or income due to the pandemic. Other groups more likely to report negative mental health symptoms include those in households making less than \$40,000 per year, family members of frontline healthcare workers, and those with preexisting health issues.

Children are being affected as well as teenagers and adults. In a survey of elementary school children during the first week of the nation's lockdown:

- 84 percent of children reported their situation being either “a bit worse” or “much worse” than before; and
- only 7 percent reported an improvement.⁶

According to Dr. Heather Huszti, Chief Psychologist at Children's Hospital of Orange County (CHOC), parents have also reported higher stress levels than non-parents during the pandemic. Parents can easily pass this stress onto their children. While there are no easy solutions to the problems of mental health during the COVID-19 pandemic, one strategy is the increased use of telehealth, such as video calls between patients and mental health providers.



1 <https://www.theatlantic.com/health/archive/2020/07/coronavirus-special-mental-health-disaster/613510/>

2 <https://www.washingtonpost.com/health/2020/05/04/mental-health-coronavirus/>

3 <https://hbswk.hbs.edu/item/solving-covid-s-mental-health-crisis>

4 <https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/>

5 <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>

6 Cited in webinar.

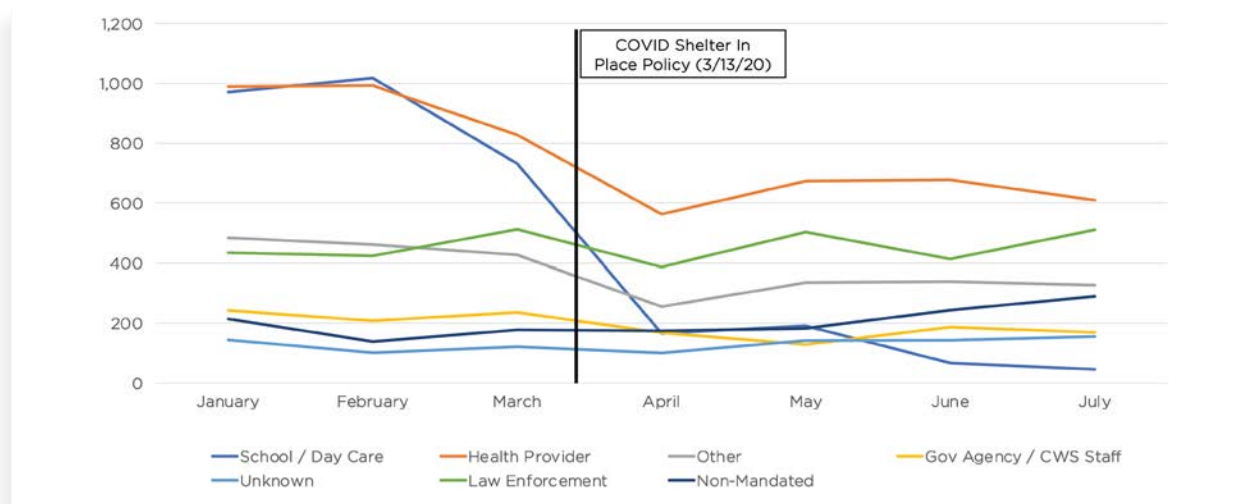
IMPACT ON CHILD ABUSE

As the pandemic took hold of the nation, significant job losses, confusing health guidelines, and shelter-in-place or stay-at-home orders exacerbated mental health issues throughout the country, further increasing stress levels for many families. As a result, many health and social professionals became increasingly concerned regarding the well-being of children in potentially abusive families. A superficial analysis of the data would seem to belie that concern. After all, according to Child Abuse Statistics Application (CARSA) data, total child abuse referrals dropped from 3,481 in January 2020 to 2,109 in July 2020, a decline of 39 percent, or 1,372 cases.

While total referrals dropped, referrals by source changed dramatically over the same time period. Schools/Day Cares (-95 percent), Health Providers (-38 percent), Other (-32 percent), and Gov Agency/CWS Staff (-30 percent) reports all saw declines in referrals during the first six months of 2020 – likely a result of school and day care closures and reduced in-person visits to health providers or social workers. Referrals coming from Unknown, Law Enforcement, and Non-Mandated increased by 8 percent, 18 percent, and 35 percent, respectively. The increase in Non-Mandated referrals reflects increases in referrals from potential relatives of abuse victims – presumably a result of families spending more time together.

In summary, referral statistics for child abuse are declining, but this is a result of “underreporting” from institutions like schools, daycares, and health providers – many of which are completely closed or operating at a significantly reduced capacity due to the pandemic and are seeing and caring for significantly fewer children. Unfortunately, their ability to report cases of abuse has been curtailed at a time when, given the stressors and isolation of families, actual abuse/neglect may be significantly higher than under normal circumstances.

REFERRALS PROVIDED TO CHILD ABUSE REGISTRY BY SOURCE OF REPORT, JANUARY 2020 – JULY 2020



Source: Child Abuse Registry Statistics Application (CARSA) Data

NOTE: Referrals provided are for unduplicated children.

DATA NOTES:

“Gov Agency/CWS Staff” includes CWS Staff and Government Agency; “Health Provider” includes Medical/Dental Professionals and Counselors/Therapists; “Law Enforcement” includes Law Enforcement and Parole/Probation; “School/Day Care” includes School Personnel/Teacher and Day Care Staff; “Non-Mandated” includes No Relationship and Non-Mandated Relative; “Other” includes Clergy, Substitute Care Provider, and Other Mandated Professional; and “Unknown” includes Unknown.

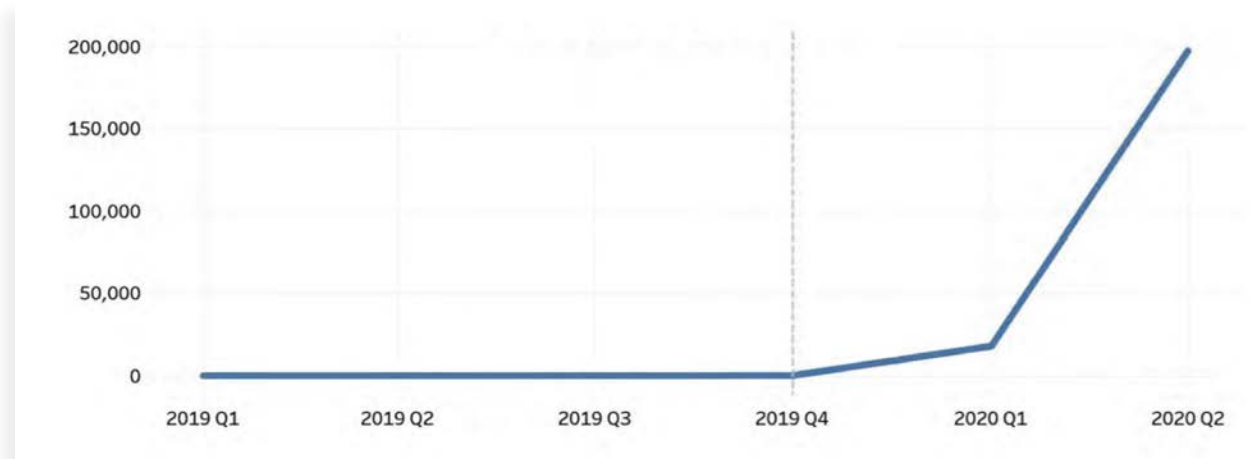


COVID-19 SPECIAL

In fact, the current pandemic might accelerate the adoption of telehealth as well as telecommuting. While telehealth has been an option for years, a J.D. Power study found that only 10 percent of American healthcare consumers used telehealth in 2019 despite high customer satisfaction among those who did use the service.⁷ A recent *New England Journal of Medicine* article notes many major health systems such as Kaiser Permanente, Mount Sinai, and Providence already offered telehealth services⁸ before the pandemic.

As Orange County's public health plan for low-income residents, CalOptima recently made dramatic investments in its telehealth services and other virtual care strategies, including approval of its Virtual Care Strategy and Roadmap and PACE Without Walls. Being able to serve patients using telehealth rather than face-to-face doctor office visits helps to reduce potential viral spread and allows medical professionals to better use their time. In Q2 2020, CalOptima data showed more than 150,000 telehealth services took place, a dramatic increase over prior use.

CALOPTIMA QUARTERLY TELEHEALTH SERVICE TRENDS, Q1 2019 - Q2 2020



Source: CalOptima

A 2019 American Medical Association survey found that the use of telehealth doubled between 2016 and 2019.⁹ The survey found that

- Physicians of all ages and specialties are increasingly using digital tools;
- Physicians are using a wider variety of digital tools; and
- Key drivers for using these tools include increasing patient safety; increasing patient adherence; improving efficiency; improving diagnostic ability and improving patient convenience.¹⁰

28 percent of surveyed physicians used telehealth in 2019; the AMA estimates the current percentage to be between 60 percent and 90 percent.¹¹

7 <https://www.jdpower.com/business/press-releases/2019-us-telehealth-satisfaction-study>

8 <https://www.nejm.org/doi/full/10.1056/nejmp2003539>

9 <https://www.ama-assn.org/about/research/ama-digital-health-care-2016-2019-study-findings>

10 <https://www.ama-assn.org/system/files/2020-02/ama-digital-health-study.pdf>

11 Ibid.

Conversa Health CEO Murray Brozinsky called the COVID-19 pandemic a catalyst for telehealth, noting that his virtual health platform's clients have seen telehealth usage increase from less than 10 percent of patients to more than 60 percent.¹² Similarly, hospitals and physicians using Epic Systems software made 2.5 million telehealth appointments in April compared to less than 50,000 in February.¹³

Dr. Huszti and First 5 Orange County President and CEO Kimberly Goll both cite the importance of pediatric care during the pandemic, especially considering the effectiveness of early intervention with many conditions. While some examinations and medical procedures will necessitate an in-person visit, telehealth can help fill some of the gaps created by the downward trend in pediatric visits. In fact, telehealth, like telecommuting, will likely remain popular long after the pandemic ends.

CALOPTIMA OVERVIEW

- 767,745 CalOptima members as of July 31, 751,373 enrolled in Medi-Cal.
- Programs include Medi-Cal, OneCare, OneCare Connect and the Program of All-Inclusive Care for the Elderly (PACE).
- CalOptima's network includes 7,443 specialists, 1,557 primary care providers and 570 pharmacies.
- 91 percent of CalOptima members report satisfaction with their physician interactions and communication.

CalOptima offers services in a variety of languages, including English, Spanish, Vietnamese, Korean, Chinese, Farsi and Arabic. Services in other languages are available via rising interpreter services.

CalOptima health insurance benefits approximately 25 percent of Orange County residents and primarily covers low-income children and adults, senior citizens and residents with disabilities. Its membership increased by more than 12,000 between 2019 and July 2020.

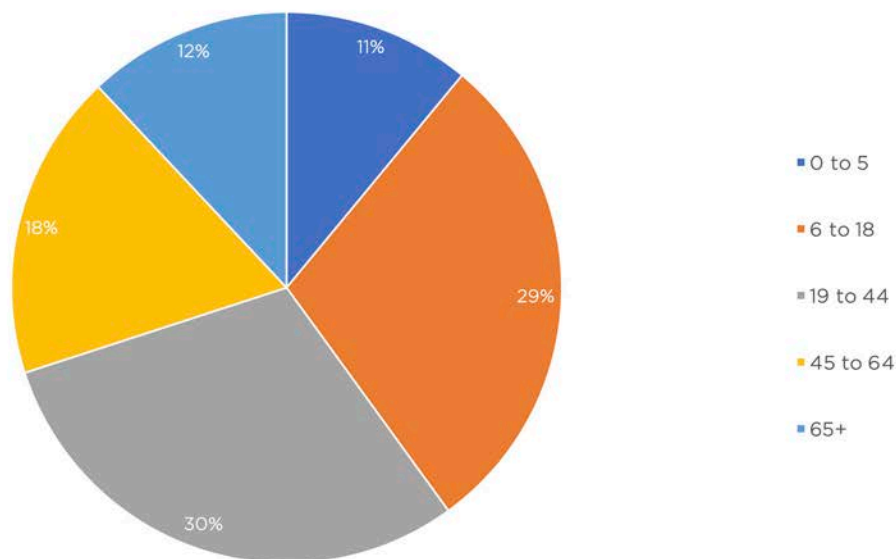
As seen in the chart below, CalOptima serves county residents of all age groups, with 40 percent of members aged 18 or younger and 12 percent of members aged 65 and older. While the number of CalOptima members over the age of 65 has significantly increased over the past decade, senior citizens make up a smaller percentage of total CalOptima membership in July 2020 than they did in 2010.

¹² <https://www.pymnts.com/healthcare/2020/can-telehealth-and-other-innovations-cure-americas-post-pandemic-medical-cost-woes/>

¹³ <https://www.pymnts.com/healthcare/2020/why-telehealth-will-go-on-strong-long-after-covid-19/>



CALOPTIMA MEMBERSHIP BY AGE GROUP, JULY 2020



Source: CalOptima¹⁴

As the county's single largest health insurer, CalOptima has responded to the COVID-19 pandemic in multiple ways, creating programs targeted at the county's least advantaged and most vulnerable residents. Its website, for example, now includes COVID-19 webpages targeted at member providers and the community. It sends weekly Community Announcements to more than 2,500 community partners with information about COVID-19 related program changes at CalOptima and other organizations. Sample information includes:

- An online COVID-19 FAQ;
- Reimbursed COVID-19 testing for members; and
- Coverage of select disinfectants and hand sanitizer products (requires a prescription and may require prior authorization).

By April 2020, most CalOptima staff had transitioned to telework, including the more than 750 teleworking on a temporary basis in response to COVID-19. Further, in addition to the significant increase in telehealth services noted above, CalOptima has implemented other telehealth strategies. For example, under CalOptima's Clinical Field Team Pilot, contracted community health centers provided on-call urgent healthcare services to Orange County residents experiencing homelessness during the pandemic; these services included treating 23 homeless persons via telehealth from mid-April through June 2020.

14 https://www.caloptima.org/-/media/Files/CalOptimaOrg/AboutUs/Board%20Materials/2020/2020-09-03_BODMeetingBook.ashx

Additionally, CalOptima's PACE, which serves nearly 400 skilled nursing-eligible seniors who are among the highest risk to contract COVID-19, has transitioned to PACE Without Walls. Through PACE Without Walls, most services are now provided virtually, which allows these seniors to continue living in the community. For example:

- Clinicians are using tablets and cell phones to engage participants virtually, and opting for in-person visits when virtual care is not feasible.
- More than three-quarters of PACE staff telecommute, with personal protective equipment (PPE) available for CalOptima staff when a face-to-face visit is needed.
- More than 11,000 calls have been made to members to provide social contact as well as to monitor wellbeing.

In May, CalOptima started a \$629,000 nursing home infection control program in collaboration with the Orange County Health Care Agency and UCI Irvine.¹⁵ The program, developed by UCI's Susan Huang, M.D., offers resources and training for nursing home staff, focusing on infection control practices and the screening of patients. Speaking to the *Los Angeles Times*, Dr. Huang noted that "the people who are in nursing homes have every risk factor that's known for COVID for poor outcomes."¹⁶ Orange County is home to 67 CalOptima-contracted nursing facilities.

CalOptima has found major changes in behavior among both its members, who are some of the county's most vulnerable residents, and its providers. Members tended to cancel appointments due to fears of infection, expressed interest in telehealth and asked about locations of COVID-19 testing sites. Many providers tended to change or reduce hours, cancel elective surgeries, and change to phone consultations and telehealth. Between March 1 and April 24, CalOptima members inquired more about COVID-19 testing than any other topic; CalOptima's Provider Relations department received the highest number of inquiries about Community-Based Adult Services (CBAS) and modified office hours, telehealth and COVID-19 testing.¹⁷

CalOptima responded to the overall pandemic and to these findings with both a general Community Awareness Campaign and programs targeted at specific at-risk groups. Its existing Bright Steps Maternity Management Program, for example, now incorporates a First 5 OC Coronavirus pamphlet for expectant mothers and information about increased screening at maternity wards. Its mental health-related programs include public service announcements on emotional health and maternal mental health, along with expanded mental health-related telehealth services and a collaboration with Be Well OC and County Behavioral Services to share mental health resources. Edwin Poon, Ph.D., CalOptima director of Behavioral Health Integration, provided an article to *OC Parenting* magazine offering mental health resources for children.¹⁸

15 <https://www.caloptima.org/en/About/PressAndMedia-PressReleases/PressRelease-NursingHomeProgram.aspx>

16 <https://www.latimes.com/socal/daily-pilot/entertainment/story/2020-05-14/new-training-program-could-better-protect-orange-county-nursing-home-workers-and-residents-from-coronavirus>

17 https://www.caloptima.org/-/media/Files/CalOptimaOrg/AboutUs/Board%20Materials/2020/2020-06-04_BODMeetingBook_v2.ashx

18 <https://parentingoc.com/2020/08/kids-mental-health-during-covid-19/>



COVID-19'S ECONOMIC AND WORKFORCE IMPACTS

COVID-19 has disrupted the global and regional economy in countless ways:

- The U.S. economy shrunk by an annualized quarterly GDP decline of 31.7 percent in Q2 2020, the most significant decline in GDP on record.
- Dozens of Hollywood film productions have been suspended, with many more completed films seeing their theatrical releases delayed or canceled; the industry could lose an estimated \$5 billion in revenue.¹⁹
- Many iconic retailers have filed for bankruptcy, including J. Crew, Neiman Marcus, Pier 1 Imports, J.C. Penney, Brooks Brothers, GNC, Sur La Table, and Lord and Taylor.
- Beyond retail, almost 150 companies have cited the pandemic as a reason for bankruptcy, from 24 Hour Fitness and Gold's Gym to Hertz, California Pizza Kitchen and multiple oil and gas companies.
- Countless global events have been canceled, from the 2020 Summer Olympics in Tokyo to San Diego Comic-Con to concerts, sports leagues and festivals.
- Disneyland Park, which drew nearly 19 million visitors in 2019, and Disney's California Adventure both closed on March 14, 2020 and remain closed until further notice. This is only the fourth time that the park has ever closed, the other times being after the assassination of John F. Kennedy, the 1994 Northridge Earthquake, and September 11, 2001.

Many disruptions also hit major Orange County events and businesses, including the cancelations of:

- The Orange County Fair, which attracts almost 1.3 million visitors per year and was expected to contribute up to \$350 million to the local economy;²⁰
- The Newport Beach Film Festival, which drew almost 60,000 attendees in 2019;²¹
- WonderCon Anaheim,²² which attracted approximately 66,000 visitors in 2019;²³
- Vidcon 2020, scheduled to be held at Anaheim Convention Center, had 75,000 attendees the previous year;²⁴
- Blizzard Entertainment's Blizzcon festival, which draws up to 40,000 visitors to the Anaheim Convention Center each year;²⁵ and
- The Vans U.S. Open of Surfing, which drew 375,000 to visitors to Huntington Beach in 2018.²⁶

19 <https://www.hollywoodreporter.com/news/film-industry-facing-5-billion-loss-coronavirus-outbreak-1282038>

20 <https://www.ocbj.com/news/2020/apr/27/oc-fair-cancelation-loss-350m/>

21 <https://www.ocbj.com/news/2020/mar/17/new-august-slot-film-fest/>

22 <https://www.comic-con.org/wca>

23 <https://www.kpbs.org/news/2019/apr/01/wondercon-wraps-and-comic-con-around-corner/>

24 <https://variety.com/2020/digital/news/vidcon-2020-canceled-coronavirus-1203542416/>

25 <https://www.ocbj.com/news/2020/may/26/blizzard-cancels-big-festival-set-autumn/>

26 <https://www.ocbj.com/news/2020/jun/15/vans-us-open-surfing-nixed-2020/>

Overall, the COVID-19 pandemic has dramatically impacted economies and workplaces at all levels, both regionally and globally. While many believed the economy would rebound into a quick recovery, continued levels of unemployment and financial distress suggest the recovery will likely take years. While Orange County was comparatively hit harder during the 2008 mortgage crisis, it also was the first Southern California county to fully recover; this indicates that while economic hardships will likely continue to grow for most Orange County residents in the short term, the county does have a history of successful economic recovery.

In fact, some have argued that the world has just jumped five to 10 years forward in 90 days. John F. Kennedy once observed that the word “crisis” in Chinese is composed of two characters—one representing danger, the other opportunity. For example, Brookings researchers Katherine Guyot and Isabel V. Sawhill call the pandemic “among other things, a massive experiment in telecommuting,” noting that it could accelerate what has been a relatively modest increase over the past fifteen years.²⁷ Only 19 percent of U.S. workers did paid work from home in 2019, a number that has increased to an estimated 50 percent in 2020.²⁸ Guyot and Sawhill mention previous disasters that increased telecommuting, such as the 2010-2012 Christchurch, New Zealand earthquakes, and speculate about “a more permanent shift to telecommuting.”

While the economic impacts from COVID-19 are likely to surpass those from the Great Recession, this disruption has also accelerated a wave of entrepreneurship, innovation, and forward-thinking as residents and business owners alike find creative solutions to adapt during the pandemic. Over the past two decades, the U.S. economy has seen multiple large shifts, including physical media to digital, brick-and-mortar retail to e-commerce, increasingly globalized supply chains, and rising automation. The pandemic will likely accelerate the adoption of new technologies and transform work, education and healthcare.

TERMINOLOGY

This report uses the terms “telecommuting” and “telehealth” to refer to two emerging ways of working and accessing healthcare that both have multiple synonyms. Telecommuting, also known as remote work, telework and cybercommuting, refers to paid work from home using electronic communication. Telehealth, which is also known as telemedicine, telecare, remote medicine and distance medicine, is defined by the Health Resources Service Administration as “the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration.”²⁹

27 <https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/>

28 Ibid.

29 <https://www.healthit.gov/faq/what-telehealth-how-telehealth-different-telemedicine>



TELECOMMUTING

The Pew Research Center found that approximately 40 percent of American jobs pre-COVID could be performed remotely, with this percentage varying greatly by demographic category.³⁰ There has been much discussion of telecommuting and its future potential:

- A survey of more than 4,000 Bay Area tech workers found that two-thirds of them would leave the area if they could work remotely.³¹
- Similarly, two-thirds of surveyed Sacramento residents expressed interest in working from home even after the pandemic ends.³²
- Two Silicon Valley tech companies, Square and Twitter, have announced that employees can permanently transition to work at home.³³
- In April, the research and advisory firm Gartner found that almost 75 percent of surveyed companies planned on permanently moving some employees to remote work.³⁴
- *New York Times* economics reporter Eduardo Porter has gone even further, arguing that COVID-19 “threatens the assets that make America’s most successful cities so dynamic” such as dense industry clusters.³⁵

This shift to remote work has and will continue to have significant challenges. For example, multiple sources have noted the lack of high-speed internet access in rural and low-income communities. A Public Policy Institute of California study entitled “California’s Digital Divide” found that 74 percent of California households had broadband internet in 2017,³⁶ with lower rates for African Americans (67 percent), Latinos (66 percent), rural residents (59 percent), and low-income residents (55 percent.) A successful expansion of remote work will require increasing access for all, including these demographics.

A potential large-scale shift toward remote work could also have significant advantages. Brookings lists several potential advantages, including a lower environmental impact and better worker quality of life related to less commuting, potential increases in employee retention, and better work-life balance.

30 <https://www.pewresearch.org/fact-tank/2020/05/06/telework-may-save-u-s-jobs-in-covid-19-downturn-especially-among-college-graduates/>

31 https://www.sfgate.com/living-in-sf/article/2-out-of-3-tech-workers-would-leave-SF-15289316.php?utm_source=CalMatters+Newsletters&utm_campaign=9def01f2b4-WHATMATTERS_NEWSLETTER&utm_medium=email&utm_term=0_faa7be558d-9def01f2b4-67850841&mc_cid=9def01f2b4&mc_eid=9091137dab

32 https://www.caprдио.org/154044?utm_source=CalMatters+Newsletters&utm_campaign=9def01f2b4-WHATMATTERS_NEWSLETTER&utm_medium=email&utm_term=0_faa7be558d-9def01f2b4-67850841&mc_cid=9def01f2b4&mc_eid=9091137dab

33 https://www.mercurynews.com/2020/05/18/coronavirus-another-bay-area-tech-firm-says-employees-can-work-from-home-permanently/?utm_source=CalMatters+Newsletters&utm_campaign=9def01f2b4-WHATMATTERS_NEWSLETTER&utm_medium=email&utm_term=0_faa7be558d-9def01f2b4-67850841&mc_cid=9def01f2b4&mc_eid=9091137dab

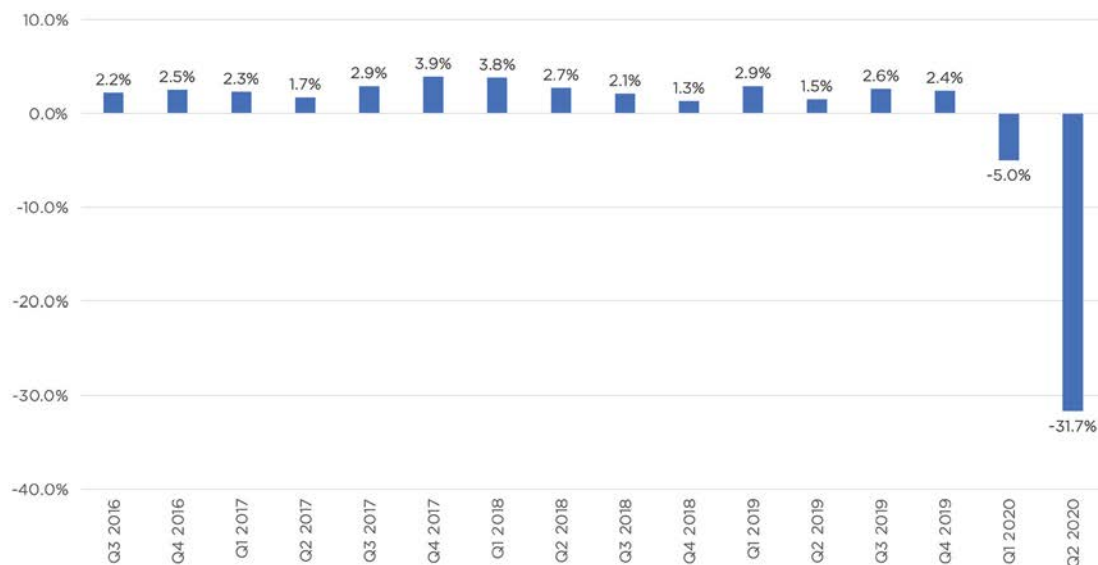
34 <https://www.forbes.com/sites/ezequielminaya/2020/04/03/cfos-plan-to-permanently-shift-significant-numbers-of-employees-to-work-remotely---survey/#3fb330e0575b>

35 https://www.nytimes.com/2020/07/21/business/economy/coronavirus-cities.html?utm_source=CalMatters+Newsletters&utm_campaign=9def01f2b4-WHATMATTERS_NEWSLETTER&utm_medium=email&utm_term=0_faa7be558d-9def01f2b4-67850841&mc_cid=9def01f2b4&mc_eid=9091137dab

36 https://www.ppic.org/publication/californias-digital-divide/?utm_source=CalMatters+Newsletters&utm_campaign=9def01f2b4-WHATMATTERS_NEWSLETTER&utm_medium=email&utm_term=0_faa7be558d-9def01f2b4-67850841&mc_cid=9def01f2b4&mc_eid=9091137dab

Looking at the economic impact COVID-19 has had on the nation so far, it is estimated that in Q2 2020, annualized GDP dropped by a staggering 31.7 percent, following a 5 percent drop in Q1 2020. While many expect a significant rebound in both Q3 and Q4 2020, lingering COVID-19 concerns, increasing permanent job losses, and a lack of public financial support from the federal government may put the recovery at risk.

ANNUALIZED QUARTERLY CHANGE IN GROSS DOMESTIC PRODUCT IN THE UNITED STATES, 2016-2020



Source: Bureau of Economic Analysis

The Pew Research Center found that “unemployment rose higher in three months of COVID-19 than it did in two years of the Great Recession,” with national unemployment rising from 6.2 million in February 2020 to 20.5 million in May.³⁷ This increase of 14 million is well above that between 2007 and 2010 – 8.8 million – and resulted in an estimated unemployment rate of 16 percent in May. The national seasonally adjusted unemployment rate was 10.2 percent in July 2020, with the number of unemployed persons falling by 1.4 million to 16.3 million.

Orange County’s unemployment rate rose from 2.9 percent in January 2020 to 12.3 percent in July 2020, an improvement from 13.8 percent in April 2020. As one might imagine, the pandemic transformed job hiring in the county. July 2020 saw only 80,877 unique job postings compared to 140,585 in July 2019, a decline of 42 percent, or just under 60,000 jobs.

The state’s unemployment rate rose from a record low of 3.9 percent in February 2020 to a record high of 16.2 percent in April before dropping slightly to 13.7 percent in July. As of July 2020, unemployment in Southern California ranged from 13.1 percent in San Bernardino County to 18.2 percent in Los Angeles County.

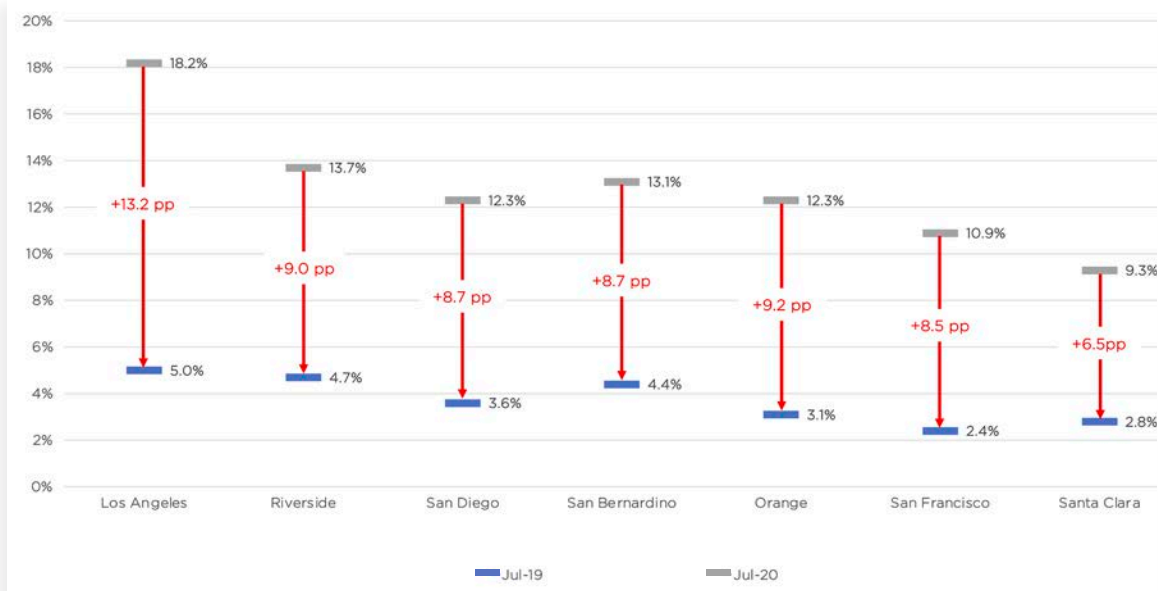
Los Angeles County’s unemployment rate rose by 13.2 percentage points between July 2019 and July 2020, more than Orange (9.2 percentage points) and Riverside (9.0 percentage points) counties. As a global tourist destination, Southern California’s labor market was more heavily affected by COVID-19 than its northern counterparts.

37 <https://www.pewresearch.org/fact-tank/2020/06/11/unemployment-rose-higher-in-three-months-of-covid-19-than-it-did-in-two-years-of-the-great-recession/>



COVID-19 SPECIAL

PRE- AND POST-COVID UNEMPLOYMENT RATES BY COUNTY, JULY 2019 - JULY 2020



Source: McKinsey, California Employment Development Department

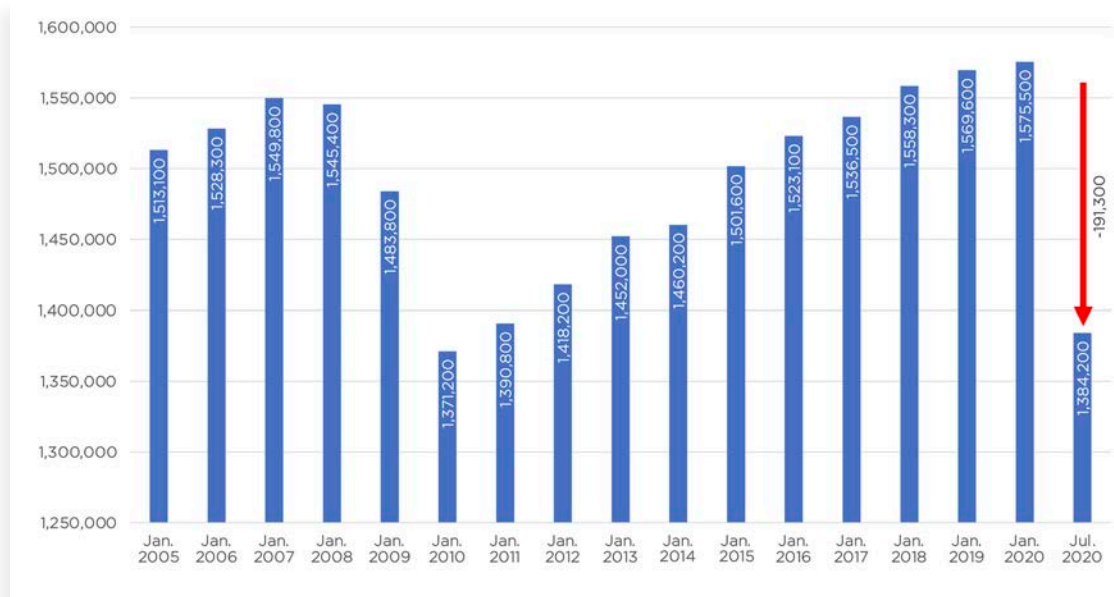
COVID-19 also reduced labor forces in counties across the state. Los Angeles saw its labor force decline by 4 percent from July 2019 to July 2020, followed by Orange County (-3 percent) and San Francisco County (-2 percent). This reduction in labor force coincides with a wave of Baby Boomers retiring and indicates that COVID-19 may be accelerating this trend. San Francisco County saw the largest percentage increase in the number of unemployed individuals (more than 342 percent), followed by Orange County (283 percent) and Los Angeles (251 percent). Overall, Los Angeles County's total employment has declined by 17 percent over the past year; Orange County's employment fell by 12 percent and San Francisco County's by 11 percent.

PERCENT CHANGE IN LABOR FORCE, EMPLOYED INDIVIDUALS AND UNEMPLOYED INDIVIDUALS BY COUNTY PRE- AND POST-COVID, JULY 2019 - JULY 2020

	PERCENT CHANGE ON LABOR FORCE	PERCENT CHANGE IN NUMBER OF EMPLOYED	PERCENT CHANGE IN NUMBER OF UNEMPLOYED
San Francisco	-2%	-11%	342%
Orange	-3%	-12%	283%
Los Angeles	-4%	-17%	251%
San Diego	-1%	-10%	242%
Santa Clara	-2%	-9%	229%
Riverside	-1%	-10%	188%
San Bernardino	-1%	-10%	193%

Source: California Employment Development Department

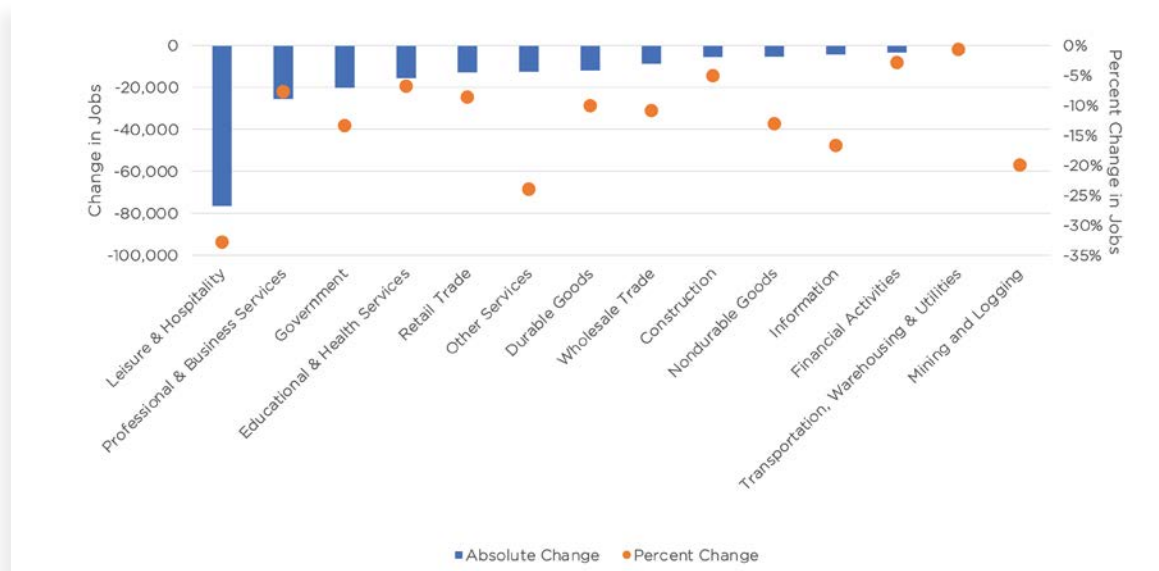
TOTAL EMPLOYMENT IN ORANGE COUNTY, 2005-2020



Source: California Employment Development Department

Due to the various travel restrictions, social distancing measures, and business closures, Orange County's Leisure and Hospitality sector saw the highest employment declines, losing 76,600 jobs, or 33 percent of the previous year's jobs. Within the Leisure and Hospitality industry, Food Service and Drinking Places lost 34,500 jobs, a reduction of 23 percent, while Accommodation and Food Services declined by 46,600 jobs, or by 26.5 percent.

CHANGE IN EMPLOYMENT BY INDUSTRY IN ORANGE COUNTY, JULY 2019 - JULY 2020



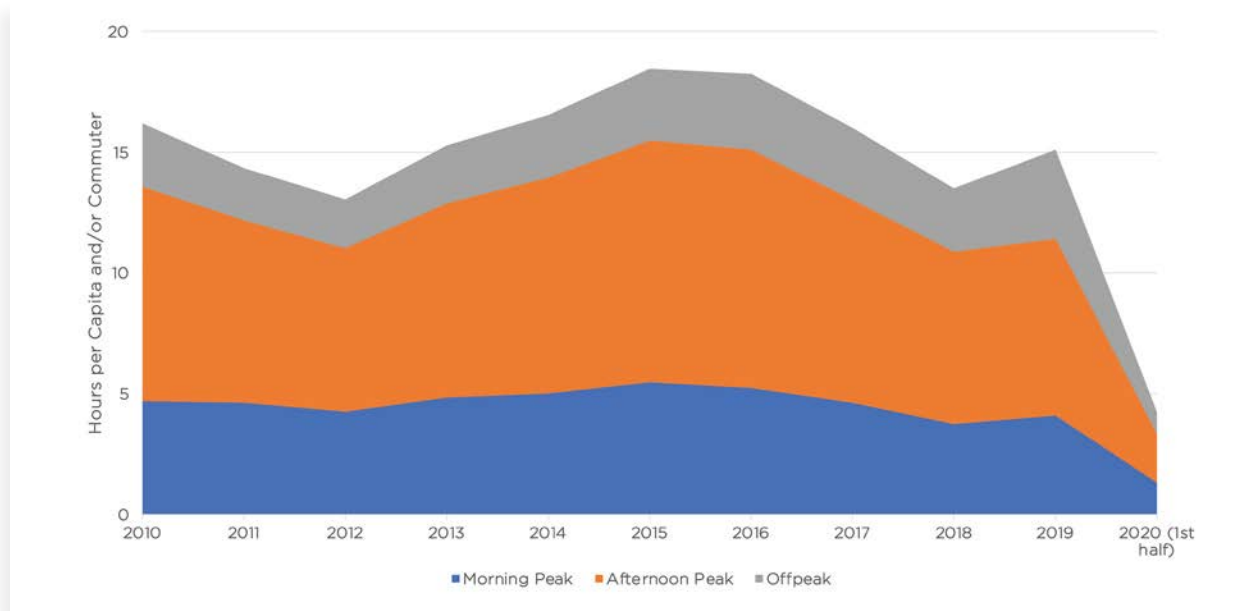
Source: California Employment Development Department



COVID-19 SPECIAL

COVID-19's impact has caused a cascading effect on everything from traffic and transit to commercial aviation. Traffic congestion in Orange County increased from an average of 13.5 hours in 2018, to 15.1 hours in freeway traffic congestion in 2019. Yet, as the pandemic spread and stay-at-home orders were given, this resulted in a massive drop in congestion, as can be seen in the chart below. Between 2019 and the first half of 2020, the morning peak time in freeway traffic congestion declined from 4.1 hours to 1.3 while the afternoon peak time dropped from 7.3 hours to 2 hours.

ANNUAL HOURS OF FREEWAY DELAY PER CAPITA OR COMMUTER IN ORANGE COUNTY, 2010-2020 (1ST HALF ONLY)

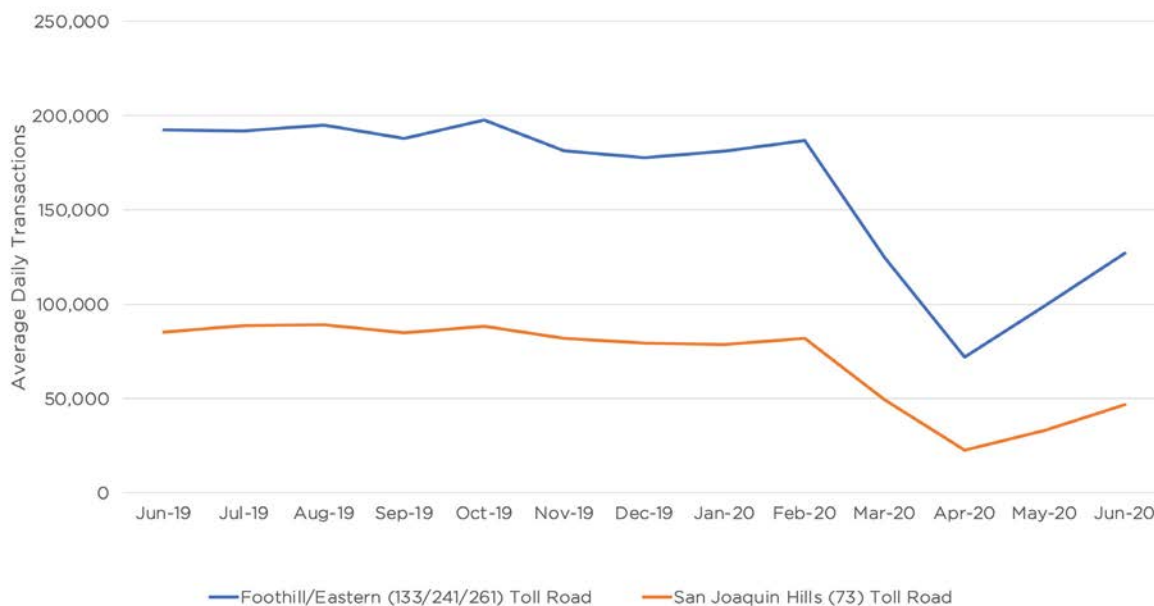


NOTE: Data for peak hours reflect annual hours of delay per commuter at speeds less than 60 miles per hour on freeways in Orange County. Data for offpeak hours are per capita. Counts of commuters in 2019 and 2020 are projected estimates based on historical trends and change in vehicle miles traveled; consequently, morning and afternoon peak estimates of delay per commuter should be interpreted with caution.

Source: Caltrans, Performance Measurement System; U.S. Census Bureau, American Community Survey, 1-Year Estimates; California Department of Finance, Population Estimates, Tables E-2 & E-4

The chart below highlights the drop in traffic congestion through average daily transactions at Orange County toll roads from June 2019 to June 2020. Over the past year, transactions peaked in October 2019 at 197,653 (for Foothill/Eastern) before falling by 64 percent to 71,947 in April 2020. It has since rebounded by 55,146 transactions, or 77 percent. San Joaquin Hills Toll Road transactions peaked at 88,249, dropped to 22,604, and recovered to 46,744 during the same time period.

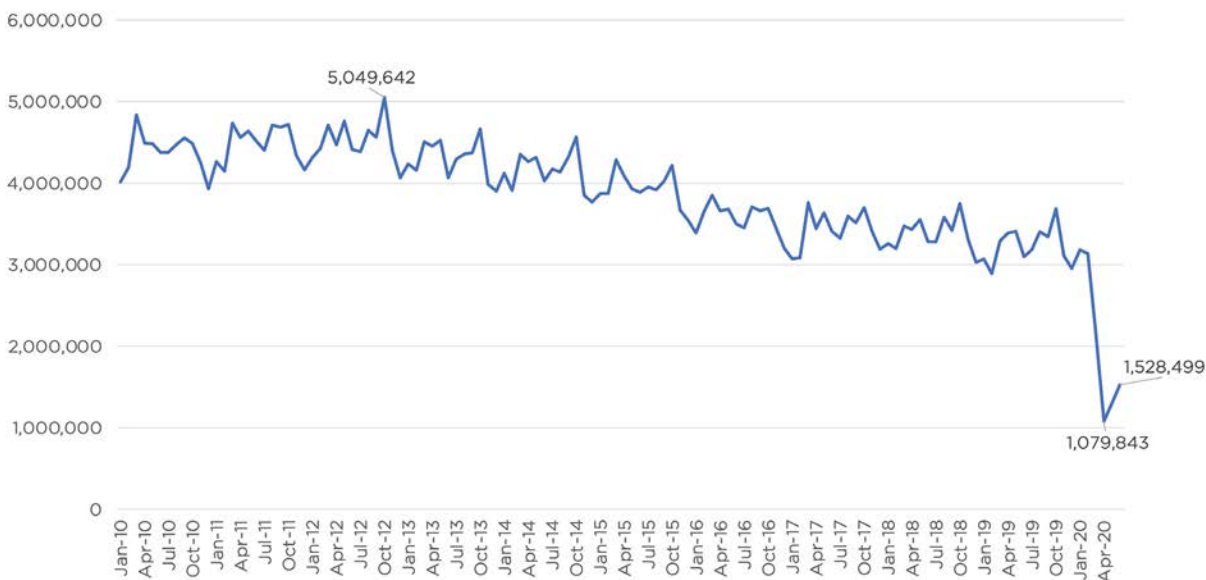
AVERAGE DAILY TRANSACTIONS AT ORANGE COUNTY TOLL ROADS, 2019-2020



Source: *The Toll Roads of Orange County, Transaction Tables*

Bus ridership in the region also fell dramatically during the pandemic. While bus ridership in the region has steadily declined since its 2012 peak of 5,049,642, the pandemic cut ridership by 66 percent between January 2020 and April 2020, when ridership dropped to a 10-year low of 1,079,843. Since then, bus ridership has recovered slightly to 1,528,499 as of June 2020, an increase of 42 percent.

ORANGE COUNTY TRANSPORTATION AUTHORITY (OCTA) MONTHLY BUS RIDERSHIP, JANUARY 2010 - JUNE 2020



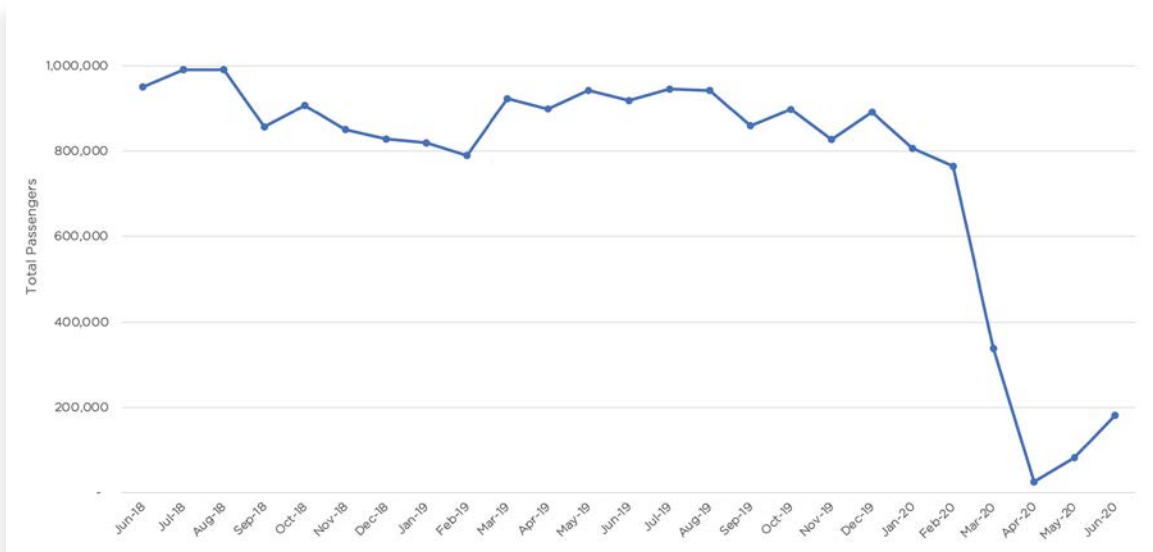
Source: *Orange County Transportation Authority*



COVID-19 SPECIAL

As the country put in place stay-at-home orders and limited travel both domestically and internationally, John Wayne Airport saw dramatic declines in total passenger counts. Compared to almost 1,000,000 passengers in August 2018, total passengers dropped from 764,506 in February 2020 to 337,981 in March to only 25,313 in April. While passenger totals have begun to slowly recover, reaching 181,486 in June 2020, reduced travel is expected to continue for both the region and the nation for at least the remainder of 2020.

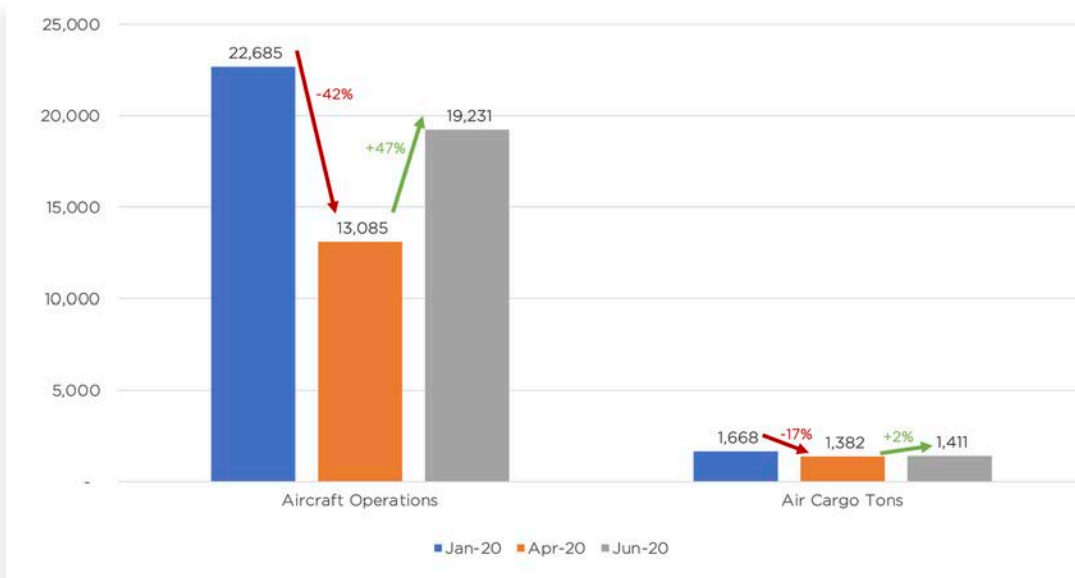
TOTAL MONTHLY PASSENGERS AT JOHN WAYNE AIRPORT, JUNE 2018 - JUNE 2020



Source: John Wayne Airport, OCair.com

While passengers travelling through John Wayne Airport saw declines of 97 percent between January 2020 and April 2020, total aircraft operations and air cargo tons were less affected, dropping 42 percent and 17 percent during the same time period, respectively.

TOTAL AIRCRAFT OPERATIONS AND AIR CARGO TONS AT JOHN WAYNE AIRPORT, 2020



Source: John Wayne Airport, OCair.com

IMPACT ON ORANGE COUNTY TOURISM

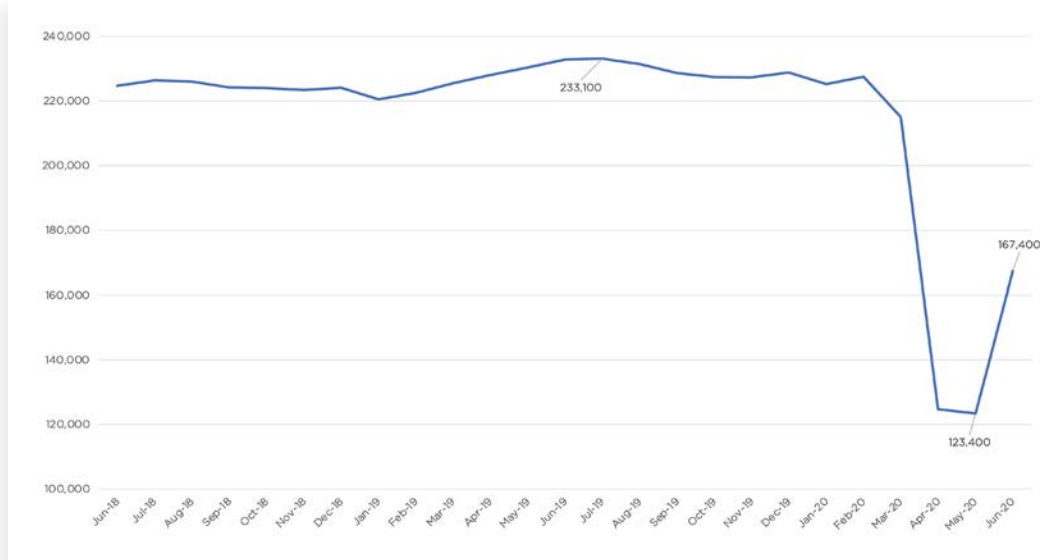
In 2019, a record 50.2 million travelers visited Orange County, spending \$13.0 billion; the industry employed more than 220,000 county workers.

While almost every Orange County industry has been affected by the pandemic, none have been hit as hard as Hospitality and Tourism. Disneyland shut down for only the fourth time in its history³⁸ and has been closed since May 14th. The Disneyland Resort is the county's largest employer, with more than 32,000 workers.³⁹ Other major county employers have also been severely affected by the pandemic, including the University of California, Irvine (23,174 employees, second in the county), and the three top ten employers who are at the front lines of fighting the pandemic: St. Joseph Health, Kaiser Permanente, Hoag Memorial Hospital.

Along with the Disneyland Resort, several newly-built Orange County hotels have delayed their openings, including the JW Marriott Anaheim Resort.⁴⁰ Developer Bill O'Connell told the Orange County Business Journal that "almost every hotel in the resort area is closed, and everyone is waiting for Disneyland to open."⁴¹ Construction of new hotels has also stalled. South Coast Plaza shut down in March⁴² but reopened on June 11th with a variety of health and safety measures in effect, including mandatory masks, reduced hours and hand sanitizer stations.⁴³

Employment in Orange County's Leisure and Hospitality sector peaked in July 2019 at 233,100, dropping to 225,200 by January 2020. Once COVID-19 took hold, employment declined to 123,400 by May 2020, a reduction of 47 percent or nearly 110,000 jobs from the sector's July 2019 high.

**TOTAL MONTHLY LEISURE AND HOSPITALITY EMPLOYMENT IN ORANGE COUNTY,
JUNE 2018 - JUNE 2020**



Source: California Employment Development Department

38 <https://www.washingtonpost.com/travel/2020/03/12/disney-is-closing-its-california-theme-parks-coronavirus-precaution/>

39 <https://www.ocbj.com/news/2020/apr/02/disney-furlough-staff/>

40 <https://www.ocbj.com/news/2020/jun/12/hotel-building-swings-strong-stalled/>

41 Ibid.

42 <https://www.ocbj.com/news/2020/jun/10/south-coast-sets-new-reopen-date/>

43 <https://www.southcoastplaza.com/reopen/>



COVID-19 SPECIAL

The pandemic could shift the regional and global real estate market. According to CBRE, a major provider of commercial real estate space and services in the nation, the pandemic is leading tenants to rethink long-term space needs. Orange County's vacancy rate increased to 10.1 percent in Q2 2020 as net absorption totaled a negative 363,814 square feet and the average asking lease rate shrank 0.3 percent quarter-over-quarter. Transaction volume for commercial real estate in Orange County declined by 69 percent to \$180 million during the same time period as buyers and sellers waited for more economic clarity.

Jones Lang LaSalle, another major provider of commercial real estate services, indicates that the impacts from COVID-19 on office space in Orange County have so far been more muted than during the Great Recession. This could be due to the pandemic's disproportionate impact on tourism-related industries thus far as opposed to professional services. However, 2020's leasing activity so far – 2.8 million square feet – is 42.3 percent below what it was 12 months ago.

ORANGE COUNTY OFFICE MARKET OVERVIEW, Q2 2020

	VACANCY RATE	2020 YTD NET ABSORPTION	AVERAGE ASKING LEASE RATE*
North Orange County	7.2%	-60,144	\$2.66
Central Orange County	11.9%	163,880	\$2.64
West Orange County	8.7%	-87,315	\$2.72
Greater Airport Area	11.0%	-306,180	\$3.23
South Orange County	8.6%	-74,055	\$3.08
Orange County	10.1%	-363,814	\$3.03

Source: CBRE, Orange County Office MarketView Q2 2020

*Class A space

ORANGE COUNTY INDUSTRIAL MARKET OVERVIEW, Q2 2020

	VACANCY RATE	2020 YTD NET ABSORPTION	AVERAGE ASKING LEASE RATE*
North Orange County	1.4%	-451,890	\$0.95
West Orange County	2.8%	-163,845	\$0.85
Greater Airport Area	2.7%	76,612	\$1.01
South Orange County	2.8%	-77,738	\$1.22
Orange County	2.2%	-616,861	\$1.03

Source: CBRE, Orange County Industrial MarketView Q2 2020

Orange County apartment rental prices fell for the first time in a decade, dropping by an average of \$27 between the first and second quarters of 2020 after registering average quarterly rent increases of \$16 over the past decade⁴⁴. While Los Angeles County saw a similar decline, Riverside and San Bernardino counties saw slight increases. This uneven growth is likely due to Orange and Los Angeles counties' reliance on hospitality and tourism-related industries.

SOUTHERN CALIFORNIA COUNTY APARTMENT RENTAL RATES, Q2 2020



Source: Southern California News Group

Vacancy rates are expected to continue increasing as moratoriums on rent expire and financial assistance declines; this indicates price growth will slump and costs will continue to decline, as early data reveals rent decreases across several major metro areas.

Rents are expected to drop across Southern California by the end of 2020: by 3.4 percent in the Inland Empire, 3.1 Percent in Los Angeles County, and only 0.5 percent in Orange County. Overall, demand is softening and renters are looking for cheaper options as the economic outlook remains muddy, a trend which may be problematic as many Southern California regions such as Los Angeles County have accelerated housing construction in recent years.

This softened demand can be seen in regional building permits, which reached an 8-year low in 2020. Adding to the highlight of coastal residents moving to inland communities, Riverside and San Bernardino counties registered a 26 percent increase in signed sales contracts in June compared to the previous year, while Orange and Los Angeles counties saw pending sales fall 19 percent⁴⁵.

44 <https://www.ocregister.com/2020/08/02/decade-of-rent-hikes-end-in-l-a-orange-counties/?shared=email&msg=fail>

45 Ibid.



BUILDING PERMITS AND SINGLE FAMILY HOME SALES, Q2 2020

	BUILDING PERMITS		SINGLE FAMILY HOME SALES	
	Totals	Year-Over-Year Change	Totals	Year-Over-Year Change
Los Angeles-Orange	4,531	-28%	1,622	-27%
Inland Empire	2,974	-24%	2,537	-14%
California	21,536	-23%	12,025	-28%

Source: Meyers Research, U.S. Census Building Permit Survey

Orange County has been through and recovered from significant economic downturns before, such as during the Great Recession. While Southern California recovered slowly from the Great Recession, it did recover, with most counties exceeding pre-Recession peaks in employment and home values. Orange County played a major role in the recovery, generating 110,000 private sector jobs between January 2010 and June 2014.⁴⁶ The Recession – alongside technological developments and the shift from physical to digital media – did transform the regional, national and global economies, and entrepreneurs and existing businesses found ways to adapt and thrive in a new environment. Similarly, many Orange County companies are finding ways to survive during the current pandemic.



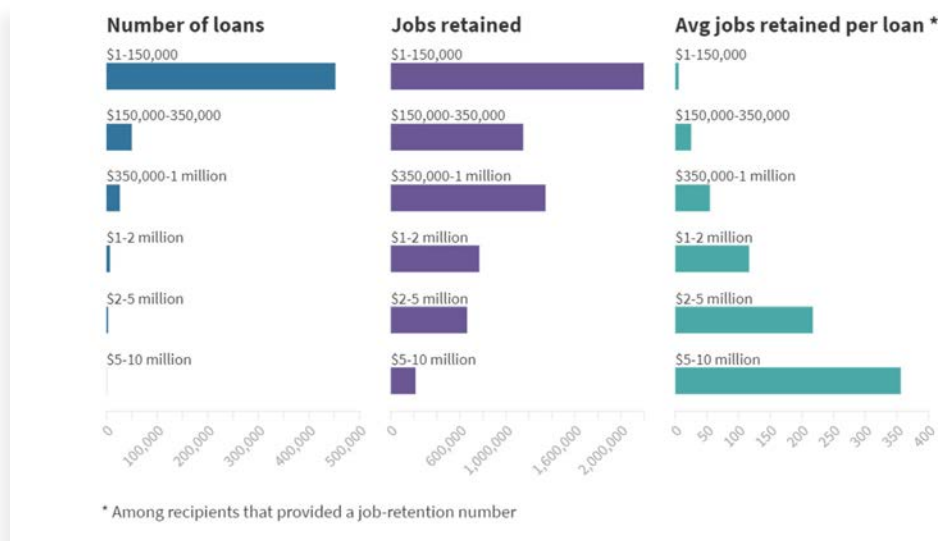
⁴⁶ 2014 Workforce Indicators, page 22.

PAYCHECK PROTECTION PROGRAM (PPP) IN ORANGE COUNTY

California businesses received approximately 540,000 loans from the Federal Paycheck Protection Program. These loans accounted for more than \$60 billion and were mostly less than \$150,000; only 16 percent were for more.⁴⁷ According to feedback from loan recipients, these loans have helped preserve more than 6 million jobs. Non-profits accounted for less than 3 percent of loans.

PPP LOANS IN CALIFORNIA

The SBA grouped loans by amount into six ranges.

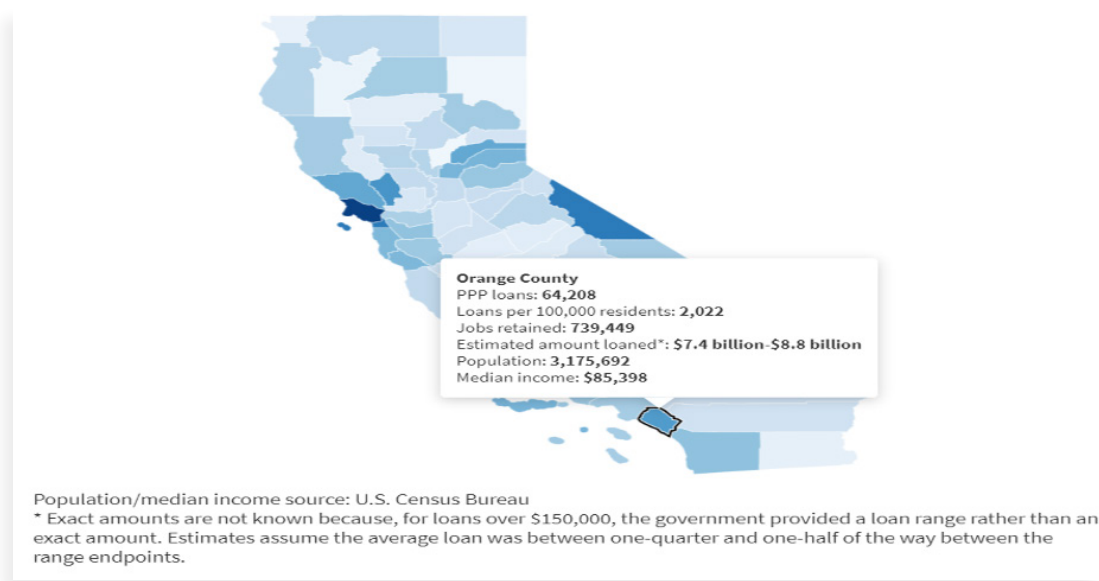


Source: Orange County Register, "Paycheck Protection Program: Sizing up California's \$60 billion-plus share."

Orange County businesses received 64,208 loans through this program, totaling between \$7.4 and \$8.8 billion. This was second only to Los Angeles County, which received an estimated \$16.2-\$19.4 billion.

LOANS BY COUNTY

Loans per 100,000 residents



Source: Orange County Register, "Paycheck Protection Program: Sizing up California's \$60 billion-plus share."

47 <https://www.ocregister.com/2020/07/18/paycheck-protection-program-sizing-up-californias-60-billion-plus-share/>



CREATIVE SECTORS IN ORANGE COUNTY NOT IMMUNE TO COVID IMPACTS

According to Arts Orange County (ArtsOC), as of April 2020, the arts community suffered a \$16 million financial hit from COVID-19 due to cancelled performances and reduced philanthropic support. Through a survey of 42 arts organizations in the region, ArtsOC determined that:

- Nearly 1 million admissions have been lost due to cancelled events;
- 62 percent of arts organizations foresee a severe financial impact from the crisis;
- 31 percent of arts organizations have been forced to lay off or furlough workers;
- 43 percent of organizations have implemented salary reductions; and
- 52 percent are depleting cash reserves to meet obligations.

While federal stimulus programs were designed to include non-profits, only nine ArtsOC organizations were approved for the Small Business Administration's Payroll Protection Program loans.

Despite these impacts, over 60 percent of arts organizations are contributing to their communities' COVID-19 mitigation efforts through important messaging to the public, donations, and volunteers. Additionally, over 75 percent of organizations have provided arts content digitally through approximately 100 online experiences featured on SparkOC.com.

GROWTH AND INNOVATION DURING THE PANDEMIC

The term "new normal," which has been used in countless reflections on the COVID-19 pandemic, was actually coined in response to the Great Recession, which represented a global economic shift. Many have called the next phase of the COVID-19 era "the next normal" or the "leap forward." COVID-19 has created both an imperative for companies to reconfigure and reimagine their operations, and an opportunity to do just that. For example, in a recent McKinsey survey of more than 200 organizations across industries, more than 90 percent of executives said they expect the fallout from COVID-19 to fundamentally change the way they do business over the next five years, with 85 percent projecting that the crisis will have a lasting impact on their customers' needs and wants during the next five years.

While the pandemic has disrupted much of the Orange County economy, county businesses have begun adapting to the "new normal," surviving and even growing in a period of economic downturn. Irvine-based Taco Bell, for example, has committed to hire 30,000 workers during the pandemic,⁴⁸ using safe hiring practices such as virtual interviews. It has also implemented contactless drive-thru⁴⁹ and added new menu options. The restaurant industry in general has made significant adjustments. A variety of Orange County restaurants, for example, have begun offering family takeout meals,⁵⁰ offering contactless pickup and delivery, and ingredients sold directly to customers.

48 <https://www.tacobell.com/news/hiring-30000-new-team-members-this-summer>

49 <https://www.tacobell.com/news/new-loyalty-program>

50 <https://www.ocregister.com/2020/05/30/5-innovations-that-have-helped-restaurants-cope-with-coronavirus-shutdowns/>

Large and small employers in a variety of industries have innovated during the pandemic:

- Irvine-based Maxair Systems has increased production of its MaxAir respirator and started production of a new filter designed for quicker manufacturing and assembly.
- Irvine-based Masimo Corp., which produces wireless pulse oximeters, has rolled out the Masimo SafetyNet, which allows doctors to monitor outpatients with COVID-19, at hundreds of hospitals.
- Local construction companies have installed anti-microbial fixtures and implemented social distancing strategies such as off-site assembly of components.⁵¹
- Two Orange County distilleries – Santa Ana’s Blinking Owl Distillery and Huntington Beach’s Surf City Still Works – have switched to producing hand sanitizer.⁵²
- Irvine-based children’s clothing manufacturer Brian the Pekingese has switched to producing face masks for children and adults.⁵³
- Costa Mesa’s Experian has created and given access to its COVID Outlook & Response Evaluator (CORE) Model, which it describes as “a ‘heat map’ of geographic populations across the United States most susceptible to developing cases of severe COVID-19, which would likely result in excessive strain on healthcare resources.”⁵⁴
- Two Irvine biomedical startups, Nanommune Inc. and Velox Biosystems Inc., have teamed up to provide COVID-19 testing.⁵⁵



51 <https://www.ocreger.com/2020/07/09/shipping-container-classrooms-and-prefab-bathrooms-the-construction-industry-evolves-amid-covid-19/>

52 <https://www.ocreger.com/2020/03/25/why-the-coronavirus-crisis-is-causing-local-distillers-to-focus-on-hygiene-instead-of-gin/>

53 <https://www.ocstartupsnow.com/catalyzed-by-the-coronavirus-organic-pajama-line-now-making-organic-face-masks/>

54 <https://www.experian.com/healthcare/covid19-population-risk>

55 <https://news.uci.edu/2020/07/13/startups-innovations-coronavirus-updates/>



IMPACTS ON K-12 EDUCATION, STUDENTS, AND FAMILIES

COVID-19 has dramatically disrupted normal family lives, especially regarding K-12 education. Even parents without job insecurity have found themselves taking on additional responsibilities for their children's schooling and care. Despite Orange County school districts making dramatic efforts to keep the quality of education for students high, many parents have become increasingly concerned about their children falling behind academically.

According to a recent Education Trust-West and Global Strategy Group survey of Southern California parents, 65 percent of parents were very concerned about their child falling behind academically while 57 percent of high school parents were concerned about their child being able to graduate on time. While 81 percent of parents indicated their child's school is doing an "excellent" job handling the coronavirus and 75 percent agreed that students were provided with adequate learning materials, there remains a large gap between parental expectations and reality.

The largest gap, at 68 percentage points, was in "providing free internet access to families," indicating that access to high-speed internet is a major challenge for many families. Access to a guidance counselor and providing materials and resources to students with disabilities also had large gaps, as seen below. Only 59 percent of low-income parents say distance learning has been successful compared to 65 percent of parents who earn more than \$50,000, highlighting current room for improvements.

GAP BETWEEN PARENT EXPECTATIONS AND SUPPORT SCHOOLS CURRENTLY PROVIDING

	WOULD BE HELPFUL	CHILD'S SCHOOL IS DOING THIS	GAP
Providing parents with regular contact with child's teacher	94%	45%	49%
Sharing examples of resources to help parents teach their children	92%	31%	61%
Providing technical assistance to help families with distance learning	91%	29%	62%
Sharing tips for parents how to structure their child's day	91%	29%	62%
Providing parents or students with regular access to school counselor	91%	24%	67%
Providing parents with paper packets of instructional materials	90%	39%	51%
Connecting parents with help with food, housing, employment, health	89%	23%	66%
Lending mobile technology devices like iPads	88%	37%	51%
Providing free internet access to families	88%	20%	68%
Providing materials and resources for students with disabilities	87%	24%	63%
Providing meals that parents can pick up at their child's school	86%	48%	38%
Providing meals to parents that can pick up at other locations	85%	35%	50%

Source: Global Strategy Group, The Education Trust-West, March 26 – April 1, 2020

The survey also highlighted the primary factors currently impacting distance learning and the effectiveness of these new learning plans. The major concerns include:

- Not enough devices in the home – 41 percent of parents indicated they do not have enough devices in their home.
- Lack of reliable, high-speed internet – 29 percent of parents highlighted a lack of reliable internet access for children to participate in distance learning.
- Subjects beyond math and reading/English – 84 percent of parents reported their children being bored or under-stimulated at home.
- Closing technological barriers – 23 percent of parents reported they did not know how to use distance learning software.
- Support for non-native English speakers and English learners – 25 percent of non-English home speakers said their child’s school has not provided materials in other languages.
- Supporting parents of children with disabilities – 44 percent of parents with children with disabilities reported much higher levels of stress compared to 35 percent of overall parents.
- Providing access to meals – 33 percent of parents either do not have access to, or do not know where school lunches are readily available to pick up.
- Advance planning – 58 percent of parents indicated that materials provided do not extend beyond two weeks of instruction.

According to a Gallup poll, three in ten parents say their child’s emotional, mental health is currently suffering and another 14 percent of parents say students are reaching their limits, that they could only last a few more weeks of social distancing before experiencing mental health impacts. Approximately 15 percent of parents were already experiencing mental distress themselves in April, a rate which increased to 22 percent a month later. Additionally, adults without a college degree are more likely than those with a college degree or higher to say their child’s mental health is suffering.

The majority of responding parents (45 percent) indicated that their children’s separation from classmates and teachers is the primary challenge for their child. Of those, 45 percent indicate their child’s mental health is already suffering. In the words of Dr. Adiaha Spinks-Franklin, a developmental behavioral pediatrician at Texas Children’s Hospital, “...parents [are] reporting an increase in anxiety levels for children who were already kind of anxious in their temperament, and kids who previously had not had anxiety have developed anxious behaviors.”⁵⁶

56 <https://www.nytimes.com/2020/08/10/well/family/children-mental-health-coronavirus.html?auth=linked-google>



COVID-19 SPECIAL

IMPACT ON ORANGE COUNTY'S CHILDREN

CHOC Children's, a pediatric health care system based in the city of Orange, tested a total of 11,689 county residents aged 18 or younger for COVID-19 as of September 8, 2020. Of those tested, 998 results were positive, for a positivity rate of 8.5 percent. As seen below, 24 percent of CHOC positive COVID-19 test results were patients between the ages of 11 and 15; a higher number than any other age group.

POSITIVE COVID-19 PATIENTS BY AGE GROUP AT CHOC ORANGE, AS OF SEPTEMBER 8, 2020

AGE	TOTAL
< 12 months	109
1 - 3 years	144
4 - 5 years	77
6 - 10 years	191
11 - 15 years	244
16 - 17 years	101
≥ 18 years	132
TOTAL	998

CHOC TESTED A TOTAL OF
11,689
 PATIENTS
POSITIVE RATE: 8.5%

Source: Children's Hospital of Orange County (CHOC)

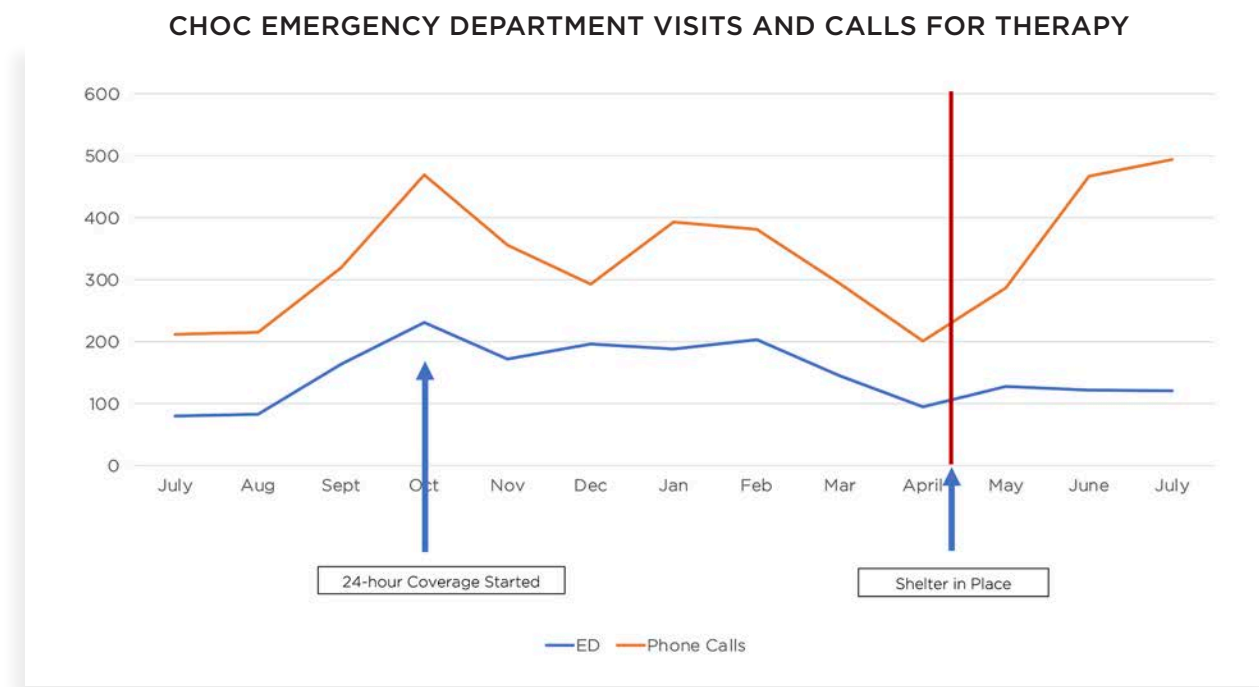
POSITIVE COVID-19 PATIENTS BY AGE GROUP AT ORANGE COUNTY HEALTH CARE AGENCY, AS OF SEPTEMBER 8, 2020

AGE	TOTAL CASES REPORTED
0 - 17 years	3,379
18 - 24 years	7,438
TOTAL	10,817

Source: Children's Hospital of Orange County (CHOC)

In addition to the disease itself, COVID-19 has also exacerbated mental health issues in young people and resulted in troubling indicators in Orange County including:

- Suicide Attempts and Deaths via Suicide:
 - » Past two months increase in suicide attempts requiring medical attention at CHOC
 - » Average of four per week
- Child Abuse Reporting Line:
 - » Orange County and Los Angeles: 50% drop in volume
 - » Calls received are higher acuity (Orange County SSA)
- Sheriff's Department:
 - » Domestic violence calls up 25%
 - » Family disputes up 24%
 - » Child custody dispute calls up 20 percent



Source: Children's Hospital of Orange County (CHOC)

The Cherese Mari Laulhere Mental Health Inpatient Center at CHOC had 824 mental health discharges in 2019, with an average stay of 6.2 days. From January to July 2020, discharges totaled 415, while the length of stay increased to 7.1 days. Other mental health trends observed by CHOC included:

- Increase in social isolation is a major contributing factor in acute mental health hospitalization
- Difference in clinical presentation of patients
 - » Broader use of drugs leading to an increase in psychotic episodes
- Severe/lethal suicidal attempts
- Severe depression has increased while resources to de-escalate have decreased (e.g. friends, teachers, appropriate after care resources)



HOW IS ORANGE COUNTY RESPONDING?

The Orange County Department of Education (OCDE) is currently facing perhaps the greatest challenge in its history. From January 27, when the first local COVID-19 case was reported, to March 13 – when county schools closed en masse – and beyond, Orange County educators have dealt with a constantly developing situation, one that has demanded extraordinary resilience and flexibility. County educators had to switch to distance learning after sudden school closures in March, a process that was challenging for many school districts from both a pedagogy and technology perspective.

According to a recent survey by the Orange County Department of Education, as of June 2020 school districts in Orange County had provided over 8.5 million meals to students, and nearly 140,000 learning devices with over 16,000 units of connectivity in the form of internet access points. School-provided meals are crucial for many families and with distance learning in place, their absence may create additional pressure, especially on low-income families. According to Feeding America, a non-profit organization working to end food insecurity in the U.S., Orange County’s food insecurity rate in 2018 for children was 11.2 percent, representing 79,360 children; 28 percent of them were ineligible for federal nutrition programs. COVID-19 has likely dramatically increased the county’s food insecurity, due to high unemployment; this further emphasizes the importance of student lunch programs during the pandemic.

Unfortunately, not all Orange County students have internet access, as discussed in a section on Broadband Internet Access later in this report. While the “digital divide” between underprivileged Californians and their peers has been an issue for years, the COVID-19 pandemic has made it a crucially important issue. In response, State Superintendent of Public Instruction Tony Thurmond announced the creation of the Closing the Digital Divide Task Force in April.⁵⁷ The Task Force will be co-chaired by California State Senator Connie Leyva and will focus on providing disadvantaged California students with access to devices and internet connections. A California Department of Education survey found that the state will need at least an additional 700,000 computers and 300,000 Wi-Fi hotspots to ensure that all students will be able to access online education.⁵⁸

In addition to students and teachers, OCDE employees have made the digital transition as well. OCDE counselors have held virtual office hours and sessions with both students and parents, using platforms such as Zoom, Google Hangouts and Google Classroom.⁵⁹ Three OCDE counselors helped colleagues from across the state develop the School Counselor Virtual Tool Kit, which includes mental health resources, sample activities, and tips on using technologies to connect with students.⁶⁰ OCDE’s Educational Services division created Instructional Continuity,⁶¹ a website that provides online resources for counselors, educational leaders, educators and families.

57 <https://www.cde.ca.gov/nr/ne/yr20/yr20rel21.asp>

58 <https://www.fresnobee.com/news/california/article244418057.html>

59 <https://newsroom.ocde.us/5-ways-school-counselors-are-using-technology-to-support-students-at-home/>

60 <https://drive.google.com/drive/folders/1NY86UTUPYeiZFMqND5O3-bilcmP1h6>

61 <https://ocde.instructure.com/courses/224>

Orange County schools have found other ways to support students and families. Garden Grove Unified School District, for instance, announced a partnership with Care Solace to provide 24/7 mental health services for students, their families and district employees. Like their counterparts across the nation, Orange County school districts offered takeout meals for both their own students and other children in the community. Many school districts continued to offer meals during the summer. Orange County's largest school district, the Santa Ana Unified School District, had served more than 1 million student meals as of May 15.⁶²

Over the spring and summer, OCDE and county schools have held a variety of events online, including:

- National History Day-OC;⁶³
- The VSA Festival, which showcases the artwork of individuals with disabilities;⁶⁴
- A virtual prom, held in a virtual recreation of Trabuco Hills High School's campus in the online game Minecraft;
- The Inside the Outdoors summer camp program, which has been in operation since 1974 and was held virtually in July.⁶⁵ This virtual summer camp included various activities and was offered for free; and
- Instead of traditional graduation ceremonies, Orange County schools held a variety of virtual or socially distanced graduations. Brea Olinda High School, for instance, held a drive-through commencement ceremony.⁶⁶

Looking forward to the 2020-2021 school year, OCDE and Orange County schools have significant challenges ahead of them. While distance learning plans have been successful in some areas, many have not and families continue to struggle due to COVID-19 related uncertainties which are compounded by insufficient childcare alternatives. Despite current hardships and discontent from parents due to school closures and altered learning plans, Orange County's educational institutions are implementing new strategies and regulations designed to ensure that students can safely and successfully continue their education. It is expected that these new distance learnings plans will improve as schools, teachers, students and parents continue to adapt to this "new normal."

62 <https://newsroom.ocde.us/santa-ana-unified-hits-student-meal-milestone/>

63 <https://newsroom.ocde.us/nearly-500-students-prepare-for-national-history-day-orange-county-competition/>

64 <https://newsroom.ocde.us/vsa-festival-goes-virtual-to-celebrate-the-artistic-accomplishments-of-individuals-with-disabilities/>

65 <https://ocde.us/ito/Pages/SummerCamp.aspx>

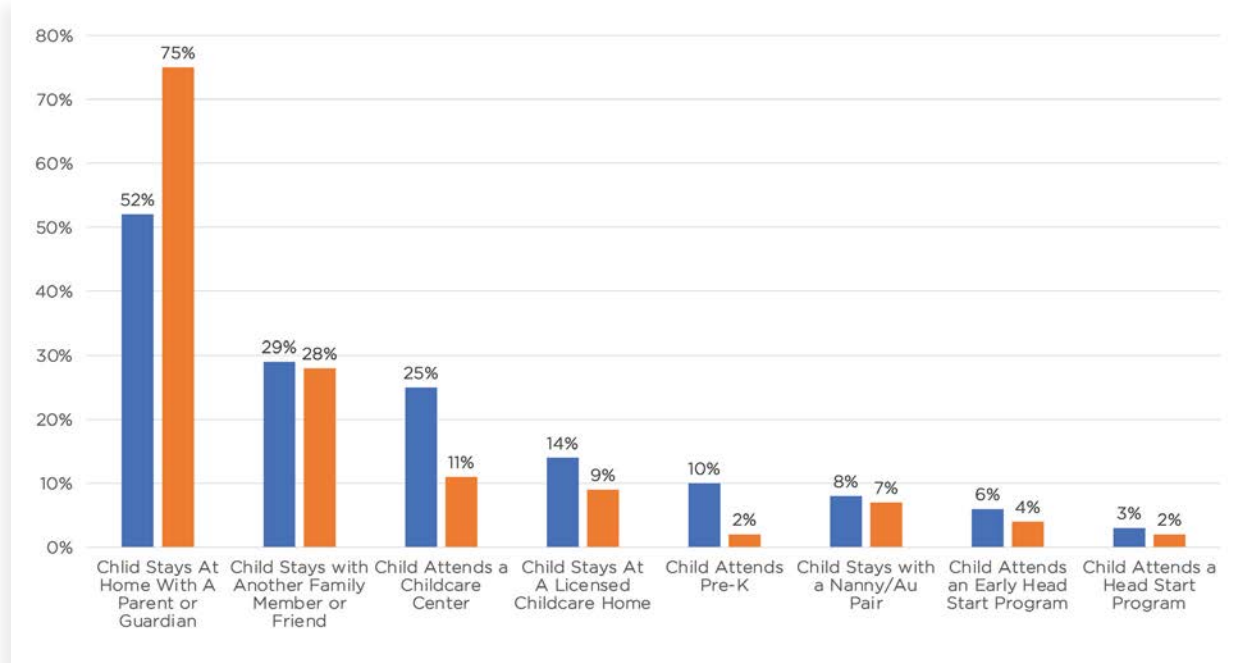
66 <https://newsroom.ocde.us/weekly-roundup-grading-in-a-pandemic-uc-drops-sat-requirement-and-more/>



IMPACTS ON CHILDCARE

Parents' jobs and school districts were not the only sectors to be dramatically impacted by COVID-19 – the childcare industry, a major support for working parents, has also seen significant shifts. According to the U.S. Chamber Foundation, about 50 percent of working parents are now working remotely and of those, 75 percent have children at home with them during work hours. Overall, 66 percent of parents have already changed their childcare arrangements due to COVID while 60 percent indicate they will change childcare arrangements within the next year. The chart below highlights the shifts in childcare arrangements pre- and post-COVID-19.

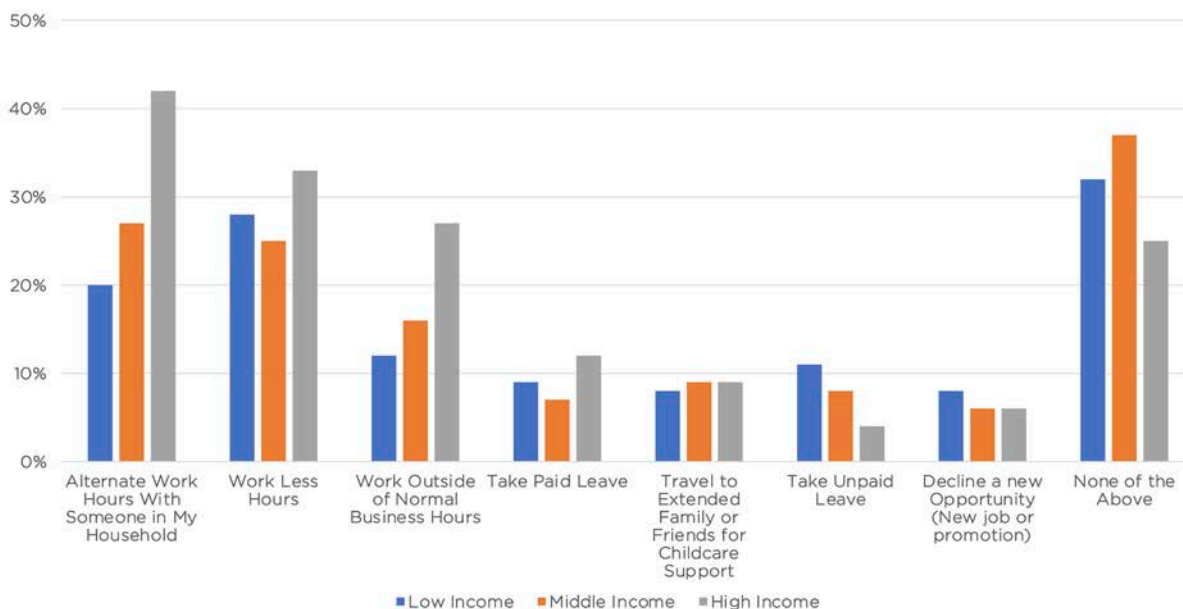
FAMILY CHILDCARE ARRANGEMENTS, JULY 2020



Source: U.S. Chamber Foundation, *Working Parents, Childcare and COVID-19*, July 2020

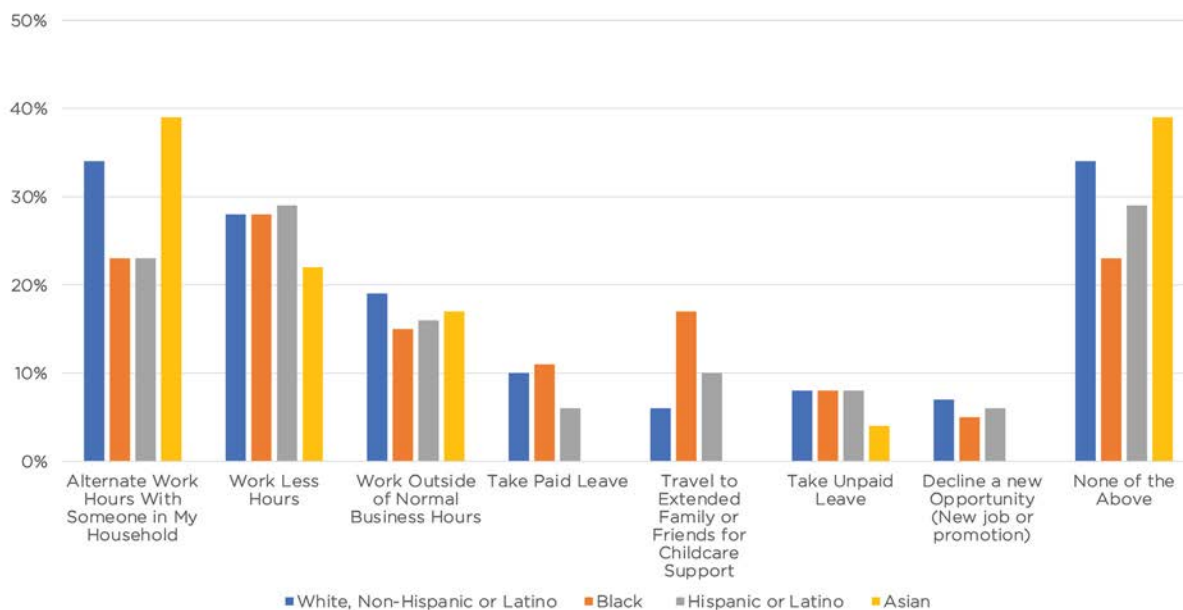
Due to the fluidity of the situation, with constant changes in safety guidelines and continued economic impacts, approximately 61 percent of parents indicated their previous childcare arrangement had closed while 25 percent of parents indicated that they chose not to send their children into childcare centers due to health concerns.

PROVISION OF CHILDCARE BY INCOME SEGMENT IN THE LAST THREE MONTHS, JULY 2020



Source: U.S. Chamber Foundation, Working Parents, Childcare and COVID-19, July 2020

PROVISION OF CHILDCARE BY RACE/ETHNICITY IN THE LAST THREE MONTHS, JULY 2020



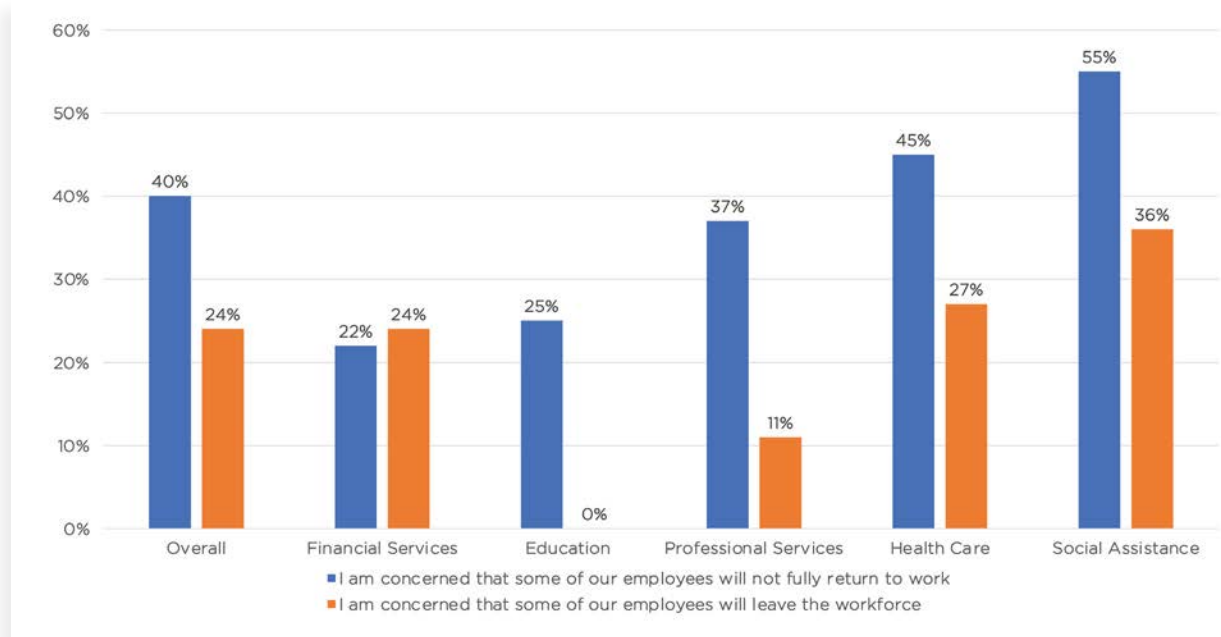
Source: U.S. Chamber Foundation, Working Parents, Childcare and COVID-19, July 2020



COVID-19 SPECIAL

Many employers have taken notice of the importance of childcare to working parents. The U.S. Chamber Foundation estimates that 79 percent of employers have shifted a major part of their employees to remote work and that 40 percent of employers have offered additional childcare assistance or benefits due to COVID-19. Employers are right to worry, as only 78 percent of working parents are expected to return to work, potentially leaving significant gaps in their workforces. Overall, 40 percent of employers were concerned that employees would not fully return to work, and 24 percent were concerned that employees will leave the workforce entirely. As a result, employers have offered additional assistance to employees.

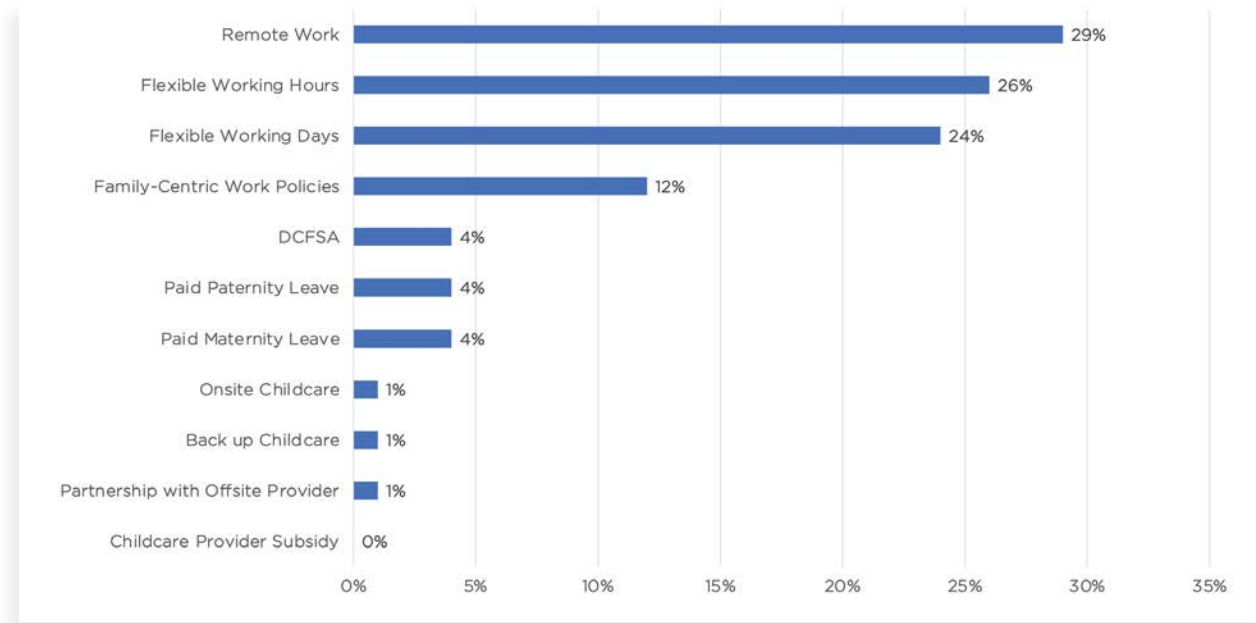
EMPLOYER WORKFORCE CONCERNS, AUGUST 2020



Source: U.S. Chamber Foundation, *Employers, Childcare and Returning to Work in COVID-19*, August 2020



ADDITIONAL CHILDCARE ASSISTANCE PROVIDED BY EMPLOYERS, AUGUST 2020



Source: U.S. Chamber Foundation, *Employers, Childcare and Returning to Work in COVID-19*, August 2020

Overall, despite employer efforts to provide employees with additional support, many families are still suffering and struggling to return to pre-COVID normality. Some employers are aware of their employees' childcare needs and would like to do more, provided their efforts are supported by the government; more specifically, approximately 51 percent of employers agreed they would provide additional assistance if the government provided incentives to do so, such as tax benefits or subsidies. In addition, 42 percent of employers reported that they would offer additional benefits if more than 20 percent of their employees cannot return to work. With previous estimates indicating that 22 percent of working parents with children under 6 would not be returning to work, it seems likely that businesses will need to provide additional support services.



COVID-19 AND CHILDCARE

With the possible exception of Hospitality and Tourism, COVID-19 has hit no sector as hard as Childcare. Four recent surveys – by the US Chamber of Commerce Foundation, Boston Consulting Group (BCG), UC Berkeley and the National Association for the Education of Young Children (NAEYC) – paint a picture of the challenges faced by parents and childcare providers. Childcare, an underfunded sector that operated on low margins even before the pandemic, faces a difficult present and an uncertain future.

- Only 65 percent of childcare centers surveyed by UC Berkeley were open during the pandemic, with safety concerns the primary reason for closures.
 - » At least one third of childcare centers cannot adhere to social distancing guidelines.
- About 40 percent of childcare centers surveyed by NAEYC believe they will close permanently without additional public assistance.
- The majority of childcare centers surveyed by NAEYC have incurred additional costs during the pandemic, primarily for cleaning supplies (more than 90 percent), personal protective equipment (more than 80 percent) and labor costs (more than 70 percent.)

These challenges have in turn created serious consequences for parents, especially mothers. As Alicia Sasser Modestino writes in the *Washington Post*, “for low-income and single moms, the pandemic has exacerbated the hard choices between spending a significant portion of their income on childcare; finding a cheaper but potentially lower-quality option; or leaving the workforce to become a full-time caregiver.” Approximately 50 million United States workers, or one third of the nation’s workforce, have children under 14.

- Two thirds of parents surveyed by the US Chamber Foundation have had to change their childcare arrangements due to COVID-19.
 - » 61 percent cited childcare centers and providers closing as the main reason for this change.
 - » 60 percent of surveyed parents will need to change childcare arrangements within a year, more than 30 percent in the next three months.
- BCG’s survey found that American parents have been spending more than twice as much time on household tasks and their children’s education during the pandemic vs. before.
- 47 percent of parents surveyed by BCG cite increased family responsibilities as causing performance issues at work; this increases to 52 percent for parents of children under five.

The COVID-19 pandemic, in the words of the US Chamber of Commerce Foundation’s report, is a “wake-up call for many to the role of the childcare industry in our lives.” As mentioned elsewhere in this report, childcare plays a major role in many other industries by allowing parents to work full-time. This in turn reduces turnover costs for businesses across the economy. NAEYC’s report ends with a challenge from CEO Rhian Evans Alvin: “As a country, we have a choice to make. Are we going to continue to underfund and undervalue a system that is the backbone to the rest of the economy or are we going to make the necessary investments that recognize the essential nature of childcare?” Ensuring that the United States’ millions of working parents can return to work will undoubtedly play a key role in the post-pandemic economic recovery.



UNLEASHING THE POWER OF PHILANTHROPY

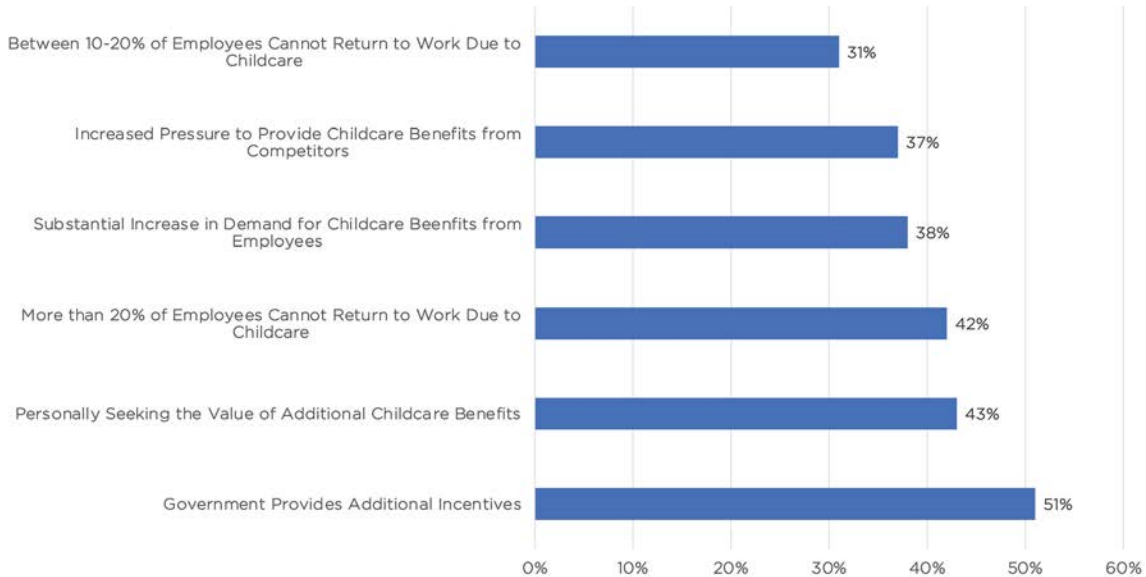
The Orange County Community Foundation celebrates the generous response of our community in support of local nonprofits and our most vulnerable neighbors during a time of great need. **We are a county that is stronger and more resilient together.**



The Orange County Community Foundation is proud to support the 2020-2021 Orange County Community Indicators Report.



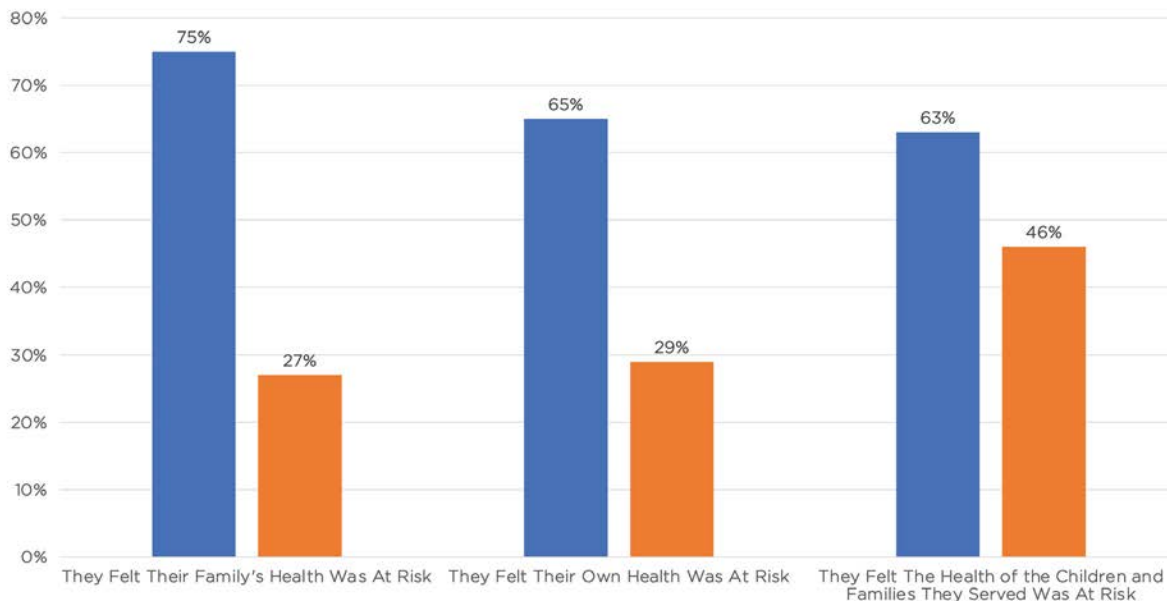
EMPLOYER LIKELIHOOD TO OFFER ADDITIONAL CHILDCARE ASSISTANCE, AUGUST 2020



Source: U.S. Chamber Foundation, *Employers, Childcare and Returning to Work in COVID-19, August 2020*

As employers wrestle with how to best provide additional support services to their employees, childcare centers are struggling to even stay afloat. According to the UC Berkeley Center for the Study of Child Care Employment (CSCCE), which conducted a survey of more than 2,000 childcare programs throughout California, childcare providers cited health risks as the primary reason for closing.

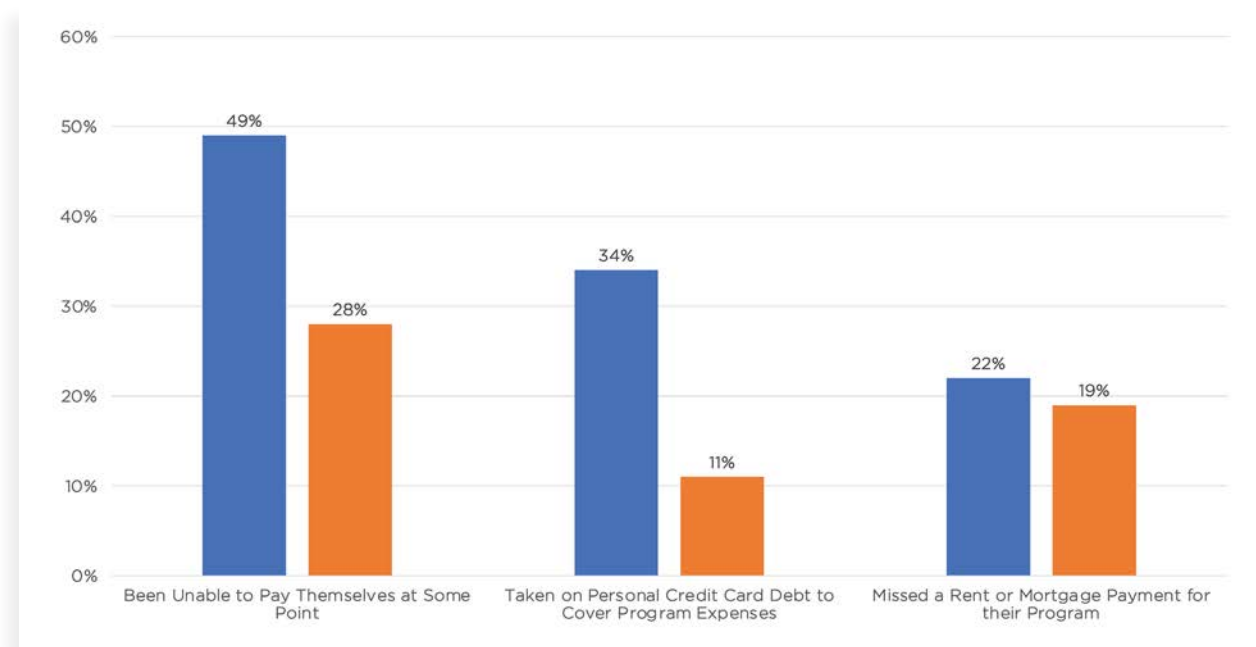
REASONS FOR CLOSING CHILDCARE FACILITIES



Source: University of California (UC) Berkeley Center for the Study of Child Care Employment (CSCCE)

Currently open programs are indicating a loss of income, with 99 percent of open centers (traditional childcare centers in a facility outside of a private home) and 78 percent of open family childcare centers (childcare provided in a person's private home) having lower attendance than in January 2020, with centers operating at 44 percent of their pre-COVID levels and family childcare centers operating at 55 percent of pre-COVID levels. On top of losses in income due to reduced attendance, centers are also seeing an increase in costs due to cleaning/sanitation and PPE supplies further adding to the burden placed on these centers. Incredibly, 80 percent of programs reported they were open because they lacked the financial resources to be able to close for several months waiting for the pandemic to pass. Overall, 63 percent of programs could not survive a closure of more than a month. Many of the financial liabilities experienced by these centers are being passed on to their employees, with 49 percent of family childcare centers and 28 percent of traditional centers being unable to pay themselves or their employees, respectively, at one point.

FINANCIAL IMPACTS ON CHILDCARE PROVIDERS DUE TO COVID-19



Source: UC Berkeley Center for the Study of Child Care Employment (CSCCE)

Additionally, approximately 66 percent of programs have had families that have lost all or a portion of their income due to the pandemic; of those programs, 61 percent see a loss of income due to reduced attendance or families not paying. In order to support these programs, 62 percent of respondents indicated that low-interest or forgivable loans would dramatically help them, with 56 percent indicating that financial resources would help them to cover costs during a closure.

Overall, schools, parents, students, and childcare centers across the nation are being upended due to the pandemic. While real-time data at the county level continues to be elusive, Orange County has not been immune to these impacts and the fallout will require that meaningful strategies are put in place to mitigate these impacts.

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CONCLUSION – MOVING THROUGH AND BEYOND THE PANDEMIC

There is no question that COVID-19 has radically changed every sector of our lives. While exposing some points of weakness and fragility, it has been striking how well and how fast many organizations have adapted, achieving new levels of agility and efficiency. For example, plans for the rollout of e-health and telehealth services that may have taken many years have been deployed in a matter of days and weeks.

While recovery may take time, Orange County's strong economy, robust healthcare infrastructure, and strong education system will all serve as valuable drivers in the process of recovery and resilience. As noted previously, the pandemic is already catalyzing innovation in a variety of fields, from healthcare to restaurants. Orange County will undoubtedly continue to face COVID-related hurdles in the coming year, but it has a proven track record of weathering and adapting to challenges. As with the Great Recession, Orange County will likely play a major role in the Southern California region's recovery and recover to new highs.

Taken together, this report shows that, even as we realize just how challenging this moment truly is, the resilience of communities, businesses, and individuals during the COVID-19 crisis has been rather extraordinary – and inspiring. To build resilience in the long run, leaders in government and across sectors are using this opportunity to not just recover but to reimagine the future. The opportunity now is to look at where our county still falls short, start fixing what is broken, and embark upon the changes needed along the pathway to the beginning of something new.

One major lesson from the pandemic is that, when aligned around a common purpose, Orange County collectively can achieve goals that would have been considered impossible before the crisis. As they plan their transition to the next normal, organizations are looking for ways to maintain this sense of purpose, leadership, and speed. This historic moment also allows for space to reimagine the way we work, educate, and provide healthcare services. Many have been energized and inspired by the progress the crisis has forced them to make and have been inspired by the new demands to make lasting changes. We can aspire to much more than a safe return to work. The county can take what has been learned during the COVID-19 pandemic and create a new, better Orange County.

STAY WELL, PLAY WELL

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key to good health.
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NCQA's Medicaid Health Insurance Plan Ratings 2019–2020



ECONOMY

DIVERSITY AND
INCLUSION **DRIVE**
RECOVERY

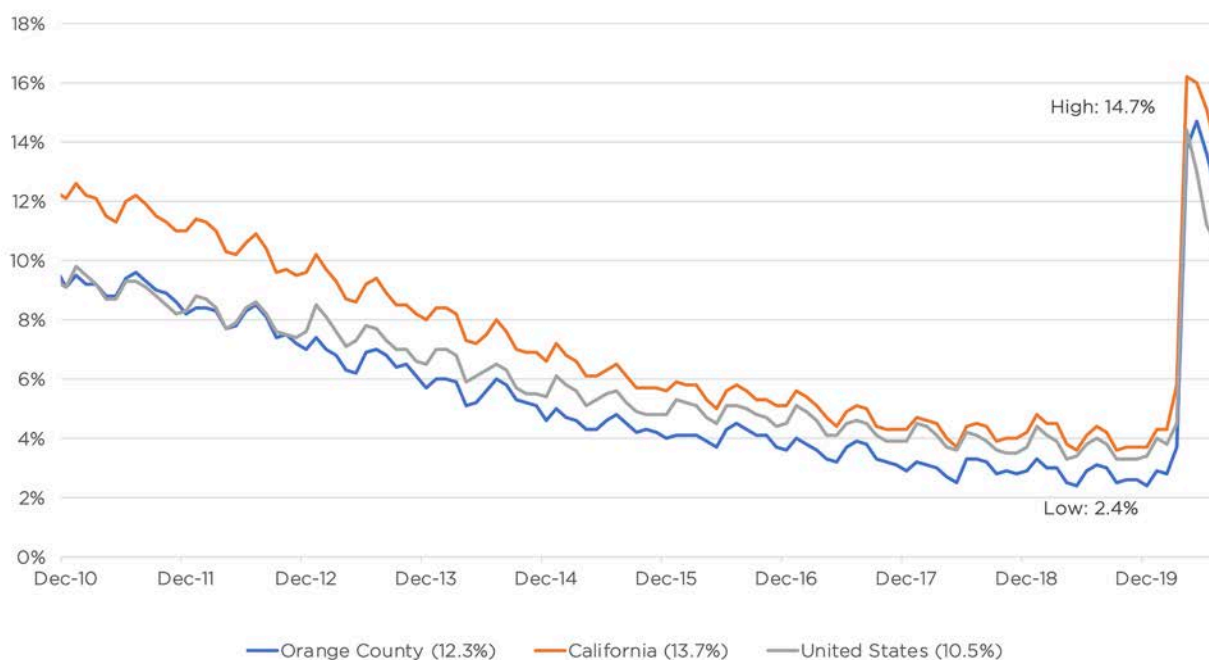


EMPLOYMENT

Orange County unemployment skyrocketed during the COVID-19 pandemic; its July 2020 unemployment rate of 12.3 percent was 9.2 percentage points higher than July 2019. While the unemployment rate has dropped from its May 2020 peak of 14.7 percent, it remains at a historically high level. The county's July unemployment rate was 1.4 percentage points low than the state average but 1.8 percentage points higher than the national average. Over the past year, employment in Orange County has declined by 191,600 jobs to 1,384,200, with 75 percent of these losses - 144,400 jobs - occurring from March 2020 to July 2020. Total unemployment increased by 283 percent over the same time period, reaching 194,400 in July.

COVID-19 PUSHES UNEMPLOYMENT RATES WELL ABOVE RECESSION-ERA HIGHS

UNEMPLOYMENT RATE IN ORANGE COUNTY,
CALIFORNIA AND UNITED STATES, 2010-2020



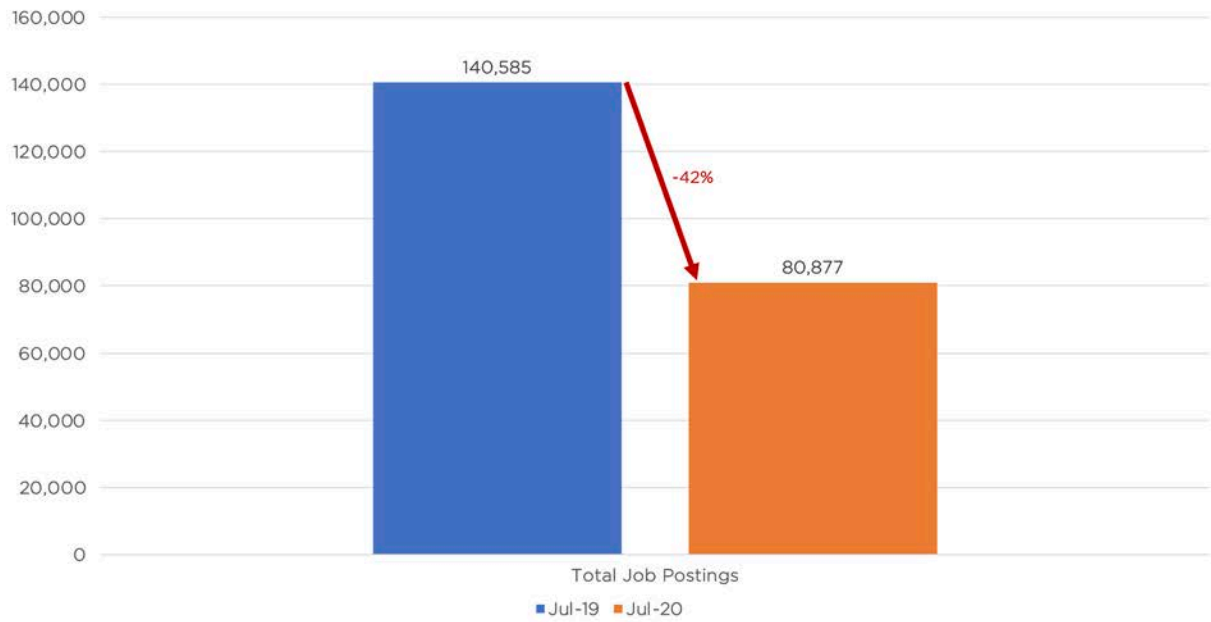
Source: California Employment Development Department, Bureau of Labor Statistics

Orange County had 522,156 unique job postings between July 2019 and July 2020, with a median posting duration of 33 days and an average advertised of \$50,000. Irvine continued to drive the demand for labor with over 125,000 job postings during the same time period, followed by Santa Ana (52,947) and Anaheim (51,529). Employers with the most job openings included University of California, Anthem, and Marriott International Inc., reflecting the county's competitive advantages in higher education, healthcare, and hospitality.

COVID-19 slashed job postings in Orange County, with monthly job postings falling from 140,585 in July 2019 to 80,877 by July 2020. Between July 2019 and July 2020, Registered Nurses had the highest number of job postings (22,906) in Orange County, followed by Software Developers and Software Analysts and Testers (22,714).

UNIQUE JOB POSTINGS FALL NEARLY 40%

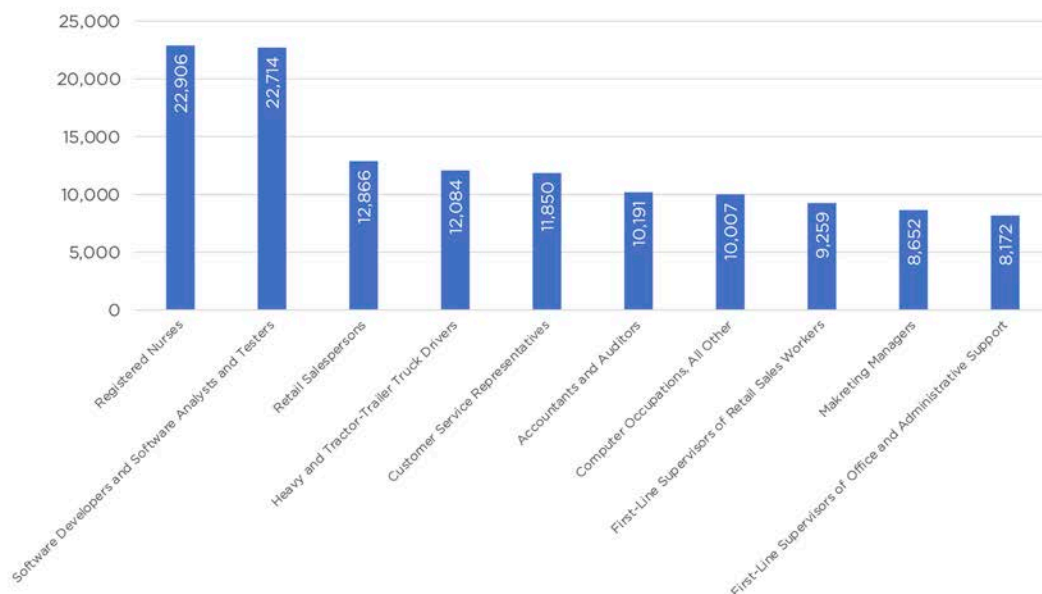
TOTAL JOB POSTINGS IN ORANGE COUNTY, JULY 2019 - JULY 2020



Source: Economic Modeling Specialists International

REGISTERED NURSES AND SOFTWARE DEVELOPERS REMAIN MOST IN-DEMAND

MOST IN-DEMAND OCCUPATIONS IN OC BY JOB POSTINGS, JULY 2019 - JULY 2020



Source: Economic Modeling Specialists International



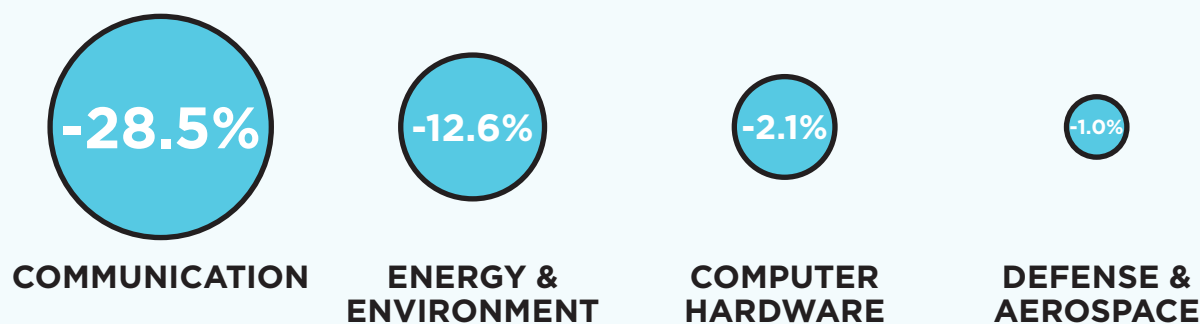
ECONOMY

The 10 Orange County industry clusters highlighted below account for more than half of all county employment. Together, these clusters created more than 180,000 jobs between 2011 and 2019, totaling more than 1 million jobs as of 2019.

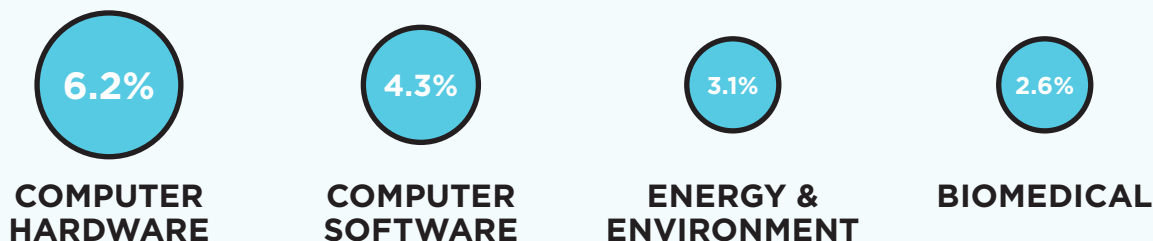
The most significant percentage growth over the past 10 years occurred in:



Four industry clusters saw employment declines since 2011:



Between 2018 and 2019, industries with the fastest salary growth included:

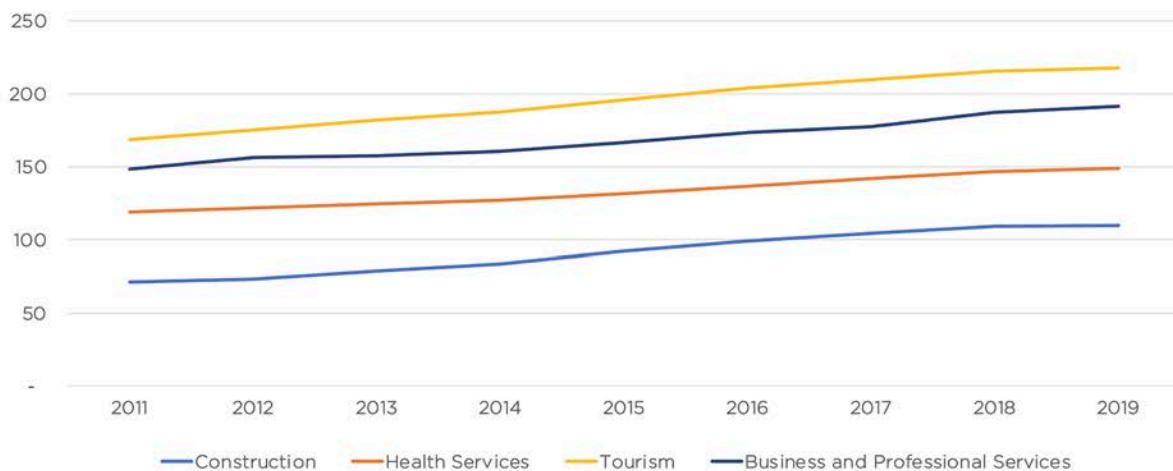


All industry clusters have seen earnings improve since 2011, with the fastest growth taking place in Computer Hardware (33.5 percent) and Construction (27.7 percent).

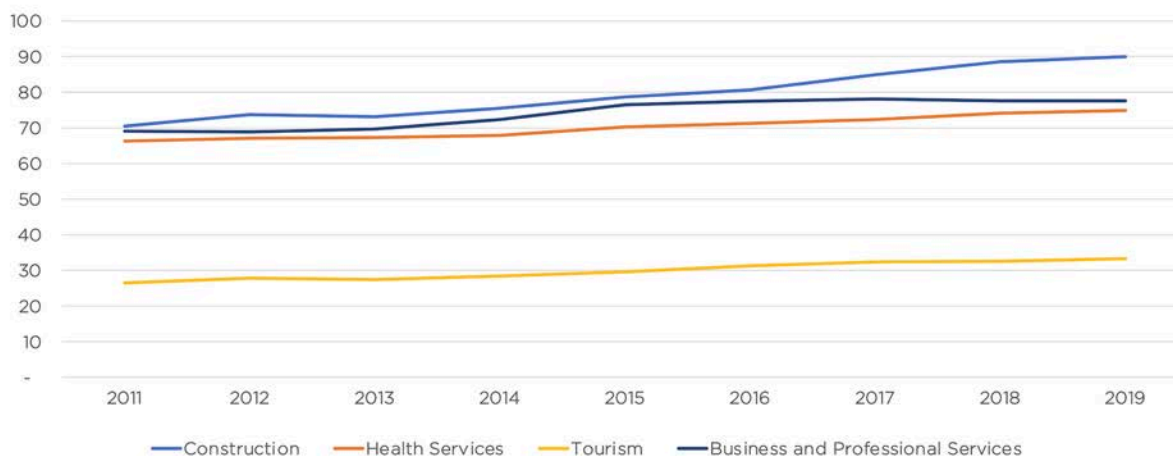
PRE-COVID-19 DATA SHOW THAT MAJOR ORANGE COUNTY SECTORS CONTINUED TO GROW

EMPLOYMENT AND AVERAGE SALARIES IN ORANGE COUNTY CLUSTERS WITH MORE THAN 50,000 JOBS, 2011-2019

Jobs, In Thousands



Salaries, In Thousands



Sources:

California Employment Development Department

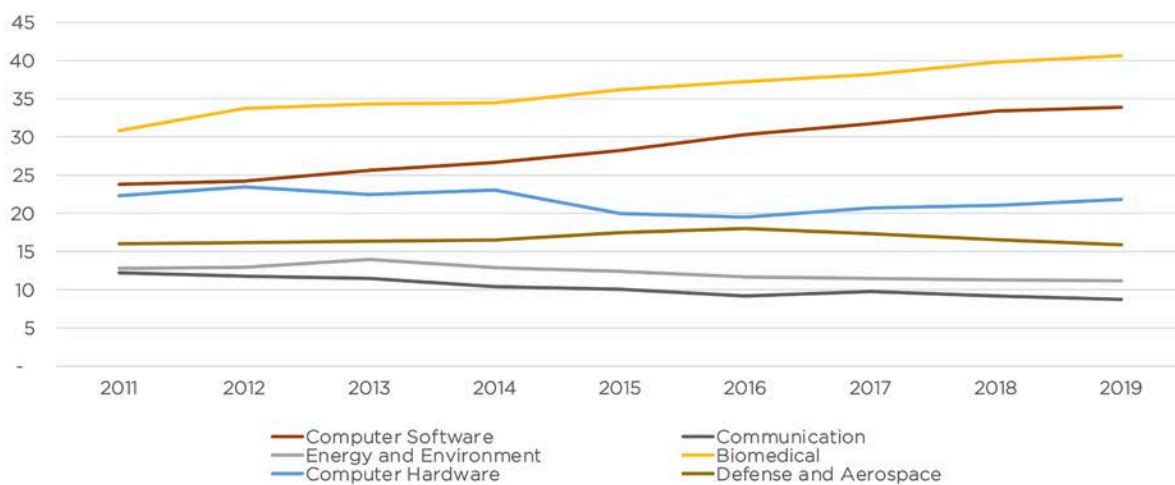
U.S. Inflation Calculator, reporting Consumer Price Index (CPI-U) data provided by the U.S. Department of Labor, Bureau of Labor Statistics (www.usinflationcalculator.com)



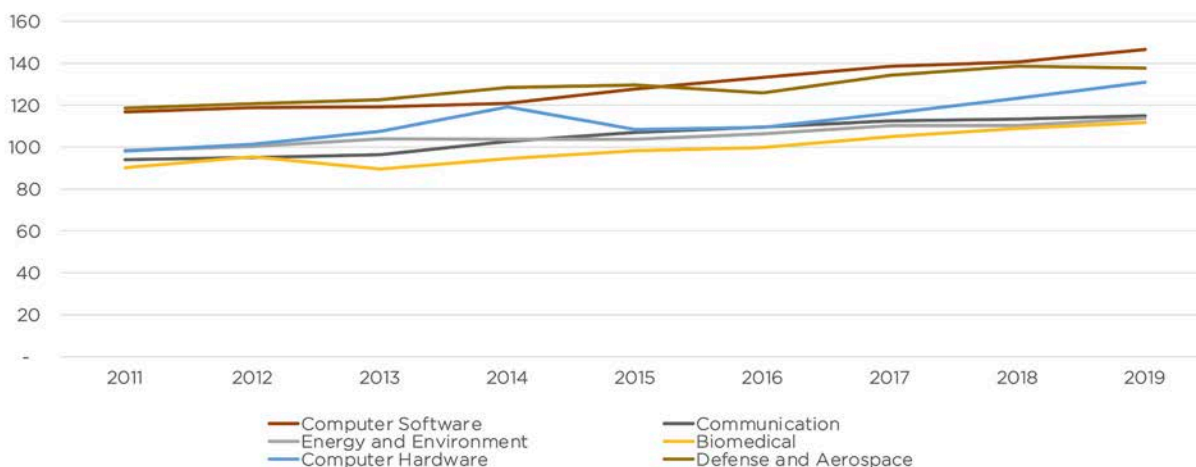
ECONOMY

EMPLOYMENT AND AVERAGE SALARIES IN ORANGE COUNTY CLUSTERS WITH 50,000 JOBS OR FEWER, 2011-2019

Jobs, In Thousands



Salaries, In Thousands



Sources:

California Employment Development Department

U.S. Inflation Calculator, reporting Consumer Price Index (CPI-U) data provided by the U.S. Department of Labor, Bureau of Labor Statistics (www.usinflationcalculator.com)

DATA NOTES:

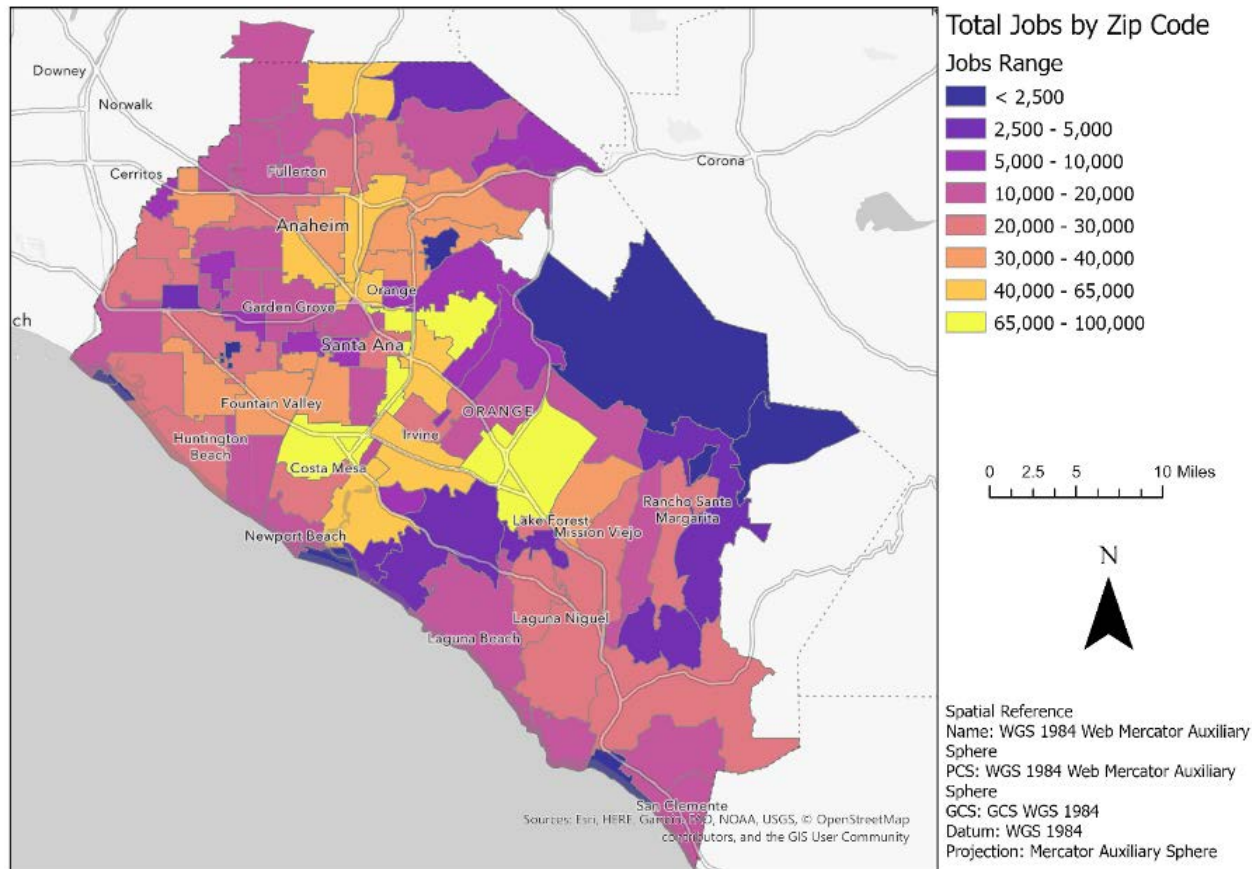
Average salaries have been inflation-adjusted to 2019 dollars.

OC JOB CENTERS REMAIN STRONG

Before the pandemic hit, Irvine, Santa Ana, and Anaheim were Orange County's major job centers, with significant opportunities for both resident workers and commuters. In Irvine, where job growth dramatically outpaced housing supply, 56 percent of jobs were filled by commuters, compared to 3 percent in Anaheim and 1 percent in Santa Ana. This is likely due to the high costs of living in Irvine, where workers may be forced to live in neighboring cities or counties while maintaining employment in the city.

These three major job centers have been heavily affected by the pandemic, especially Anaheim, which is the center of the county's tourist industry. Their ability to withstand and bounce back will play a major role in the county's overall recovery.

ORANGE COUNTY TOTAL JOBS BY ZIP CODE, 2019



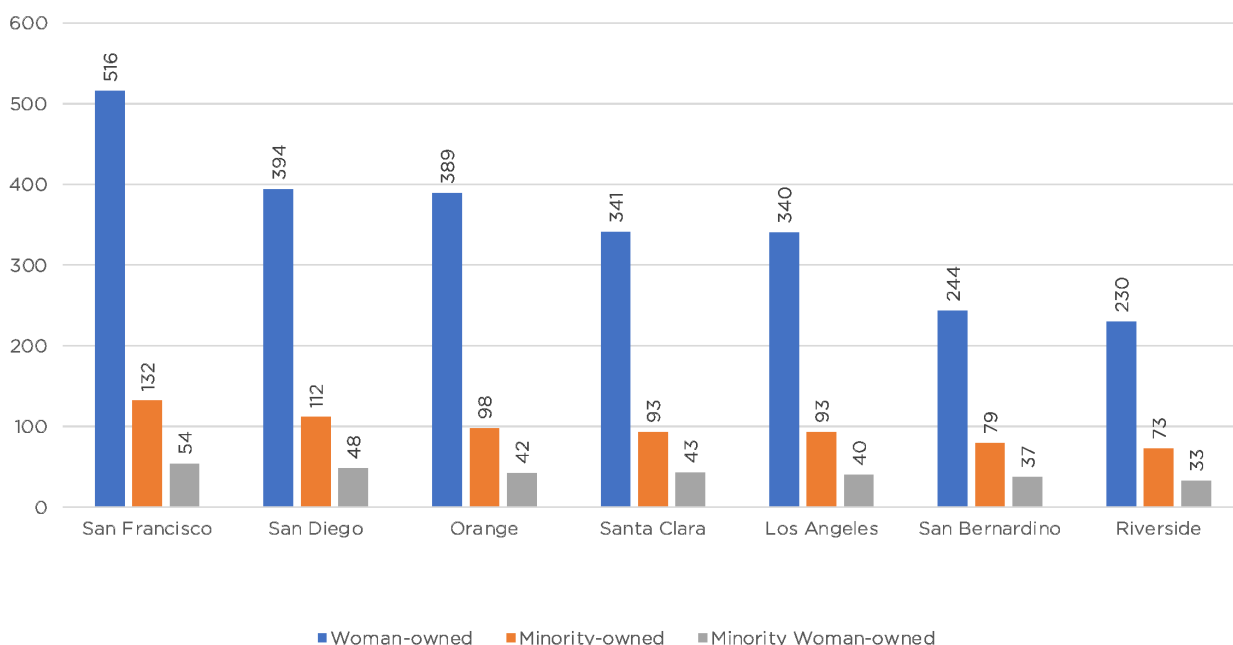


DIVERSITY IN BUSINESS

The number of businesses owned by women in Orange County declined in 2020, likely due to the effects of the pandemic serving to close many businesses across the region and state. The number of women-owned businesses per 100,000 people shrunk from 422 in 2018 to 389 in 2019 in Orange County, while the number of minority-owned businesses declined from 137 to 98 during the same period.

OC TIED WITH SAN DIEGO FOR WOMEN-OWNED BUSINESSES

REGIONAL WOMEN-OWNED, MINORITY-OWNED AND MINORITY WOMEN-OWNED BUSINESSES PER 100,000 PEOPLE, 2020



Source: Dun and Bradstreet, Market Insight

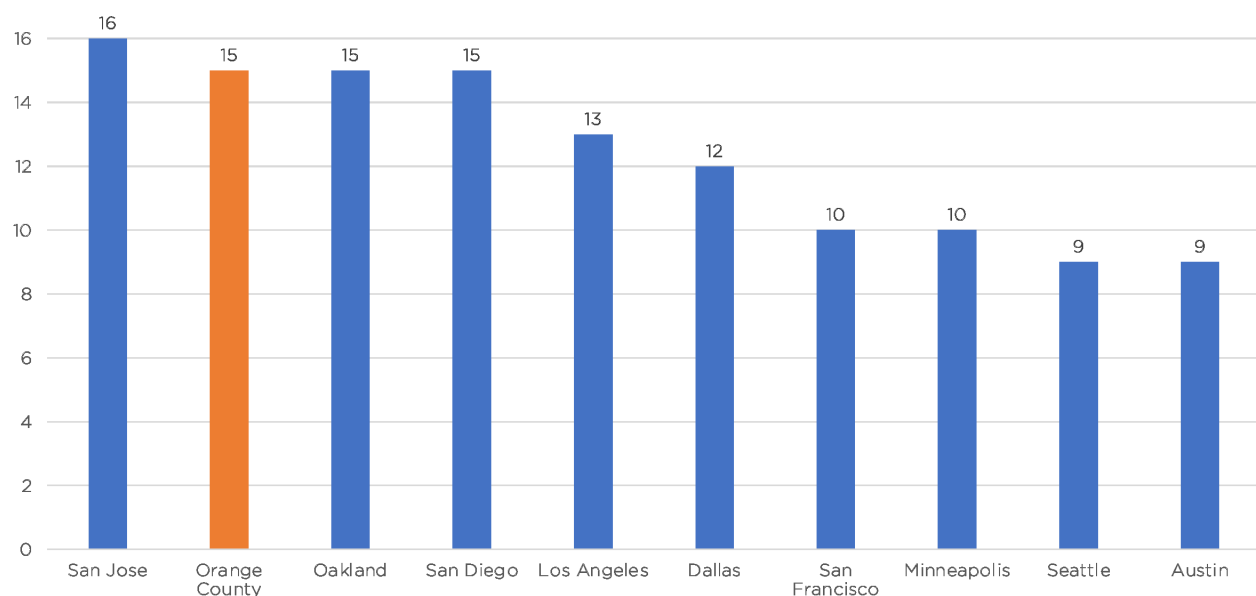


HIGH-TECH DIVERSITY AND GROWTH

15 out of 19 Orange County high-tech industries have an employment concentration above the national average; this level of high-tech employment concentration ties Orange County with Oakland and San Diego and puts it behind only San Jose. Orange County's one-year high-tech sector output growth of 102.4 and its five-year output growth of 107.7 are above the national average of 100.0 for both time periods.

ORANGE COUNTY TIED AT 2ND FOR MOST DIVERSE HIGH-TECH SECTOR

NUMBER OF HIGH-TECH INDUSTRIES WITH EMPLOYMENT ABOVE THE NATIONAL AVERAGE (OUT OF 19 TOTAL INDUSTRIES) IN ORANGE COUNTY COMPARED TO 200 METRO AREAS (TOP RANKED AND SELECTED PEERS SHOWN), 2019



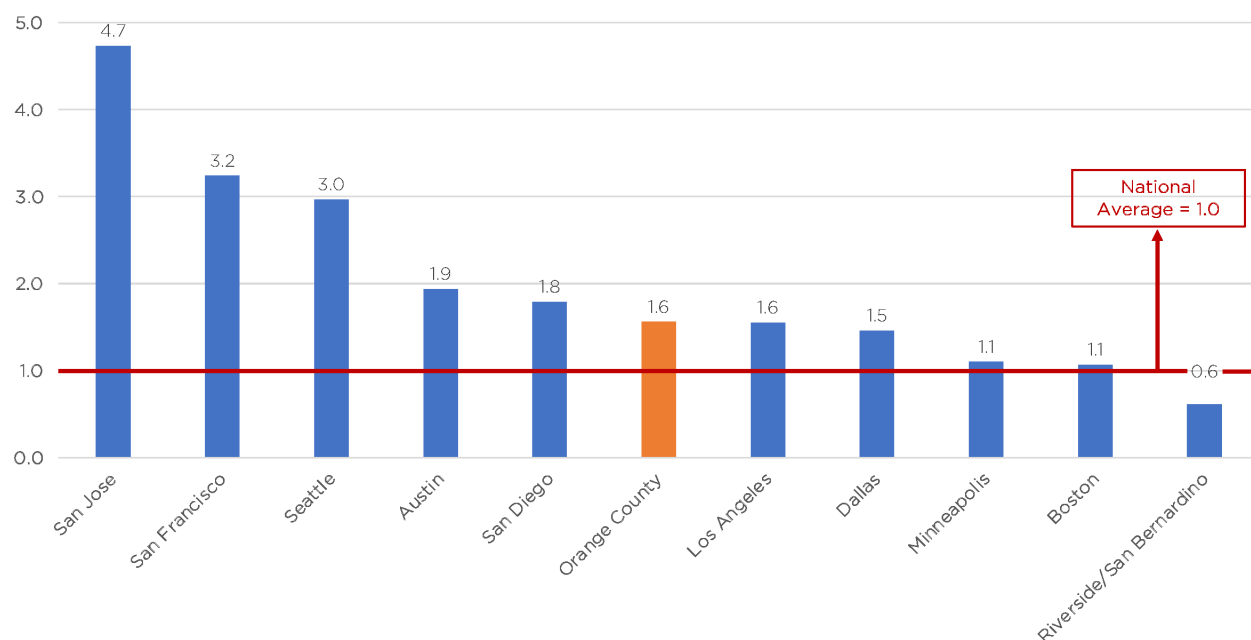
Source: Milken Institute, Best Performing Cities Report



ECONOMY

ORANGE COUNTY HIGH-TECH EMPLOYMENT CONCENTRATION IS IN THE MID-RANGE COMPARED TO PEERS

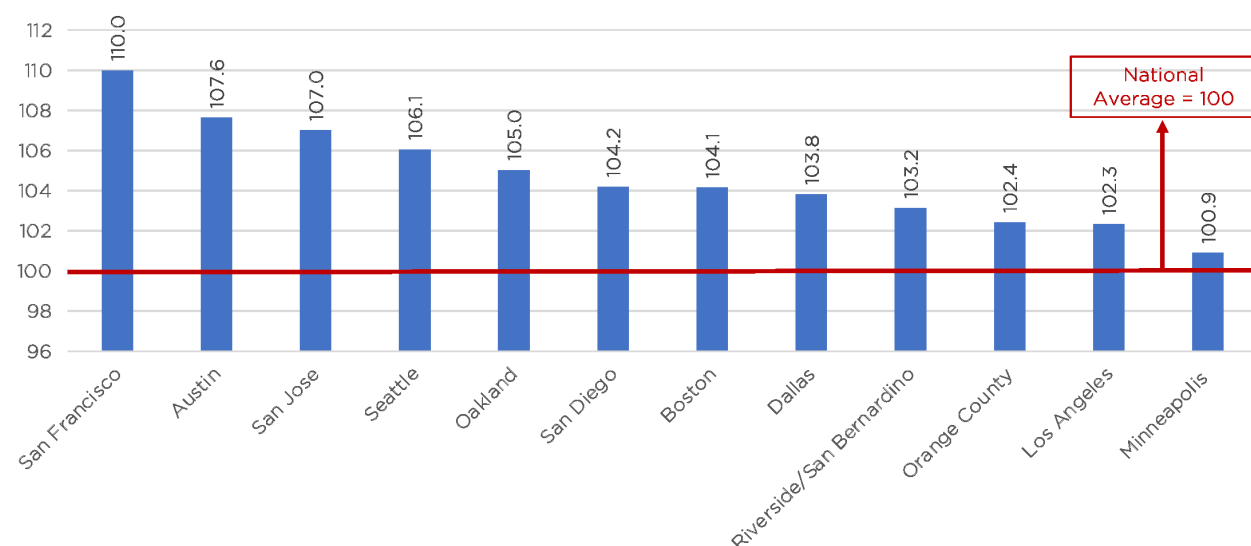
HIGH-TECH SECTOR EMPLOYMENT CONCENTRATION (LOCATION QUOTIENT) IN ORANGE COUNTY COMPARED TO PEER METRO AREAS, 2019



Source: Milken Institute, Best Performing Cities Report

REGIONAL HIGH-TECH GDP GROWTH OUTPERFORMS NATIONAL AVERAGE

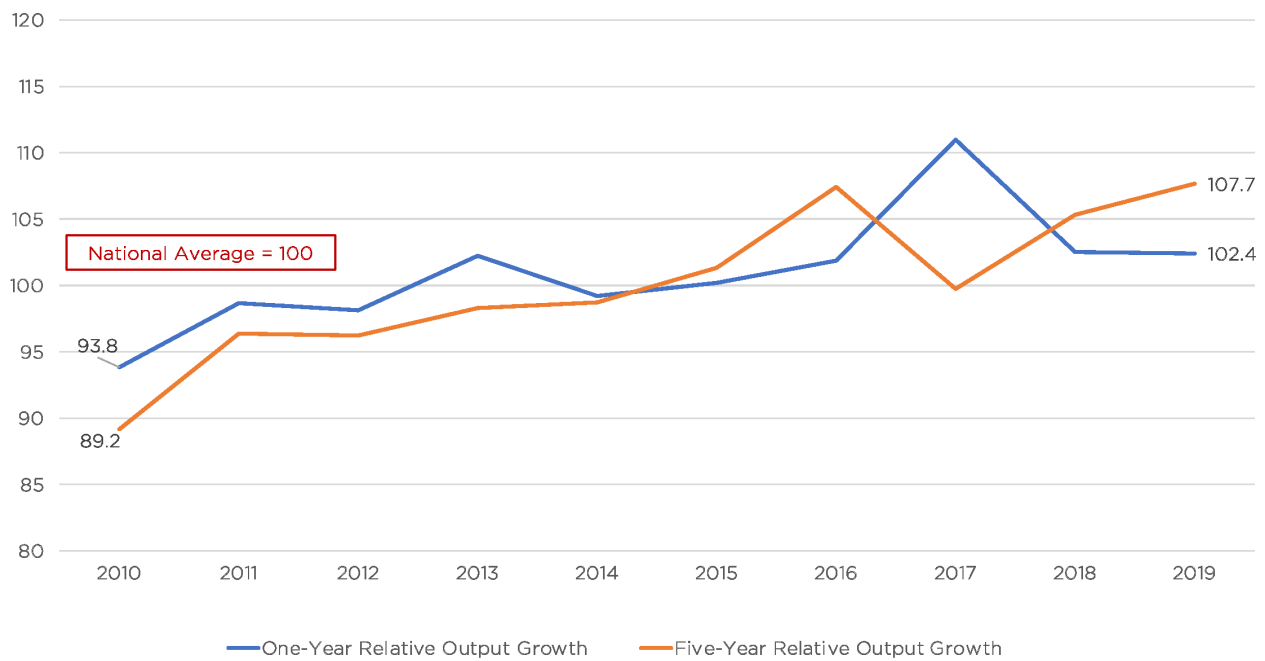
REGIONAL COMPARISON OF ONE-YEAR HIGH-TECH SECTOR OUTPUT GROWTH RELATIVE TO NATIONAL AVERAGE, 2019



Source: Milken Institute, Best Performing Cities Report

FIVE-YEAR HIGH-TECH OUTPUT GROWS; ONE-YEAR OUTPUT REMAINS ABOVE NATIONAL AVERAGE

HIGH-TECH SECTOR OUTPUT GROWTH IN ORANGE COUNTY RELATIVE TO THE NATIONAL AVERAGE, 2010-2019



Source: Milken Institute, Best Performing Cities Report



DATA NOTES:

The diversity of Orange County's high-tech economy is measured by counting the number of high-tech sector industries out of 19 that have employment concentrations above the national average. Employment concentration is relative to a national average of 1.0, where results below 1.0 signal lower employment in a particular industry than the national average and results above 1.0 signal greater employment in a particular industry than the national average. High-tech sector output growth is relative to the national average of 100.0.



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HOUSING

PRICES CONTINUE
TO CLIMB,
**SUPPLY LIMITED
BY A LACK OF
DEVELOPMENT**

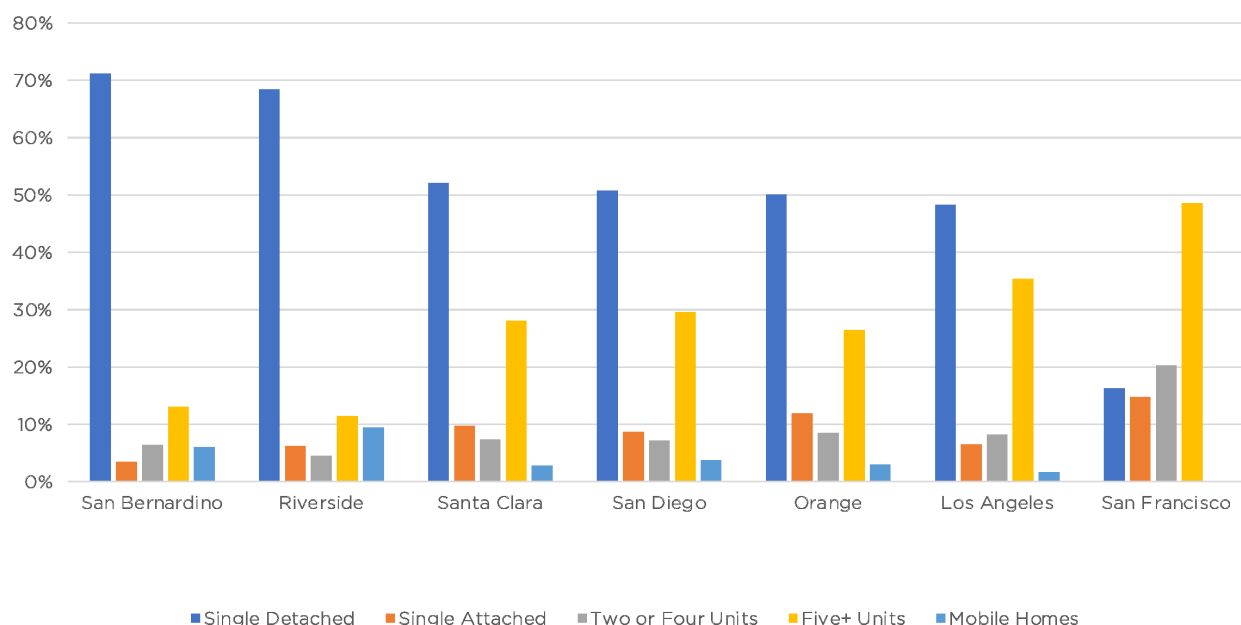


HOUSING LANDSCAPE

More than half (51 percent) of Orange County's housing consists of single-family detached homes, the result of a trend stretching back decades; multi-unit housing accounts for only 33.7 percent of the county's housing structures. Similar trends are seen in all peer regions except San Francisco, where multi-unit housing dominates, and San Bernardino and Riverside, which have significantly higher proportions of single-family detached housing.

MULTI-UNIT HOMES GROW IN IMPORTANCE AS SINGLE-FAMILY HOUSING SUPPLY STAYS TIGHT

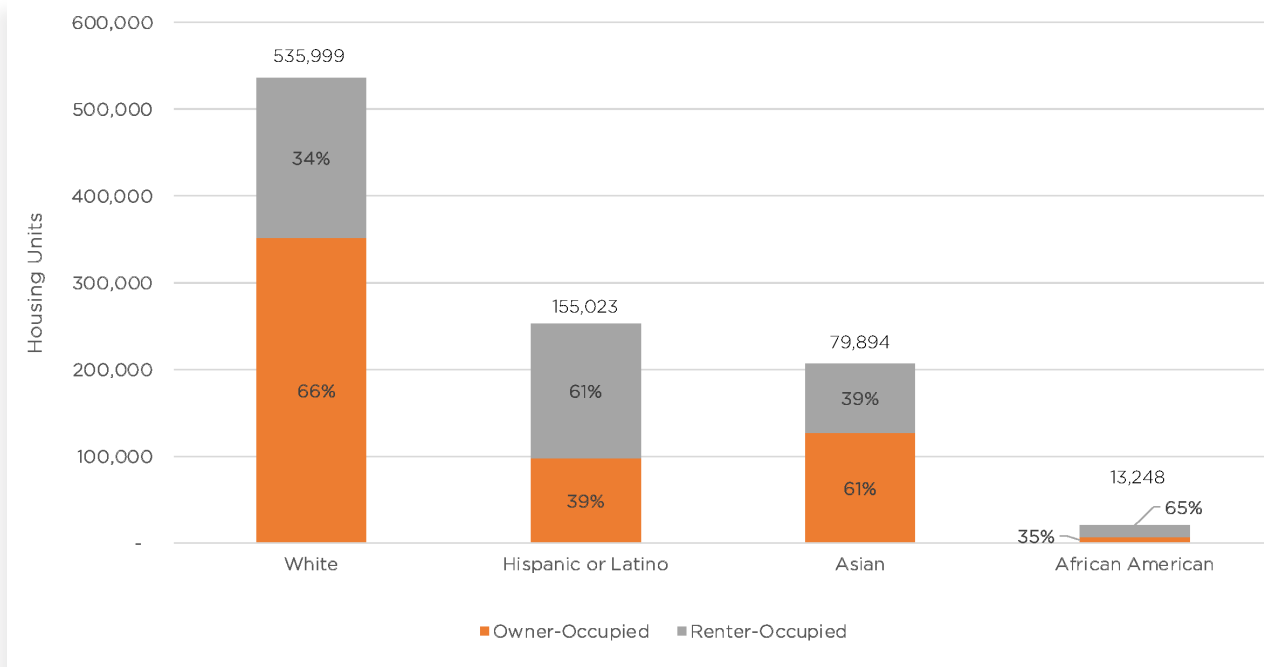
HOUSING STRUCTURES BY TYPE FOR PEER CALIFORNIA REGIONS, 2020



Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2020. Sacramento, California, May 2020.

Orange County's homeownership rate was largely unchanged from 2017 to 2018 at 57 percent, slightly above the state rate of 55 percent, yet below the national rate of 64 percent. White communities had the highest rate of homeownership at 66 percent, followed by Asians (61 percent) and Hispanics or Latinos (39 percent). Homeownership has a significant effect on the net worth of individuals, especially in Orange County, where residential real estate prices have seen significant appreciation.

OWNER- AND RENTER-OCCUPIED RATES OF HOMEOWNERSHIP BY MAJOR ETHNIC GROUPS IN ORANGE COUNTY, 2018

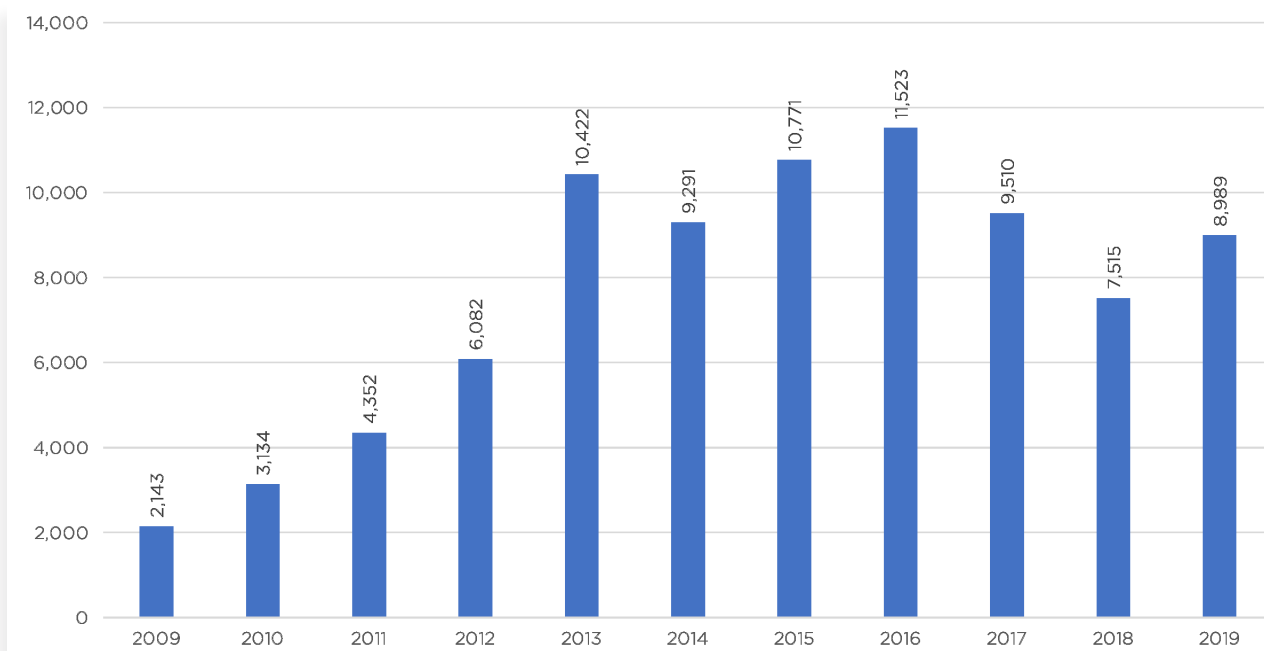


Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table S2502

The number of county building permits increased by 19.6 percent between 2018 and 2019, reaching an annual total of 8,989; this increase reflects the continuing demand to live and work in Orange County. While annual building permits remain well below 2016's total, developers are building more affordable, multifamily housing units, which are crucial for keeping younger workers in Orange County.

BUILDING PERMITS BOUNCE HIGHER IN 2019

ORANGE COUNTY BUILDING PERMIT ANNUAL TRENDS, 2009-2019



Source: U.S. Census Bureau's Building Permits Survey

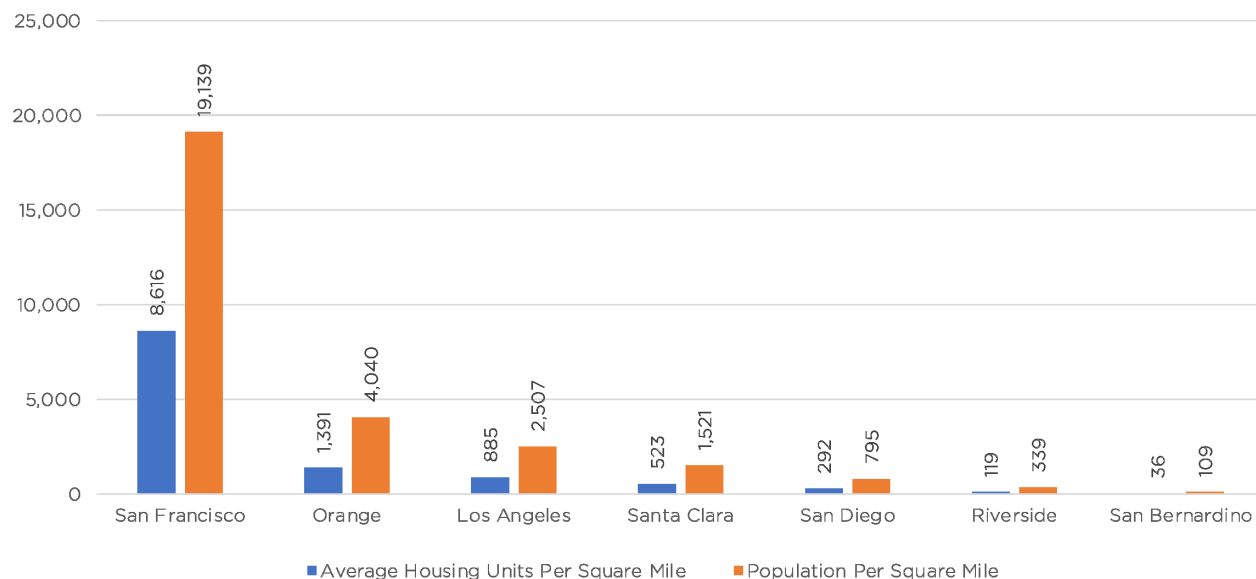


HOUSING

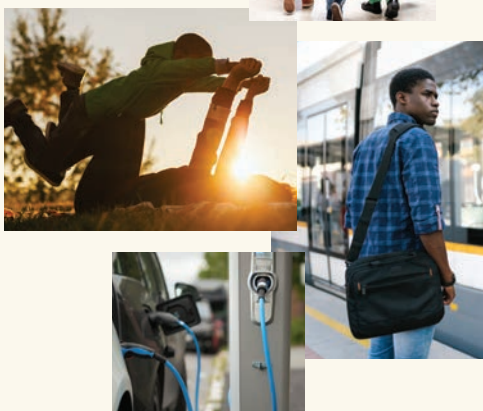
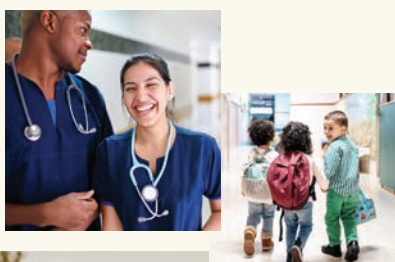
Except for San Francisco, Orange County had the highest housing and population densities when compared to peer regions. Overall, Orange County had approximately 1,391 housing units per square mile and 4,040 residents per square mile.

POPULATION AND HOUSING DENSITY RISE IN ORANGE COUNTY

HOUSING UNIT AND POPULATION PER SQUARE MILE
IN PEER CALIFORNIA COUNTIES, 2020



Source: State of California, Department of Finance, E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011-2020. Sacramento, California, May 2020.



Let's create

A sustainable society finds the balance between environmental justice and social equity. It has many components that seamlessly work together: a quality education, spaces that foster healthy bodies and minds, attainable and affordable housing, efficient use of office spaces, arts and recreation, and protection of the environment. When people and places function in harmony together, it empowers individuals, builds relationships, and creates an identity within the community.

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HOUSING AFFORDABILITY

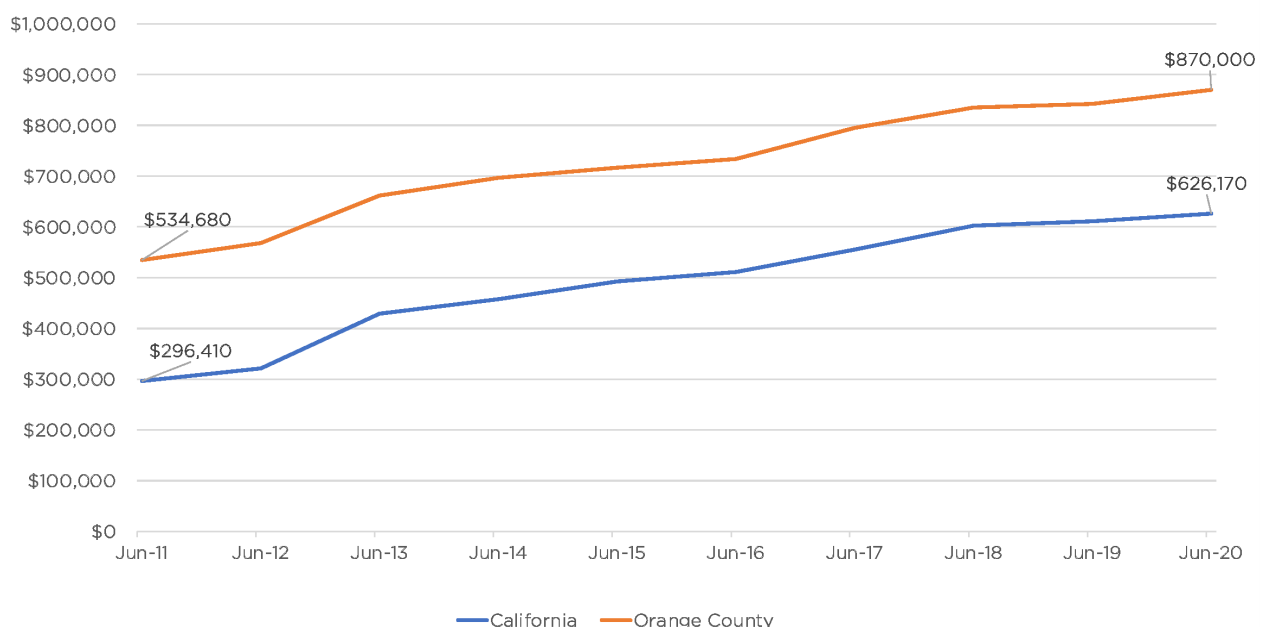
Orange County's median home price grew by 63 percent between June 2011 and June 2020, when it reached a new record high of \$870,000. A first-time home buyer in the county would need a minimum qualifying income of \$110,700 to afford an entry-level home priced at \$730,150. While housing prices continue to reach new highs, the percentage of first-time homebuyers who can afford an entry-level home actually increased from 41 percent in Q2 2019 to 42 percent in Q2 2020. Despite this improvement in affordability, this level of first-time homebuyer affordability remains well below the quarterly average of 59 percent in 2011.

While the full impacts of COVID-19 on Orange County's housing market remain to be seen, many expect to see prices softening as demand drops in the face of an economic downturn. Up to this point, however, rock bottom interest rates have kept demand levels higher, and supply remains tight, which has helped buoy prices in recent months.

While the Great Recession was caused in large part by a bursting housing bubble, the current economic downturn is unlikely to include a similarly dramatic decline in home prices.

HOUSING PRICES CLIMBED HIGHER BEFORE COVID-19 IMPACTS

**MEDIAN EXISTING SINGLE-FAMILY HOME SALE PRICE IN
ORANGE COUNTY AND CALIFORNIA, JUNE 2011 - JUNE 2020**



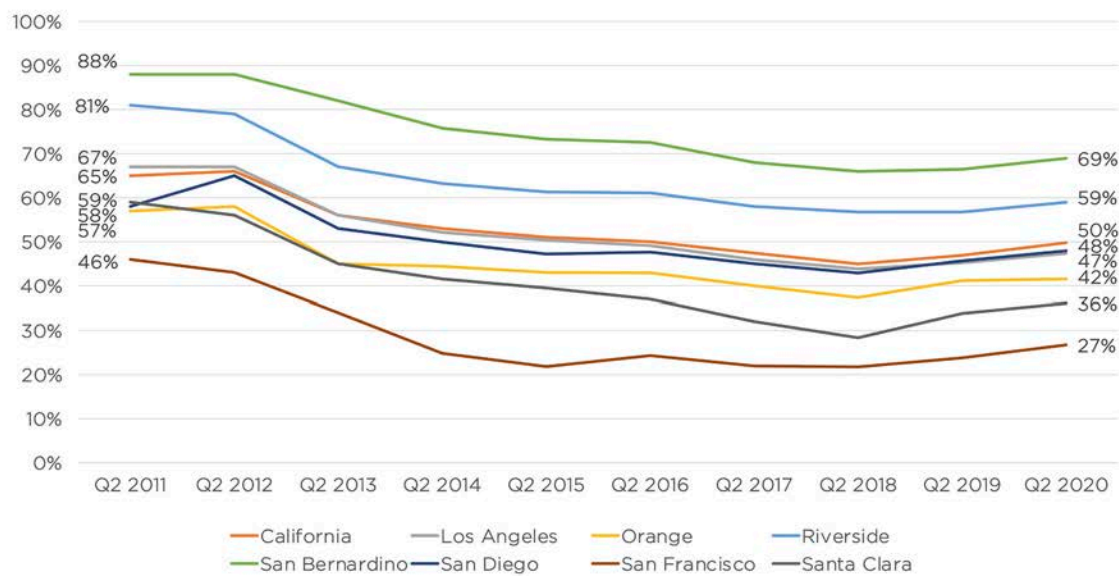
Source: California Association of Realtors, Current Sales & Price Statistics



HOUSING

AFFORDABILITY CONTINUES TO IMPROVE ACROSS CALIFORNIA

REGIONAL COMPARISON OF THE PERCENTAGE OF FIRST-TIME HOMEBUYERS ABLE TO AFFORD AN ENTRY-LEVEL HOME, Q2 2011 - Q2 2020



Source: California Association of Realtors, First-Time Home Buyer Affordability Index

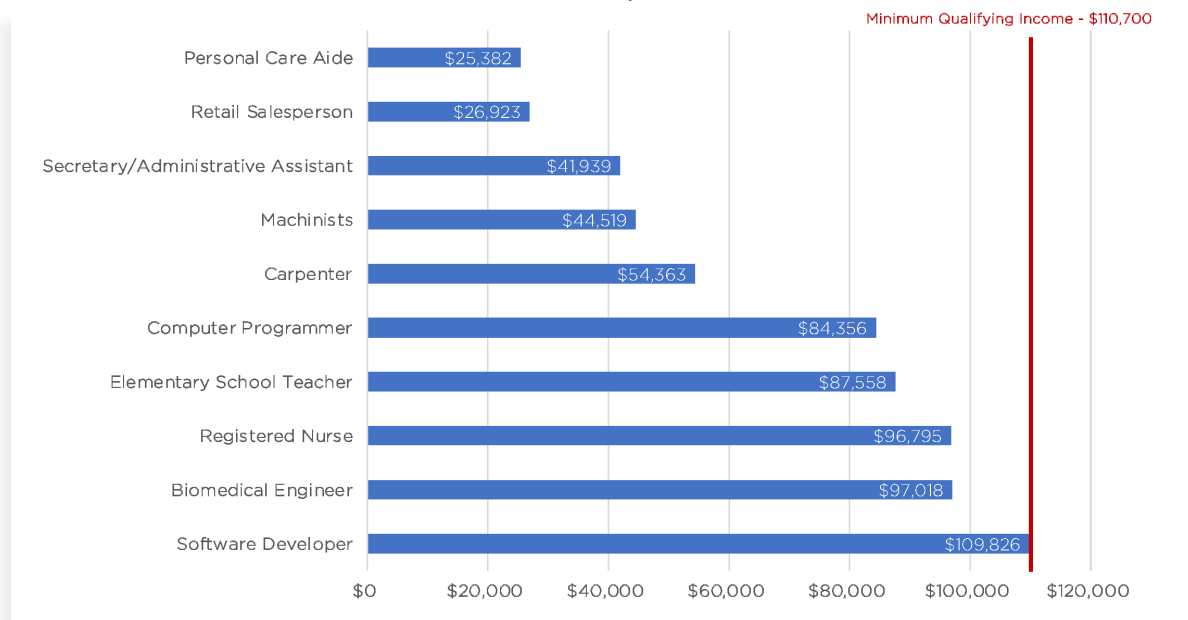
Despite improvements in the first-time affordability index in Orange County, many occupations earned less than the required minimum qualifying income. This mismatch of increased affordability and wages falling below minimum qualifying limits indicates that affordability has likely been driven by lower interest rates rather than increased household incomes. While interest rates were already considered low in 2019, they continued to fall in 2020, reaching as low as 3 percent for 30-year fixed-rate loans.

Affordability issues continue to disproportionately affect lower-income county residents; residents making under \$20,000 spend more than 30 percent of household incomes on housing, compared to only 19 percent of residents making over \$75,000. While wages are rising throughout Orange County, they are outpaced by increases in housing costs.



AFFORDABILITY INCREASES YET MANY STILL PRICED OUT

MINIMUM INCOME NEEDED TO AFFORD AN ENTRY-LEVEL HOME COMPARED TO MEDIAN SALARIES IN SELECTED OCCUPATIONS IN ORANGE COUNTY, 2ND QUARTER 2020



Sources:

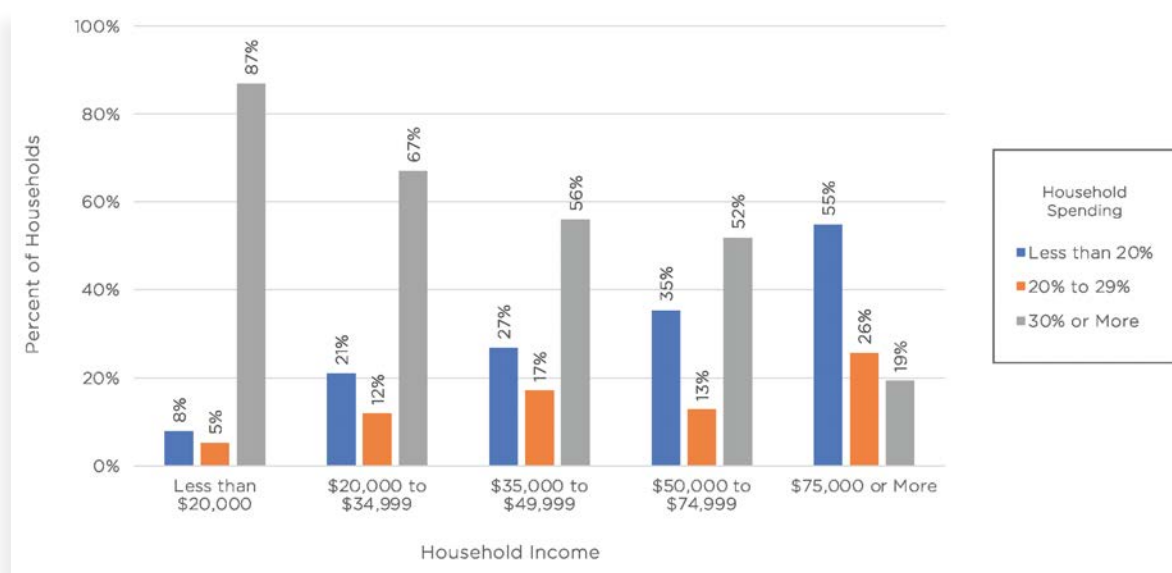
California Association of Realtors;

Economic Modeling Specialists International;

California Employment Development Department

HOUSING COSTS REMAIN AN ISSUE FOR LOW-INCOME RESIDENTS

ORANGE COUNTY OWNER-OCCUPIED HOUSING COSTS AS A PERCENT OF INCOME, 2018



Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates, Table B25106



HOUSING

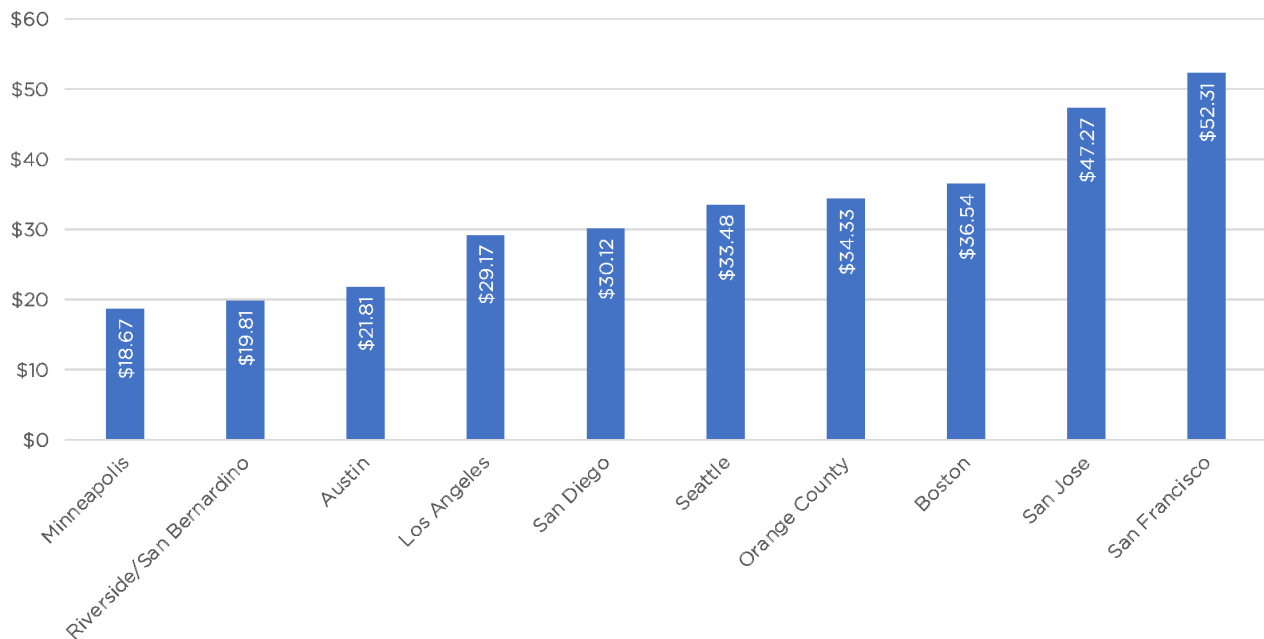
RENTAL AFFORDABILITY

In 2020, a resident of Orange County would have to make \$34.33 an hour, or \$71,406 per year, in order to afford a median-priced one-bedroom apartment. This “housing wage” rose by 9.4 percent over the past year. A minimum-wage worker would need to work 106 hours per week to afford a one-bedroom apartment, 131 hours per week to afford two bedrooms, and 183 hours per week to afford three bedrooms.

While rents in Orange County have been consistently increasing for the past decade, they marked their first decline in the second quarter of 2020. Marred by increasing vacancy and regional labor market exposure to tourism-related job losses, Orange County’s average monthly rent dropped by \$27 to \$2,066 per month. Prior to the pandemic, rents in the region had largely plateaued due to new construction coming online. Looking forward, rent in Orange County is expected to drop further by 0.5 percent, the smallest drop among 30 metro areas. Affordability concerns were already an issue well before the current pandemic and have since only been amplified. COVID-19 will undoubtedly affect the local, regional, and national housing markets, potentially driving up rental demand as was the case during the Great Recession.

ORANGE COUNTY RENTALS SEE LARGE INCREASE IN PRICE

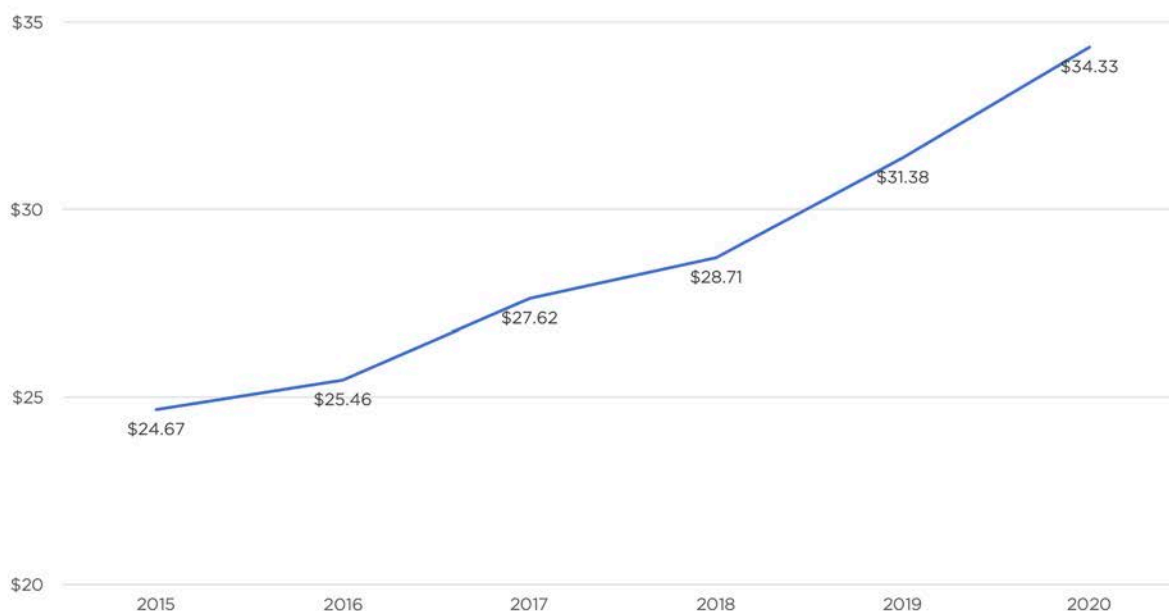
REGIONAL COMPARISON OF THE HOURLY WAGE NEEDED
TO AFFORD A ONE-BEDROOM UNIT, 2020



Source: Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development using the methodology of the National Low Income Housing Coalition

REQUIRED WAGE FOR ONE-BEDROOM JUMPS BY 9.4%

HOURLY WAGE NEEDED TO AFFORD A ONE-BEDROOM UNIT
IN ORANGE COUNTY, 2015-2020



Sources: Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development using the methodology of the National Low Income Housing Coalition

AFFORDING MEDIAN RENT REQUIRES 106 MINIMUM WAGE WORK HOURS

RENTAL MARKET AFFORDABILITY IN ORANGE COUNTY, 2017-2020

	2017	2018	2019	2020
One Bedroom	\$1,436	\$1,493	\$1,632	\$1,785
Two Bedroom	\$1,813	\$1,876	\$2,037	\$2,216
Three Bedroom	\$2,531	\$2,626	\$2,862	\$3,098

AMOUNT A HOUSEHOLD WITH
ONE MINIMUM WAGE EARNER
CAN AFFORD TO PAY
IN RENT (MONTHLY)

2017	2018	2019	2020
\$546	\$572	\$624	\$676

NUMBER OF HOURS PER WEEK
A MINIMUM WAGE EARNER
MUST WORK TO AFFORD A
ONE-BEDROOM APARTMENT

2017	2018	2019	2020
105	104	105	106

Sources: Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development using the methodology of the National Low Income Housing Coalition

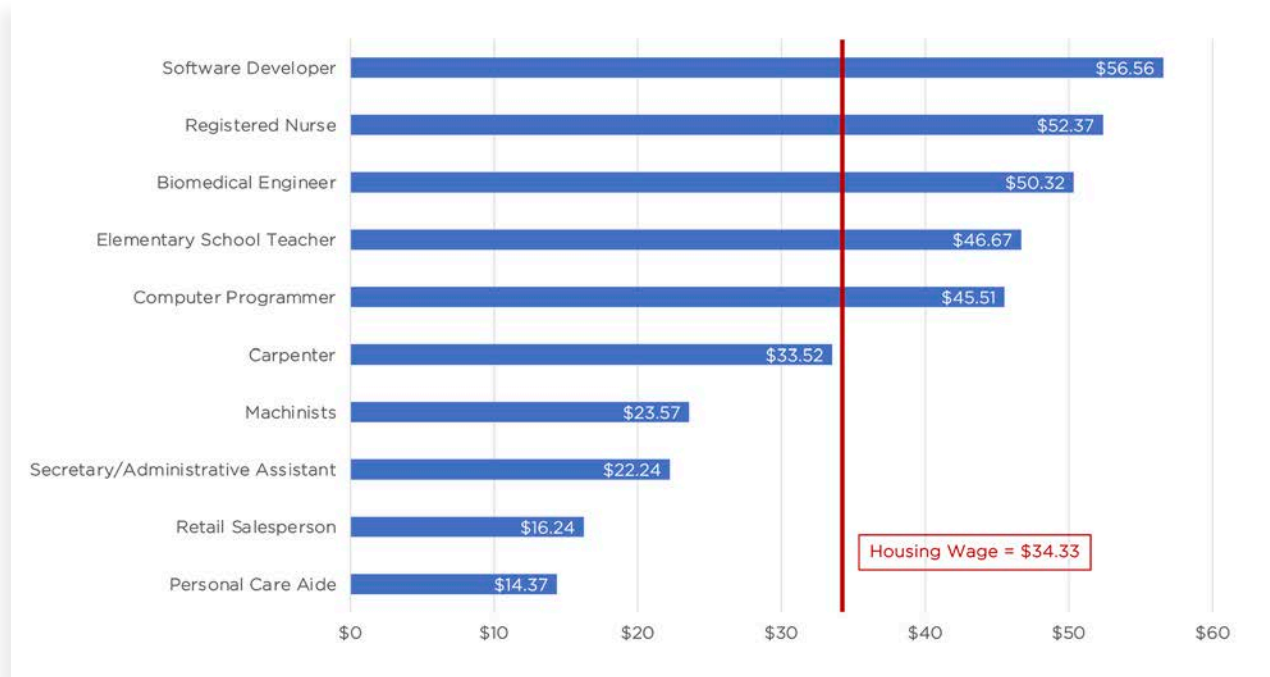


HOUSING

Half of the county's most common occupations – carpenters, machinists, administrative assistants, retail salespersons, and personal care aides – earn less than the required \$34.33 per hour to afford a one-bedroom apartment. While individuals in these occupations may seek out shared housing arrangements with roommates, housing price increases have outpaced wage increases and, if not properly addressed, could lead to increased homelessness, especially considering recent housing shifts brought on by COVID-19. Eviction moratoriums currently protect many renters and homeowners, but they will soon expire, significantly increasing the risk of homelessness for many families in Orange County.

HOUSING WAGE TOO HIGH FOR MANY OCCUPATIONS

**HOURLY WAGE NEEDED TO AFFORD A MEDIAN ONE-BEDROOM UNIT
IN ORANGE COUNTY (2020) COMPARED TO MEDIAN LOCAL WAGES
IN SELECTED OCCUPATIONS (1ST QUARTER 2020)**



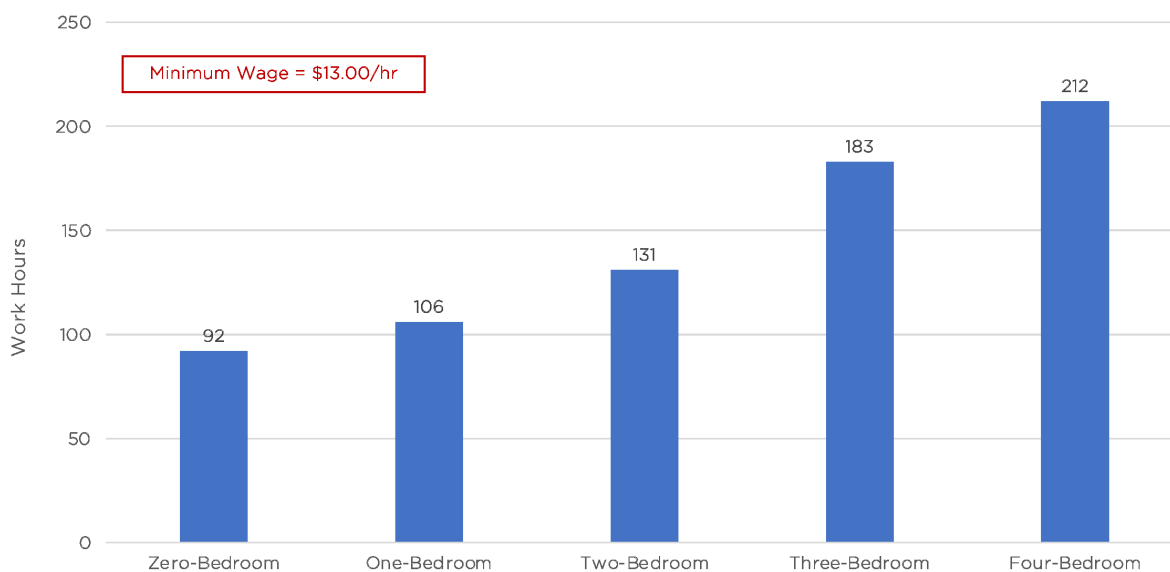
Sources:

Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development using the methodology of the National Low Income Housing Coalition (2020 housing wage)

California Employment Development Department Occupational Employment Statistics (1st Quarter 2020)

WITH CURRENT AFFORDABILITY RATES, RENTERS SHOULD BRACE FOR IMPACTS FROM COVID-19

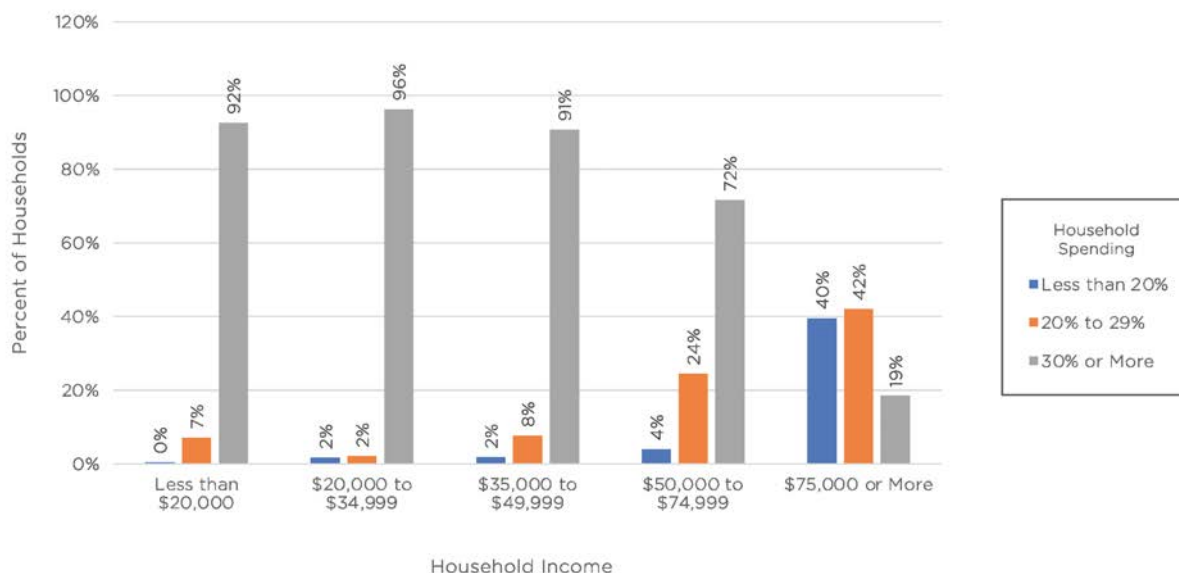
ORANGE COUNTY WORK HOURS REQUIRED BY HOUSING SIZE
FOR MINIMUM WAGE WORKERS, 2020



Source: Community Indicators Report analysis of Fair Market Rent data from the U.S. Department of Housing and Urban Development using the methodology of the National Low Income Housing Coalition

LOW-INCOME RENTERS CONTINUE TO SEE THE MOST SIGNIFICANT RENT BURDEN

ORANGE COUNTY RENTER-OCCUPIED HOUSING COSTS
AS A PERCENT OF INCOME, 2018



Source: U.S. Census Bureau, 2018 American Community Survey 5-Year Estimate, Table B25106



HOUSING

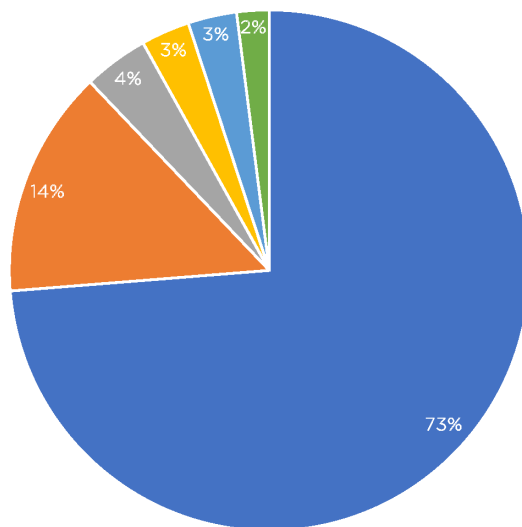
Low-income Orange County residents already spend a disproportionately high percentage of their salaries on housing, as seen in the graph on the previous page. These residents are also less likely to be able to telecommute, which means that they face a higher risk of unemployment during the COVID-19 pandemic. This combination could lead to housing insecurity or uncertainty for many of the county's most disadvantaged residents. It also points to the importance of addressing a long-running Orange County economic development issue: the lack of affordable housing.

HOUSING SECURITY

In 2020, Orange County has a total of 3,017 residents living in sheltered homeless arrangements; 36 percent of these are adults with children. While the number of homeless adults with children declined by 73 over the past year, the total number of sheltered homeless adults increased by 118.

White residents represented 73 percent of sheltered homeless people in 2020, followed by African Americans (14 percent) and American Indian or Alaska Natives (4 percent). When compared to their respective proportions of the overall county population, African American residents experience homelessness at much higher rates than other groups, while Asian residents experience much lower rates.

PROPORTION OF SHELTERED POINT-IN-TIME HOMELESS BY RACE/ETHNICITY IN ORANGE COUNTY, 2020

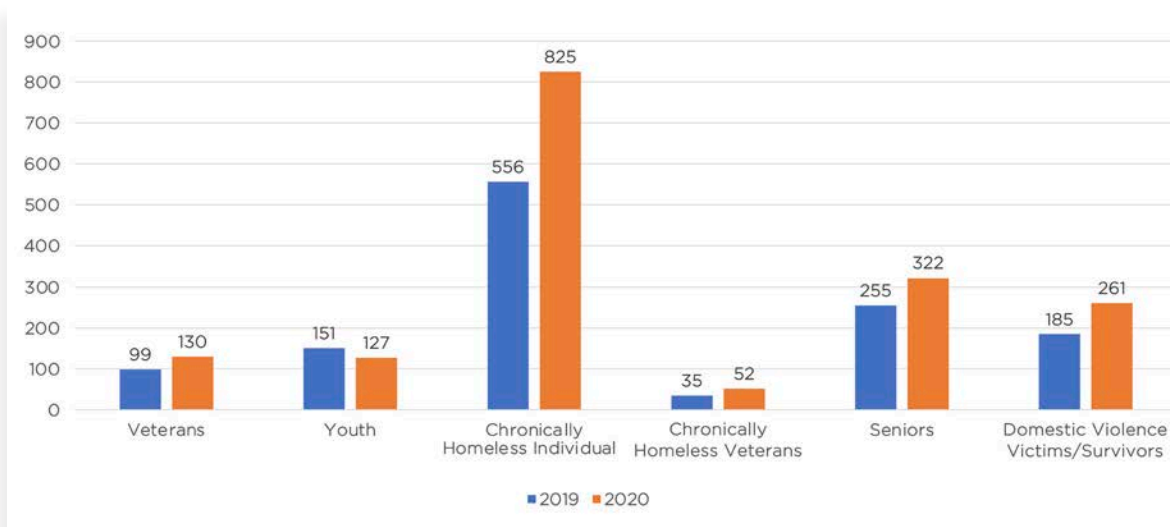


■ White ■ African American ■ American Indian or Alaska Native ■ Asian ■ Multiple Races ■ Native Hawaiian or Pacific Islander

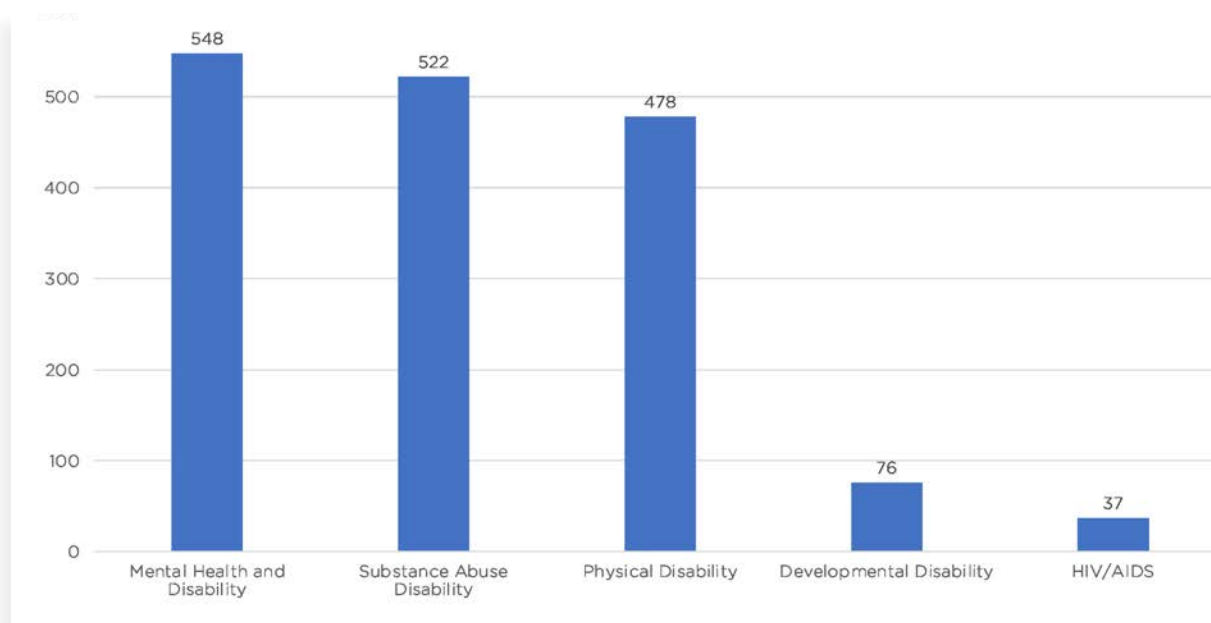
Source: Orange County 2-1-1, 2020 Sheltered Point in Time Count

Sheltered homeless youths in Orange County, the only special population group to see improvements in homelessness, declined by 16 percent over the past year. The most significant increases in sheltered homelessness in special populations were seen in Chronically Homeless Individuals (a 48 percent increase), and Chronically Homeless Veterans (a 49 percent increase). Mental health disability, substance abuse disability, and physical disabilities were among the most prevalent disabilities reported by Orange County's sheltered homeless.

SHELTERED HOMELESS COUNTS BY SPECIAL POPULATIONS IN ORANGE COUNTY, 2020



DISABILITIES REPORTED BY PERSONS SHELTERED IN ORANGE COUNTY, 2020



Source: Orange County 2-1-1, 2020 Sheltered Point in Time Count

DATA NOTES:

Due to release dates of Point-in-Time counts, this year's report only highlights sheltered homeless residents in Orange County while previous years' reports have highlighted both sheltered and unsheltered homeless counts in the region.

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ECONOMIC DEVELOPMENT



WORKFORCE DEVELOPMENT



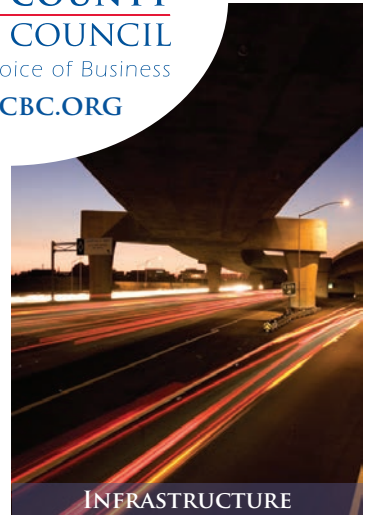
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Orange County Community Indicators Report.



WE'RE HERE FOR ORANGE COUNTY.

We are leaders in workforce development and job placement for people facing barriers.

Our employment training specialists, job coaches and advocates are ready to help individuals with disabilities and mental health diagnoses, veterans, and the most vulnerable in our county get back to work.

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INCOME

A COMPETITIVE
JOB MARKET
**DRIVES HIGHER
EARNINGS**



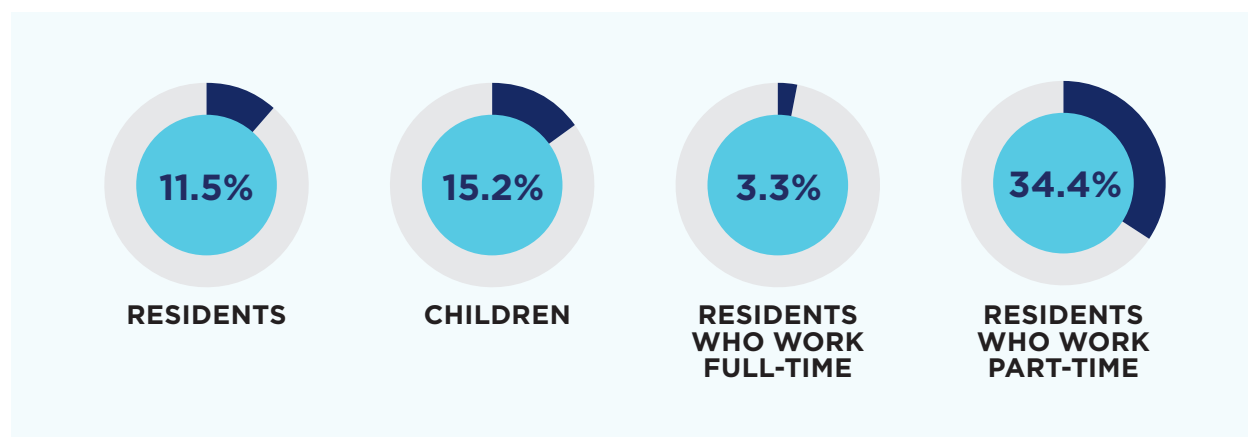
INCOME

HOUSEHOLD INCOME

Orange County's median household income grew by more than \$3,500 between 2017 and 2018, reaching \$89,759 in the latter year. The county's median income has grown consistently since 2012 and was 45 percent higher than the national average (\$61,937) and 19 percent higher than the state average (\$75,277) in 2018.

As seen below, Orange County continues to boast significantly more “high” and “very high” earners than the state and national averages due in large part to its competitive job market and high cost of living. Approximately 25 percent of county households earned less than \$45,000 in 2018, with 4.5 percent (43,771 households) earning less than \$10,000 and 15.3 percent earning more than \$200,000.

SEGMENTS OF ORANGE COUNTY POPULATION LIVING IN POVERTY

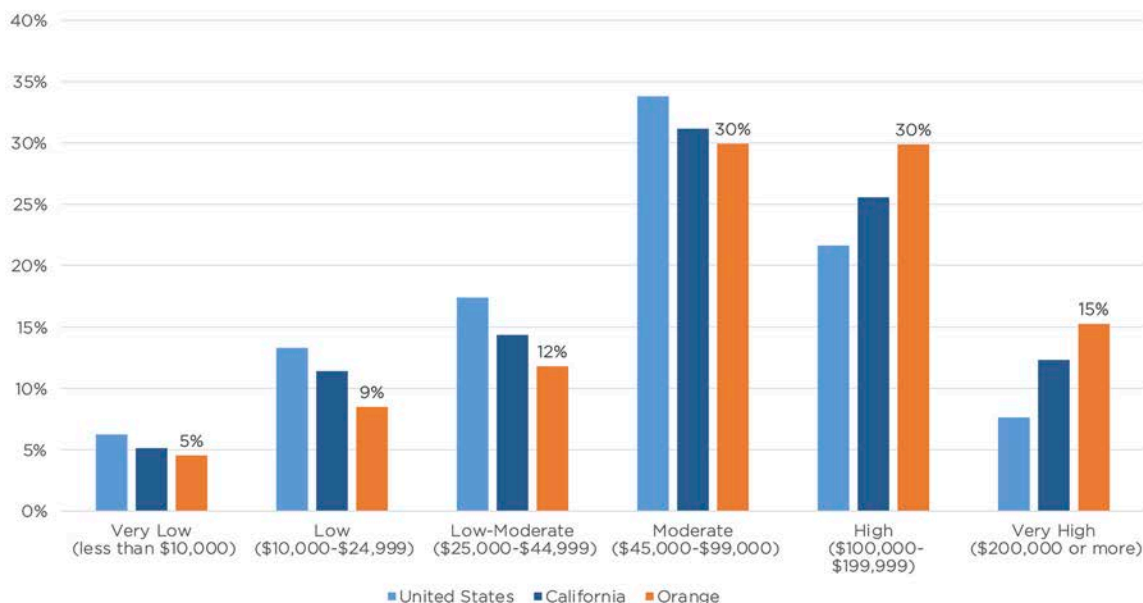


Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates (Table S1701)



COMPETITIVE LABOR MARKETS PUSH MORE HOUSEHOLDS INTO 'HIGH' AND 'VERY HIGH' INCOME CATEGORIES

DISTRIBUTION OF HOUSEHOLDS BY MEDIAN HOUSEHOLD INCOME, ORANGE COUNTY, CALIFORNIA AND THE UNITED STATES, 2018



43,771

NUMBER OF ORANGE COUNTY HOUSEHOLDS IN THE **"VERY LOW"** INCOME GROUP



\$25,926

APPROXIMATE 2018 **U.S. POVERTY THRESHOLD** FOR A 4-PERSON HOUSEHOLD



\$48,000

ELIGIBILITY FOR MANY SUPPORT SERVICES BEGINS AT <185% OF POVERTY, OR ROUGHLY \$48,000 FOR A 4-PERSON HOUSEHOLD



\$89,759

2018 **MEDIAN HOUSEHOLD INCOME** IN ORANGE COUNTY



\$102,000

MINIMUM QUALIFYING INCOME FOR A FIRST-TIME HOMEBUYER IN ORANGE COUNTY IN 2017

5%

60%

THE NUMBER OF ORANGE COUNTY HOUSEHOLDS GREW 5% BETWEEN 2010 & 2018, WHILE THE NUMBER OF HOUSEHOLDS IN THE "VERY HIGH" GROUP GREW 60%

Sources:

U.S. Census Bureau, American Community Survey, 5-Year Estimates (Table B19001), 2010 through 2018

U.S. Census Bureau, Poverty Thresholds for 2018; California Association of Realtors, First-Time Buyer Housing Affordability Index

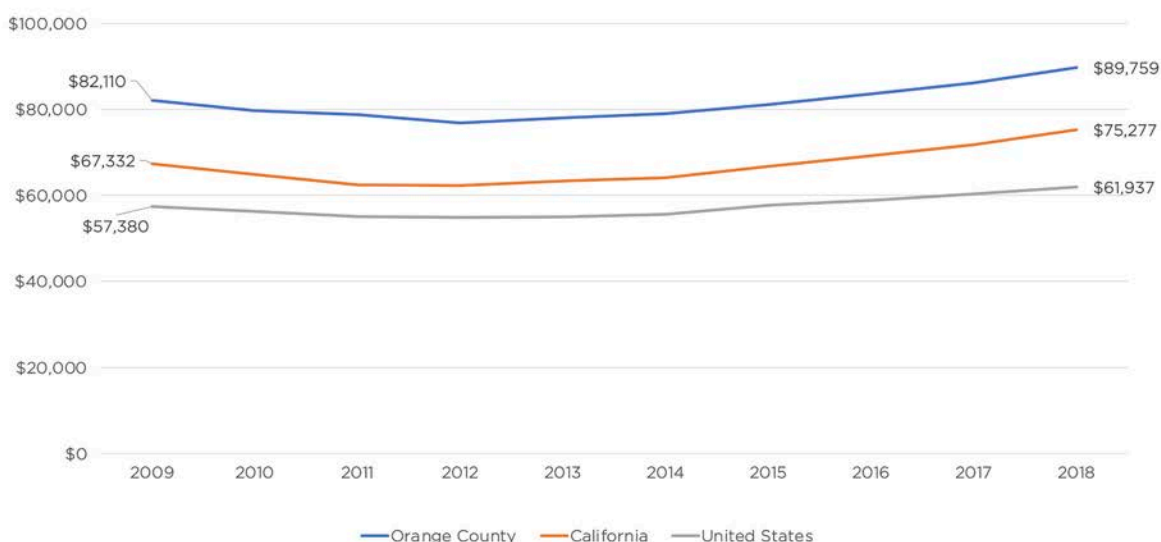


INCOME

The COVID-19 pandemic will likely have a significant impact on Orange County's median income as its economy faces high unemployment and a lack of consumer demand. While the county's median income could decline in the short-term, the county's competitive job market and strong business environment will help it during the eventual recovery.

OC MEDIAN INCOMES JUMP 4 PERCENT

MEDIAN HOUSEHOLD INCOME (INFLATION ADJUSTED TO 2018 DOLLARS), ORANGE COUNTY, CALIFORNIA AND UNITED STATES



Sources:

U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table B19013 (<http://factfinder.census.gov/>)

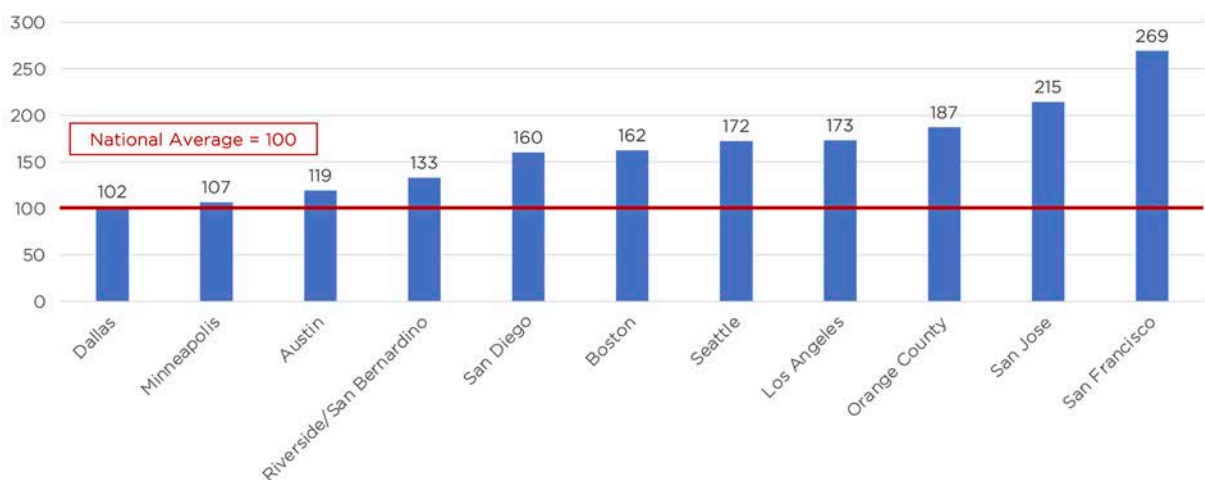
U.S. Inflation Calculator, reporting Consumer Price Index (CPI-U) data provided by the U.S. Department of Labor, Bureau of Labor Statistics (www.usinflationcalculator.com)





HIGH COST MARKETS SEE A DECLINE IN COST OF LIVING

While the cost of living in Orange County is 87 percent higher than the national average, it did decline by 4 points compared to the previous year. Several major markets experienced similar declines, especially San Jose and San Francisco. Orange County's housing costs, which are 374 percent higher than the national average, continue to drive its high cost of living. The cost of living takes housing, groceries, health, utilities, transportation, and miscellaneous expenses into account. While Orange County outpaced the nation in nearly all metrics, its cost for health (95.9) and utilities (98.3) were both below the national averages.



Source: Sperling's Best Places (www.bestplaces.com)



INCOME

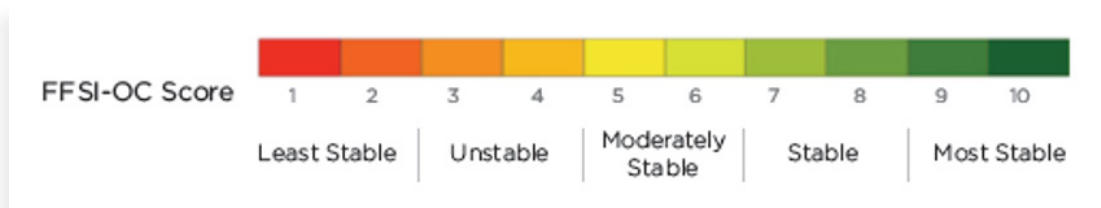
FAMILY FINANCIAL STABILITY

FAMILY FINANCIAL STABILITY CONTINUES TO IMPROVE

According to the 2018 Family Financial Stability Index for Orange County (FFSI-OC), 23 percent of county neighborhoods had high levels of family financial instability in 2018 (scores of 1, 2, 3, or 4 out of a maximum score of 10). The FFSI-OC, which measures the financial stability of families with children under 18, is a composite of three metrics: family income, employment status, and the proportion of household income spent on rent. When FFSI-OC tracking began in 2012, 39 percent of neighborhoods received “unstable” FFSI-OC scores of 4 or less. The following year, the rate of instability rose to include 41 percent of neighborhoods; however, family financial stability has steadily improved each year since then, driven by factors including:

- A substantial increase in employment levels of families;
- A modest increase in income among families; and
- A corresponding modest easing of rent burden, as fewer families commit more than half of their income to rent.

Two cities (Santa Ana and Stanton) and one major unincorporated area (Midway City) had the highest concentrations of family financial instability, with scores of 4 on the 2018 FFSI-OC.



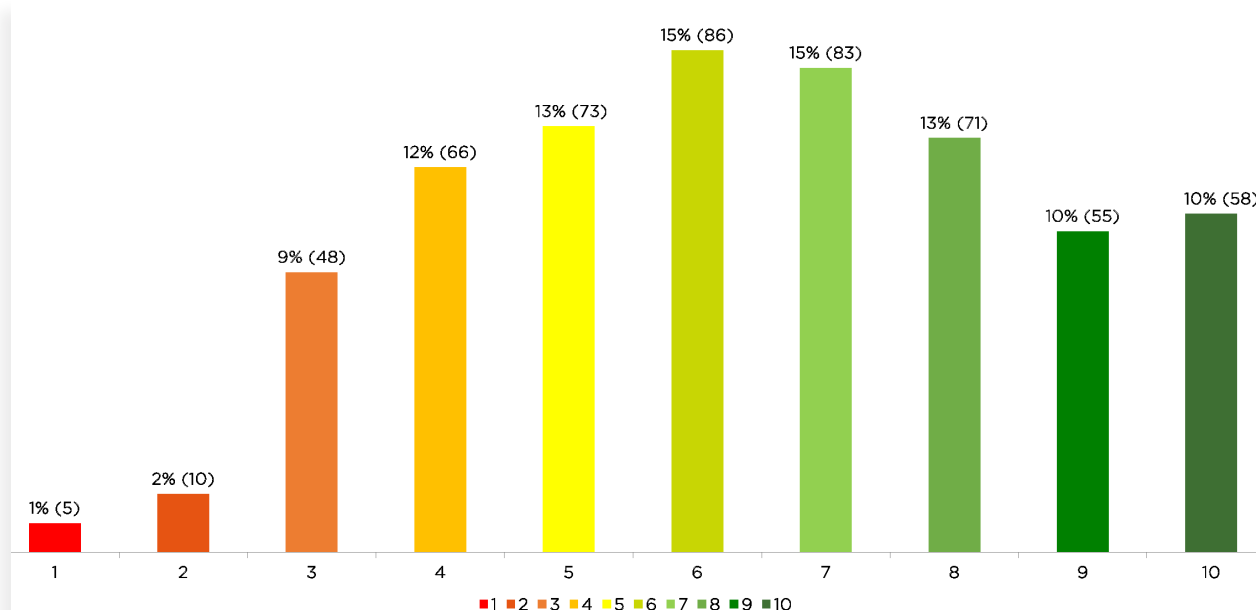
TOGETHER, WE HAVE THE POWER TO KEEP THE FUTURE BRIGHT

We are proud to sponsor the Orange County Business Council
Orange County Community Indicators Virtual Rollout



MOST NEIGHBORHOODS ARE FINANCIALLY STABLE

FFSI-OC SCORES: PERCENT (AND COUNT) OF ORANGE COUNTY NEIGHBORHOODS, 2018



NOTE: Percentages have been rounded. The number of neighborhoods falling within each FFSI-OC index score is provided in the parentheses following the percentage.

Source: Parsons Consulting, Inc. for Orange County United Way

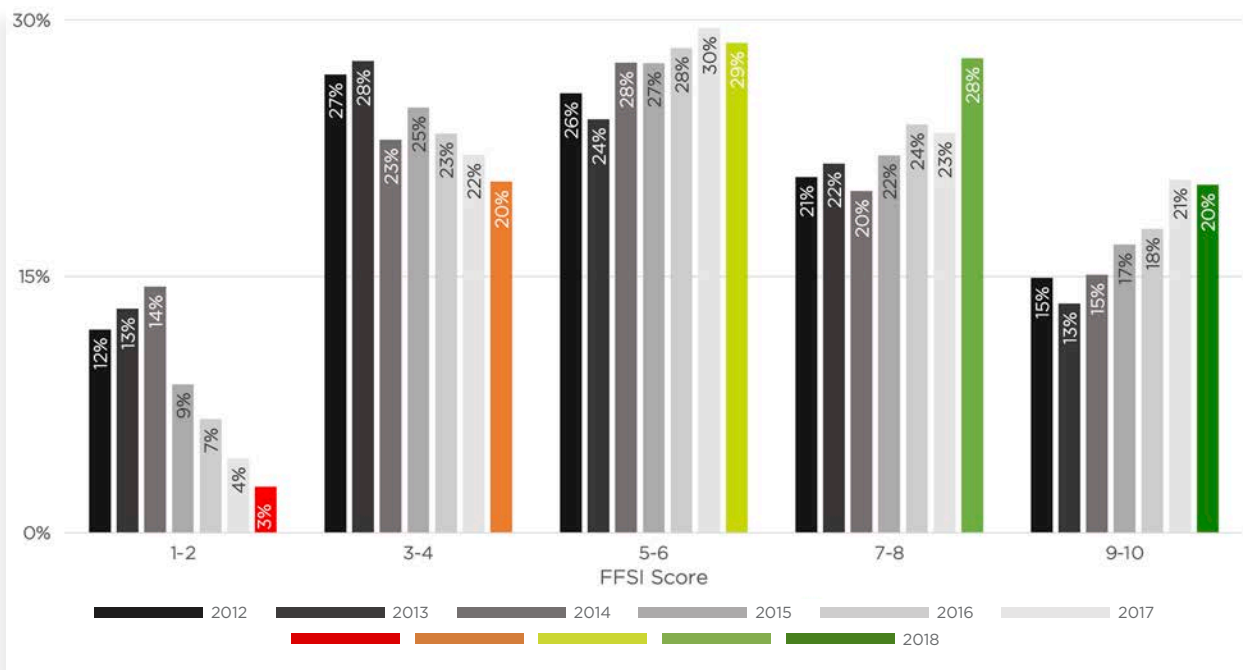
This 2018 data does not reflect the impacts of the COVID-19 pandemic, which will undoubtedly have a long-term impact on all facets of the county's economy. Family financial stability metrics may change significantly due to unemployment and overall economic uncertainty. As the impacts from COVID-19 are measured, analyzed, and reported, Orange County's FFSI is likely to see significant declines over the short-term.



INCOME

FAMILY FINANCIAL INSTABILITY FALLS TO LOWEST LEVEL SINCE TRACKING BEGAN

PERCENTAGE OF ORANGE COUNTY NEIGHBORHOODS BY FFSI-OC SCORE, 2012-2018



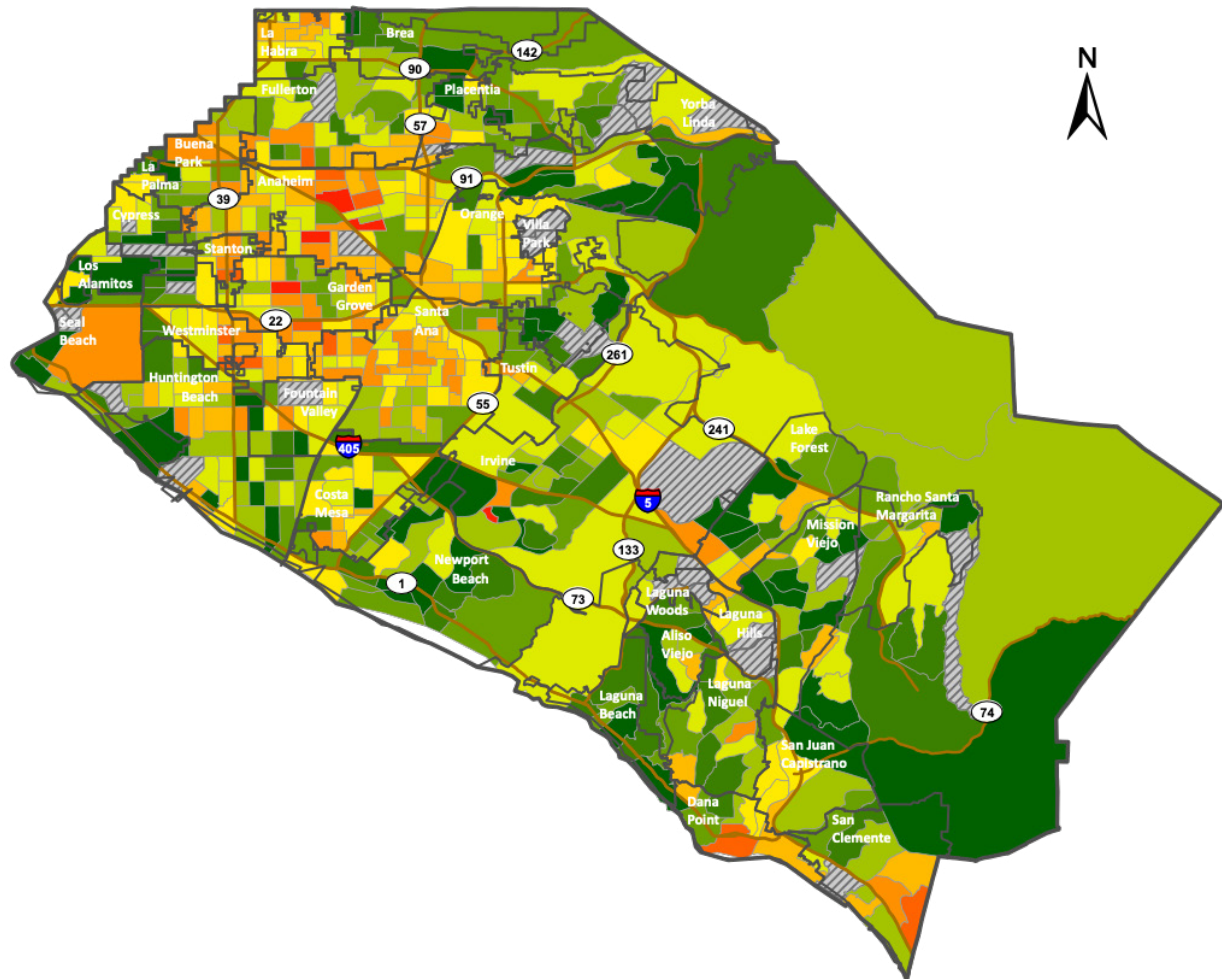
NOTE: Annual percentages may not sum to 100 due to rounding.

Source: Parsons Consulting, Inc. for Orange County United Way



23 PERCENT OF NEIGHBORHOODS HAVE HIGH LEVELS OF FAMILY FINANCIAL INSTABILITY

FAMILY FINANCIAL STABILITY INDEX - ORANGE COUNTY:
2018 NEIGHBORHOOD-LEVEL RESULTS



Red or dark orange areas on the map represent neighborhoods with low levels of family financial stability. Families in these neighborhoods are more likely to have a low income (less than 185 percent of the poverty level), spend 50 percent or more of household income on rent, and/or have one or more unemployed adults seeking employment. Green areas, on the other hand, have a higher proportion of families that are financially stable. Gray and hatch-marked areas represent neighborhoods with no data available due to small populations where data has been suppressed to protect privacy.

The Auto Club is proud to support the 2020 Orange County Community Indicators Report



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TO ALL THE ESSENTIAL WORKERS
WHOSE JOBS ARE CRUCIAL IN THIS UNPRECEDENTED TIME

UCI Health

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California, Irvine

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EDUCATION

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UNIVERSITIES
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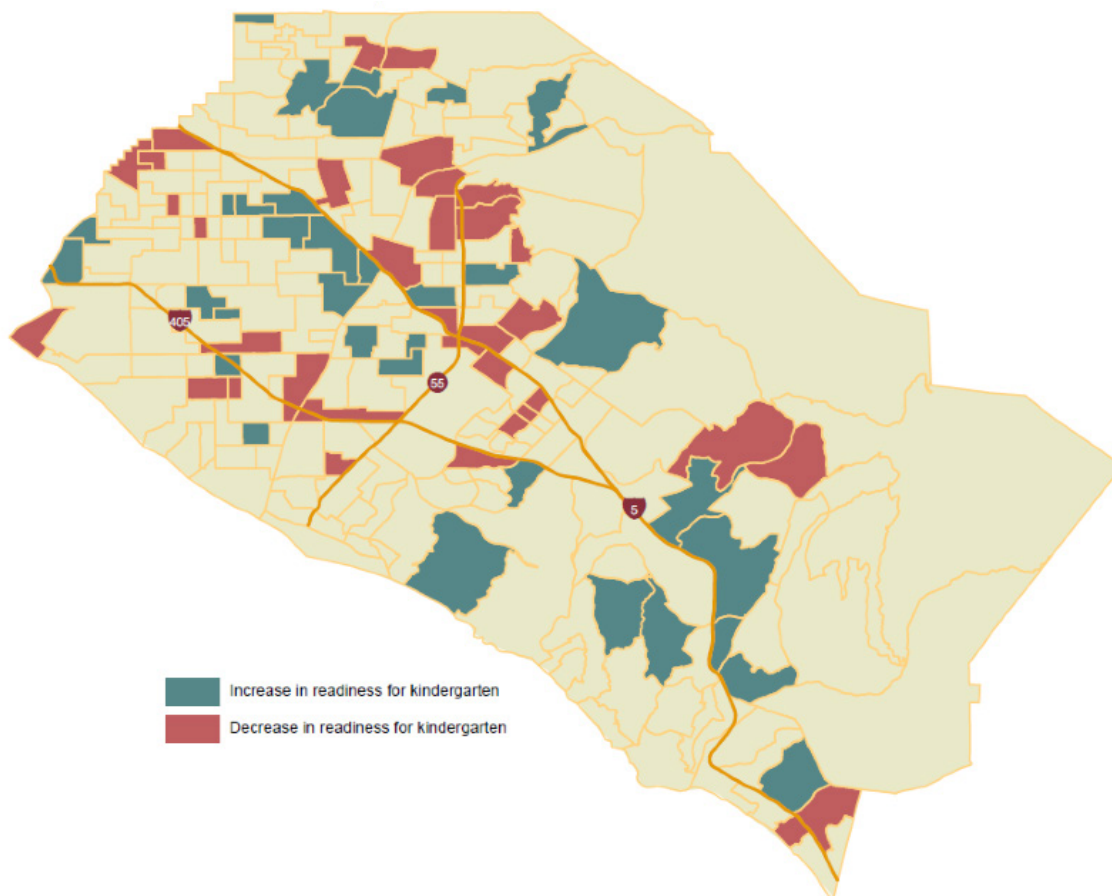


KINDERGARTEN READINESS

Orange County measures children's readiness for school through the Early Development Index (EDI). Using the EDI tool, public school teachers assess their kindergarten students based on the EDI's five areas of development: physical health and well-being, communication skills and general knowledge, social competence, emotional maturity, and language and cognitive development.

Between 2015 and 2019, 35 neighborhoods (15 percent) had an increase in their children's readiness for kindergarten, while 34 neighborhoods (14 percent) had a decrease. In most of the neighborhoods (171 or 71 percent), there was no critical difference in children's readiness over time.

EARLY DEVELOPMENT INDEX: CHANGE IN CHILDREN'S READINESS FOR KINDERGARTEN IN ORANGE COUNTY NEIGHBORHOODS, 2015 TO 2019



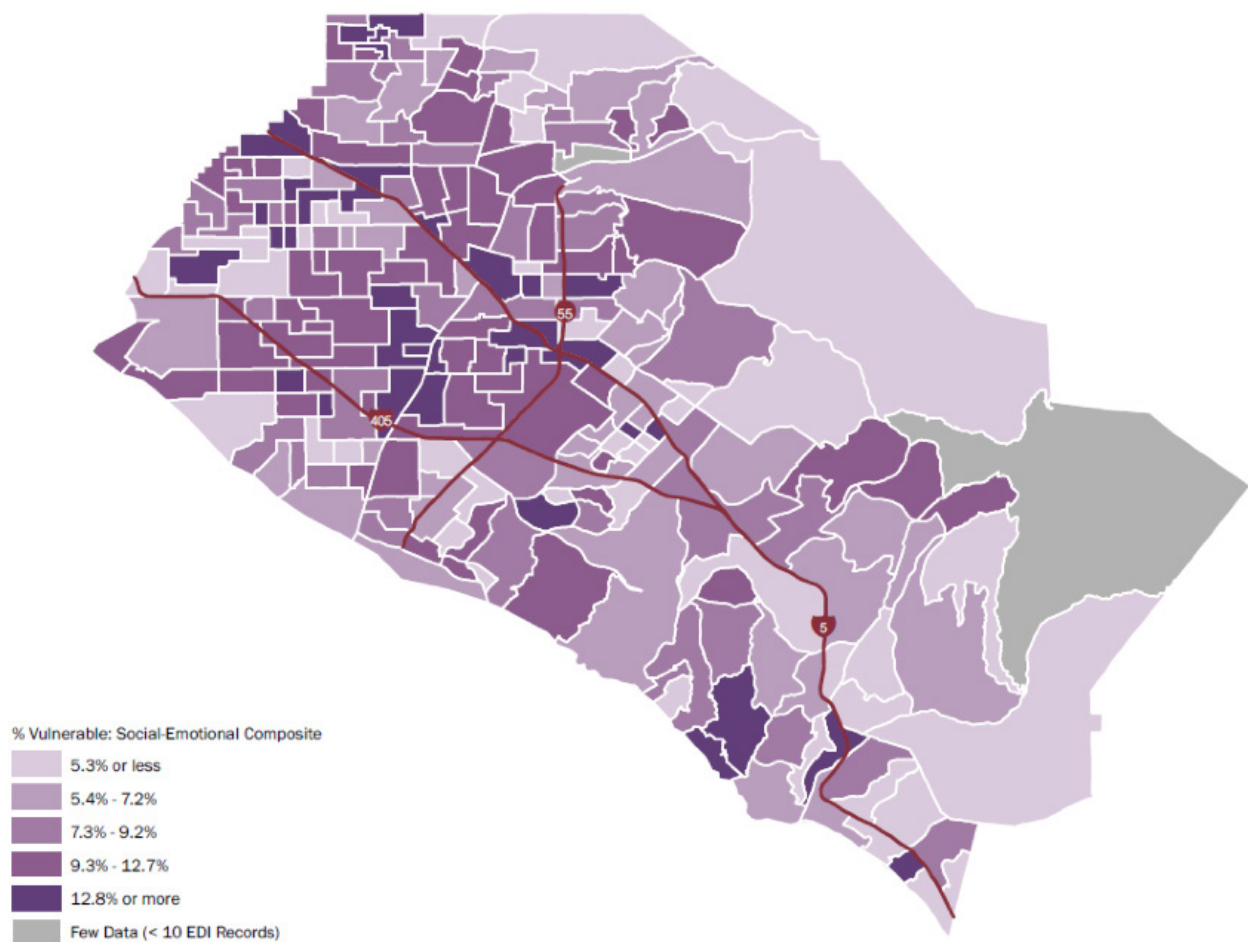
NOTE: Analysis based on the percentage of children vulnerable on one or more of the EDI domains and the Critical Difference between 2015 and 2019 data. A critical difference is the amount of change over two-time points in an area's EDI vulnerability rate that is large enough to be considered as meaningful in the statistical sense. A decrease in vulnerability is translated as an increase in readiness for kindergarten.

SOCIAL EMOTIONAL DEVELOPMENT

In Orange County, 9.6 percent of kindergarteners are considered vulnerable in their social-emotional development on the EDI. Areas in central and south Orange County have the highest percentages of vulnerable children on the social-emotional composite.

EARLY DEVELOPMENT INDEX 2019: PERCENTAGE OF CHILDREN VULNERABLE ON SOCIAL EMOTIONAL COMPOSITION

Orange County, CA



Source: First 5 Orange County in partnership with the UCLA Center for Healthier Children, Families and Communities, under license from McMaster University, is implementing the Early Development Index with its sub-licenses in the U.S. The EDI is the copyright of McMaster University and must not be copied, distributed, or used in any way without the prior consent of the Commission, UCLA OR McMaster.

NOTE: The EDI assists stakeholders in identifying how children are faring developmentally as they enter school. Therefore, data in this map is based on where children live rather than the school (and district) where their data is collected.

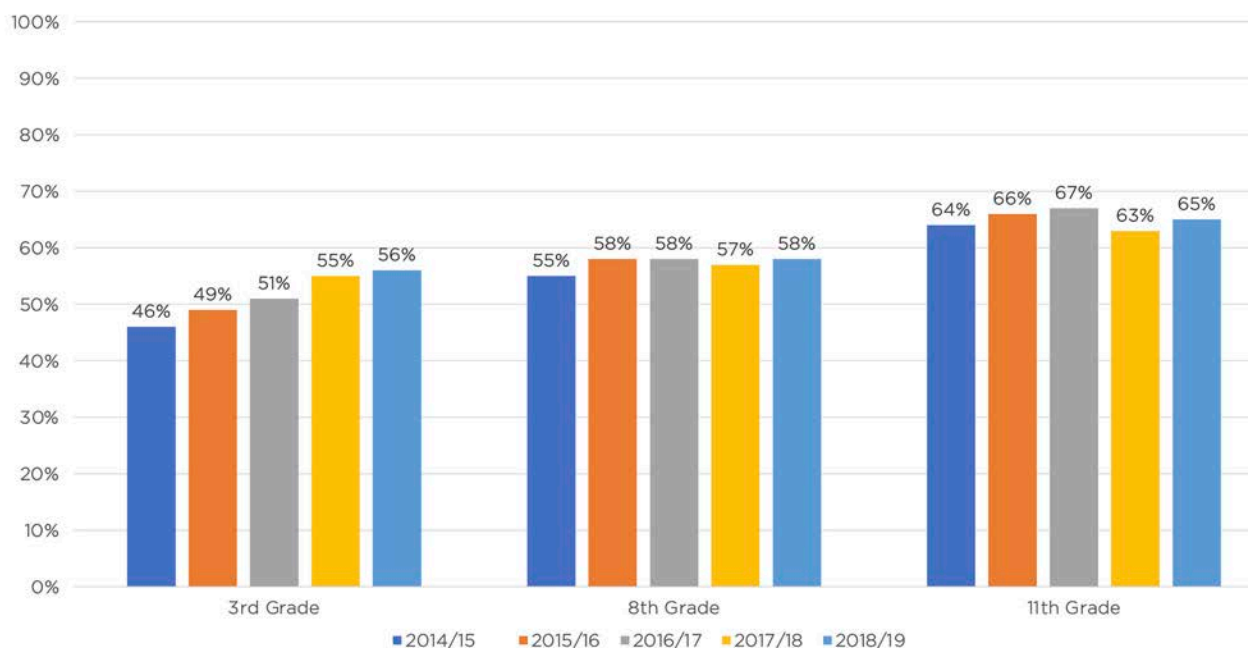


ACADEMIC PERFORMANCE: LITERACY

Academic performance in Orange County improved slightly in 2018/19 for 11th graders. The percentage of students meeting or exceeding statewide grade-level standards for English language arts (ELA) increased from 63 percent to 65 percent. Third graders' academic performance improved to the highest level since Smarter Balanced testing began with 56 percent meeting or exceeding standards. 8th graders' performance increased to 58 percent, meeting or exceeding standards.

11TH GRADE LITERACY RECOVERS; 3RD AND 8TH GRADE SCORES INCREASE

PERCENT OF STUDENTS MEETING OR EXCEEDING STATE STANDARDS ENGLISH LANGUAGE ARTS AND LITERACY, 2014-15 TO 2018-19



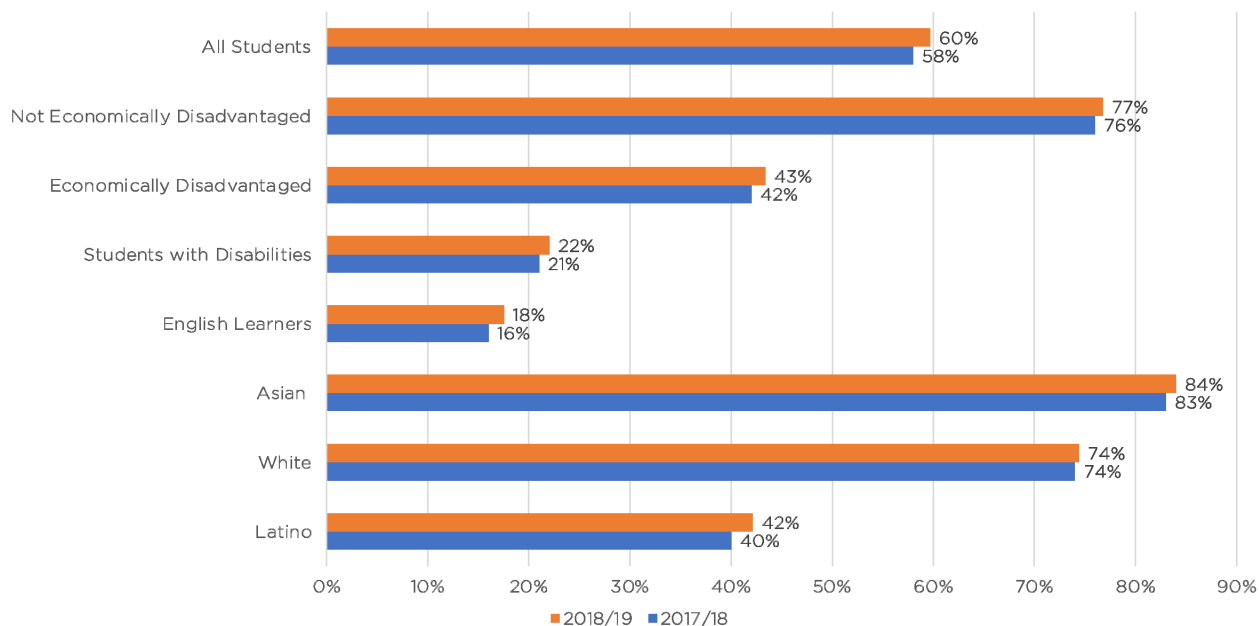
Source: California Department of Education (caaspp.cde.ca.gov/sb2019/search)

Academic performance in ELA among all grades¹ combined increased from 58 percent in 2017-18 to 60 percent in 2018-19. However, only 43 percent of economically disadvantaged students, 22 percent of students with a disability, and 18 percent of English learners met or exceeded the performance standard. Asian students had the greatest percentage of students meeting or exceeding the ELA standard at 84 percent, followed by White students (74 percent) and Latino students (42 percent). Latino students saw the largest increase year-over-year, improving their academic performance by 2 percentage points.

¹ Grades tested include 3rd, 4th, 5th, 6th, 7th, 8th, and 11th grades.

IMPROVEMENTS IN ELA SEEN ACROSS DEMOGRAPHIC GROUPS

ORANGE COUNTY STUDENT ELA PERFORMANCE BY ECONOMIC STATUS, ENGLISH LEARNERS, AND RACE/ETHNICITY, 2017-18 AND 2018-19



Source: California Department of Education (caaspp.cde.ca.gov/sb2019/search)



DATA NOTES:

Due to release dates of Point-in-Time counts, this year's report only highlights sheltered homeless residents in Orange County while previous years' reports highlight both sheltered and unsheltered homeless counts in the region.

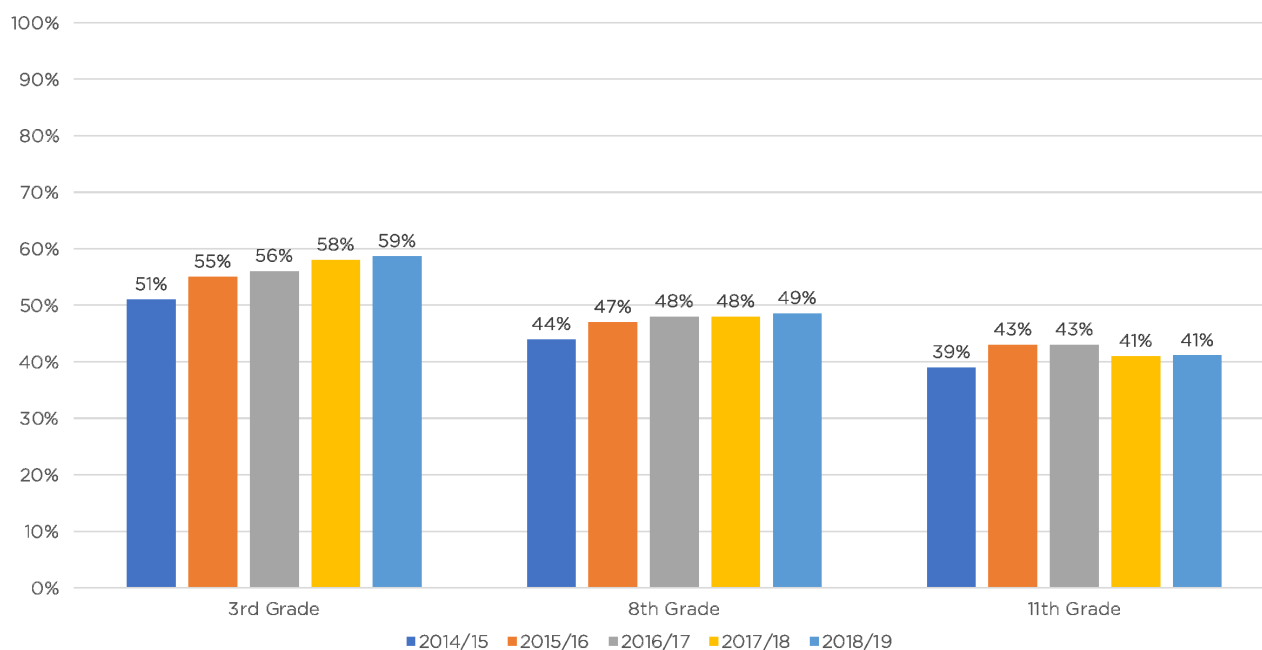


ACADEMIC PERFORMANCE: MATHEMATICS

More than half (59 percent) of Orange County 3rd graders met or exceeded the statewide grade-level standard for mathematics in 2018-19, an increase of 1 percentage point compared to the prior year. Orange County 8th graders saw a similar increase in their academic performance, while 11th graders saw performance stagnate stagnant at 41 percent in 2018-19. While the Orange County 11th graders' academic performance remains above the 39 percentage recorded by their counterparts, it remains below the 2016-17 total of 43 percent.

MATH SCORES IMPROVE FOR 3RD GRADERS; REMAINS STEADY FOR 11TH GRADER STUDENTS

PERCENT OF STUDENTS MEETING OR EXCEEDING STATE STANDARDS MATHEMATICS, 2014-15 TO 2018-19



Source: California Department of Education (caaspp.cde.ca.gov/sb2019/search)

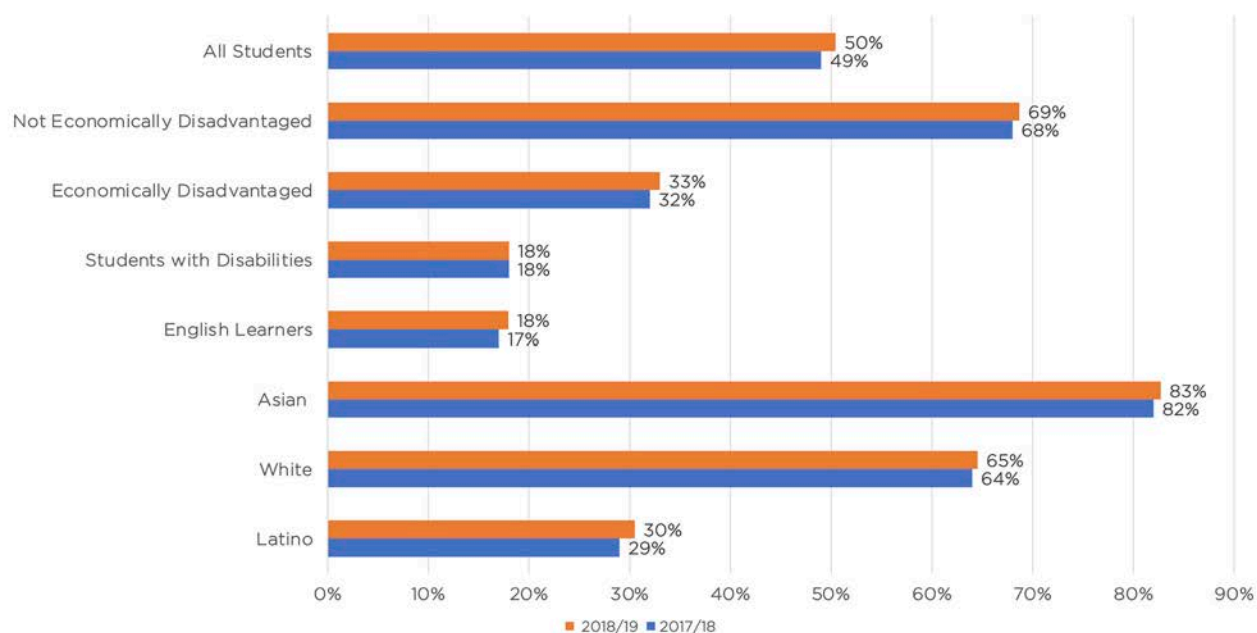
Half of all tested Orange County students (all grades combined) met or exceeded grade-level standards for mathematics in 2018-19, a major milestone for the region. This compares to only 33 percent of economically disadvantaged students, 18 percent of students with disabilities, and 18 percent of English Learners students who have met or exceed statewide testing standards. Asian students had the highest rate of academic performance at 83 percent in 2018-19, followed by White students (65 percent) and Latino students (30 percent).

Academic performance in ELA among all grades combined² increased from 58 percent in 2017-18 to 60 percent in 2018-19.

² Grades tested include 3rd, 4th, 5th, 6th, 7th, 8th, and 11th grades.

HALF OF TESTED ORANGE COUNTY STUDENTS MET OR EXCEEDED STATEWIDE MATHEMATICS STANDARDS

ORANGE COUNTY STUDENT MATHEMATICS PERFORMANCE BY ECONOMIC STATUS, ENGLISH LEARNERS, AND RACE/ETHNICITY, 2017-18 AND 2018-19



Source: California Department of Education (caaspp.cde.ca.gov/sb2019/search)



DATA NOTES:

This is the fourth year that students have taken the California Assessment of Student Performance and Progress (CAASPP) with published results. This assessment, designed to demonstrate progress toward mastery of the knowledge and skills needed for likely success in future coursework, is not comparable to assessments prior to 2014-15.



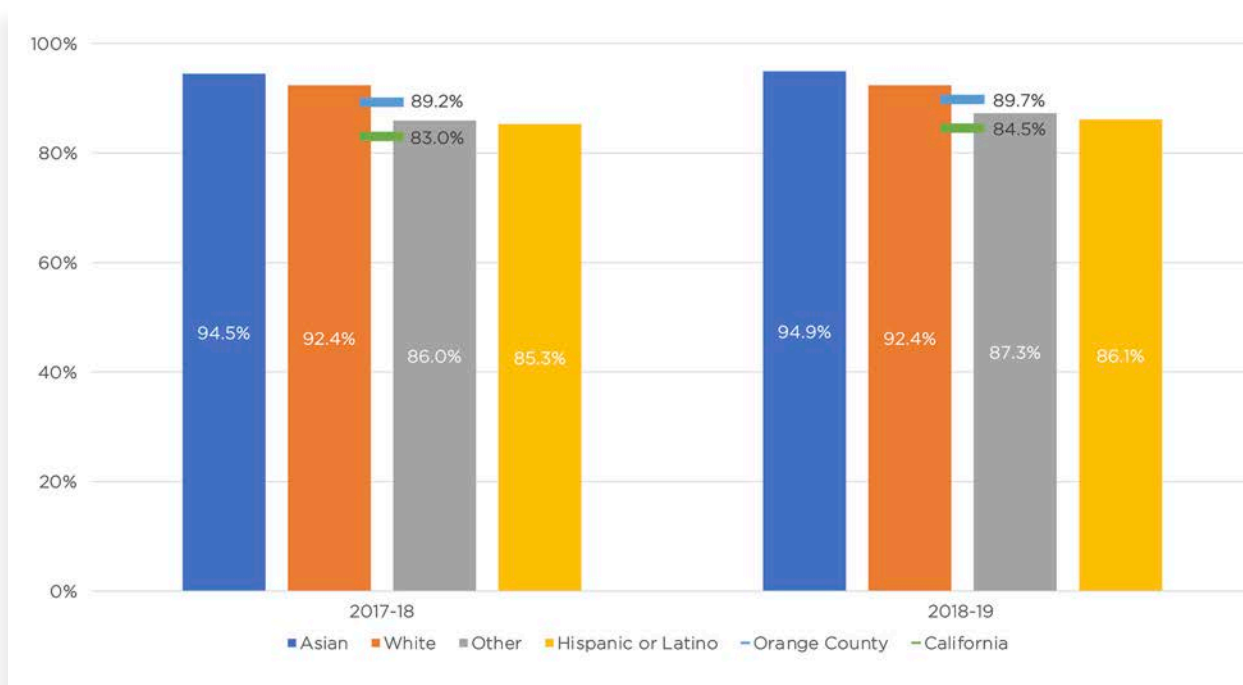
HIGH SCHOOL GRADUATION RATE

In Orange County, 89.7 percent of students who entered 9th grade in 2015 graduated on time four years later in 2019, an improvement of 0.5 percentage points compared to the previous year. Orange County outperformed the statewide average graduation rate of 84.5 percent by over 5 percentage points.

Asian students continued to post the highest graduation rates in Orange County at 94.9 percent, followed by White students (92.4 percent), and Latino students (86.1 percent). Rates for all measured groups saw improvements over the past year, with the exception of White students, where the graduation rate remained the same at 92.4 percent.

STUDENTS OF COLOR DRIVE GRADUATION RATE IMPROVEMENTS

GRADUATION RATE BY RACE/ETHNICITY IN ORANGE COUNTY,
2017/18-2018/19

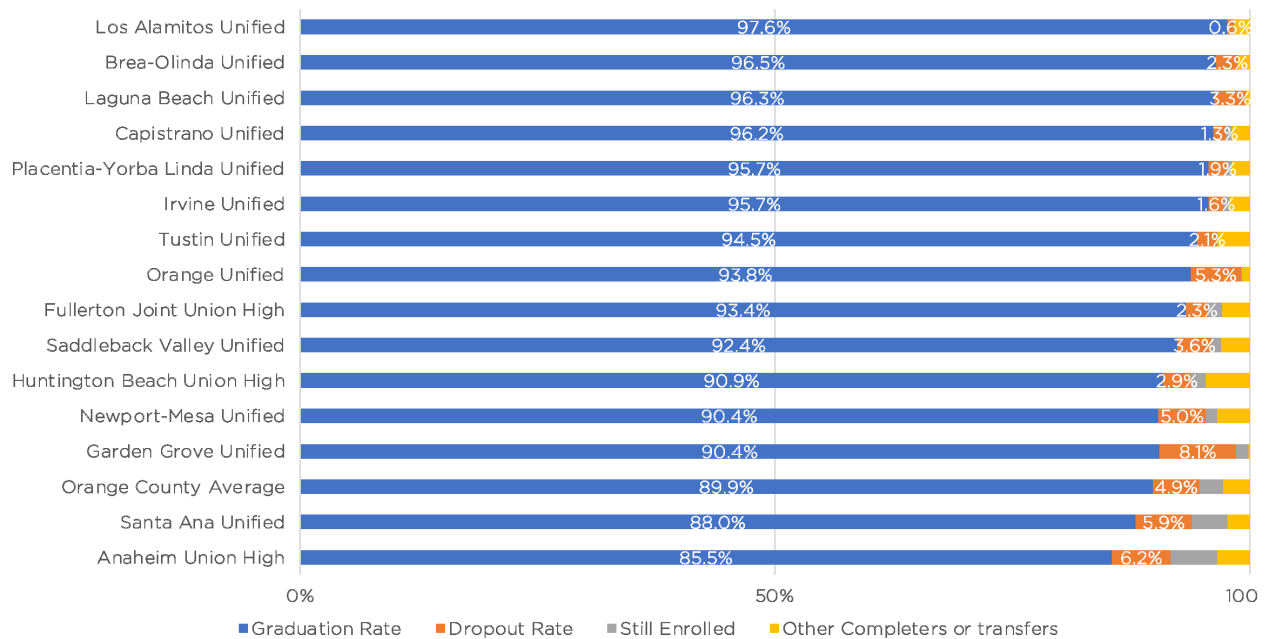


Source: California Department of Education, DataQuest

Los Alamitos Unified registered the highest graduation rate at 97.6 percent while Anaheim Union High registered the county low of 85.5 percent. Los Alamitos Unified also registered the lowest dropout rate at 0.6 percent while Garden Grove Unified saw the highest dropout rate at 6.2 percent. Overall, the countywide dropout rate was 4.6 percent, an improvement of 0.3 percent over last year's rate of 4.9 percent.

LOS ALAMITOS AND BREA-OLINDA UNIFIED SEE HIGHEST GRADUATION RATES

HIGH SCHOOL STUDENT OUTCOMES BY ORANGE COUNTY SCHOOL DISTRICT, 2018-19



Source: California Department of Education, DataQuest

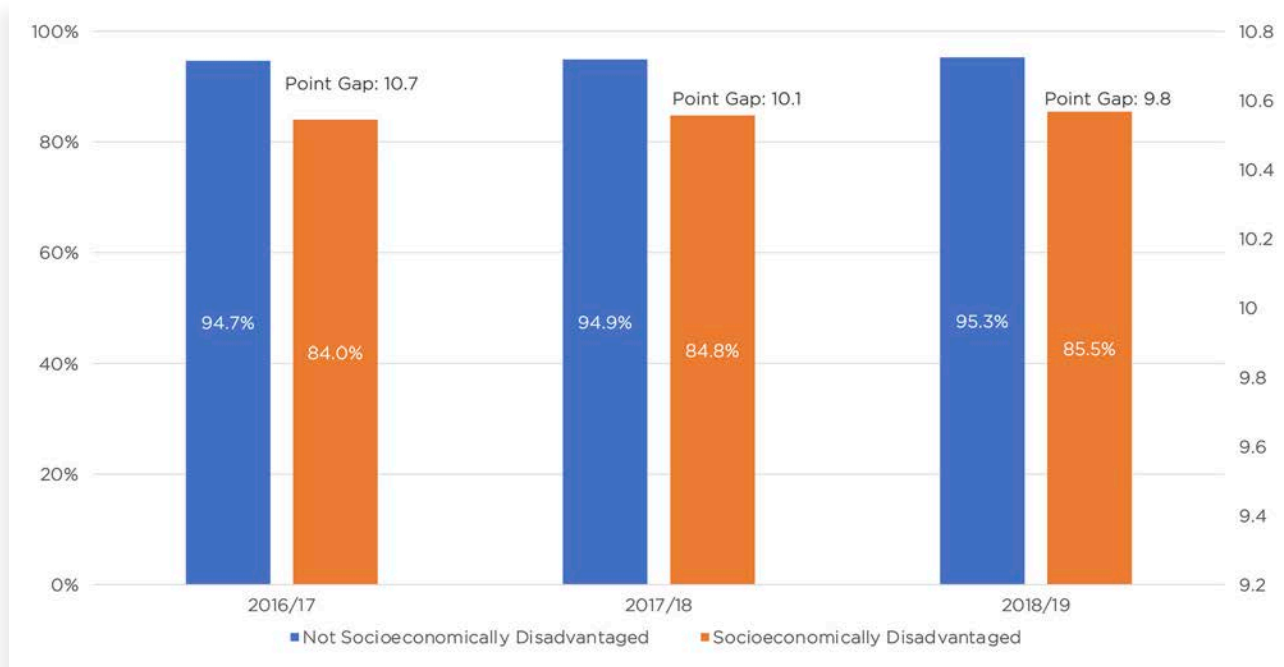
The percentage point gap between the graduation rate of students who are not socioeconomically disadvantaged and those that are (95.3 percent and 85.5 percent, respectively) totaled 9.8, an improvement over the gaps of 10.1 in 2017-18 and 10.7 in 2016-17.





GRADUATION RATE GAP BY SOCIOECONOMIC STATUS CONTINUES TO IMPROVE

FOUR-YEAR ADJUSTED COHORT GRADUATION RATE
BY SOCIOECONOMIC STATUS, 2016-17 TO 2018-19



Source: California Department of Education, DataQuest

DATA NOTES:

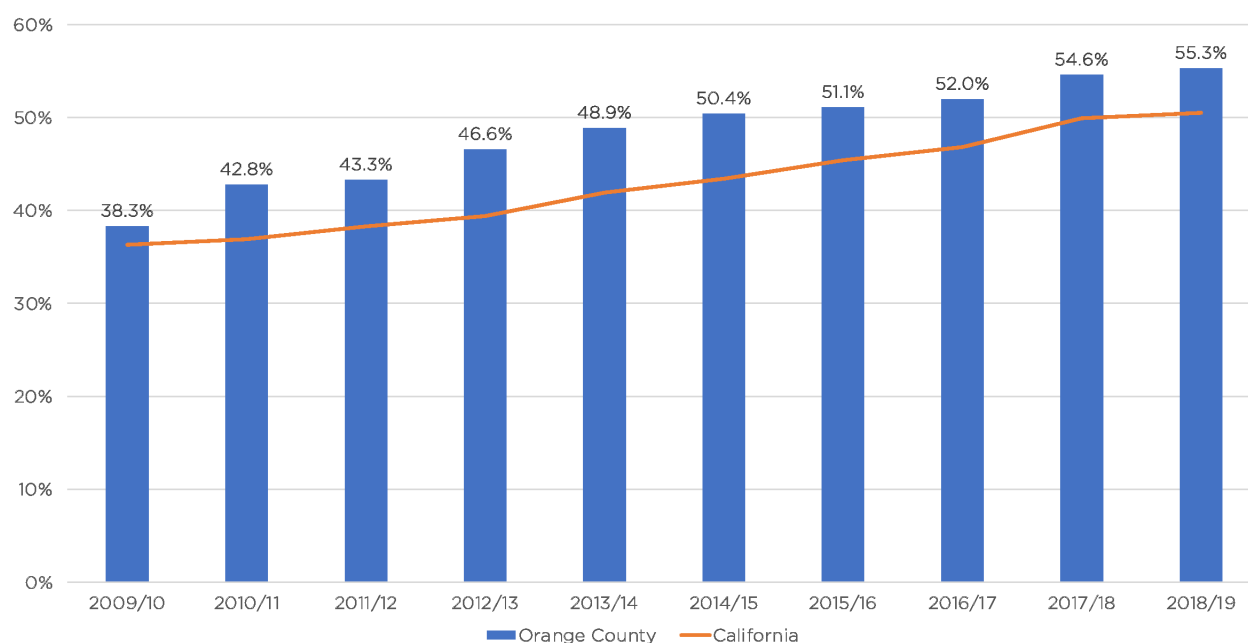
The graduation rate measures the percentage of students who receive a diploma in four years. Due to changes in methodology, four-year adjusted cohort graduation rate data are only available for the 2016/17, 2017/18, and 2018/19 school years. Data are for non-charter schools only, with the exception of the analysis by socioeconomic status, which includes all schools. "Asian" includes Asian, Pacific Islander, and Filipino. "Other" includes Native American/Alaskan Native, African American, two or more races, or not reported. A student is considered socioeconomically disadvantaged if both parents have not received a high school diploma, the student is eligible for Free or Reduced-Price Meals, or the student is a migrant, homeless or foster youth.

COLLEGE AND CAREER READINESS

The percentage of University of California (UC) or California State University (CSU) eligible graduates in Orange County high schools increased from 54.6 percent in 2017-18 to 55.3 percent in 2018-19. This rate is 17 percentage points higher than a decade ago, highlighting the dramatic improvements made by Orange County students.

UC/CSU ELIGIBILITY GROWTH SLOWS

PERCENTAGE OF HIGH SCHOOL GRADUATES THAT ARE UC/CSU ELIGIBLE IN ORANGE COUNTY, 2009-10 TO 2018-19



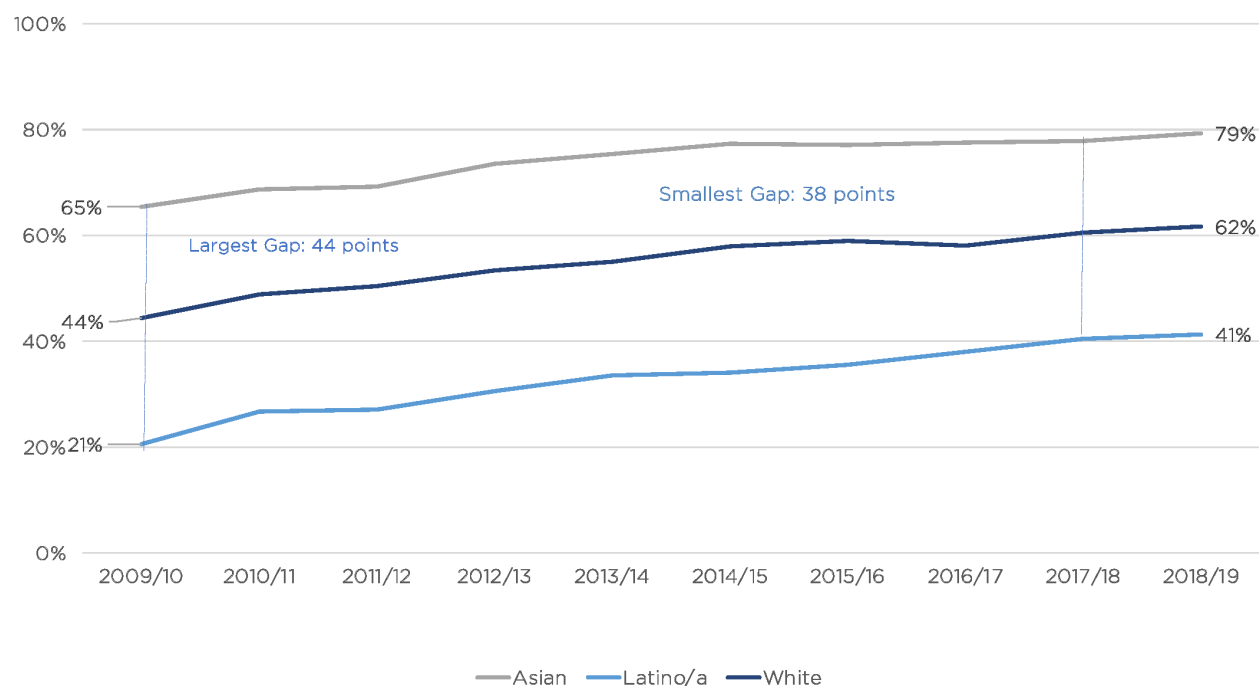
Source: California Department of Education, DataQuest

Further highlighting local student progress, the three largest race/ethnic groups in Orange County – Latino/a, Asian, and White – have seen improvements in their UC/CSU eligibility rates upon graduation. The most substantial improvements have been in the Latino/a community where UC/CSU eligibility improved by over 20 percentage points in 10 years. Overall, Asian students have the highest rate of UC/CSU eligibility at 79 percent, followed by White students (62 percent) and Latino/a students (41 percent).



UC/CSU ELIGIBILITY RISES FOR THREE LARGEST RACE/ETHNIC GROUPS; GAP BETWEEN LATINO AND ASIAN STUDENTS WIDENS SLIGHTLY

PERCENTAGE OF HIGH SCHOOL GRADUATES ELIGIBLE FOR UC/CSU BY RACE/ETHNICITY IN ORANGE COUNTY, 2009-10 TO 2018-19



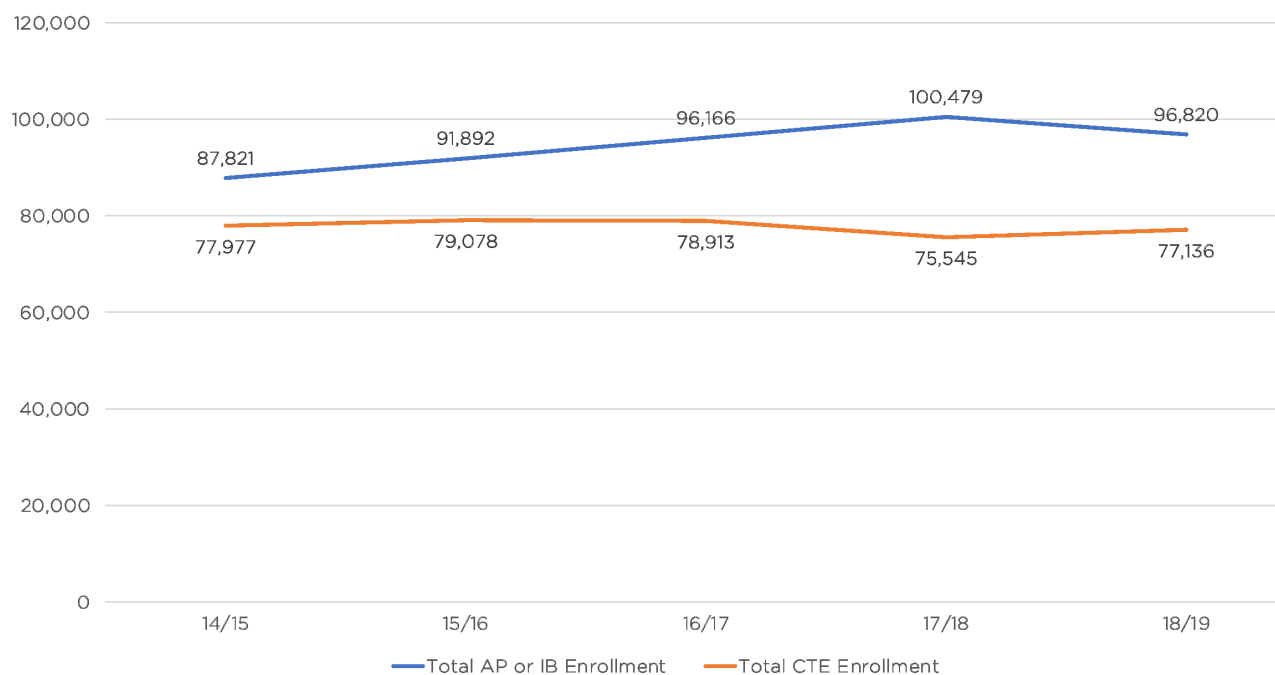
Source: California Department of Education, DataQuest.

Enrollment in Orange County Advanced Placement (AP)/International Baccalaureate (IB) courses and Career Technical Education (CTE) courses diverged in 2018-19, with AP or IB course enrollment shrinking by 4 percent over the past year and CTE course enrollment growing by 2 percent during the same time period. The recent AP/IB declines were largely due to reduced enrollment in Mathematics (-1,188), English Language Arts (-1,130), and Science (-954). Only one AP or IB sector saw an increase in enrollment over the past year – Foreign Languages – where enrollment increased by 247 students, or 3 percent. Increases over the past year in CTE enrollment were primarily seen in Information and Communication Technologies, where enrollment increased by 934 students, or 13 percent.

Over the past five years, AP/IB enrollment increased from 87,821 in 2014-15 to a peak of 100,479 in 2017-18, an increase of 14 percent, before dropping to its 2018-19 total of 96,820. Despite the one-year increase in CTE enrollment in 2018-19, Orange County high school CTE enrollment has declined 1 percent since 2014-15. Only four of the CTE courses available in Orange County saw enrollment increases over the past five years: Engineering and Architecture, Health Science and Medical Technologies, Information Technology, and Agriculture and Natural Resources. These courses, however, represent regional competitive advantages, such as Orange County's strong healthcare sector and its growing information technology base.

CTE ENROLLMENT JUMPS BACK UP; AP/IB ENROLLMENT FALLS

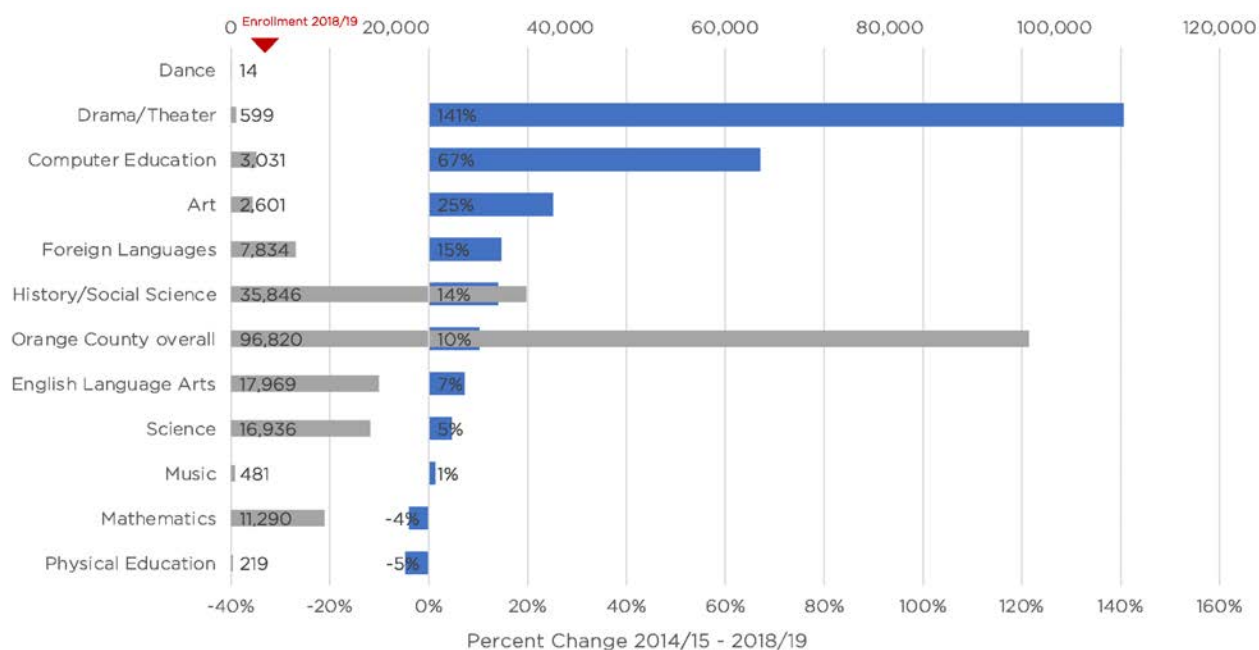
ENROLLMENT IN CAREER-TECHNICAL EDUCATION (CTE) AND IB OR AP COURSES IN ORANGE COUNTY HIGH SCHOOLS, 2014-15 TO 2018-19



Source: California Department of Education, DataQuest

DRAMA AND COMPUTER EDUCATION CONTINUE TO GROW; MATHEMATICS SHRINKS

ENROLLMENT (2018-19) AND CHANGE IN ENROLLMENT (2014-15 TO 2018-19) IN AP OR IB COURSES IN ORANGE COUNTY HIGH SCHOOLS BY SUBJECT



*Dance is a new subject as of 2017-18; therefore, a percent change cannot be calculated.

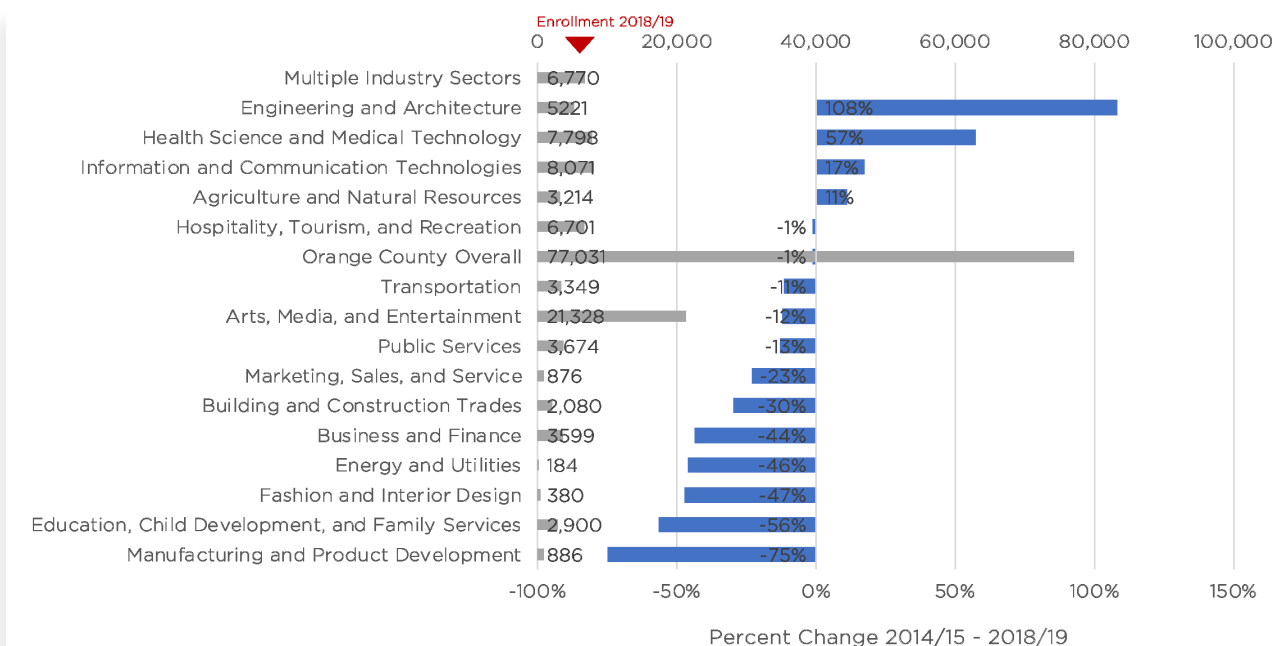
Source: California Department of Education, DataQuest



EDUCATION

CTE COURSE ENROLLMENT REFLECTS OC COMPETITIVE ADVANTAGES

ENROLLMENT (2018-19) AND CHANGE IN ENROLLMENT (2014-15 TO 2018-19) IN CAREER-TECHNICAL EDUCATION (CTE) IN ORANGE COUNTY HIGH SCHOOLS BY INDUSTRY SECTOR



*Multiple Industry Sectors is a new category as of 2017-18 therefore a percent change cannot be calculated.

Source: California Department of Education, DataQuest



DATA NOTES:

UC/CSU data presented by race/ethnicity have been revised since previously reported. UC/CSU data are for public high school graduates who have fulfilled minimum course requirements to be eligible for admission to University of California (UC) or California State University (CSU) campuses.

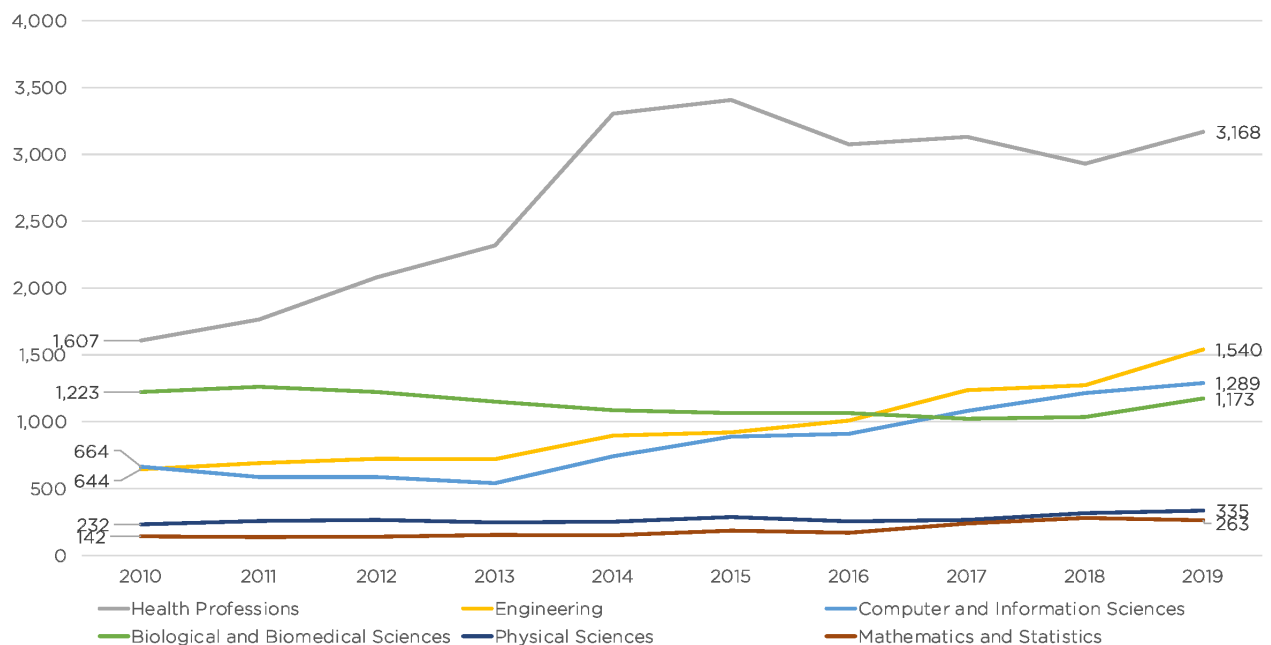
STEM-RELATED DEGREES

STEM-related degrees conferred by Orange County colleges and universities increased by 7 percent between 2018 and 2019 compared to only 4 percent for all degrees (STEM and non-STEM). STEM-related degrees accounted for 31 percent of all degrees granted in 2019, a considerable increase over 23 percent in 2010. Over the past year, STEM-related Bachelor's degrees increased by 10 percent to 7,768, while STEM-related graduate degrees increased by 5 percent, reaching 3,723. Overall, 29 percent of all Bachelor's degrees granted were STEM-related while 34 percent of all graduate degrees granted were STEM-related.

Over the past 10 years, the number of Engineering degrees (undergraduate and graduate combined) has seen the most significant growth, increasing by 127 percent, followed by Mathematics and Statistics, which grew by 106 percent. Over the past year alone, Engineering and Biological and Biomedical Sciences saw the largest increase at 13 and 12 percent, respectively.

NEARLY ALL STEM-RELATED BACHELOR'S DEGREES GROW IN NUMBER; HEALTH PROFESSIONS DRIVE GRADUATE DEGREES

STEM-RELATED BACHELOR'S DEGREES CONFERRED AT ORANGE COUNTY COLLEGES AND UNIVERSITIES, 2010-2019

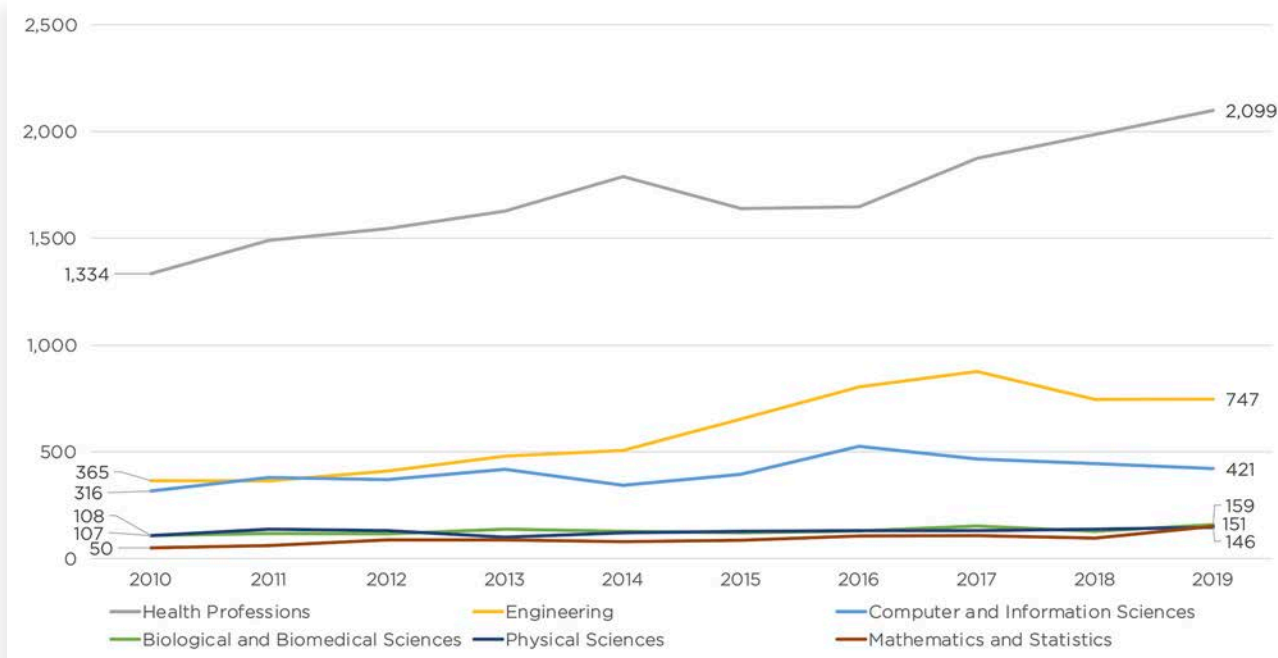


Source: Economic Modeling Specialists International



RECORD NUMBER OF DEGREES GRANTED IN 2019

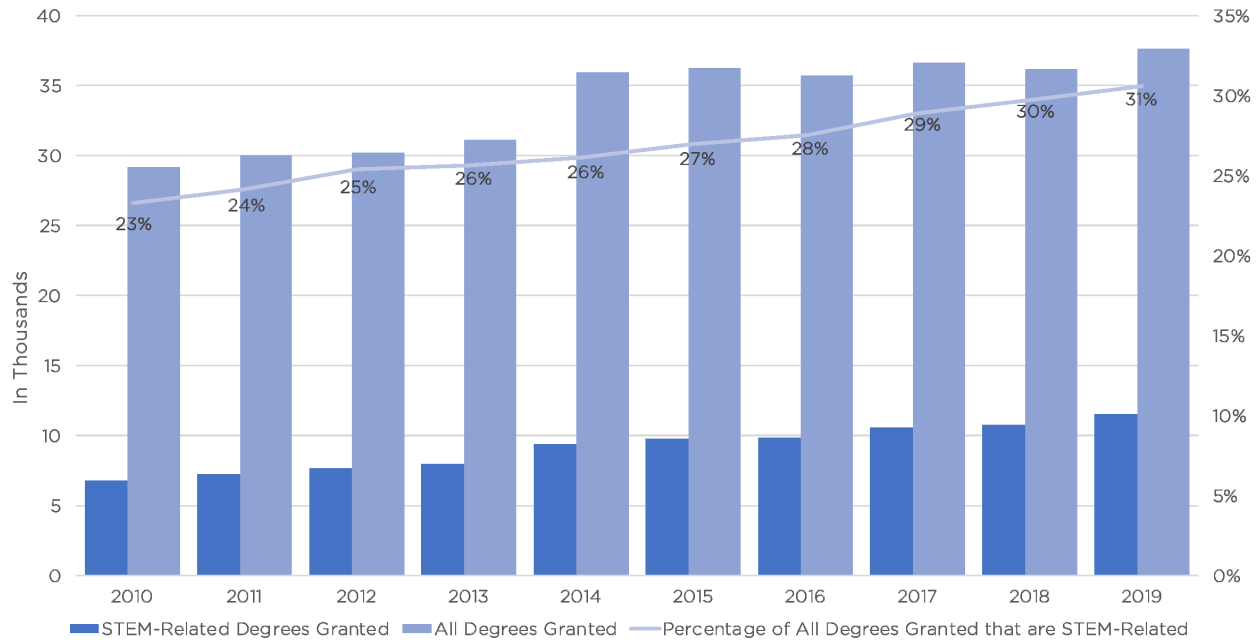
STEM-RELATED GRADUATE DEGREES CONFERRED AT ORANGE COUNTY COLLEGES AND UNIVERSITIES, 2010-2019



Source: Economic Modeling Specialists International



STEM-RELATED DEGREES AS A PROPORTION OF TOTAL DEGREES GRANTED IN ORANGE COUNTY, 2010-2019



Source: Economic Modeling Specialists International

DATA NOTES:

“STEM” degrees are those granted in the fields of science, technology, engineering, and mathematics. Data are inclusive of Bachelor’s, Master’s, and Doctorate degrees granted at public, private, and for-profit 4-year degree granting institutions in Orange County. Data reflect degrees granted in a given school year, where 2019 represents degrees-granted in the 2018/19 school year, for example.

5 for every 100 children

That's how many
licensed child care
slots are available
**in all of Orange
County** for infants and
toddlers age 0 to 2.



If their **PARENTS** are **WORKING**
who's watching **THEM?**

60% OF YOUNG KIDS in
Orange County have both parents working.

ONLY 5% of infants and toddlers under 2 have
availability in licensed child care.

Child care is unaffordable with costs averaging **\$26,150**
PER YEAR for 2 young children in full-time care.



**We need your help. We invite you to join
us in this critically important effort.**

Learn more at www.occhildrenandfamilies.com/childcare



HEALTH

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**ACCESS TO
HEALTH CARE**

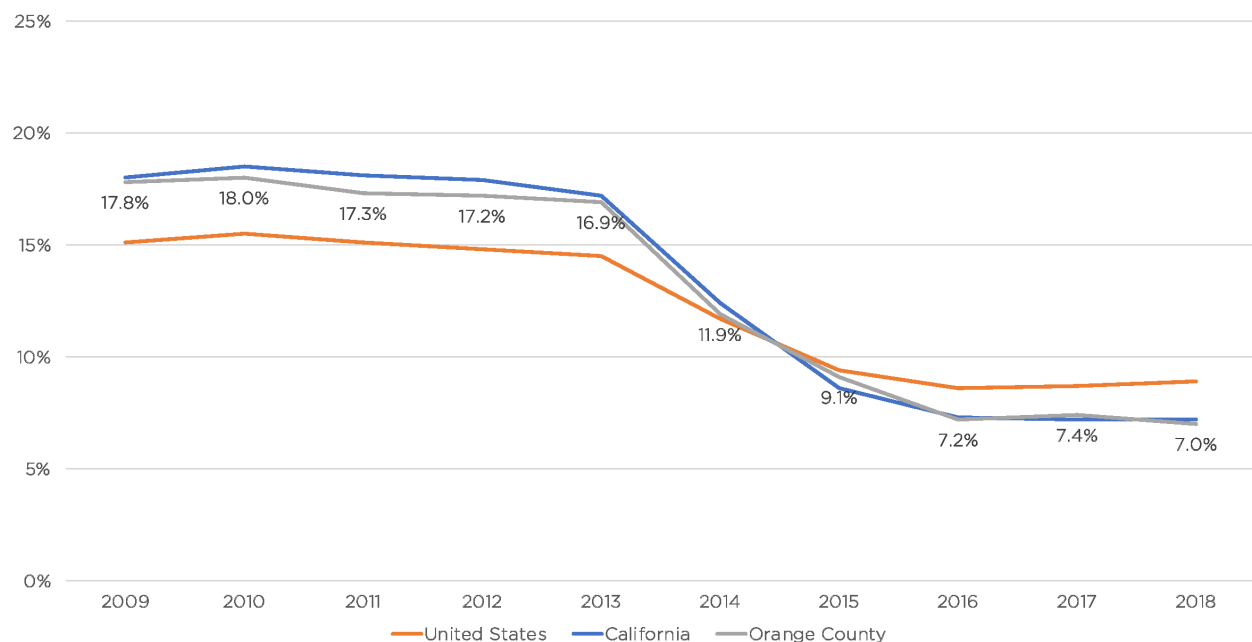


HEALTH CARE ACCESS

Seven (7.0) percent of Orange County residents lacked health insurance in 2018, an improvement of 0.4 percentage points from the previous year. The national rate increased by 0.2 percentage points, while the state rate remained at 7.2 percent. Compared to peer regions, Orange County had the third-lowest rate of uninsured, behind San Francisco (3.5 percent) and Santa Clara (4.1 percent). In Southern California, Orange County had the best performance.

UNINSURED RATES REMAIN RELATIVELY STEADY

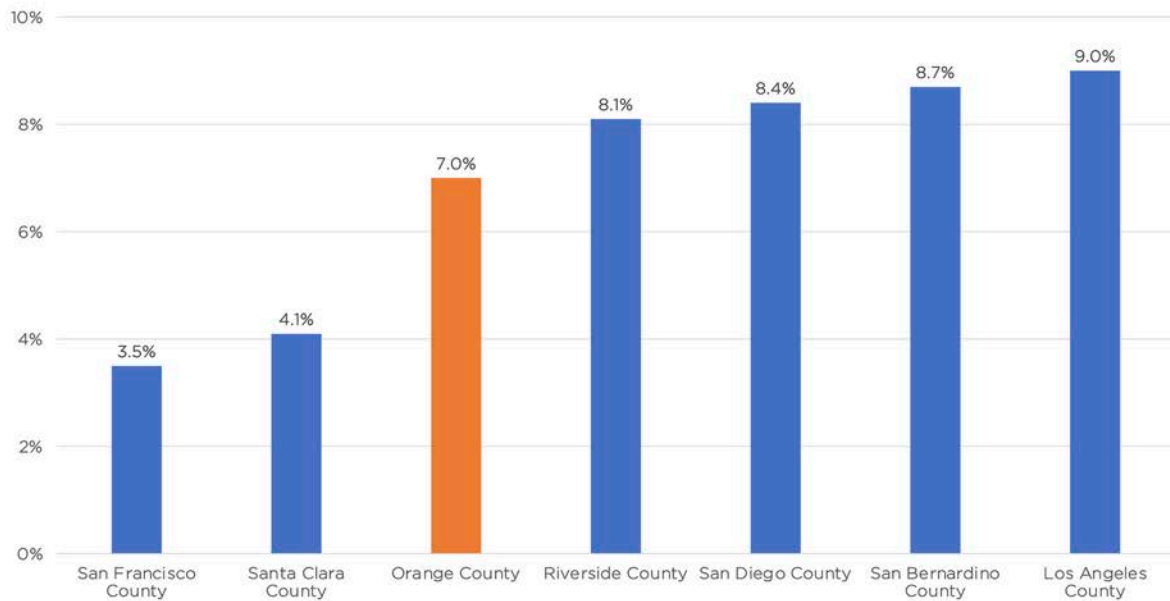
UNINSURED (ALL AGES) IN ORANGE COUNTY, CALIFORNIA,
AND UNITED STATES, 2009-18



Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table S2701



UNINSURED (ALL AGES) IN ORANGE COUNTY AND PEER REGIONS, 2018

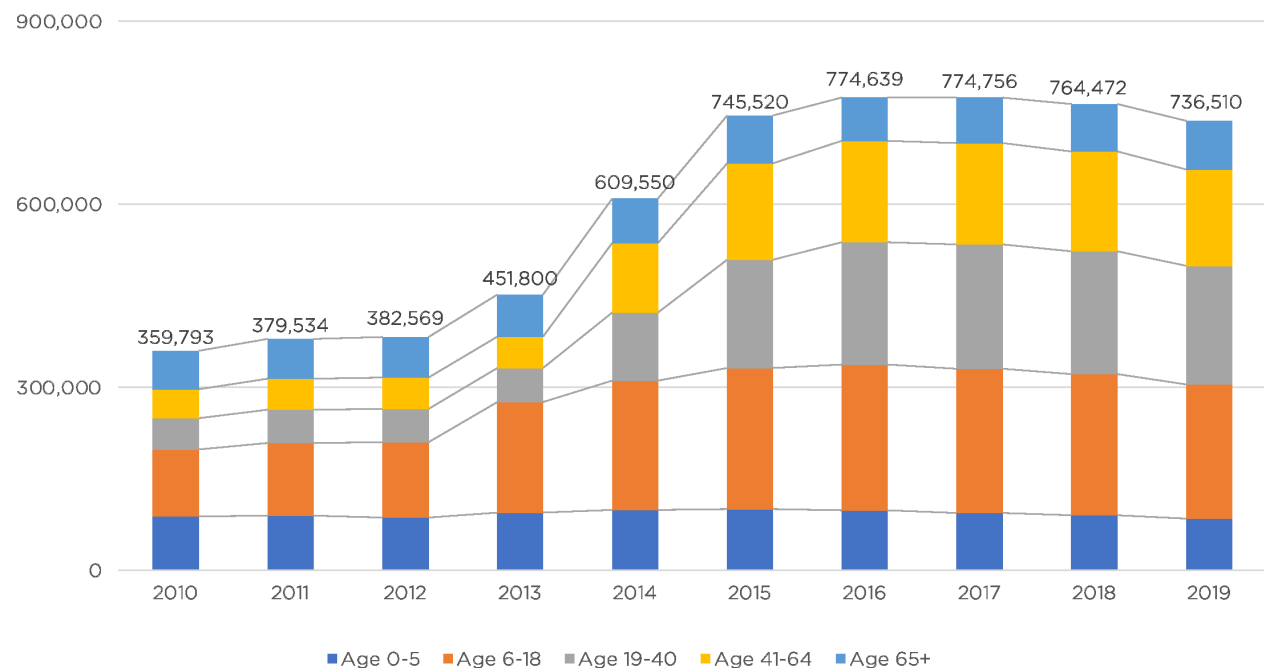


Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table S2701

Orange County Medi-Cal membership peaked at 774,756 in 2017 and fell to 736,510 in 2019. This decline occurred across all age groups except the 65+ group, which saw a 1 percent increase in enrollment between 2018 and 2019. Orange County's 0-5 age group saw a decline of 6 percent, which may be attributable to the declining birth rate.

MEDI-CAL MEMBERSHIP CONTINUES DOWNWARD TREND IN 2019

MEDI-CAL MEMBERSHIP IN ORANGE COUNTY, 2010-19



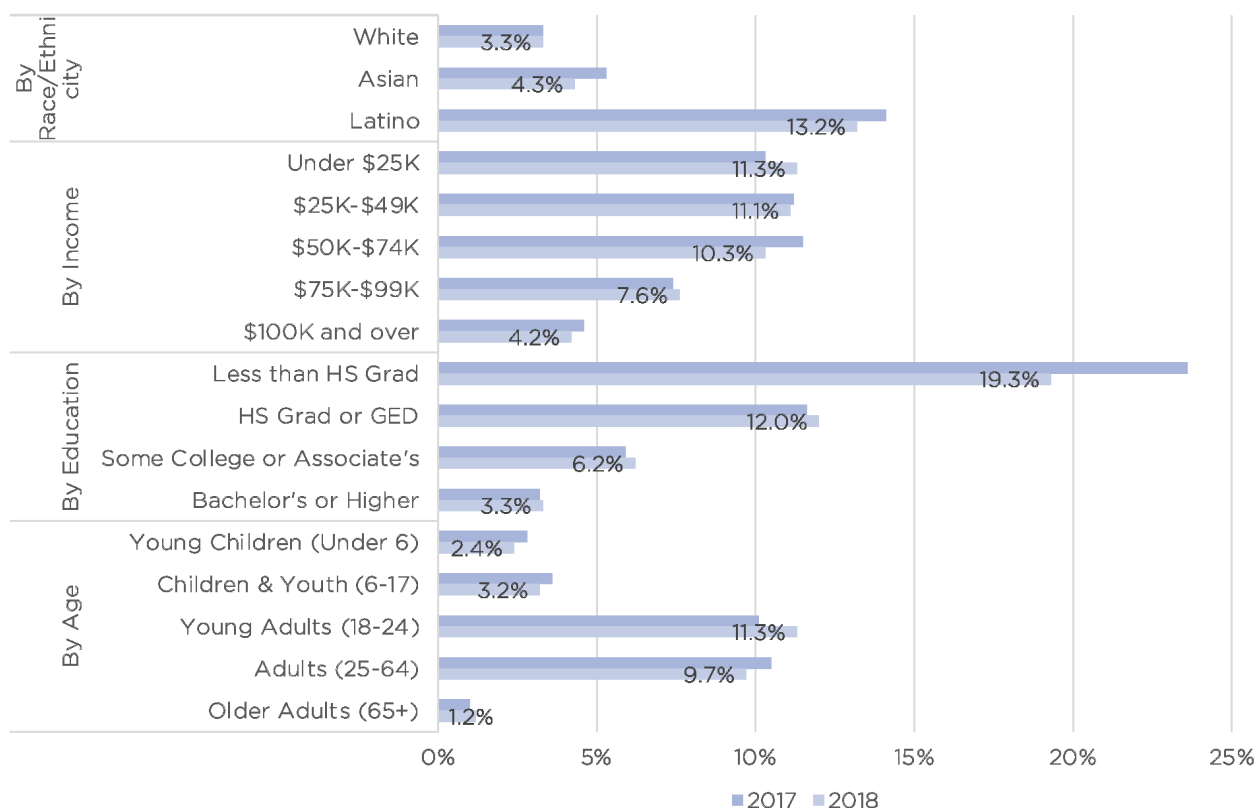
Source: CalOptima



In 2018, 19.3 percent of residents without a high school diploma were uninsured, marking a substantial improvement from the 23.6 percent uninsured in 2017. Despite the improvement, this group is the least likely to be insured compared to the other subgroups shown. Latino residents are the next most likely group to be uninsured, at 13.2 percent of all Latino residents in Orange County in 2018. This is followed by residents whose highest level of education is a high school diploma (12.0 percent uninsured). Young adults (ages 18-24) and people with low income also lack insurance at higher than average rates.

INSURANCE COVERAGE IMPROVES SIGNIFICANTLY FOR RESIDENTS WITHOUT A HIGH SCHOOL DIPLOMA, BUT 1-IN-5 REMAIN UNINSURED

UNINSURED IN ORANGE COUNTY BY RACE/ETHNICITY, INCOME, EDUCATION AND AGE, 2017 AND 2018



Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates, Table S2701

HEALTH & FITNESS

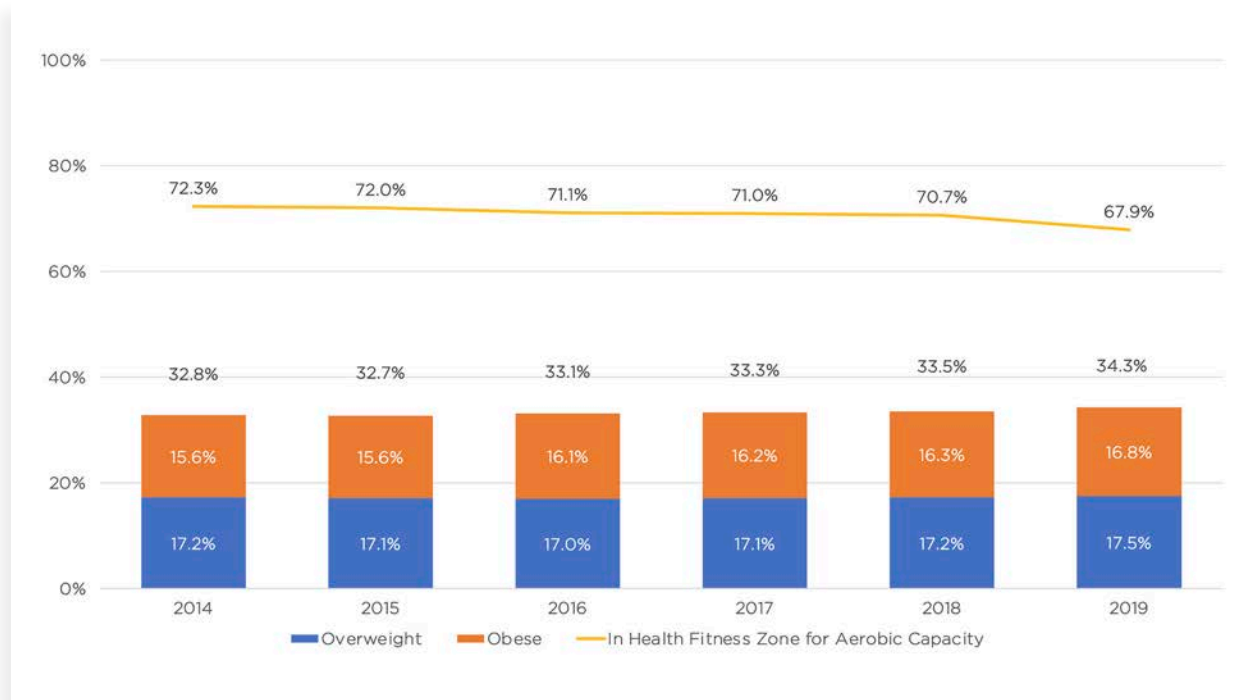
The proportion of overweight or obese students at Orange County schools increased by 0.3 and 0.6 percentage points, respectively, between 2018 and 2019. Overall, approximately 34.3 percent of Orange County students in 5th, 7th, and 9th grades were overweight or obese in 2019, compared to 32.8 percent in 2014.

Laguna Beach, Irvine, and Los Alamitos school districts had the lowest rates of student obesity in 2019, while Santa Ana, Anaheim, and Garden Grove school districts had the highest rates.

The percentage of students in the Health Fitness Zone for Aerobic Capacity – a proxy for physical fitness – declined by 2.8 percentage points in one year, from 70.7 percent of 5th, 7th, and 9th-grade students in 2018 to 67.9 percent in 2019.

ORANGE COUNTY STUDENTS SEE NO IMPROVEMENTS IN FITNESS

PERCENTAGE OF OVERWEIGHT OR OBESE STUDENTS BY SCHOOL DISTRICT IN ORANGE COUNTY, 2019

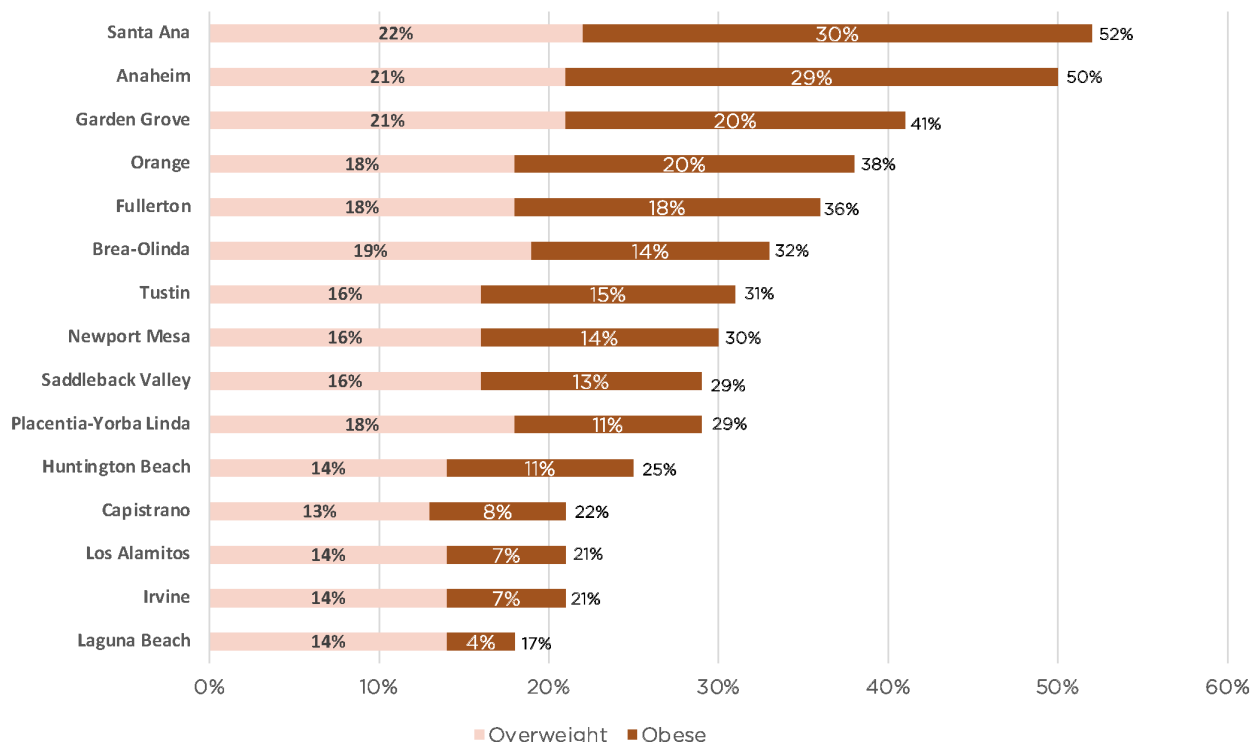


Source: California Department of Education Physical Fitness Test



CENTRAL ORANGE COUNTY SCHOOL DISTRICTS REPORT HIGHEST PROPORTIONS OF STUDENTS WITH OBESITY

PERCENTAGE OF OVERWEIGHT OR OBESE STUDENTS BY SCHOOL DISTRICT IN ORANGE COUNTY, 2019



Source: California Department of Education Physical Fitness Test

DATA NOTES:

The percentage totals of 'overweight' and 'obese' by school district in Orange County may mismatch total sums due to rounding issues.

20 MINUTES OF PHYSICAL ACTIVITY (ADULTS) 5-7 DAYS/WEEK

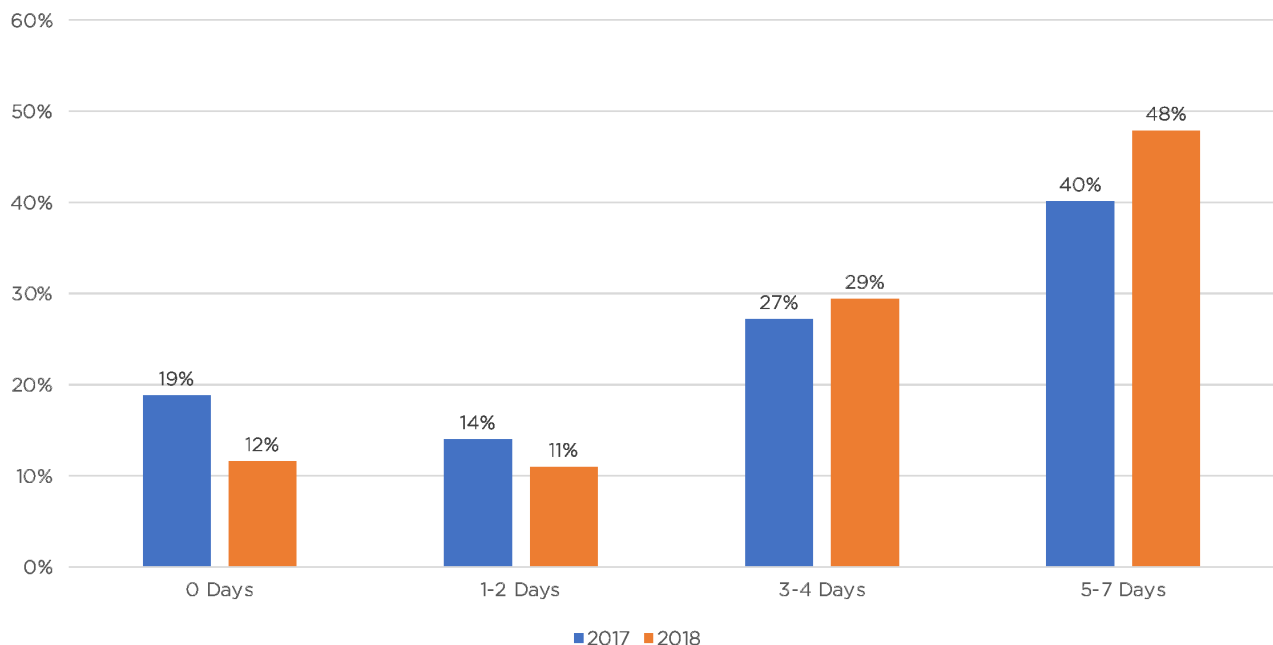


While the physical fitness of children continues to decline, Orange County adults have become increasingly active. The percentage of county adults engaging in at least 20 minutes of physical activity 5-7 days a week increased from 40.1 percent in 2017 to nearly 48 percent in 2018; the percentage of adults engaging in no physical activity declined from 18.8 percent to 11.6 percent over the same time period. California as a whole saw similar improvements, with the percentage of adults engaging in 20 minutes of activity 5-7 days a week increasing from 39.6 percent to 51.2 percent.

Orange County's adult obesity rate fell from 34 percent to 31 percent over the past year, with the percentage of adults at a healthy weight increasing from 43 percent to 47 percent. While obesity rates continue to fluctuate widely year-over-year, the recent rise in healthy weight adults, along with increased rates of physical activity, could potentially signify that residents are increasingly focused on their health.

RESIDENTS BECAME MUCH MORE ACTIVE IN 2018

NUMBER OF DAYS PHYSICALLY ACTIVE AT LEAST 20 MINUTES AT A TIME IN THE PAST SEVEN DAYS FOR ADULTS IN ORANGE COUNTY, 2017-2018

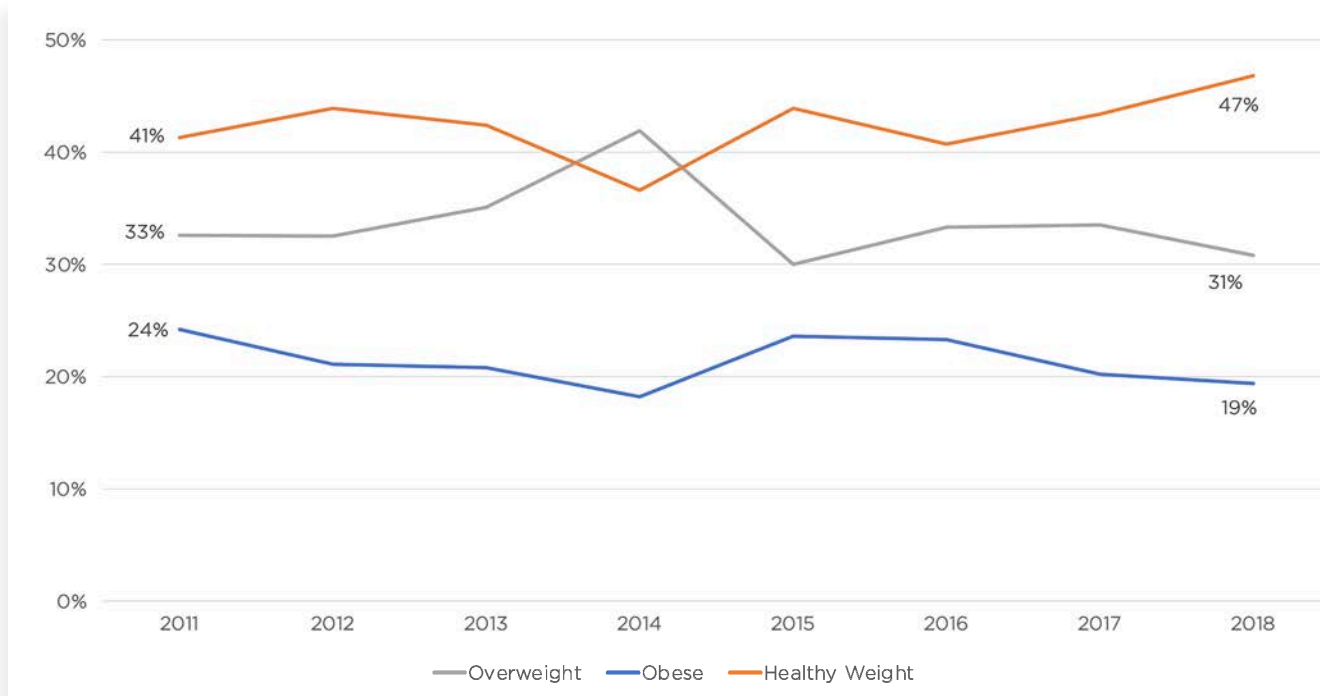


Source: California Health Interview Survey



HEALTHY WEIGHT ADULTS INCREASE TO 47%; NUMBER OF OBESE AND OVERWEIGHT ADULTS DECLINE

WEIGHT STATUS OF ADULTS IN ORANGE COUNTY, 2011-2018



*Percentages do not sum to 100 percent due to the omission of “underweight,” which is statistically unstable.

Source: California Health Interview Survey

DATA NOTES:

Overweight and obesity data for students is determined by skinfold measurements, bioelectric impedance analyzer, and/or body mass index; data for adults is determined by self-reported body mass index. Aerobic capacity for students is determined by 20-meter PACER (Progressive Aerobic Cardiovascular Endurance Run), one-mile run, and/or walk test (only for ages 13 or older). For the physical activity measure for adults, survey respondents (who could walk) were asked, “In the past 7 days, on how many days did you exercise for at least 20 minutes at a time?” Anaheim, Fullerton, and Huntington Beach represent combined data of the high school districts and their feeder elementary school districts. Charter schools and Orange County Department of Education alternative programs are not included. State and county weight status data are sourced to the California Health Interview Survey.

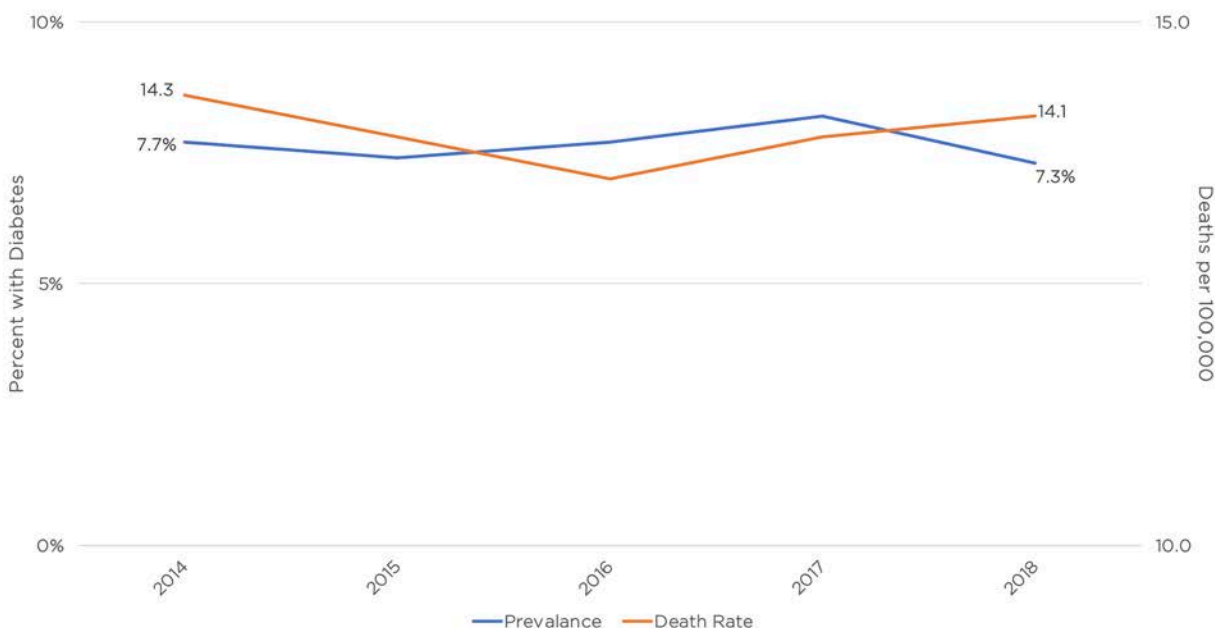
CHRONIC DISEASE

Four modifiable health risk behaviors – a sedentary lifestyle, poor nutrition, tobacco use, and excessive alcohol consumption – contribute to much of the illness, suffering, and early death from chronic diseases. Deaths due to diabetes and strokes increased in Orange County from 2017-18, while the death rate due to heart disease continued a five-year decline despite a recent uptick in prevalence rates. The death rate for chronic lower respiratory disease dropped marginally by 0.4 percentage points. Orange County's prevalence of diabetes declined from 8.2 percent in 2017 to 7.3 percent in 2018, while the prevalence of asthma remained 11.8 percent. Prevalence rates for high blood pressure jumped by two percentage points to 26.8 percent during the same time period.

It is important to note that COVID-19 has been especially hard on individuals with pre-existing conditions, especially respiratory and heart disease issues. Therefore, identifying these at-risk populations and providing appropriate care and services should be a priority.

STROKE AND DIABETES DEATHS INCREASE; HEART DISEASE AND RESPIRATORY DEATHS DECLINE

DIABETES PREVALENCE AND DEATH RATE
IN ORANGE COUNTY, 2014-2018



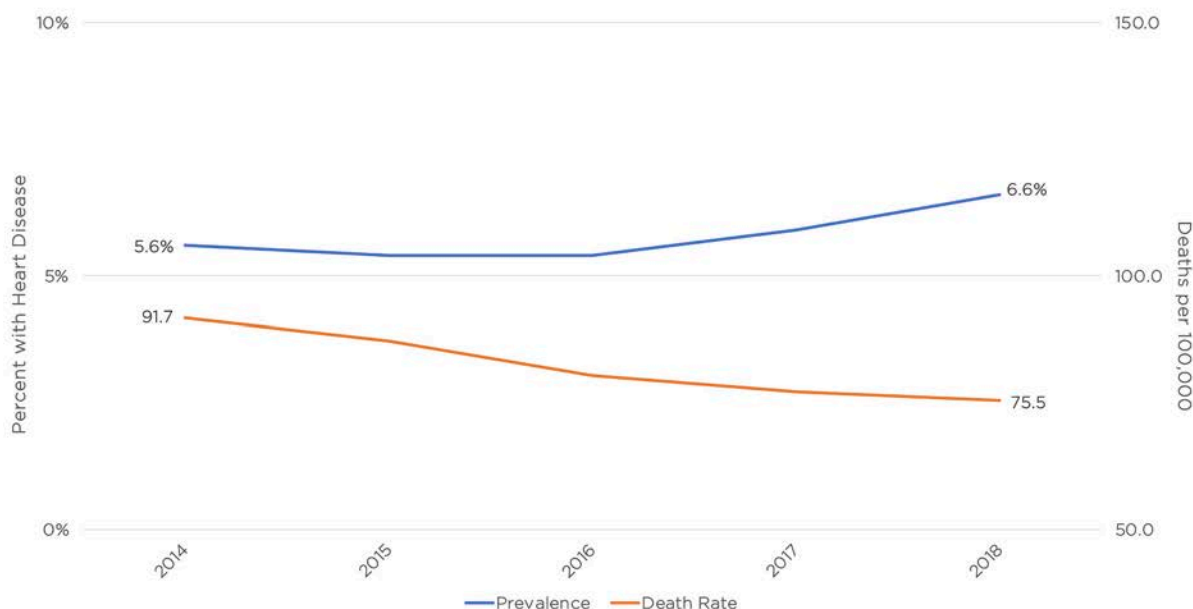
Sources: California Health Interview Survey; California Department of Public Health, County Health Status Profiles



DIABETES

The rate of adults with diabetes declined by 0.9 percentage points in 2018 (to 7.3 percent), while the death rate recorded a slight increase of 0.2 percentage points (to 14.1 percent). This is the lowest prevalence rate measured over the past five years.

HEART DISEASE PREVALENCE AND DEATH RATE IN ORANGE COUNTY, 2014-2018



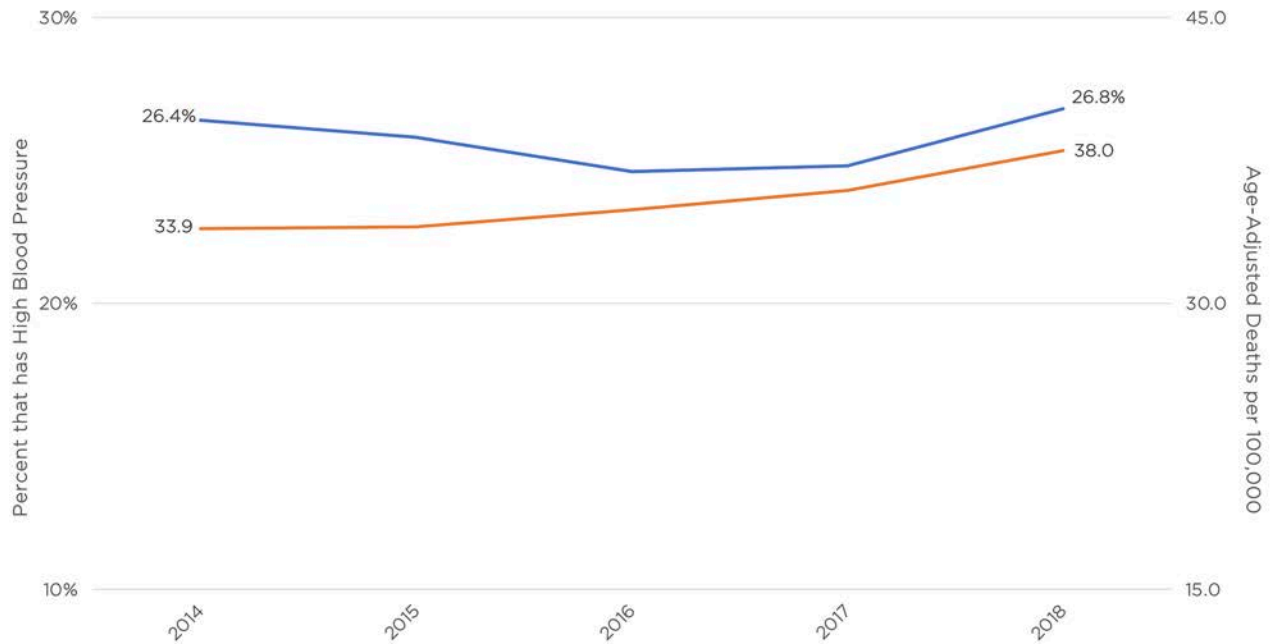
Sources: California Health Interview Survey; California Department of Public Health, County Health Status Profiles

HEART DISEASE

The rate of Orange County adults with heart disease increased from 5.9 percent in 2017 to 6.6 percent in 2018, while the death rate declined from 77.2 to 75.5 during the same time period. While the death rate in 2018 was the lowest measured over the past five years, the prevalence rate was the highest over that period.



HIGH BLOOD PRESSURE PREVALENCE AND STROKE DEATH RATE IN ORANGE COUNTY, 2014-2018



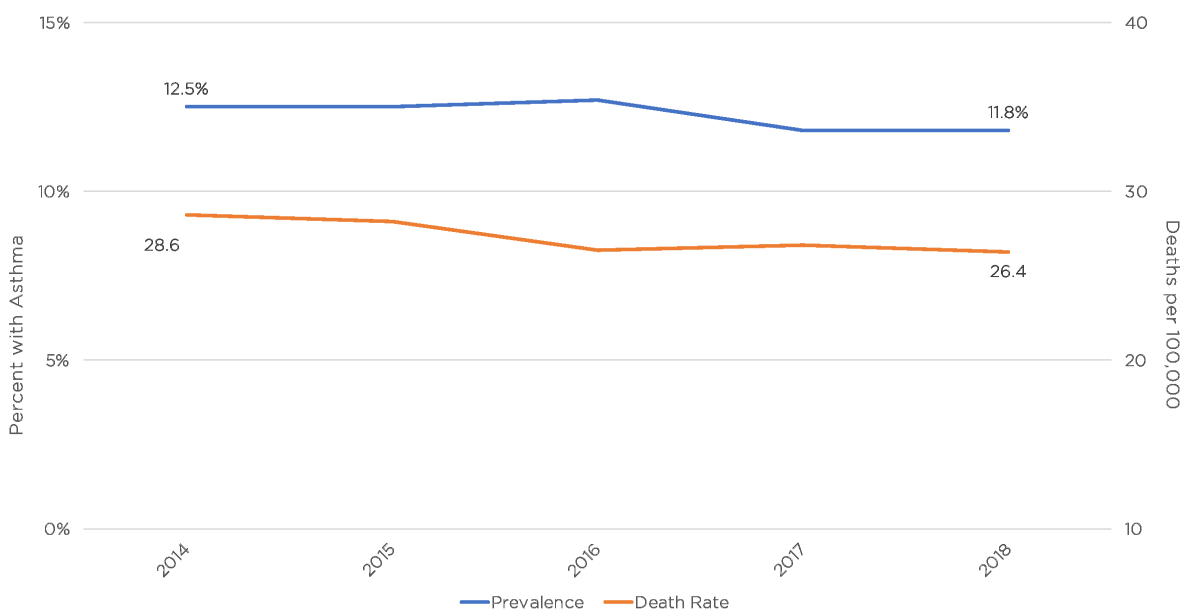
Sources: California Health Interview Survey; California Department of Public Health, County Health Status Profiles

HIGH BLOOD PRESSURE/STROKE

The prevalence of high blood pressure (the most important treatable risk factor for stroke) in Orange County climbed to a five-year high of 26.8 percent; the death rate also reached a high of 38 percent during the same time period. The county's death rate for stroke has increased by 12 percent over the past five years.



ASTHMA PREVALENCE AND CHRONIC LOWER RESPIRATORY DISEASE DEATH RATE IN ORANGE COUNTY, 2014-2018



Sources: California Health Interview Survey; California Department of Public Health, County Health Status Profiles

ASTHMA/CHRONIC LOWER RESPIRATORY DISEASE

Asthma prevalence remained steady at 11.8 percent in 2018, well below the rate of 12.5 percent measured in 2014. The death rate from chronic lower respiratory disease dropped by 8 percent during the same time period.

CHRONIC DISEASE PREVALENCE IN CHILDREN

Epidemiologic studies suggest that as many as one out of four children in the U.S., or 15 to 18 million children age 17 years and younger, suffer from a chronic health problem. In the U.S. alone, nine million children suffer from asthma, and approximately 13,000 children are diagnosed with type 1 diabetes annually. As many as 200,000 children nationwide live with either type 1 or type 2 diabetes. Type 2 diabetes is still extremely rare in children and adolescents (0.22 cases per 1,000 youth), but these rates are increasing rapidly with rising obesity rates.

Source: Compas, B. E., et. al. (2012). *Coping with Chronic Illness in Childhood and Adolescence. Annual Review of Clinical Psychology*

DATA NOTES:

Prevalence and death data reflect rolling (overlapping) three-year averages. For example, “2015” is an average of 2013, 2014, and 2015 data, and “2014” is an average of 2012, 2013, and 2014 data. The death data shown are age-adjusted rates, which controls for regional variability in age composition.

MENTAL HEALTH AND SUBSTANCE ABUSE

Over the past decade, Orange County's overall hospitalization rate for mental health-related issues declined by approximately 3 percent. Rates, however, vary greatly by age group. The hospitalization rate of county children and youth (ages 0-17) has increased significantly by 57 percent since 2009, while that of older adults (aged 65+) has declined by 26 percent over the same period. Depression and mood disorder hospitalizations continue to drive mental health hospitalizations in children and youth.

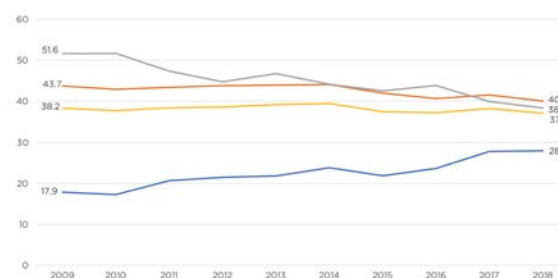
Since 2009, Orange County has seen substance abuse-related hospitalizations increase by 17 percent, primarily driven by a 20 percent increase in adults (ages 18 to 64) and a 10 percent increase in older adults. Children and youth saw their rate decline by 56 percent over the same time period.

In total, the mental health and substance abuse-related hospitalization rate in Orange County was 50 per 10,000 residents in 2018, a decline of 2.5 percent over 2017, but an increase of 1.5 percent from a decade ago. Since 2009, this rate has increased by 50 percent for children and youths while declining by 21 percent in older adults. The rate for adults has declined by 1.4 percent over the same time period.

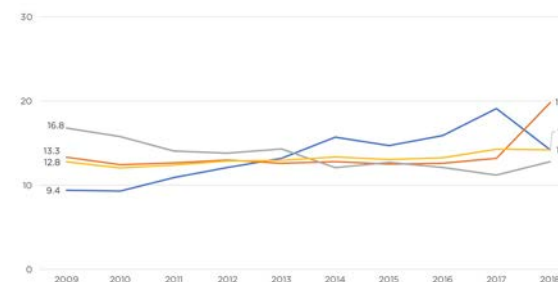
ADULTS EXPERIENCE SHARP RISE IN DEPRESSION AND MOOD DISORDER HOSPITALIZATIONS

Children and Youth Adults Older Adults All

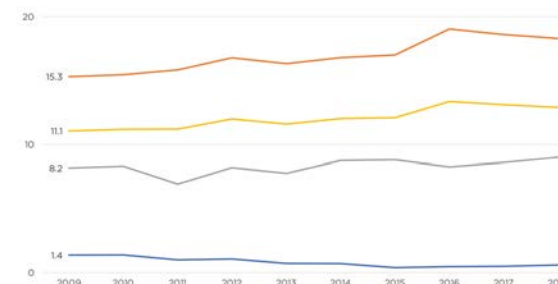
Overall Mental Illness Hospitalizations per 10,000 by Age in Orange County, 2009-2018



Major Depression and Mood Disorder Hospitalizations per 10,000 by Age in Orange County, 2009-2018



Substance Abuse Hospitalizations per 10,000 by Age in Orange County, 2009-2018



Sources:

Office of Statewide Health Planning & Development Patient Discharge Data prepared by Orange County Health Care Agency, Research and Planning;

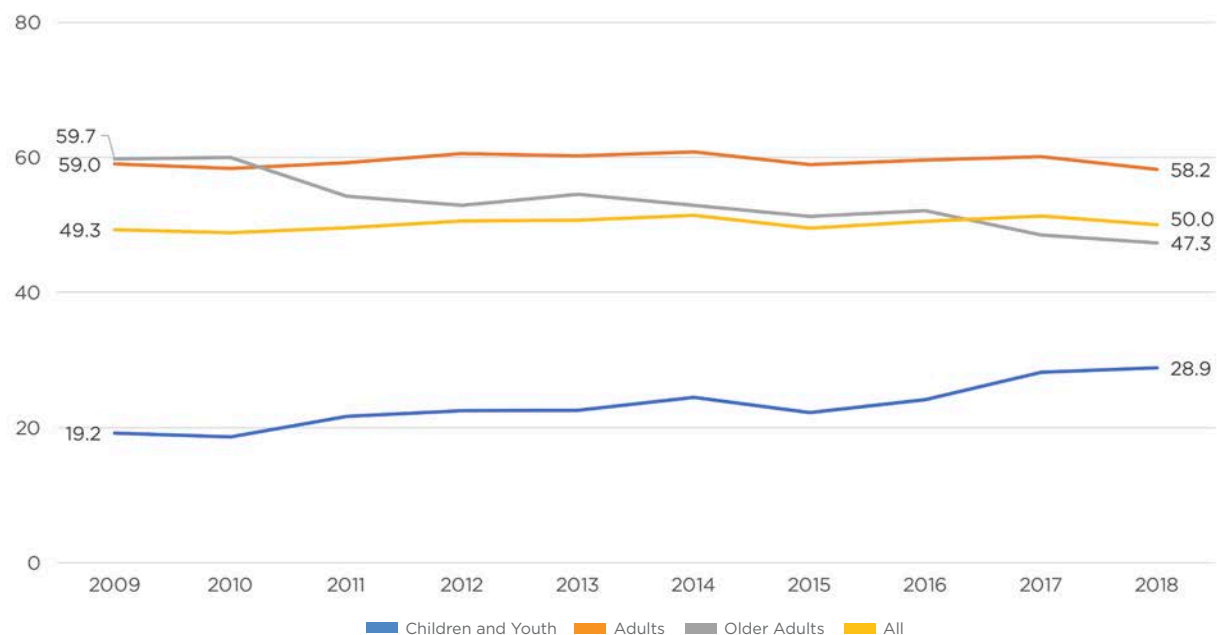
California Department of Finance;

U.S. Census Bureau, American Community Survey



CHILDREN AND YOUTH SEE STEADY RISE IN MENTAL HEALTH AND SUBSTANCE ABUSE DEATHS

MENTAL HEALTH AND SUBSTANCE ABUSE-RELATED DEATHS PER 100,000 IN ORANGE COUNTY, 2009-2018



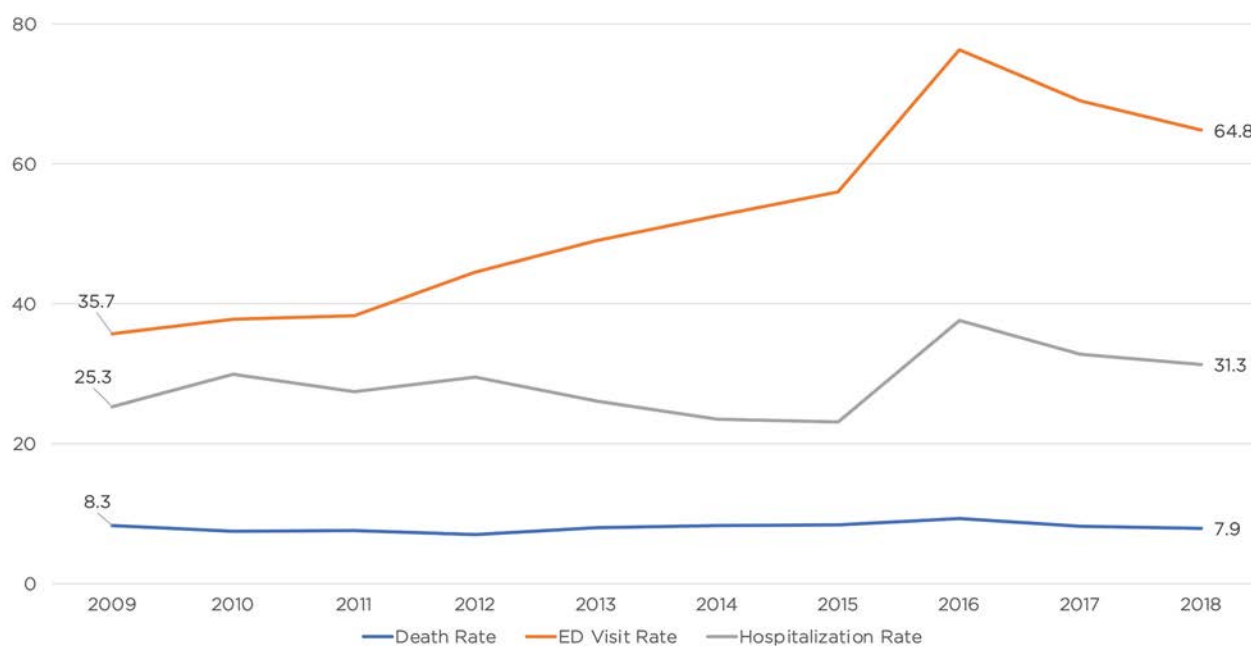
Source: California Department of Public Health, County Health Status Profiles



OPIOIDS IN ORANGE COUNTY

- Drug overdose deaths in the nation decreased by 4.1 percent from 2017 to 2018.
- Opioids were involved in 70 percent of all drug overdose deaths in the U.S., and 67 percent of opioid-involved overdose deaths involved synthetic opioids.
- 45 percent of 2018 overdose deaths in California involved opioids, a total of 2,400 fatalities.
- California deaths involving heroin rose to 778 in 2018, while deaths involving prescription opioids continued to trend downward, totaling 1,084 in 2018.
- Orange County's emergency department (ED) visit rate for opioid overdose or abuse increased 82 percent since 2009, while hospitalizations increased 24 percent.
- Opioid-related emergency visits and hospitalizations in Orange County declined by 4 and 6 percent, respectively, from 2017 to 2018.
- The opioid-related death rate in Orange County decreased by 5 percent over the past decade and 4 percent over the past year.

RATE OF OPIOID-RELATED EMERGENCY DEPARTMENT (ED) VISITS, HOSPITALIZATIONS, AND DEATHS IN ORANGE COUNTY, 2009-18



Sources: California's Office of Statewide Health Planning and Development Emergency Department and Patient Discharge Data (ED/hospitalization data); CDC Wonder (death data)



SAFETY

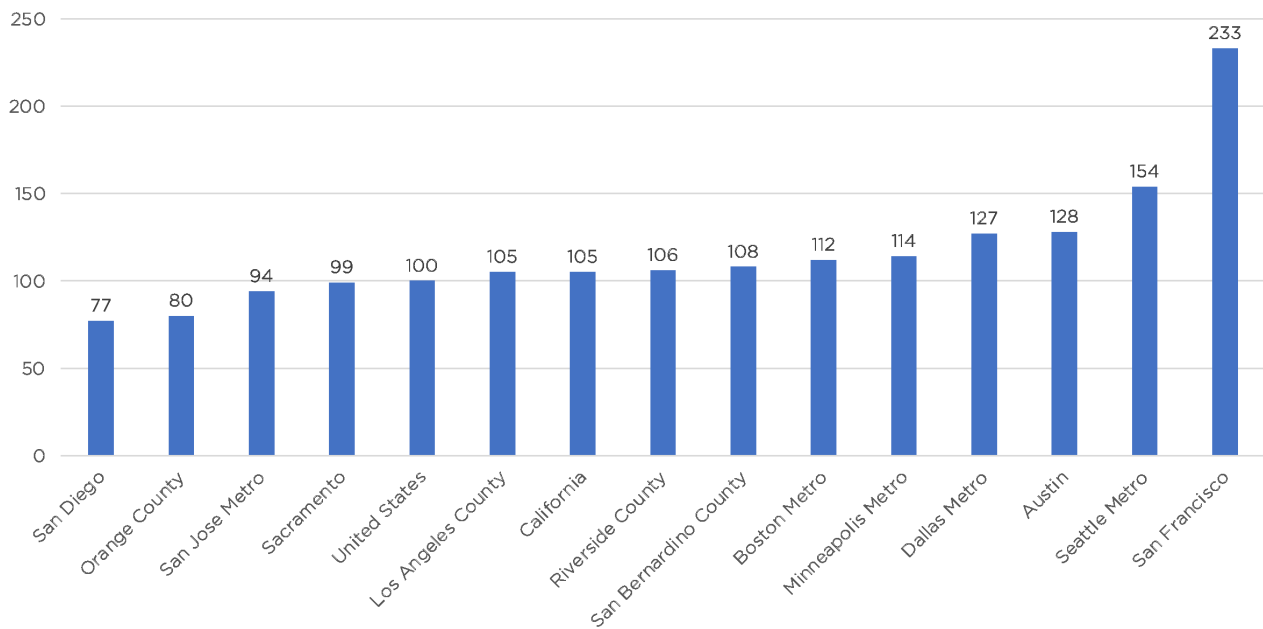
ORANGE COUNTY
CONTINUES TO BE
**A STATEWIDE
SAFETY LEADER**



CRIME RATE

Orange County's crime rate index increased slightly from 77 in 2019 to 80 in 2020 but was still well below the national average of 100 and the state crime index of 105. Orange County was second to only San Diego County (77) when compared to peer regions. The crime rate increased in a number of areas, including San Francisco, which jumped from 212 to 233, and the Seattle Metro, which increased from 150 to 154.

ORANGE COUNTY PEER REGION CRIME INDEX COMPARISON, 2020



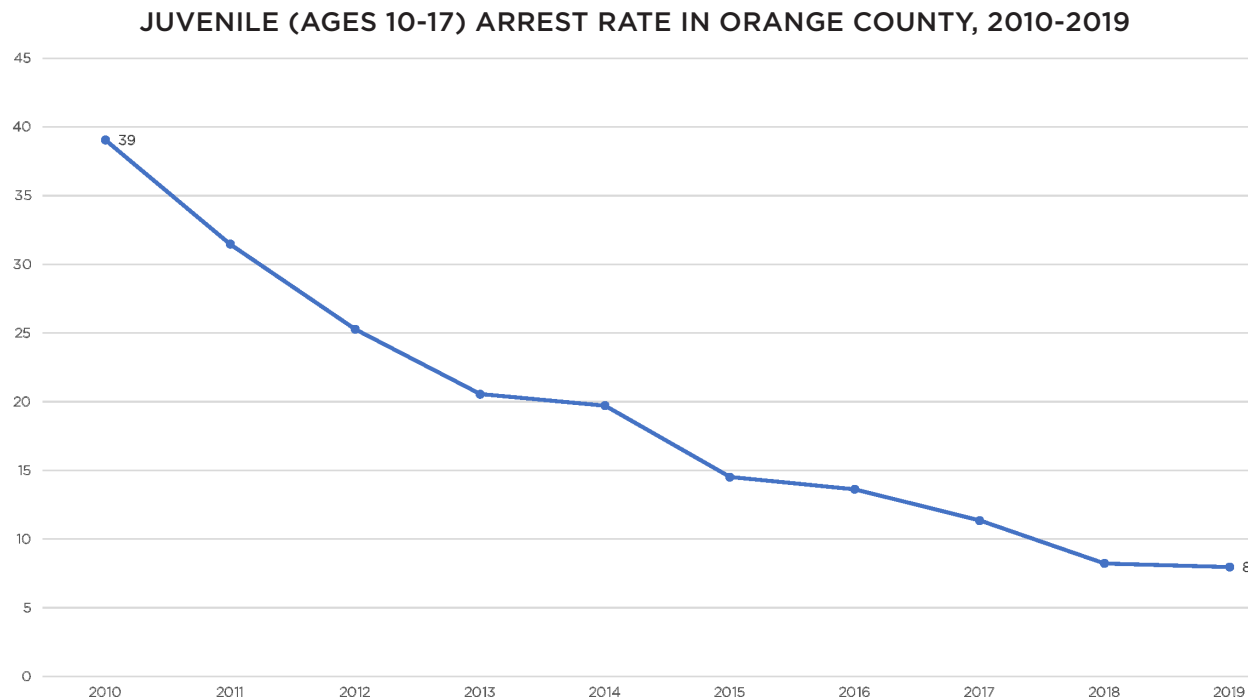
NOTE: An index value of 100 represents the national average. The crime index is a compilation and analysis of the FBI Uniform Crime Report 2010-2020 databases prepared by Applied Geographic Solutions (AGS).

Source: Esri Crime Index, 2020



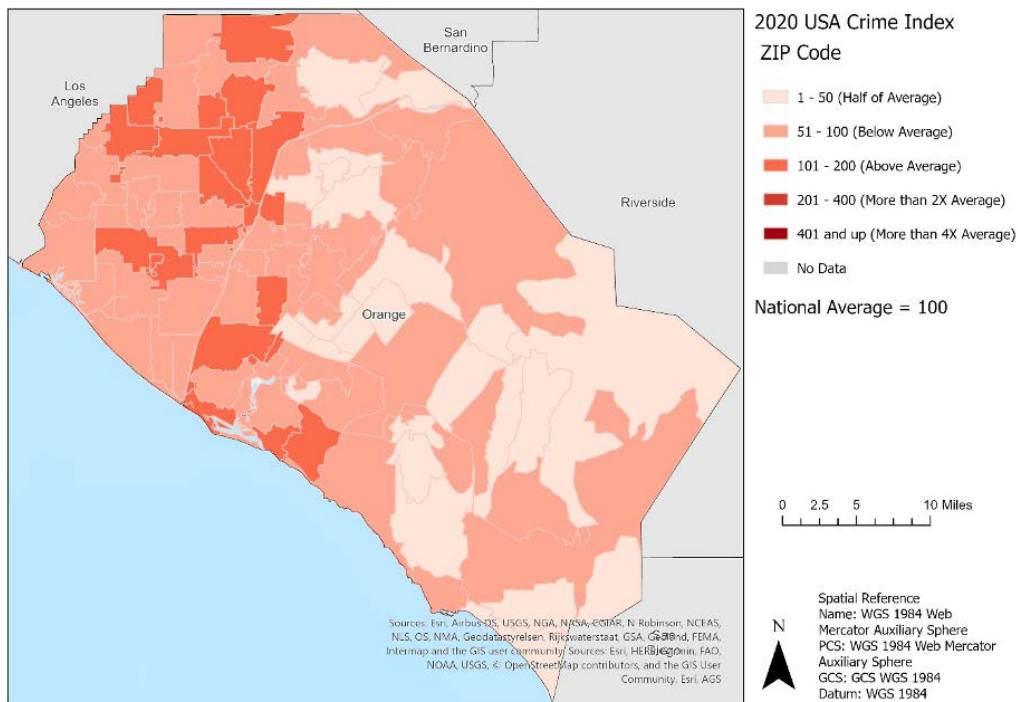
In 2019, there were 8 arrests per 1,000 juveniles (10-17 years) in Orange County, significantly below the rate of 39 measured in 2010. Orange County's juvenile arrest rate was lower than the statewide total of 10 per 1,000 juveniles.

JUVENILE ARRESTS CONTINUE STEADY DECLINE



Source: California Department of Justice, Criminal Justice Statistics Center; California Department of Finance

ORANGE COUNTY CRIME INDEX BY ZIP CODE





INFRASTRUCTURE

INTERNET ACCESS
**DRIVEN BY
COVID-19**

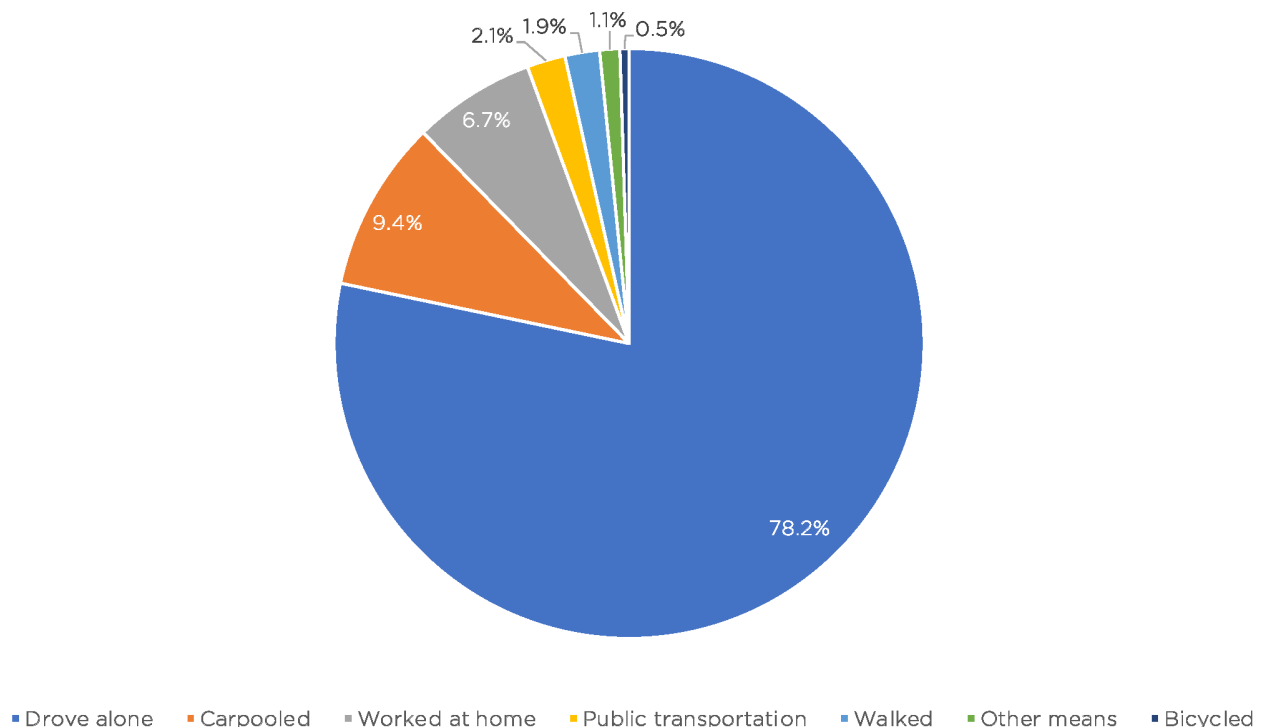


TRANSPORTATION

In 2018, 78.2 percent of Orange County residents age 16 and over drove to work alone; this figure has not changed significantly in more than a decade. The second most common mode of travel to work, carpooling, has also not changed significantly in 10 years and accounted for 9.4 percent of commuters in 2018. Meanwhile, working at home, the third most common mode of travel, has grown rapidly, from 4.9 percent of commuters in 2009 to 6.7 percent of commuters in 2018. While U.S. Census Bureau statistics are not yet available for 2020, working at home spiked in 2020 due to widespread stay-at-home orders. Whether this massive shift to working at home will persist after the threat of COVID-19 subsides remains to be seen. All other means of commuting – including public transportation, rideshare or taxi, walking, or bicycling – make up less than 6 percent of all commuters.

AFTER DRIVING ALONE, CARPOOLING AND WORKING AT HOME ARE MOST COMMON COMMUTE MODES

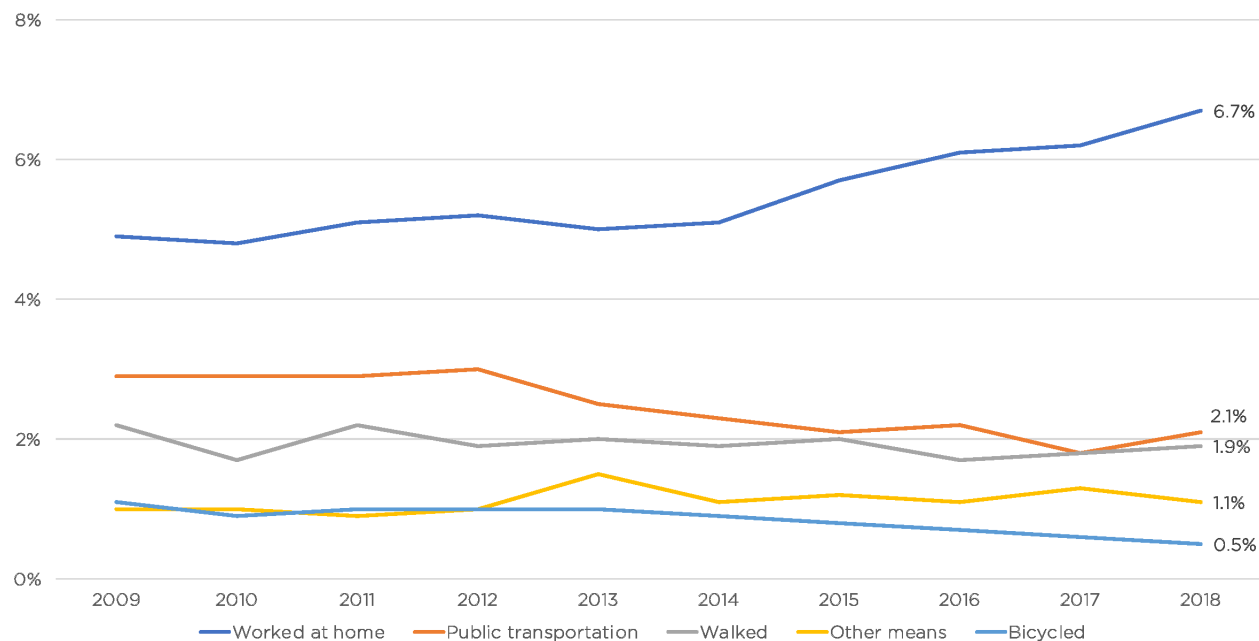
MODE OF TRAVEL TO WORK IN ORANGE COUNTY, 2018



Source: U.S. Census Bureau, 2018 American Community Survey, 1-Year Estimates

WORKING AT HOME INCREASING EVEN BEFORE COVID-19

SELECTED MODES OF TRAVEL TO WORK
IN ORANGE COUNTY, 2009-2018



Source: U.S. Census Bureau, 2009-2018 American Community Survey, 1-Year Estimates

Traffic congestion and the ongoing decline in transit ridership had begun to worsen well before the pandemic due to an increasing number of people who work in Orange County but live in more affordable, neighboring regions. Due to a myriad of factors, including COVID-19, transit ridership faces an uncertain future.

In 2019, the average Orange County traveler experienced 15.1 hours in freeway traffic congestion, up from 2018, when the average annual delay was 13.4 hours. In 2018, Orange County posted less traffic delay than its peers, except for the Inland Empire. Over the past ten years, the average annual delay has fluctuated from a high of 18.5 hours in 2015 to a low of 13.0 hours in 2012. It is possible that this year could improve on that figure. The average delay fell to just 4.2 in the first half of 2020, reflecting the lockdown and rise of telecommuting.

The flow of traffic in Orange County's carpool lanes has improved since hitting a peak in 2015. According to Caltrans, 77 percent of Orange County's carpool lanes were congested in 2017, down from 81 percent in 2015.

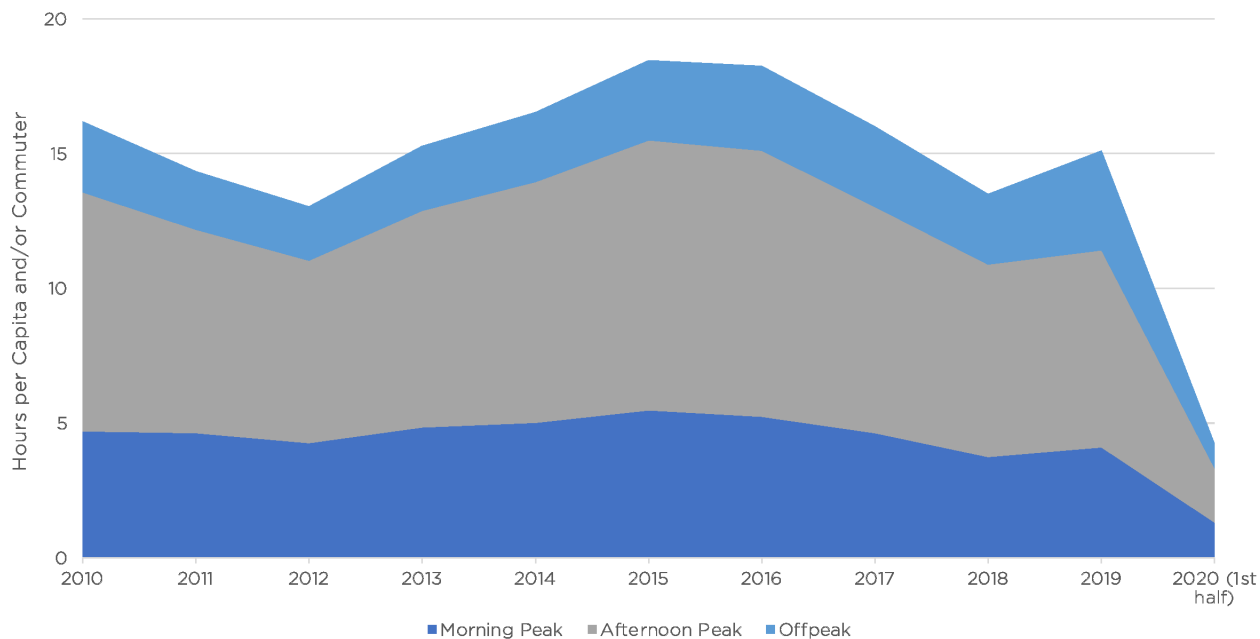
After remaining relatively flat through the Great Recession, car ownership in Orange County began to rise again in 2012. Overall, car ownership grew 18 percent between 2010 and 2019.



INFRASTRUCTURE

FREEWAY DELAYS INCREASING UNTIL COVID-19 HIT

ANNUAL HOURS OF FREEWAY DELAY PER CAPITA OR COMMUTER IN ORANGE COUNTY, 2010-2020 (1ST HALF ONLY)



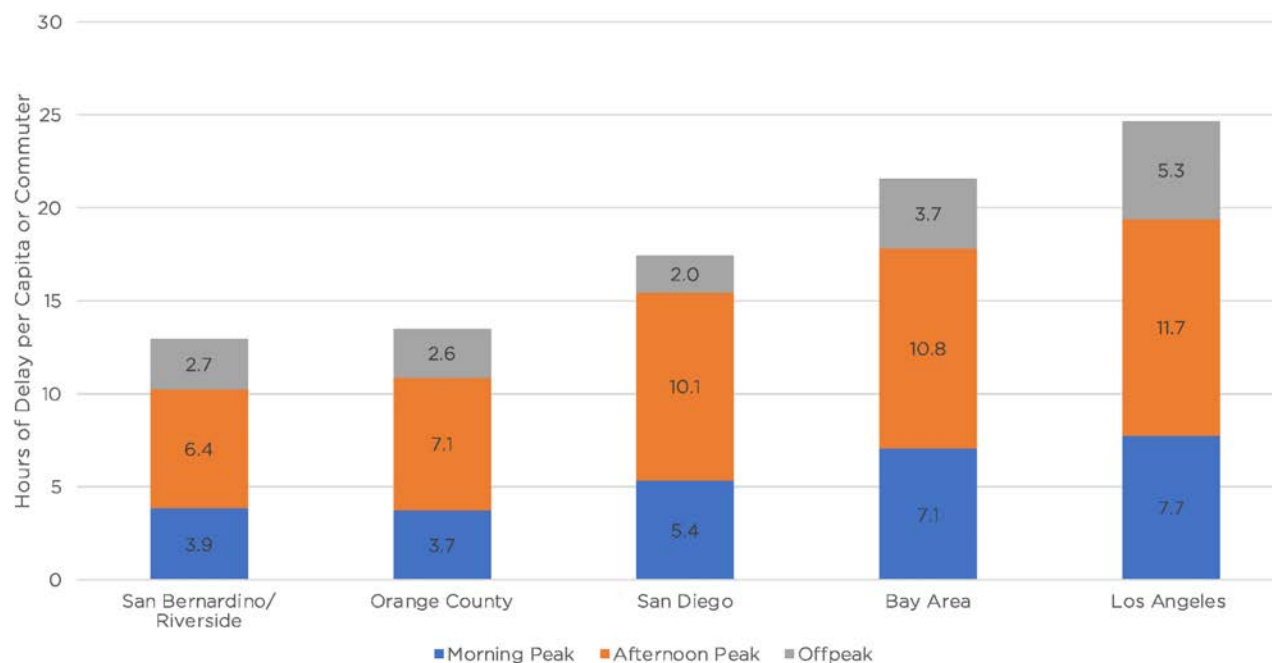
NOTE: Data for peak hours reflect annual hours of delay per commuter at speeds less than 60 miles per hour on freeways in Orange County. Data for offpeak hours are per capita. Counts of commuters in 2019 and 2020 are projected estimates based on historical trends and change in vehicle miles traveled; consequently, morning and afternoon peak estimates of delay per commuter should be interpreted with caution.

Source: Caltrans, Performance Measurement System; U.S. Census Bureau, American Community Survey, 1-Year Estimates; California Department of Finance, Population Estimates, Tables E-2 & E-4



ORANGE COUNTY TRAVELERS EXPERIENCE LESS DELAY ON FREEWAYS THAN SAN DIEGO, THE BAY AREA, AND L.A.

REGIONAL COMPARISON OF ANNUAL HOURS OF FREEWAY DELAY PER CAPITA OR COMMUTER, 2018



NOTE: Data for peak hours reflect annual hours of delay per commuter at speeds less than 60 miles per hour on freeways in Orange County. Data for offpeak hours are per capita.

Source: Caltrans, Performance Measurement System; U.S. Census Bureau, American Community Survey, 1-Year Estimates; California Department of Finance, Population Estimates, Table E-2

CAR OWNERSHIP UP 18% OVER 10 YEARS

VEHICLE REGISTRATION IN ORANGE COUNTY, 2010-2019



Source: California Department of Motor Vehicles, Forecasting Unit



INFRASTRUCTURE

While most Orange County workers live and work within the county, a substantial number commute from surrounding counties. A smaller number of people live in Orange County but work outside the county. In 2017, a net of nearly 106,000 non-resident commuters traveled to Orange County to work.

The largest volume of traffic flow is between Orange County and Los Angeles County, with about 25,000 more commuters coming into Orange County than going into Los Angeles. Orange County has seen consistent growth in the number of Los Angeles residents traveling into Orange County for work due to the strong regional labor market and sustained wage growth prior to the pandemic. While the volume is less, the differences between inflow and outflow are more pronounced between Orange County and the Inland Empire, as well as San Diego County. A net 109,000 commuters come into Orange County from the Inland Empire.

MORE PEOPLE COMMUTE IN THAN OUT

INTERCOUNTY COMMUTING PATTERNS BETWEEN ORANGE AND NEIGHBORING COUNTIES, 2017

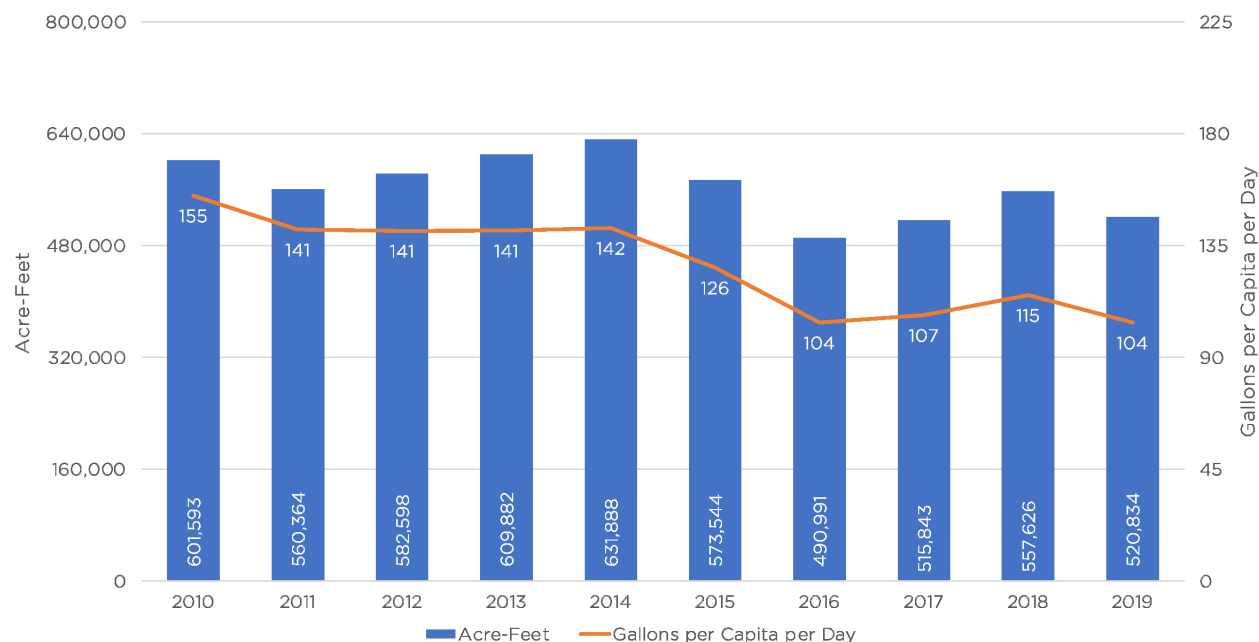


WATER USE AND SUPPLY

Potable water consumption in Orange County averaged 104 gallons per capita per day (GPCD) in 2019, down from 115 the year before and equal to the 10-year low recorded in 2016. The region's GPCD averages remain well below the Senate Bill X7-7 (SB X7-7) target of 158 GPCD by 2020, highlighting the effectiveness of recent conservation efforts. Enacted in November 2009, SB X7-7, also known as the Water Conservation Act of 2009, or SB X7-7, was enacted in November 2009 and requires that all water suppliers increase their water use efficiency and that the state reduce urban water consumption by 20 percent by the year 2020. Orange County's potable water consumption has dropped by 33 percent since 2010 and remains 10 points below California's statewide average of 114 GPCD.

WATER USAGE RETURNS TO 10-YEAR LOW

URBAN WATER USAGE IN ACRE-FEET AND GALLONS PER CAPITA PER DAY IN ORANGE COUNTY, 2010-19



Source: Municipal Water District of Orange County

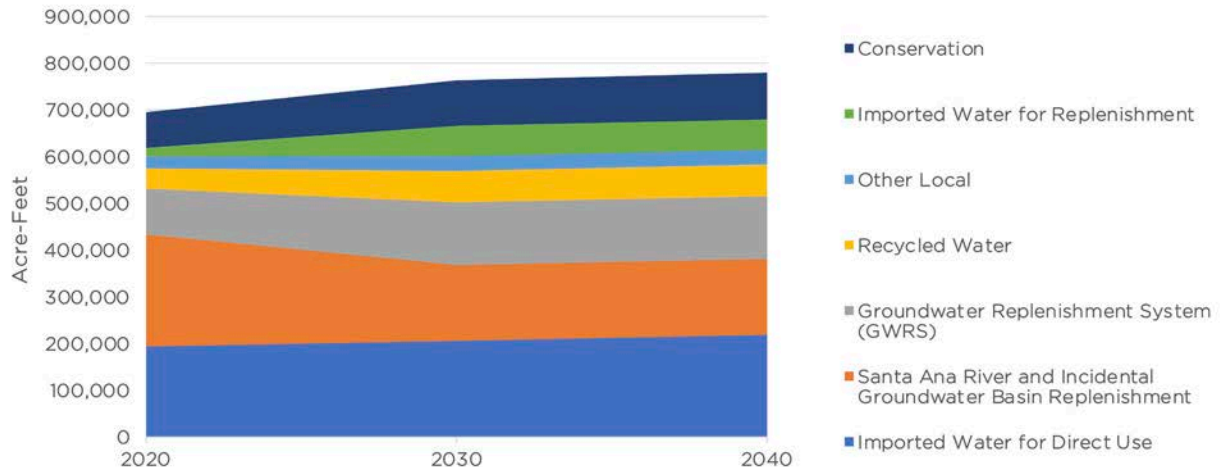
Orange County has committed to increasing conservation efforts since the last drought, with recycled water increasing by 54 percent and the Groundwater Replenishment System (GWRS) increasing by 37 percent. Orange County's "consumptive water use" (i.e., water sourced after conservation efforts) totaled approximately 599,870 acre-feet in 2020 and is expected to total 579,189 acre-feet by 2040, a reduction of 3 percent. Water conservation efforts are expected to total 77,000 acre-feet in 2020 and increase to 100,000 acre-feet by 2040, a 30 percent increase.



INFRASTRUCTURE

CONSERVATION EFFORTS INSULATE COUNTY FROM FUTURE DEMAND SPIKES

ORANGE COUNTY WATER SOURCES PROJECTIONS, 2020-2040

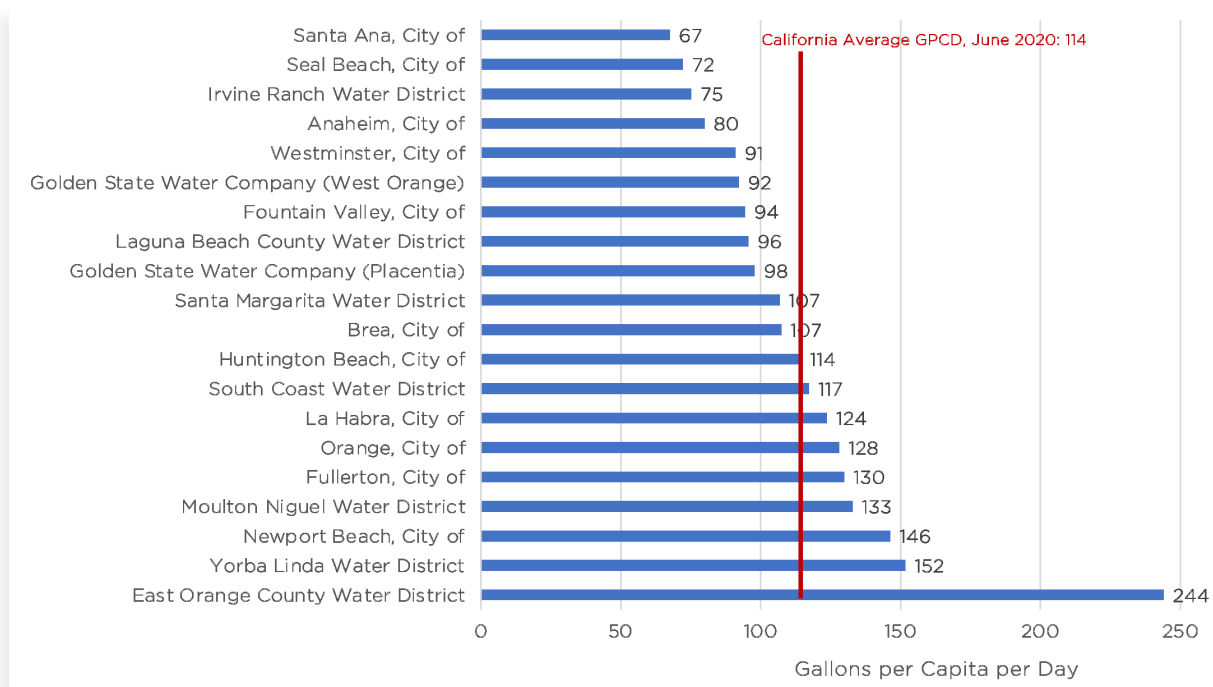


Sources: Municipal Water District of Orange County; Orange County Water District

Residential water consumption data from June 2020 shows that 12 of the 20 measured water districts reported lower per capita water consumption than the statewide average of 114 gallons per capita per day (GPCD). The remaining 8 reported GPCD above the statewide average while nine water retailers did not report usage for June 2020.

12 OC WATER RETAILERS HAVE LOWER CONSUMPTION THAN STATEWIDE AVERAGE

WATER CONSUMPTION IN GALLONS PER CAPITA PER DAY BY ORANGE COUNTY WATER RETAILER, JUNE 2020



Source: State Water Resources Control Board

DROUGHT STATUS

According to the most recent snow survey by the California Department of Water Resources, the statewide snowpack was only 53 percent of the average in the April 1st survey, the 11th lowest reading in 71 years. While last year's snowpack has reduced impacts on water levels, this year's reduction in snowpack has already translated into lower-than-average water levels at the state's two biggest reservoirs, Shasta Lake and Lake Oroville; they were measured at 98 percent and 85 percent of average water levels on April 1.

As of July 2020, Orange County has no drought status or conditions; an estimated 12.8 million California residents are currently experiencing a drought, according to the U.S. Drought Monitor. Groundwater storage levels in Orange County are currently 93 percent full, while groundwater recharge is 8.9 percent below where it was last year.

While Orange County is currently not experiencing drought, ongoing efforts to manage consumption are needed given California's dry, warm climate and history of cyclical drought.

Sources: California Department of Water Resources; U.S. Drought Monitor, 8/4/20; U.S. Geological Survey, Runoff Estimates for California



DATA NOTES:

Urban water usage data in acre-feet includes residential, industrial, and commercial water use in a fiscal year (July-June); data identified as 2018, for example, reflects water use in FY 2017/18. The gallons per capita per day (GPCD) calculations for Orange County overall, provided by the Municipal Water District of Orange County, are calculated to comply with SB X7-7. These GPCD calculations include potable water, less recycled water and indirect potable reuse water for the entire fiscal year. This measure of GPCD differs from GPCD reported in Community Indicators Reports prior to 2017. The GPCD figures by water supplier from the State Water Resource Control Board reflect residential water use only and report water usage for a single month. Reporting to the state is currently voluntary for water suppliers; the following water suppliers serving Orange County did not file water conservation reports for June 2020: City of Garden Grove, City of San Juan Capistrano, Trabuco Canyon Water District, City of Tustin, City of San Clemente, Mesa Water District, City of La Palma, City of Buena Park, and El Toro Water District. For water cost data by source, please see the 2019-20 Orange County Community Indicators Report at https://www.ocbc.org/wp-content/uploads/2019/09/CommIndicators_Report_091219-WEB.pdf



INFRASTRUCTURE

BROADBAND INTERNET ACCESS

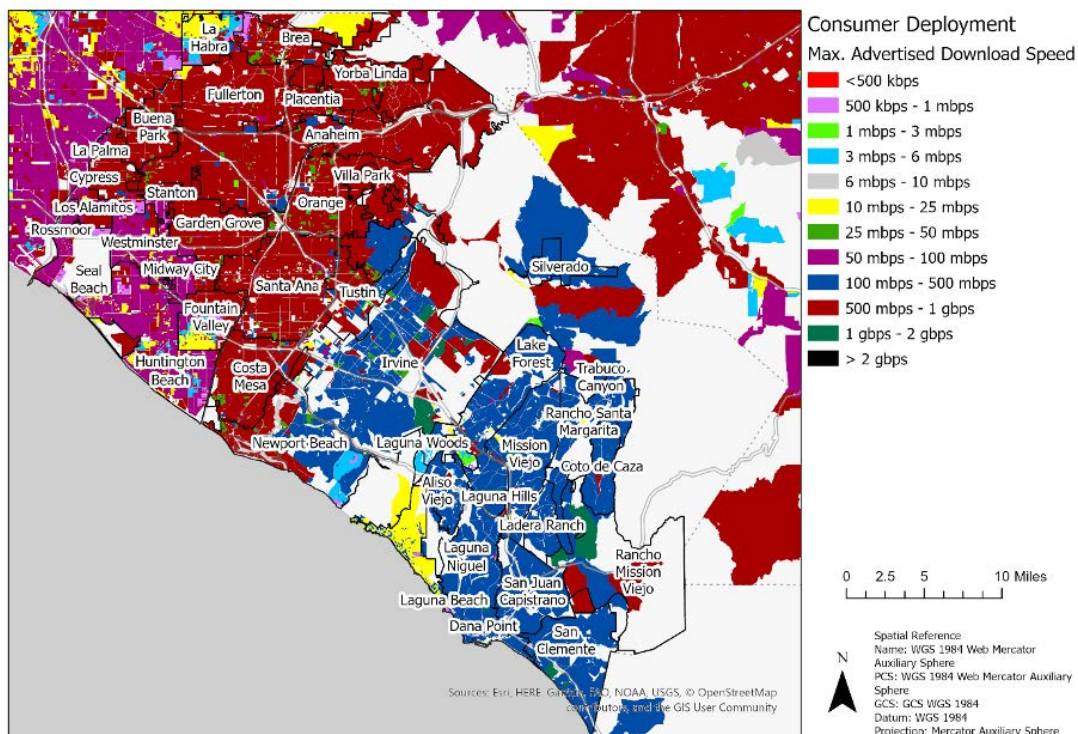
Internet access has become critically important to work, education, and daily life in recent years, with individuals and businesses relying on secure, high-speed internet connections for daily activities. It has become even more important during the “new normal” of COVID-19 – a time of telecommuting, telehealth, e-commerce, and online education. As schools from K-12 to universities plan on distance learning for the rest of 2020, Orange County’s broadband infrastructure has become an essential resource for county residents of all ages.

At the state level, approximately 95.6 percent of Californians have access to broadband speeds of 100 megabits per second (Mbps), while only 15.7 percent of residents have access to 1 gigabit of broadband. California’s high broadband 100 Mbps or better coverage rate is led primarily by high rates of coverage in Southern California counties like Los Angeles (99.6 percent) and Orange (98.6 percent).

The maps below highlight fixed (wired) downstream (download) maximum download speeds by Orange County area for both businesses and consumers. Private, non-business consumers in northern Orange County and Costa Mesa have access to the region’s highest speeds (500 Mbps-1 Gbps), as do some areas of Irvine and Ladera Ranch.

CENTRAL AND NORTH COUNTY CONSUMERS HAVE ACCESS TO FASTEST BROADBAND SPEEDS

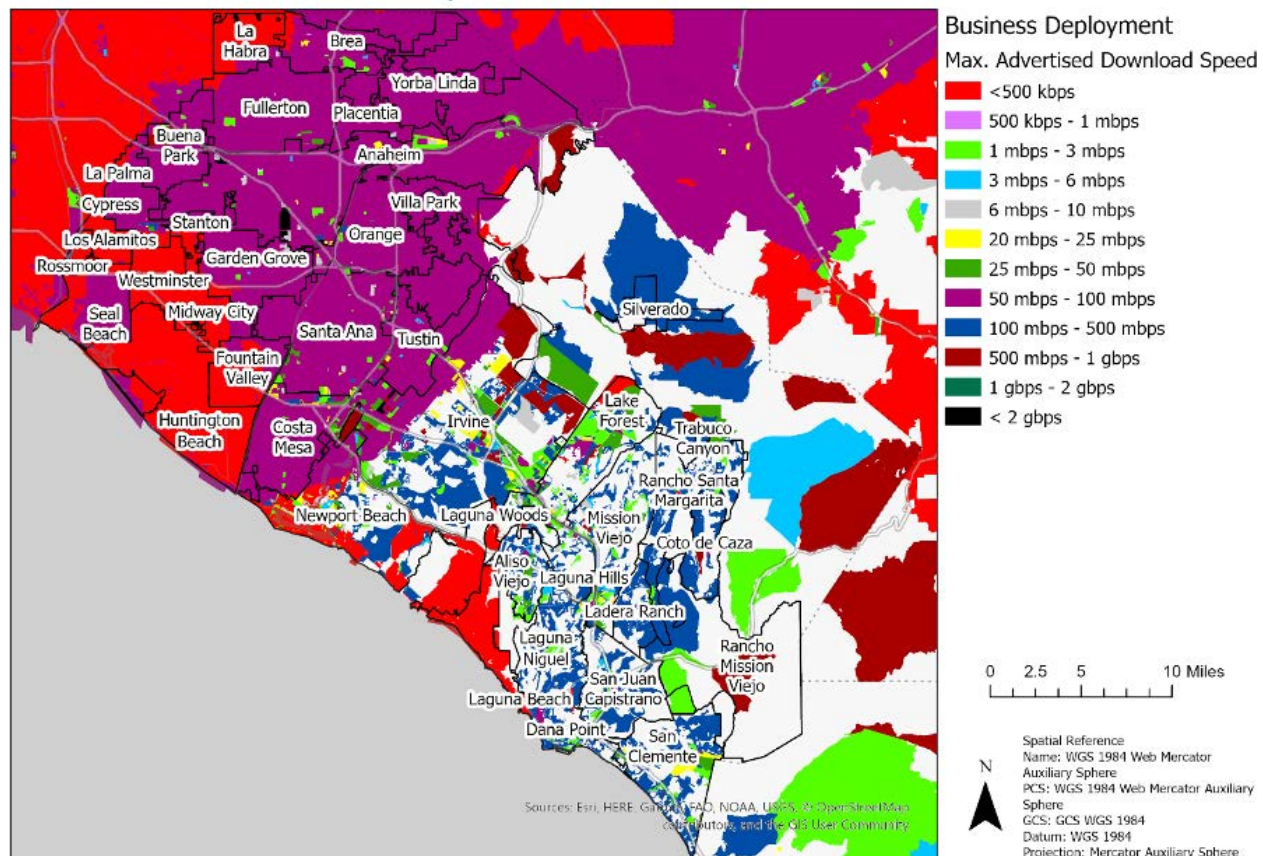
ORANGE COUNTY FIXED BROADBAND DEPLOYMENT FOR CONSUMERS BY ADVERTISED DOWNSTREAM SPEED



Source: California Public Utilities Commission, GIS Data and Broadband Maps

SOUTH COUNTY BUSINESSES SEE HIGHER SPEEDS THAN NORTHERN NEIGHBORS

ORANGE COUNTY FIXED BROADBAND DEPLOYMENT FOR BUSINESSES BY ADVERTISED DOWNSTREAM SPEED



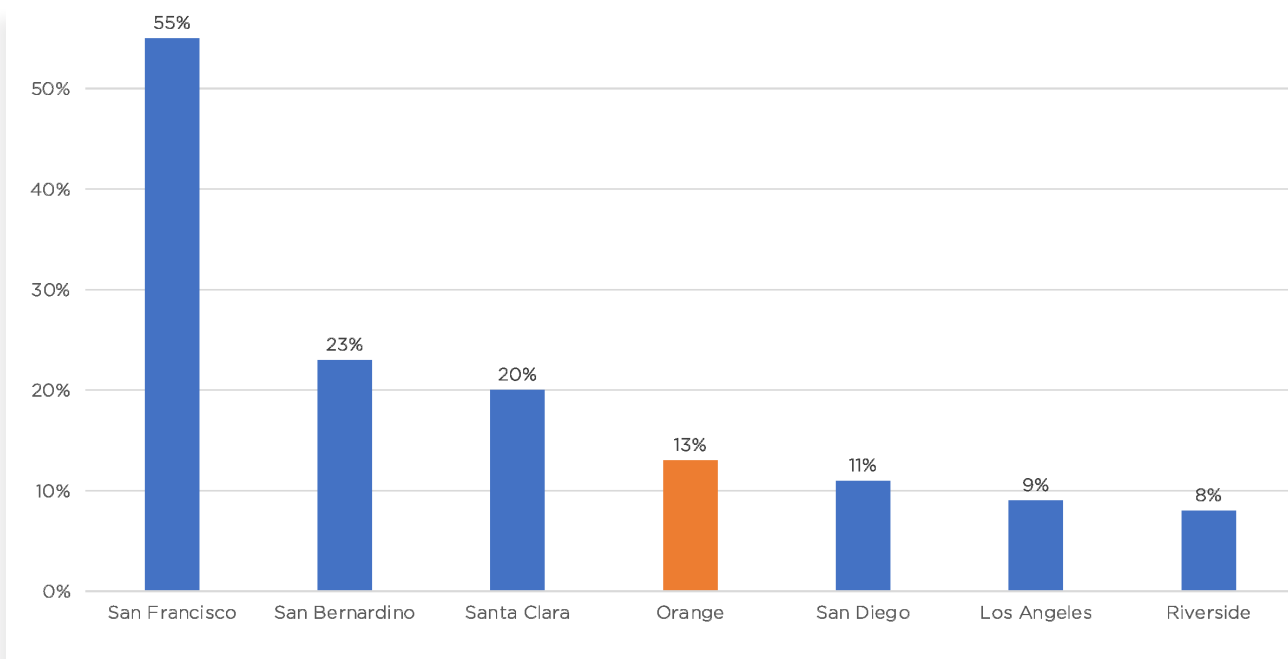
Source: California Public Utilities Commission, GIS Data and Broadband Maps

As can be expected, higher download speeds lead to more effective communication and better performance for both individuals and businesses. While speeds of 100 Mbps are fairly widespread throughout the state and especially in Southern California, 1-gigabit speeds are rarer as they require greater infrastructure investments. 13 percent of Orange County residents have access to 1-gigabit speeds compared to 9 percent in Los Angeles County, 11 percent in San Diego County, and 23 percent in San Bernardino County.

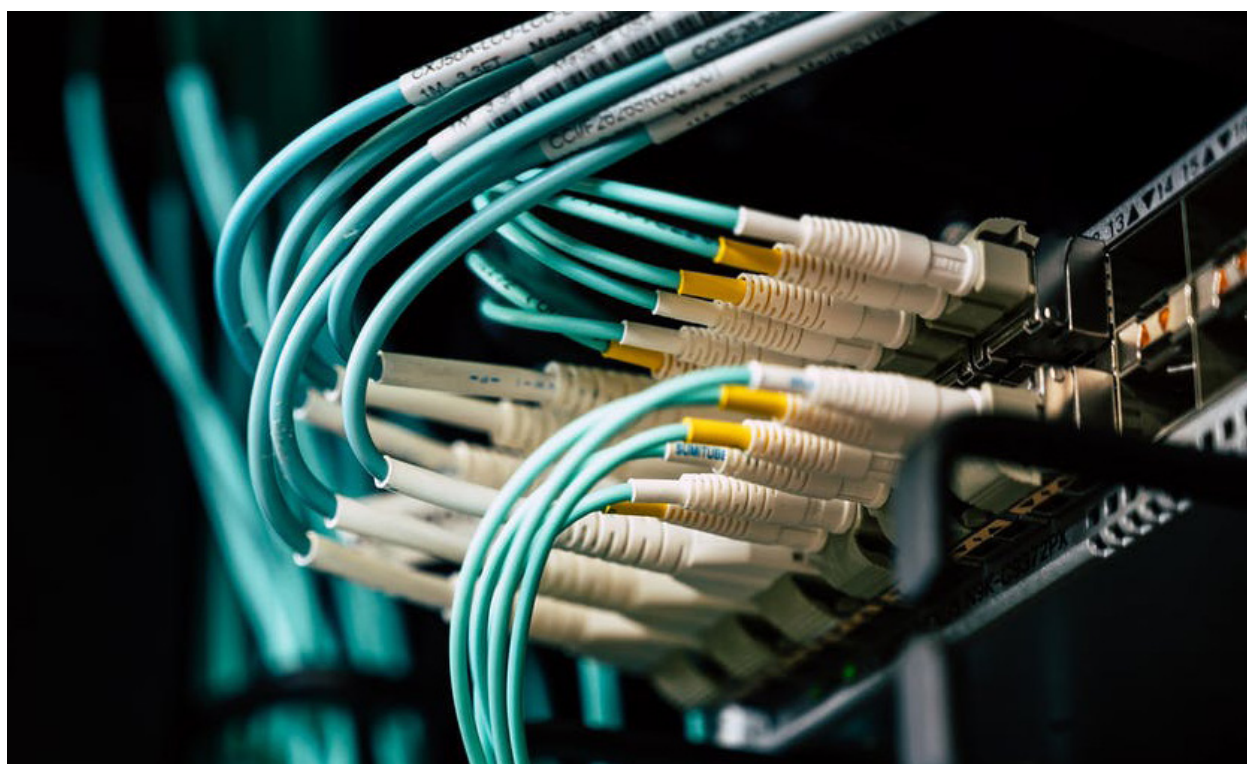


GIGABIT SPEEDS MORE PREVALENT IN BAY AREA

PERCENT OF RESIDENTS WITH ACCESS TO 1 GIGABIT BROADBAND COVERAGE BY COUNTY, 2018



Source: *Broadbandnow.com*



MAJOR ORANGE COUNTY BROADBAND PROVIDERS HIGHLIGHTS

COX COMMUNICATIONS

Cox Communications, which has approximately 68 million high-speed internet customers, estimates that 80 percent of U.S. households have broadband internet access at home and that 80 percent have access to cable internet. As internet usage has increased, the price per megabit has decreased by 92 percent while investments into cable infrastructure increased from \$55.8 billion in 2002 to \$290 billion in 2018.

California's cable industry employs 21,934 employees and generates 196,802 direct and indirect jobs. It has an economic impact of \$30.95 billion. Downstream (download) peak traffic grew by 20.1 percent during the first weeks of the pandemic and by 9.1 percent since March, reflecting increased internet usage during the lockdown. Despite this rise in usage, many providers have indicated that backbone networks have shown no signs of congestion.

CHARTER COMMUNICATIONS / SPECTRUM

Charter Communications currently serves 4.5 million customers in California, employing over 10,000 workers and generating \$8.5 billion in economic impact in 2018. Charter has invested \$842 million in infrastructure and technology while contributing \$335 million in taxes to the state. Charter has also committed to serving those in need through its Spectrum Housing Assist program, which has served 41,504 homes thus far and has the goal of reaching 50,000 by the end of 2020. In 2018, it also awarded \$141,000 in Digital Education Grants, which provide high-speed internet service to schools.

Charter is also actively investing in California's digital economy through Spectrum Internet Gig, a fiber connections program providing gigabit speed to customers. Spectrum Enterprise is currently ranked the third U.S. provider of fiber-connected buildings, where businesses can receive up to 100 gbps via dedicated fiber connections.

During the initial weeks of the pandemic, Charter handled a 20 percent increase in downstream traffic and a 32 percent increase in upstream traffic without straining their network. To alleviate some of the hardship caused by the pandemic, Charter offered sixty days of wi-fi at no cost to 700,000 customers, including 450,000 students, teachers, and families. Charter is also waiving late fees and disconnections, providing low-cost internet to families that qualify, reinforcing the Stay Connected K-12 Program, and offering reduced prices for seniors on SSI.

Charter has also provided key pandemic-related support for its workers, including increasing the minimum wage for frontline workers from \$15 to \$20, and additional paid time off for all 95,000 workers, including hourly workers. It has also instituted a no layoffs for at least 60 days, increased telecommuting options, and implemented social distancing measures at its stores and offices.



GOVERNANCE & CIVIC ENGAGEMENT

VOTING RATES
REMAIN LOW

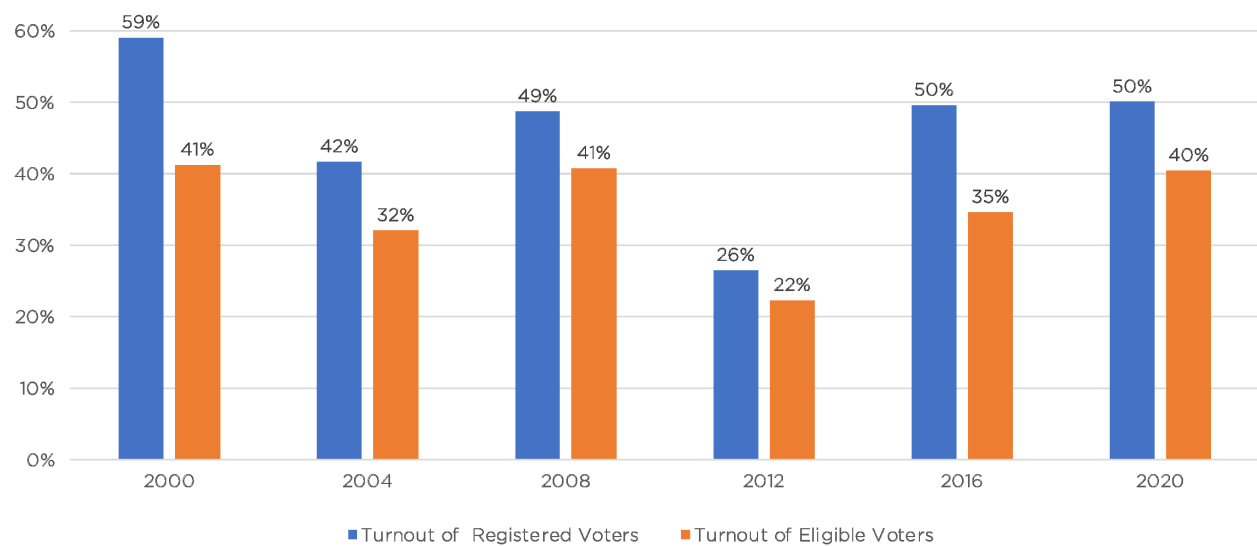


VOTER PARTICIPATION

Approximately 50 percent of Orange County registered voters turned out in the 2020 presidential primary, which represents around 40 percent of all residents eligible to vote. These rates are in line with the presidential primary election of 2016, yet well above 2012 turnout rates. While Orange County did see a 5 percentage point increase in eligible voter turnout, it still lagged behind peer regions such as San Francisco, Santa Clara, and San Diego.

2020 TURNOUT OF ELIGIBLE VOTERS SEES SIZEABLE INCREASE SINCE 2012

ORANGE COUNTY PRESIDENTIAL PRIMARY ELECTION TURNOUT AMONG REGISTERED VOTERS AND VOTING-ELIGIBLE POPULATION, 2000-2020

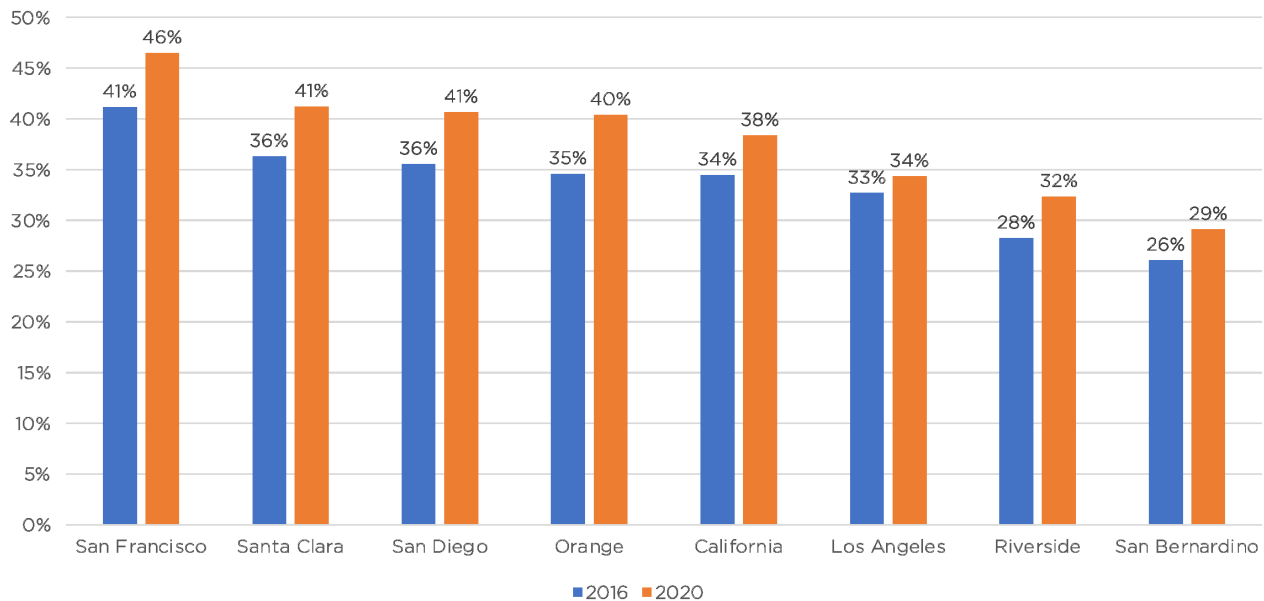


Source: California Registrar of Voters, California Secretary of State



INCREASES IN VOTING ELIGIBLE POPULATIONS SEEN ACROSS THE STATE

COUNTY COMPARISON OF VOTER TURNOUT FOR PRESIDENTIAL PRIMARY ELECTION AMONG VOTING-ELIGIBLE RESIDENTS, 2016 & 2020



Source: California Registrar of Voters, California Secretary of State

IRVINE RANKS FIRST IN CITY FINANCES

Truth in Accounting's 2019 Financial State of the Cities report ranked Irvine first among the nation's 75 most populous cities, for the 3rd year in a row, based on comprehensive annual financial reports for the 2017 fiscal year. With a financial grade of "B," Irvine had a net \$377 million surplus, which equates to a surplus of \$4,400 per taxpayer. In contrast, 63 of the 75 cities had taxpayer burdens or deficits, largely a result of unfunded pensions and debt from healthcare costs, underfunded pensions, and other expenses.

SOURCES

2-1-1 Orange County, 2020 Sheltered PIT Count

Broadbandnow.com

Brookings Institute

California Association of Realtors

California Department of Education, DataQuest

California Department of Education, Physical Fitness Test

California Department of Finance, Demographic Research Unit

California Department of Justice, Criminal Justice Statistics Center

California Department of Motor Vehicles

California Department of Public Health, County Health Status Profiles

California Department of Water Resources

California Community Colleges Chancellor's Office

California Employment Development Department

California Health Interview Survey

California Registrar of Voters

California Secretary of State

California State University, Fullerton

California Public Utilities Commission

CalOptima

Caltrans

CBRE

Center for Disease Control and Prevention

Chapman University

County of Orange

Duns and Bradstreet, Market Insight

Economic Modeling Specialists International (Emsi)

Esri

Experian

First 5 Orange County

Harvard Business School

HealthIT.gov

John Wayne Airport

Jones Lang LaSalle

Kaiser Family Foundation

Los Angeles Times

McKinsey & Company

Milken Institute

Meyers Research

Municipal Water District of Orange County

National Association of Realtors

National Low Income Housing Coalition

Office of Statewide Health Planning & Development

Ontario International Airport

Orange County Business Journal

Orange County Department of Education

Orange County Early Development Index

Orange County Health Care Agency

Orange County Register

Orange County Transportation Authority

Orange County United Way

Orange County Water District

Pew Research

Public Policy Institute of California

Southern California News Group

Sperling's Best Places

State Water Resources Control Board

The Atlantic

The Toll Roads of Orange County

The Washington Post

University of California, Irvine

U.S. Bureau of Economic Analysis

U.S. Bureau of Labor Statistics

U.S. Census Bureau, American Community Survey

U.S. Census Bureau, Building Permit Survey

U.S. Drought Monitor

U.S. Geological Survey, Runoff Estimates for California

U.S. Department of Commerce, Economic Development Administration

U.S. Department of Housing and Urban Development

U.S. Department of Labor



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