

**2019-2023 COMPREHENSIVE ECONOMIC
DEVELOPMENT STRATEGY REPORT
TO THE U.S. DEPARTMENT OF COMMERCE,
ECONOMIC DEVELOPMENT ADMINISTRATION**

 **Community Services**

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Table of Contents

About this Document	2
Executive Summary	3
What is the Comprehensive Economic Development Strategy?	5
The CEDS Process	6
CEDS Committee and Public Comment	6
Primary Goals and Key Strategies for Orange County	7
2019-2023 CEDS Performance Objectives	13
Orange County Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis	14
Introduction to Orange County	17
Orange County Demographics	18
Orange County Housing Overview	21
Orange County Wage Overview	25
Orange County Educational Attainment Overview	26
Industry and Occupational Employment and Wages	37
In-Demand Occupations, Skills, and Education in Orange County	49
Red Zone Analysis in Orange County	55
A Closer Look at Red Zone Residents	56
Transportation and Infrastructure in Orange County	65
The State of Orange County’s Infrastructure, 2016	68
Review and Effectiveness of Previous CEDS Report	71
Appendix A – Orange County Cities Updates	76

About this Document

Every five years, the Orange County Community Services Division (OCCS) prepares the Orange County Comprehensive Economic Development Strategy that provides the framework required for entities and projects in Orange County to be eligible to receive U.S. Department of Commerce, Economic Development Administration (EDA) funding. The 2019-2023 Comprehensive Economic Development Strategy Report (2019 CEDS Report) presents the current conditions of the Orange County economy and identifies economically vulnerable areas for investment. The 2019 CEDS Report adopts a special focus on the county's Red Zone areas, geographic locations within the county experiencing high unemployment and substantially lower levels of income relative to the rest of the county, in order to recommend economic development projects. This report provides valuable information on Orange County's economic environment along with potential plans for developing and growing the economy.

The 2019 CEDS Report provides a blueprint designed to bring together the public and private sectors in the creation of a roadmap to diversify and strengthen the regional economy by aligning efforts to arrive at common countywide goals, which include:

1. Addressing the Skills Gap, the discrepancies between employer needs and employee skills, by better aligning education and training programs with the current job market.
2. Promoting key industry clusters that drive economic growth and innovation in Orange County.
3. Making Orange County more competitive in an interconnected global economy.
4. Maintaining and improving county infrastructure.
5. Improving conditions in Orange County's "Red Zone" areas with higher than average unemployment and lower than average per capita income.

These five goals are based on the most recent economic data and informed projections of the future, and will encourage partnerships between local businesses, governments, non-profits, and academia to meet the economic challenges of today and tomorrow.

State and Local Plans, Reports and Strategies Referenced in this Document

- [2017 State of the County Workforce Indicators Report](#)
- [2018 Orange County Community Indicators Report](#)
- [2016 State of Orange County's Infrastructure Report Card](#)
- [2018 Orange County Cities Updates](#)

Executive Summary

As designated by the Board of Supervisors, the Orange County Community Services Division (OCCS) developed the 2019-2023 Orange County Comprehensive Economic Development Strategy (CEDS), which provides important information regarding Orange County's current economic state, demographics, social landscape, and potential strategies to further drive economic growth and activity in the region. Overall, the CEDS:

- Provides a detailed overview of Orange County's economy.
- Identifies economically disadvantaged communities in the region that would benefit from economic improvement activities.
- Proposes actionable strategies on improving the lives of all Orange County residents; increase educational attainment and access to workforce opportunities; maintain and improve state-of-the-art infrastructure; support and leverage growing industry clusters; and improve the region's ability to compete economically.
- Creates the framework required for the Orange County region to be eligible to apply for and to receive U.S. Department of Commerce, Economic Development Administration (EDA) funding.

Orange County has changed significantly since the first two CEDS Reports created in 2008 and 2013. While the county has, for the most part, been able to fully recover from the Great Recession, new socioeconomic trends are creating both challenges and opportunities. Some of the major trends impacting Orange County include:

- Technological advances, such as social media, e-commerce, and automation, are currently disrupting many traditional industries.
- A surging housing market representing tremendous economic growth while simultaneously creating affordability concerns for many residents.
- Near record-low unemployment rates and significant employment growth in traditional and emerging industry sectors.

This report aims to educate local stakeholders and policymakers on these dynamic shifts while proposing practical ways to mitigate potential problems and providing proactive solutions. While Orange County has experienced a significant increase in economic activity in recent years, this economic growth has not been evenly spread across the county's diverse communities. Therefore, this report focuses on the county's Red Zone areas which have higher than average unemployment rates and lower than average per capita incomes.

Census tracts and cities qualify as disadvantaged Red Zones if the unemployment rates are 2.0 percentage points above the national average and the average per capita income is less than 80 percent of the national average. The U.S. Census Bureau's 2016 American Community Survey measured the national unemployment rate at 7.4 percent and the national per capita income at \$29,829, which means that Red Zones will have an unemployment rate higher than 9.4 percent and a per capita income of less than \$23,863. Currently, no city as a whole qualifies as a Red Zone, however several census tracts located within cities and county unincorporated areas qualify as Red Zone areas.

Since the implementation of the 2013-2018 CEDS, the number of Red Zones in the county has decreased from 71 to 55 (-28%). Overall, the average unemployment rate and per capita incomes of Orange County Red Zone census tracts are 11.5 percent and \$17,832.

Red-Zone Population Breakdown by OC Cities and Unincorporated Areas				
City/ Unincorporated Area	Total Population	Population Living in a Red Zone	% of City Population Living in a Red Zone	Number of Red Zone Census Tracts
Anaheim	346,776	76,314	22.0%	12
Costa Mesa	112,439	11,326	10.1%	2
Fullerton	139,491	41,550	29.8%	7
Garden Grove	174,676	31,351	17.9%	6
Irvine	246,992	3,233	1.3%	1
La Habra	61,660	21,992	35.7%	5
Midway City	9,235	8,100	87.7%	1
Orange	139,919	4,767	3.4%	1
Placentia	62,168	7,001	11.3%	1
San Juan Capistrano	36,006	9,728	27.0%	1
Santa Ana	333,605	62,740	18.8%	10
Seal Beach	24,510	466	1.9%	1
Stanton	38,594	21,751	56.4%	4
Westminster	91,635	17,382	19.0%	3
Total:	1,817,706	317,701	17.5%	55

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

This report details ways to improve economic conditions in the Red Zone areas and support continued sustainable economic growth across the county as a whole.

The five main goals for Orange County identified in this report are as follows:

1. Provide world-class education, career, and workforce opportunities (including training) to address the Skills Gap.
2. Promote key priority clusters.
3. Improve Orange County’s economic competitiveness in the global economy.
4. Plan and develop state-of-the-art infrastructure.
5. Focus on residents living in the Red Zones.

Achieving these goals will allow Orange County to continue on a path of balanced and sustainable economic growth. Orange County has become an economic engine for the Southern California region and possesses the potential to continue to drive the regional economy through sustainable expansion guided by the CEDS. These new goals are part of the 2019 CEDS Report aimed at maintaining recent economic activity while accelerating economic growth in economically disadvantaged areas in the region. The goals highlighted above will ensure continued and sustainable economic expansion to accomplish both short and long-term objectives.

What is the CEDS?

Comprehensive Economic Development Strategy

The Orange County Community Services Division (OCCS) developed the 2019 CEDS Report to support Orange County's economic strengths and recommend investment solutions to address the region's opportunities and weaknesses. Through the development of the 2019 CEDS Report, OCCS will build on successful strategies and policies implemented in the 2013-2018 CEDS through innovation of new approaches aimed at tackling new and emerging issues associated with the continual evolution of economic, workforce, and demographic trends. This comprehensive approach ensures continued focus on long-term difficulties experienced by economically disadvantaged areas while placing strategic measures to prevent future complications associated with the evolving economic and demographic environments that could impact economic growth and activity. The alignment of strong goals and actionable strategies aimed to improve the lives of all Orange County residents is the focal principle behind the 2019 CEDS Report.

While Orange County has experienced tremendous economic growth and activity in recent years evidenced by record low unemployment levels, increased wages, and strong industry clusters, several important issues still remain, such as economic sustainability and unevenly distributed growth. In order to address these issues, an extensive economic and demographic trend analysis has been conducted to identify areas that are experiencing economic hardships while recognizing areas of strong economic activity. This provides a comprehensive picture of Orange County's current economic landscape and business environment. With this detailed analysis, stakeholders and local policymakers will be able to craft attainable short and long-term goals. These actionable goals will aim to improve underperforming areas while leveraging local competitive advantages.

The 2019 CEDS Report provides a detailed overview of current economic trends and conditions at the local and regional level, along with an analysis of its origins. It is intended to serve as a roadmap to guide local stakeholders, policymakers, educators, and employers toward establishing mutually beneficial collaborations that will generate economic benefits across the region. While these efforts should focus on improving conditions in economically disadvantaged areas, it is also important to support currently successful areas through the provision of resources needed for continued growth. Overall, the 2019 CEDS Report identifies locally-grown strategies that will guide regional economic development, encourage partnerships, and regional collaboration in order to improve economic outcomes and the overall quality of life for residents in the region.

2019 Orange County Board of Supervisors

As the Planning Organization for the entire Orange County region, the Orange County Board of Supervisors is responsible for appointing members to the OCCS Workforce Development Board/CEDS Committee. The CEDS Committee oversees the development and submission of the CEDS to the Economic Development Administration (EDA) pursuant to Section 13 of the Code of Federal Regulations §303.7.

The CEDS Process

In order to provide a detailed, comprehensive analysis of Orange County and its current economic environment, the 2019 CEDS Report includes a multitude of data points, metrics, and information from a wide variety of sources. These sources include:

- GIS mapping software that identify regional Red Zone areas using a combination of census-defined areas and economic metrics
- Industry and occupational employment data from multiple sources including:
 - The California Employment Development Department
 - The U.S. Bureau of Labor Statistics
 - The Urban Explorer’s EconoVue software
 - Economic Modeling Specialists International (Emsi)
 - The U.S. Cluster Mapping Project, a collaboration between Harvard Business School and the U.S. Department of Commerce, Economic Development Administration (EDA)

These sources provide a myriad of data points for trend analysis and projections of future economic growth and activity providing policymakers, educators, and other stakeholders a clear view of the past, present, and anticipated future of Orange County’s economy. Through this evidence-based process, policymakers and local stakeholders can create actionable strategies to target economically disadvantaged and at-risk communities while leveraging the strengths of high-performing areas.

CEDS Committee and Public Comment

All CEDS Committee meetings are conducted in accordance to the Ralph M. Brown Act (California Government Code sections 54950-54963).

On July 25, 2018, the Orange County Development Board approved the 2019 CEDS Report draft and allowed for staff to make non-substantive changes. As defined in Section 13 C.F.R. § 303.6, the CEDS Process requires the CEDS Planning Organization to make the CEDS available for review and comment by the public for a period of at least thirty (30) days prior to submission of the CEDS to the U.S. Department of Commerce, Economic Development Administration (EDA) and a draft was posted on www.ocboard.org beginning July 31, 2018, no comments were received.

Primary Goals and Key Strategies for Orange County

The purpose of the 2019 CEDS Report is to set effective, attainable goals that will drive economic growth and activity across Orange County. While some areas, such as Red Zones, require special focus and targeted strategies to lift local communities out of economic hardship, involved stakeholders must also focus on the creation of plans and actionable policies to promote sustainable growth across the entire region. In order to come to a better understanding of issues affecting Orange County, this report utilizes data focused on economic and demographic trends in disadvantaged areas. As trends are identified, policymakers and stakeholders can help create the most effective solutions to these problems and support the County's continued economic growth.

A major achievement during the previous five-year CEDS period was the decreased number of Red Zone areas in Orange County, reflecting the efficacy of the previous goals and strategies. Therefore, the 2019 CEDS Report will build on the previous strategies and create innovative approaches to newly-developed issues that affect the local and regional economies. Orange County's continual shift of economic and demographic environments requires an innovative and evolving strategy.

A combination of proven strategies with innovative approaches is not a sufficient solution to the problems that currently face Orange County. Maintaining consistent values and messages across local, regional, and state-level geographies to ensure collaboration between workforce and economic development organizations, educational programs, private employers, non-profits, and government institutions is paramount. Therefore, the 2019 CEDS Report takes local and regional workforce goals and economic development strategies into account, such as those identified in the Workforce Innovation and Opportunity Act Four-Year Regional Planning Unit Plan and Related Local Plans Program Years 2017-2020. This effort ensures that state-level and regional workforce development goals and economic development strategies are all addressed. In doing so, pathways for effective programs and strategies are better streamlined which will reduce potential inefficiencies and gaps between program administrators and program participants.

Taking into account previously successful strategies, new economic realities, and the need for collaboration at various levels allows stakeholders to set and reach attainable goals for improvement of communities, cities, and the county as a whole. Despite the vast economic and demographic differences between neighborhoods in North and South Orange County, improvements in either area will have indirect and induced impacts across the region. Achievement of the goals highlighted below will help Orange County retain one of its most important competitive advantages, its highly-skilled and educated workforce, which helps the county attract and retain first-class employers.

GOAL 1:

Provide World-Class Education, Career, and Workforce Opportunities to Address the Skills Gap

Technological and social changes continue to transform the workforce making it imperative that businesses have well-trained, qualified employees with the relevant skills needed to be successful. While Orange County is supported by several world-class educational institutions, it faces the Skills Gap, a discrepancy between employer needs and the skills that job candidates actually present. This trend limits economic growth, as employers struggle to find qualified candidates to fill vacant positions.

In many cases, the Skills Gap reflects a lack of workers with the right mix of both technical and soft skills. Although four-year universities and certification programs offer technical skills ranging from software programming languages to advanced financial analysis and operation of complex machinery, they often fail to provide reasonable training in soft skills such as verbal communication, teamwork, or project management. As a result, job candidates are often technically proficient, but lack in other key workplace skills, which can lead to a drop in overall efficiency resulting in limited growth in the marketplace. While the Skills Gap is a national issue, not specific to Orange County, the county is uniquely placed to reduce the regional impact of the Skills Gap, which would not only dramatically help local employers fill vacant positions, but also attract new major employers into the region.

In order to properly address the Skills Gap, local business leaders and major employers must be consulted to better understand the skill sets necessary for specific positions that are difficult to identify through the hiring process. Community colleges and certification programs are uniquely positioned to effectively reduce the growing Skills Gap by providing core classes focused on soft skills and access to more technical programs and certifications emphasizing new technologies. The cost of four-year colleges may be prohibitively expensive for some individuals in Orange County while community colleges and certification programs offer lower cost and often times more effective pathways for workers in economically disadvantaged areas. One possible strategy to effectively reduce or close the local Skills Gap would be to create and promote partnerships between community colleges, certification programs, and local employers that develop soft skills, creating clear career pathways from education to gainful employment. These programs could focus on Science, Technology, Engineering, Arts, and Mathematics (STEAM) related occupations within key high-value industry clusters not only to warrant lucrative employment positions for candidates, but also continued growth in Orange County's strongest and valuable developed sectors.

Key Strategies:

1. Ensure businesses have enough skilled workers in the workforce to compete in the global economy.
2. Support Orange County's education system at all levels to ensure college and career-readiness.
3. Support career and technical education.
4. Develop and promote targeted education and training programs in Orange County's key high value priority industry clusters – Advanced Manufacturing, Healthcare, Hospitality and Tourism, and Information Technology.
5. Increase middle-skills, industry-valued, and recognized post-secondary credentials.
6. Analyze and forecast new and emerging technological advances with industry and organizational processes that may require additional training and skills development.

GOAL 2:

Focus on Residents Living in Red Zones

Orange County has experienced significant increased growth as evidenced by record low unemployment rates, wage growth, and high housing prices which have reached new peaks. This economic growth has not been disbursed evenly throughout the region. Orange County has multiple economically disadvantaged areas, where recent economic development has been offset by a consistent increase in the cost of living. Red Zones are characterized by below average per capita incomes and above average levels of unemployment. Red Zones have been areas of significant focus for a number of years and strategies to improve conditions and increase opportunities in these areas played a major role in the previous 2013-2019 CEDS Report. Since the implementation of the 2013-2018 CEDS, Orange County has reduced its number of Red Zone areas from 71 census tracts in 2013 to 55 in 2018. This positive trend is expected to continue over the next few years.

Further progress in this area will required a concerted effort, backed by a cohesive strategy with input and participation from stakeholders including Red Zone residents, local policymakers, academia, economic and workforce development organizations, non-profits organizations, and businesses. Accessible, affordable training and certification programs, along with improved access to community college programs, will play an important part of the solution to this problem, as they offer affordable alternatives to costly four-year college degrees. While certifications lack marketability when compared to college degrees, certifications do serve as important pathways to gainful employment, and should be promoted as options to local Red Zone residents. Educators and policymakers should focus attention on further improvement of the English Language programs, as Red Zones have a higher percentage of English Language Learners (ELL) in comparison to the county as a whole. A lack of English language proficiency can significantly limit educational attainment and, as a result, overall career progression resulting in limited upward mobility. Therefore, involved stakeholders must focus on improving the quality and accessibility of these English language programs, especially in Red-Zone areas, as this will better prepare those residents for their academic and professional careers.

Economic development programs that specifically target Red Zone areas and residents will help spread the county's economic growth more evenly and increase overall levels of economic activity throughout the county. The key strategies outlined below will ensure that continued support is provided to Red Zone areas which will in turn help to further reduce the number of Red Zone census tracts in Orange County.

Key Strategies:

1. Develop targeted EDA project proposals in economically distressed Red Zone areas to spur revitalization and employment growth opportunities, including targeted alignment of partner resources.
2. Enable economic self-sufficiency for Red Zone residents through the promotion of economic and educational opportunity which can remove barriers to employment and lead to career advancement.
3. Upgrade the skills of the current Red Zone workforce to strengthen abilities and improve the lives of Red Zone residents.

GOAL 3:

Promote Key Priority Clusters

Orange County's key priority clusters represent industries which offer tremendous benefits to the local economy. Promotion of these clusters is crucial to ensure visibility to both potential employees and investors. These industry clusters are well-established sectors, such as Hospitality and Tourism, Advanced Manufacturing, Healthcare, and Information Technology. These clusters play a pivotal role in Orange County's overall economy.

Proper promotion of key clusters and their benefits will require a collaborative effort from both public and private organizations to ensure overall effectiveness. Educational institutions, including K-12 programs, should start highlighting employment and career advancement opportunities in these key clusters. For example, the manufacturing sector has suffered from a poor reputation in recent years being stereotyped as a struggling industry with primarily low-skill jobs that are threatened by foreign markets. This reputation is outdated and does not reflect the sector's recent technological transformation. Today's manufacturing industry has been transformed by new technologies, creating high-paying jobs that require more skills than traditional manufacturing jobs. Promotion of these new technologies and educating parents in the K-12 system and students in colleges will help dismiss the stigma often associated with traditional manufacturing careers. Additionally, the endorsement of skill-building and the cross-functionality of occupations within Hospitality and Tourism can help drive employment and expansion in that industry. A career in Hospitality and Tourism provides access to valuable skills that may easily be transferable over into other sectors, providing employees with career pathways to experience more lucrative positions in other industries.

An effective strategy to promote the benefits of key sectors will fuel employment growth in the county. As industries grow, the number and size of businesses in the region will deliver additional profitable employment positions for the local population, effectively creating a self-sustaining cycle of economic growth and activity. By promoting these industries and their occupations in K-12 programs and local economic development events, more effective career pathways for job seekers can be created which will help serve businesses in these industries.

Key Strategies:

1. Encourage expansion and retention of Orange County's key high value priority industry clusters as each provide significant economic benefits across a number of complementary and supplemental sectors and industries: Advanced Manufacturing, Healthcare, Hospitality and Tourism, and Information Technology.
2. Form industry sector groups to promote growth and expansion of companies in Orange County's key industry clusters.

GOAL 4:

Improve Orange County's Economic Competitiveness in a Global Economy

Orange County's economy is a dynamic part of the economic engine driving Southern California. Its unique geographical location provides access to international seaports and airports, while its interconnected infrastructure system allows for easy movement of goods and services across the region. Over 90,000 businesses call Orange County home, including a number of Fortune 500 companies, further exemplifying the region as a center for economic growth and success. This strong foundation combined with the area's industry clusters and tradition of innovation and entrepreneurship, create opportunities for further growth and increased economic competitiveness in an interconnected global economy.

In order to compete and expand in a global market, Orange County will need to champion a number of key strategies to continue highlighting itself as a leader in the global economic market. For example, partnerships with international businesses, trade organizations, and overseas economic development organizations will prove crucial in the promotion of the region as a hub for international economic activity. Leveraging the county's geographic location, streamlining regulatory procedures, encouraging investments in innovative businesses, and fostering partnerships with the Small Business Association (SBA), Small Business Development Centers (SBDC), U.S. Commercial Service, and others will help the region stand-out as the prime location for international business.



Key Strategies:

1. Promote the county as a national and international center for business, global trade, and development.
2. Foster a positive, business-friendly environment to make Orange County competitive and create and retain good quality jobs.
3. Increase investment in small business start-ups and promote entrepreneurship.
4. Identify opportunities to lower the costs of business production and provide streamlined business services to attract and retain businesses.

GOAL 5: Plan and Develop State-of-the-Art Infrastructure

Orange County's infrastructure system provides a well-connected network of rail lines, freeway systems, and access to international trade ports. Assurance that these systems are maintained and kept up-to-date will play a crucial role in the promotion of economic growth and activity. As Orange County continues to grow, increased pressure will be placed on these systems which will require proactive solutions to mitigate already concerning issues such as traffic, pollution, and water supply.

Orange County's economic success has led to the resurgence of the local housing market, which was dramatically affected by the Great Recession. Home prices soared as the county recovered from the Recession and have reached all-time highs. While providing an economic benefit to existing homeowners, these rising prices are beginning to negatively impact economically disadvantaged populations as well as renters by pricing them out of the region.

Local policymakers and stakeholders will have to work together to find an effective solution to the county's chronic shortage of affordable housing. Young professionals have been hit particularly hard by the county's high and continually increasing cost of living, which has become a significant barrier to living and working in the area. First, the county's high cost of living encourages many workers to relocate to neighboring counties and commute to work in Orange County, significantly increasing traffic congestion. Secondly, and of most importance, the pricing out of young talent could lead to a reduction in the county's talent pool, which may limit economic growth, making it harder for local employers to find qualified candidates. If left unchecked, this trend could negatively impact innovation and overall economic activity, making Orange County a less attractive environment for potential businesses. Considering these impacts, studies and recommendations are already underway. One strategy includes repurposing underperforming retail centers into housing developments to increase the housing supply.

As technology advances and the world becomes increasingly interconnected, special focus will have to be put on broadband access, specifically gigabit internet access, which will enable more rapid transfer of information and applications across individuals and businesses. The "Internet of things" (IoT) continues to digitize more and more aspects of daily life putting increased pressure on broadband networks. Building accessibility to broadband networks that can support increased activity will benefit, not only the quality of life in the region, but the level of economic activity.

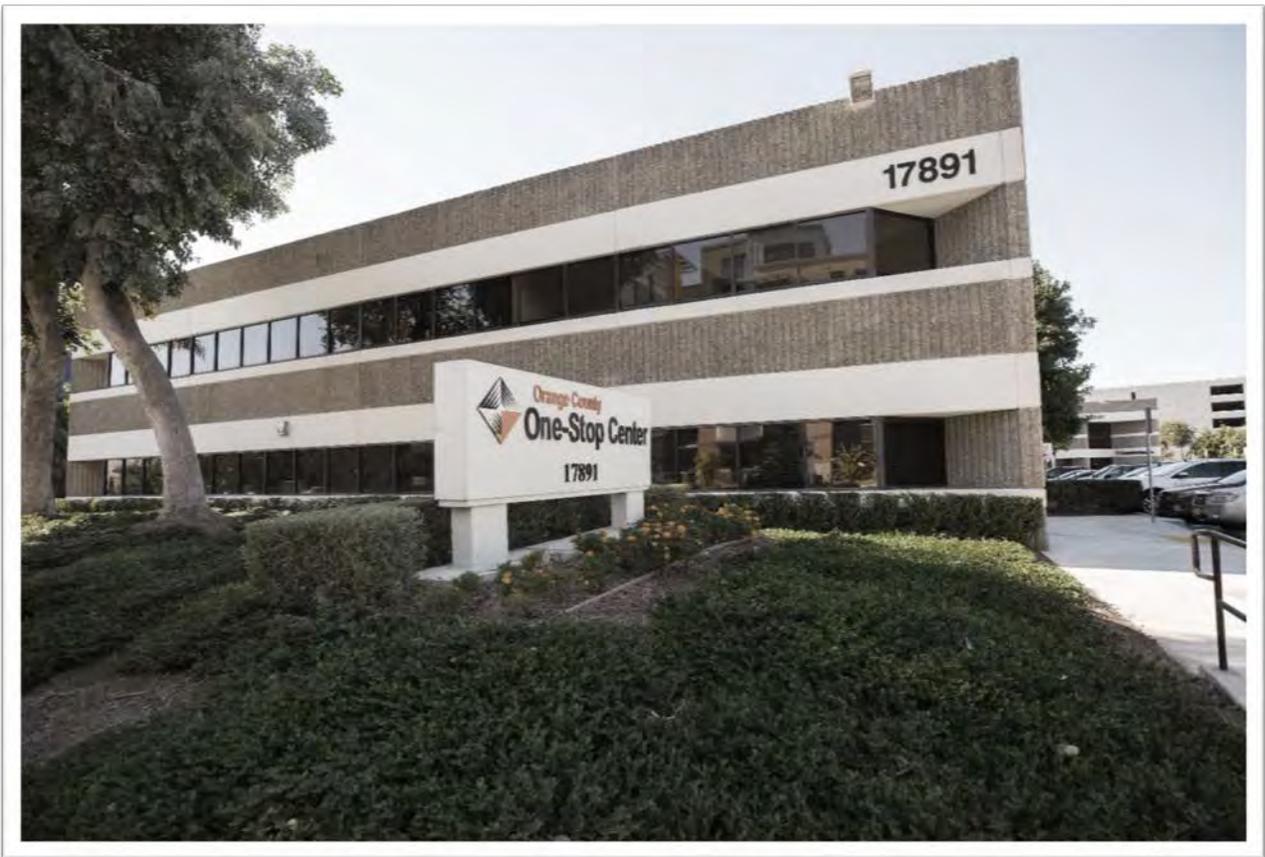
Key Strategies:

- Develop an expanded and improved infrastructure system, including affordable housing, to support economic growth and development.
- Support infrastructure that facilitates the efficient movement of goods, energy, information, and labor.
- Coordinate infrastructure investments with economic development opportunities in unincorporated parts of the county.
- Support the expansion of communication networks, such as broadband connectivity, telecommunications, and wireless technologies.
- Ensure sufficient supply of affordable housing to meet the rising demand from new job creation, including reusing obsolete retail centers for housing opportunities.

2019-2023 CEDS Performance Objectives

The following performance objectives will measure the success of the implementation of the CEDS strategies:

- 1. Number and types of investments undertaken in the region:**
Orange County will undertake at least two (2) economic development investments around Red Zones, with particular emphasis on infrastructure and transit-transportation centers.
- 2. Number of jobs retained in the region:**
In the next five (5) years, through economic development and workforce development investments, Orange County will grow at least 5,000 jobs in key priority clusters.
- 3. Amount of private sector investment in the region after implementation of the CEDS:**
If economic development investments are successful around transit-transportation centers, it is anticipated that private investment will be at least \$50 million county-wide (with a substantial beneficial effect on the residents in the Red Zones) after implementation of the 2019 CEDS Report.



Orange County Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

As part of creating an effective Comprehensive Economic Development Strategy for Orange County, building a strong Strength, Weakness, Opportunity, and Threats (SWOT) Analysis helps provide a high-level examination of the current economic, demographic, and social landscape of the region. A SWOT Analysis is a technique for identifying and analyzing the strengths (S), weaknesses (W), opportunities (O), and threats (T), and is an important element in the CEDS Report as it helps in determining economic development priorities and strategies by taking into account internal and external factors currently impacting various communities in the region.

A SWOT Analysis highlights regional and local strengths to understand the origin and how it can be leveraged to increase the positive impacts. Highlighting weaknesses allows policymakers and stakeholders to create more focused and targeted solutions aimed at eliminating these weaknesses. Both strengths and weaknesses are internal factors that local policymakers and stakeholders have some control over and can be improved through strategic policies. For example, Orange County’s strengths include strong industry clusters and a diverse and well-educated population, while weaknesses include a lack of workforce housing and the Skills Gap in certain high-growth industries.

Opportunities and threats are external factors with the potential to amplify strengths or exacerbate weaknesses. The SWOT Analysis for Orange County is highlighted below. As many of these issues will be detailed later in the report, this SWOT Analysis attempts to highlight the general trends currently impacting Orange County.

Strengths

Increasingly Diverse Population	Growing levels of Asian and Latino residents increase diversity in the region.
Highly-Educated and Qualified Workforce	Orange County possesses one of the most educated populations at nearly all age levels in the nation, which is a significant attraction factor for employers.
Central Geographic Location in Southern California	Proximity to major population and employment centers, including Los Angeles and San Diego.
High Quality of Life	Serves to continually attract and retain residents into the area, providing employers with a large pool of potential employees.
Highly Interconnected Transportation Infrastructure	Access to several rail lines, several freeways and highways, and proximity to major international seaports and airports.
World-Class Educational and Research Institutions	Home to world-class research institutions including the University of California, Irvine, and California State University, Fullerton, that create synergy between academia and business.
Record Low Unemployment Rates	A workforce at near full employment highlights the benefits of an Orange County location for both employers and employees.
Strong and Concentrated Industry Clusters	Focused industry clusters, such as Advanced Manufacturing (Medical Devices), provide a number of advantages for complementary and supplementary industries.

Weaknesses

Widening Workforce Skills Gap	A mismatch between employer needs and employee qualifications limits potential economic activity and growth.
Lack of Unified Regional Vision	A more collaborative approach between local municipalities could better spread economic growth across all Orange County communities.
Low-Income and Affordable Housing Options	A lack of affordable housing pushes the workforce to relocate to more affordable areas outside of the county and commute to work.
Increasingly High Cost of Living	The increasingly high cost of living is beginning to affect not only low income individuals, but middle-income families as well.
High Proportion of English Language Learners	Increased diversity is impacting local schools that have not properly planned or reinforced English language programs, limiting the educational attainment of English Language Learners.
Decreasing Availability of Land for New Construction	Population growth and housing needs are outpacing developers' ability to build new homes.

Opportunities

Commitment to Innovation & Entrepreneurship	Increasing the number of partnerships between academia, business, and government could accelerate the levels of innovation and new business creation in the region.
Leveraging Shifting Age and Ethnic Demographics	Healthcare will play an increasingly important role in Orange County as the population continues to age and healthcare technology continues to evolve.
Increasing Preferences for Urban Lifestyle	The preferences of younger generations are concentrating individuals in “downtown” metro areas which provide housing options with easy access to amenities, entertainment, and cultural events.
Leverage Existing and Emerging Industry Clusters	Reinforce high-performing sectors such as Advanced Manufacturing (Medical Devices) while cultivating an environment which increases the support emerging sectors will receive, increasing the likelihood for healthy, rapid expansion.
Continue to Promote Tourism	Increasing the level of tourism in the region will ensure growing levels of funding to Orange County cities through increased sales tax revenues which will provide major economic benefits to the region.
Cultivate Retail and Arts & Entertainment Sectors	Generational shifts and technological improvements are serving to disrupt traditional sectors while increasing revenue levels such as e-commerce and its impacts on retail.
Attract and Retain World-Class Employers	While several world-class organizations already call Orange County home, increasing the number of major employers in the region will help showcase Orange County as an economic powerhouse in Southern California.
Promote Innovation Through Entrepreneurship	Home to a number of startup incubators, accelerators, and venture capital funds, providing increased support to entrepreneurs will surge new business formation, innovation, and even patent generation.

Threats

Increasing Older Population	As the population grows older, additional pressure may be put on healthcare services such as senior care while the number of young families will decrease, potentially impacting the supply of well-qualified workers for businesses.
Barriers to Entry/Regulatory Environment	A large number of policies and regulations may impact local business' ability to grow, limiting overall economic activity, the creation of new businesses, and the region's desirability as a business climate.
Automation's Impact on Occupation and Career Ladders	As automation transforms traditional career ladders by replacing low-skill, low-wage positions, such as kiosks replacing cashiers at fast food restaurants, skill and knowledge building associated with entry-level positions may be impacted.
Affordability and High Cost of Living Alienating Young Professional Workforce	As housing prices and the cost of living reach new highs in Orange County, young professionals may find themselves priced out of housing options near places of employment, resulting in increasingly long commute times and potentially prompting many to move to neighboring regions.
Poverty Rates and Homelessness	As rent and the cost of homes continue to rise, many individuals and families are being pushed into the streets, putting additional pressures on cities to address homelessness.
Water Supply Uncertainty	While the region was able to lift itself out of the most recent drought, concerns remain regarding water usage and how another drought could further impact communities by increasing the chances of wildfires.

While the SWOT Analysis helps to highlight both the positive and negative aspects of the current economic landscape in Orange County, the rest of this report provides context and actionable strategies individuals can take to leverage the benefits or mitigate the negatives. Following a general introduction of Orange County, this report will provide a detailed overview of local populations, industry employment, housing, wages, education, and a variety of other metrics that provide a more complete picture of Orange County's current economic situation.

Introduction to Orange County

Orange County is an urbanized county of almost one thousand square miles bordering Los Angeles, San Diego, Riverside, and San Bernardino counties. Made up of 34 cities and several unincorporated areas, with a population of 3,190,400 according to the U.S. Census Bureau's 2017 Population Estimate, Orange County is the third largest county in the state, and the sixth largest county in the nation. It has become a major regional economic engine due to several factors including:

- Its prime geographic location and proximity to other major population centers.
- Its extensive transportation network, including ports, airports, freeways and railways.
- Its status as a major tourist destination boasting 42 miles of picturesque coastline, The Disneyland Resort, Knott's Berry Farm, South Coast Plaza, Angel Stadium, Honda Center, and other attractions.
- Its strong business environment and deep talent pool.

In 2016, researchers at California State University, Fullerton, estimated Orange County's gross county product (GCP) – the county-level equivalent of gross domestic product (GDP) at \$221.4 billion.

Following its recovery from the Great Recession, Orange County continues to have a falling unemployment rate fueled by the growth of thriving industries such as Information Technology, Advanced Manufacturing, Healthcare, Construction, Tourism, Financial Services, and Professional and Business Services. The county's housing market has completely recovered from the Recession, with housing prices reaching new highs. As discussed previously, this has led to affordability and housing supply concerns throughout the region. Orange County's growing diverse and well-educated workforce offers a number of significant benefits such as an increased ability to attract world-class businesses that drive economic competitiveness, innovation, and growth.

Despite these promising improvements, Orange County still faces several significant challenges:

- An increasing interest rate environment.
- Complicating environmental regulations.
- National and international political uncertainty.
- Technological disruption of key industries, such as retail.
- Significant demographic shifts.
- Skyrocketing housing costs and a severe lack of housing supply.

The following section of this report provides an overview of Orange County's demographic, economic, and social climates, focusing on trends which may impact its future economic growth and ability to meet the 2019 CEDS Report's goals.

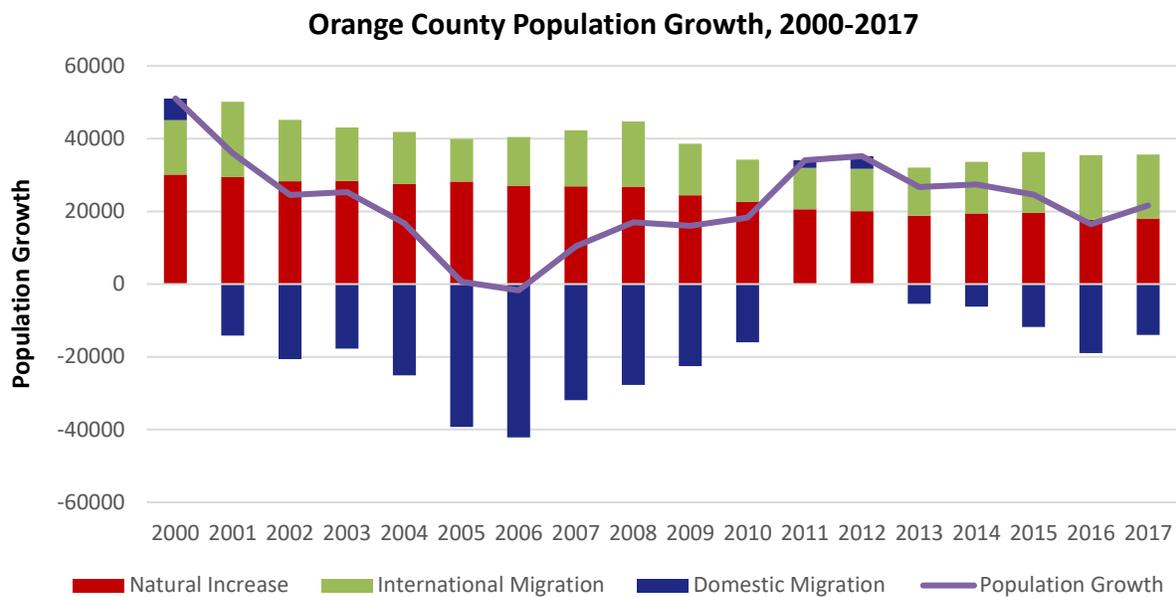
Orange County Demographics

While population growth has slowed since 2010, the California Department of Finance predicts that Orange County will continue to grow, albeit at a slower pace.

Orange County Population Decennial Change and Forecast, 1990 - 2060				
	Orange County		California	
	Total	Decennial Percent Change	Total	Decennial Percent Change
1990	2,398,400	24.1%	29,558,000	24.9%
2000	2,846,289	18.1%	33,873,086	13.8%
2010	3,014,677	5.9%	37,335,085	10.2%
2017	3,194,024	-	39,523,613	-
2020	3,260,012	8.1%	40,639,392	8.9%
2030	3,433,510	5.3%	43,939,250	8.1%
2040	3,558,071	3.6%	46,804,202	6.5%
2050	3,615,935	1.6%	49,077,801	4.9%
2060	3,616,576	0.0%	50,975,904	3.9%

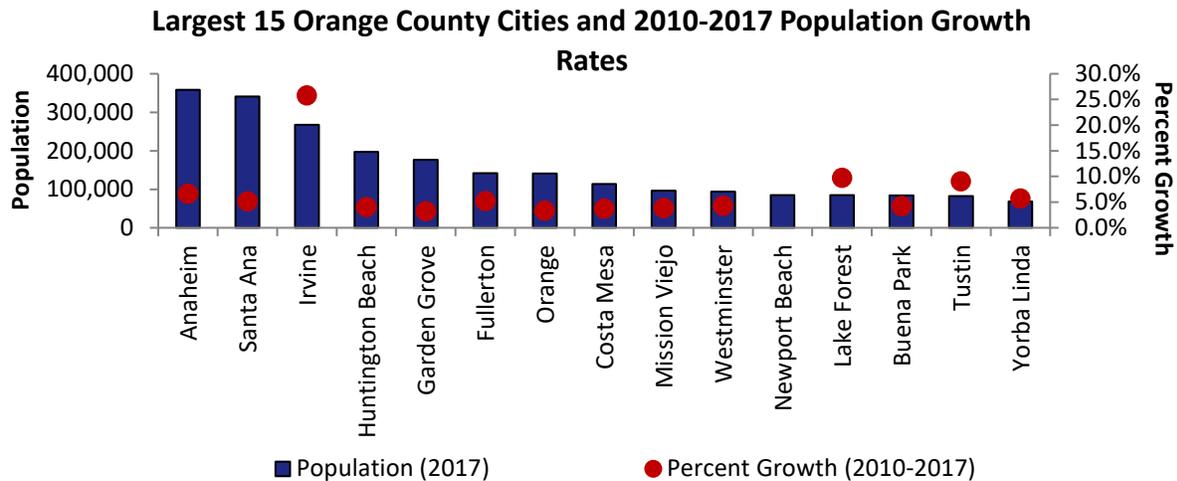
Source: California Department of Finance, Demographic Forecasts

Recent population growth in Orange County has been driven by natural increase (births minus deaths), and international migration, as domestic migration into Orange County turned negative in 2001 and has generally remained that way up to the present. This trend is the result of the county’s high cost of living and relatively slow wage growth, which combined has priced many residents out of Orange County. In 2017, nearly 14,000 county residents moved to lower cost areas of the country such as Texas, Arizona, Washington, Nevada, and Oregon.



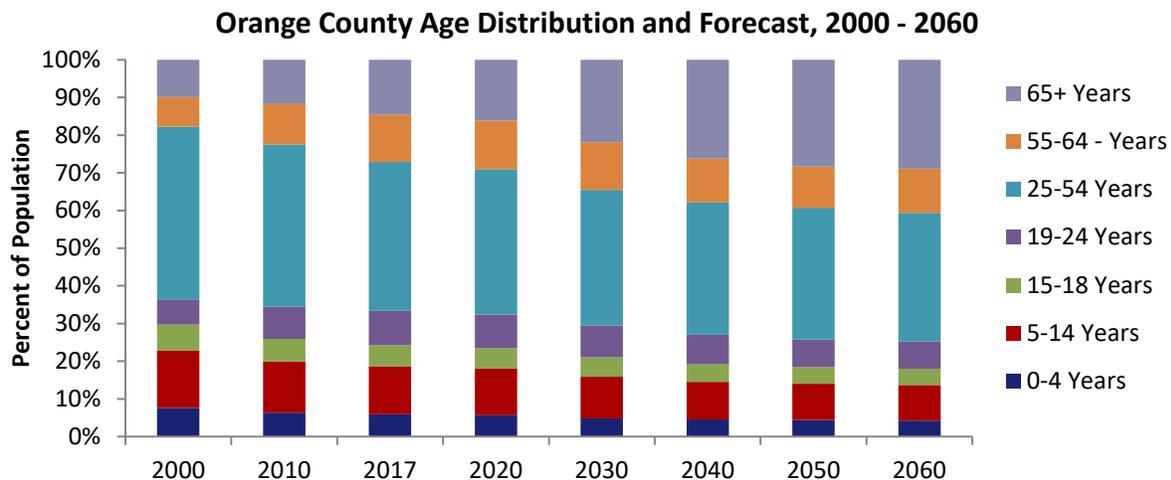
Source: California Department of Finance, Demographic Estimates

Orange County’s three largest cities are Anaheim, Santa Ana, and Irvine. Irvine grew faster than any other city between 2010 and 2017. This growth resulted from a number of factors: the city’s status as a master-planned community, which allows for quicker and more efficient construction and regulation processes; its importance as the county’s de facto business hub, which attracts businesses and workers; its central location; its many amenities; and a reputation as one of the nation’s safest cities.



Source: California Department of Finance

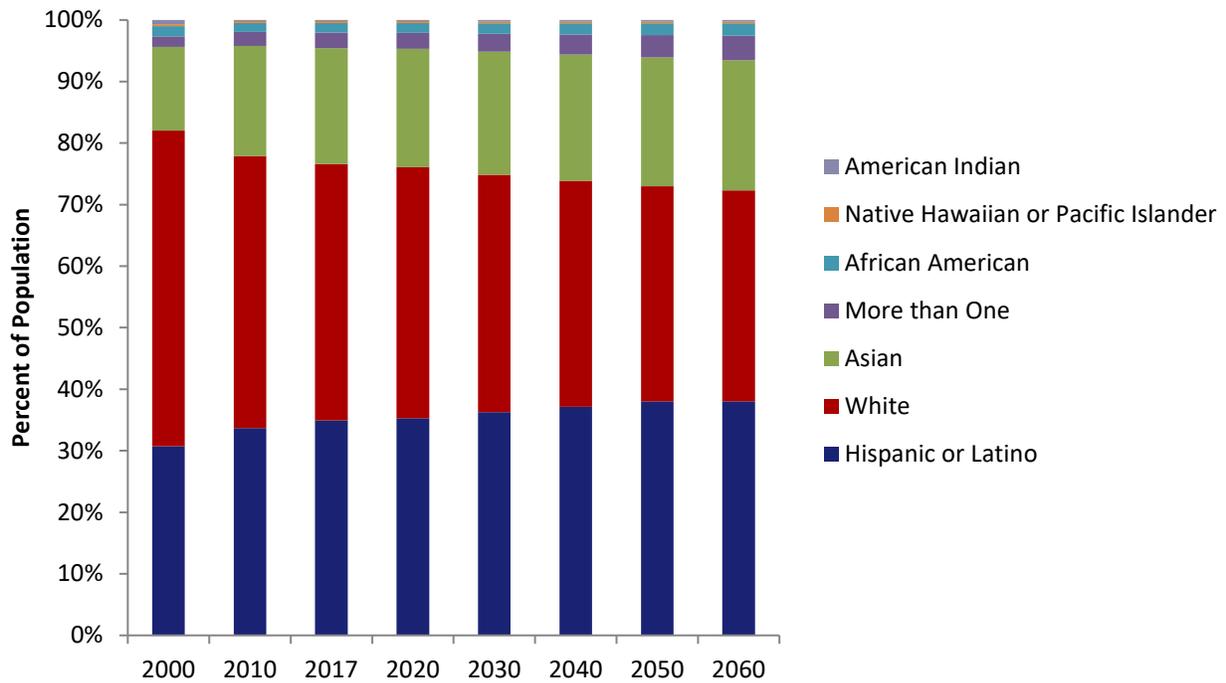
Following broader state and national trends, Orange County is becoming increasingly older and more diverse, with the median age in the county increasing from 37.1 in 2015 to 37.3 in 2016. Since 2000, older age groups account for a larger percentage of the county’s overall population; the percentage of county residents aged 65 and older increased by 66.3 percent between 2000 and 2017, while the percentage of residents aged 19 and under shrunk by 8.2 percent. The California Department of Finance predicts that these trends will continue, with the county’s share of residents over 65 increasing by 123.8 percent between now and 2060.



Source: California Department of Finance

The county’s percentage of White residents decreased by 8.7 percent between 2000 and 2017, while its percentage of Hispanic or Latino and Asian residents increased by 27.7 percent and 56.0 percent, respectively, over the same time period. In 2060, Orange County’s population is expected to be 38.1 percent Hispanic or Latino, 34.2 percent White, and 21.2 percent Asian.

Orange County Ethnic Distribution and Forecast, 2000 - 2060

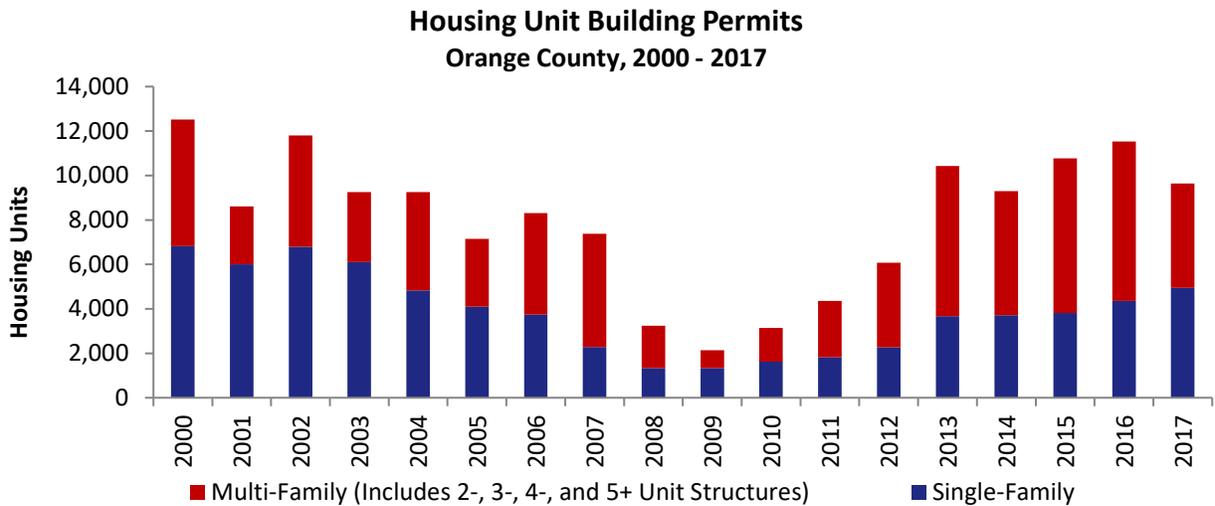


Source: California Department of Finance

These major changes in Orange County demographics will have far-reaching effects on the regional economy. Orange County’s aging population, for example, will drive employment growth in the Healthcare industry, while its growing diversity will put more pressure on English as a Second Language (ESL) programs in schools.

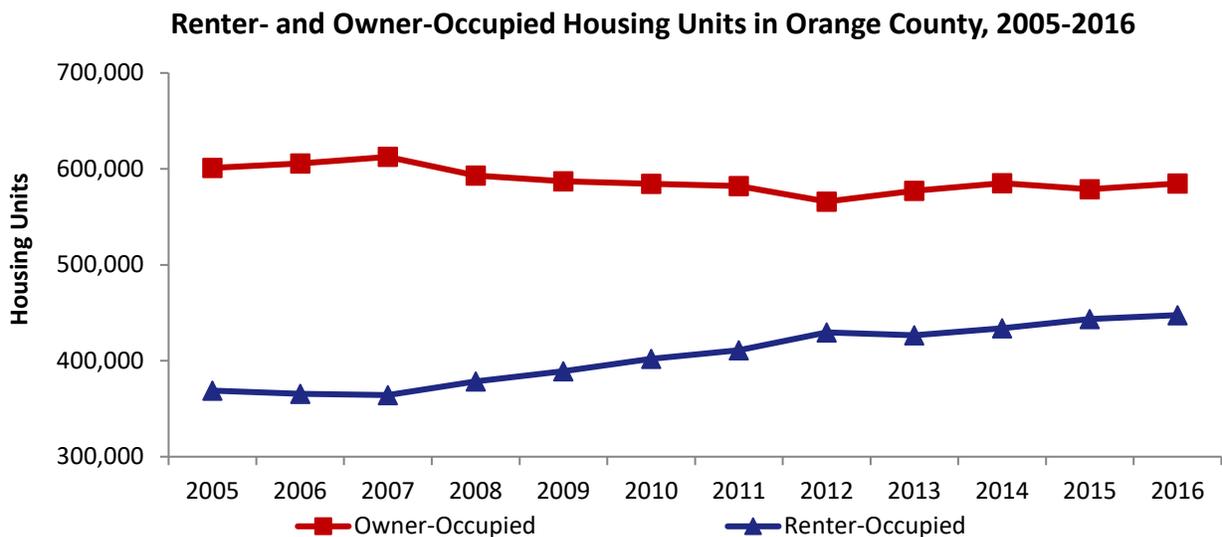
Orange County Housing Overview

Despite being severely impacted by the mortgage crisis in 2008, Orange County’s housing market has improved significantly in recent years and has fully recovered from the Recession. While the region has completely recovered, its housing makeup has begun to shift from single-family, detached homes to multi-family attached homes as rapid population growth has driven housing demand – and home and rental prices – to new highs. Changes in the number of building permits, as shown in the following chart, illustrate the county’s rapidly increasing housing density. Single-family units, which accounted for almost 70 percent of all building permits in 2001, made up less than 40 percent of new home building in 2017.



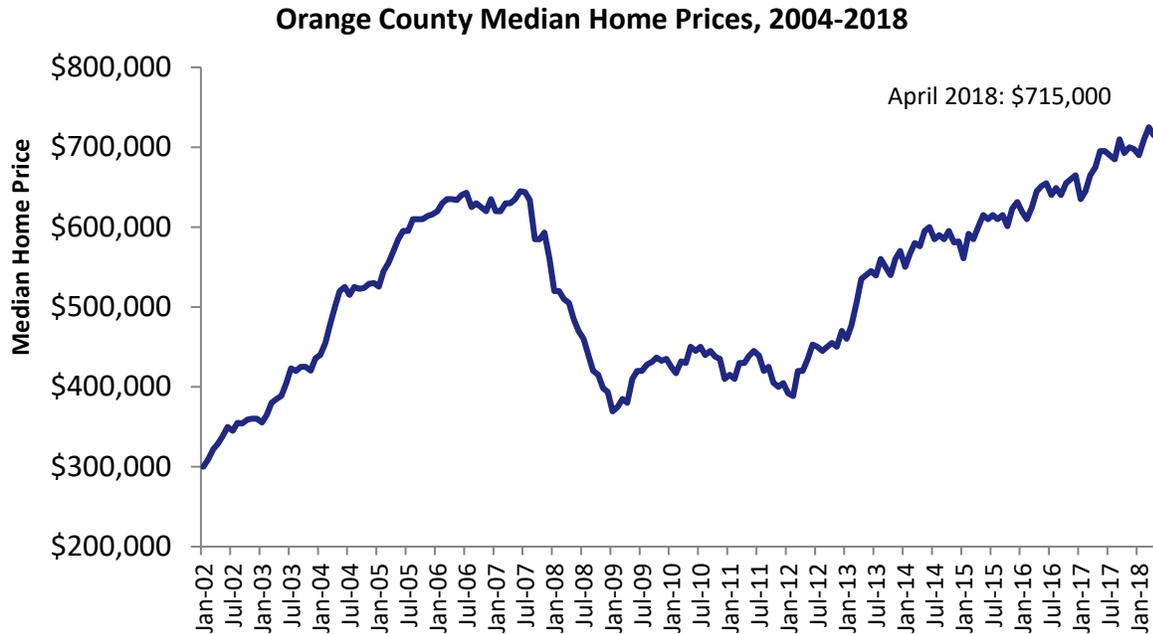
Source: U.S. Census Bureau, American Community Survey

Orange County’s skyrocketing home prices have lead many residents to rent homes instead of buying them, as illustrated in the following graph. 56.6 percent of county residents owned their homes in 2016, compared to 62 percent in 2005; the percentage of rental units has correspondingly increased.



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

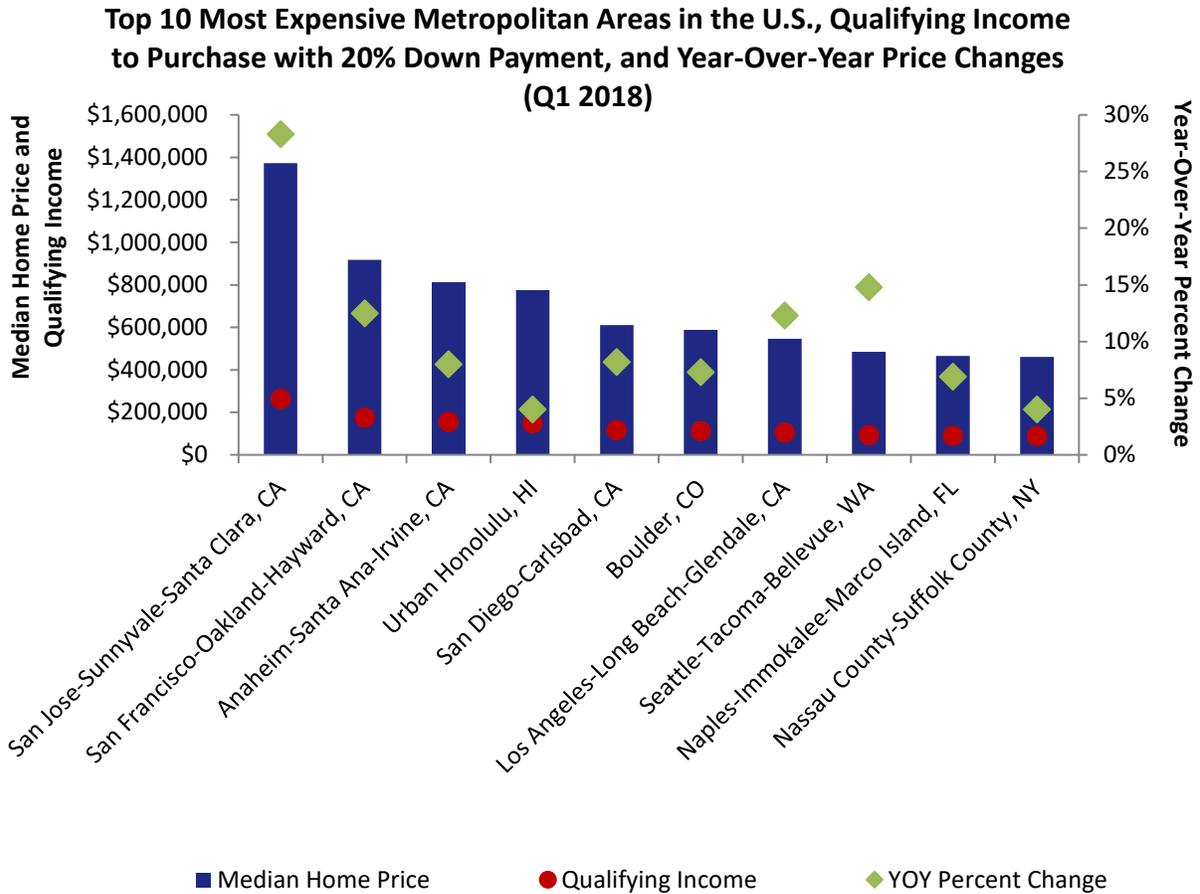
CoreLogic measured Orange County’s median home price at \$715,000 in April 2018; this includes resale single-family homes and condos as well as new homes. This price, while \$10,000 below its peak in March 2008, remains well above pre-Recession median home prices.



Source: CoreLogic, Dataquick

Housing affordability has become a major issue in Orange County, as it has outpaced recent wage increases. In 2017, the National Association of Realtors (NAR) found that Orange County had the nation’s third highest qualifying income to purchase a new home, behind only San Jose and San Francisco. The California Association of Retailers (CAR) list Orange County as one of the most expensive housing markets in Southern California. The county’s median price for an existing single-family home is \$810,000, which would necessitate a qualifying income of more than twice the county’s median household income. Orange County’s CAR Housing Affordability Index score is 21, which means that only 21 percent of county households can afford a median-priced home.

These affordability rates demonstrate the county’s relatively high cost of living. The minimum qualifying income to afford a single-family home in Orange County is two to three times higher than in surrounding counties such as Riverside and San Bernardino, a fact that helps explain the trend of migration out of Orange County into more affordable areas. As discussed later in this report, many residents of these less expensive areas commute to work in Orange County, which allows them to take advantage of the county’s above-average wages while avoiding its above-average cost of living. However, these residents face significant tradeoffs including long commutes with increasing traffic congestion, which negatively impact the quality of life of residents throughout the region.



Source: National Association of Realtors

Southern California Housing Affordability				
Counties	Q1 2018	Q4 2017	Median Home Price	Minimum Qualifying Income
San Bernardino	52	50	\$278,500	\$57,650
Riverside	39	38	\$397,000	\$82,180
California	31	29	\$538,640	\$111,500
Los Angeles	28	25	\$545,540	\$112,930
San Diego	26	26	\$610,000	\$126,270
Ventura	31	26	\$635,500	\$131,550
Orange	21	21	\$810,000	\$167,670

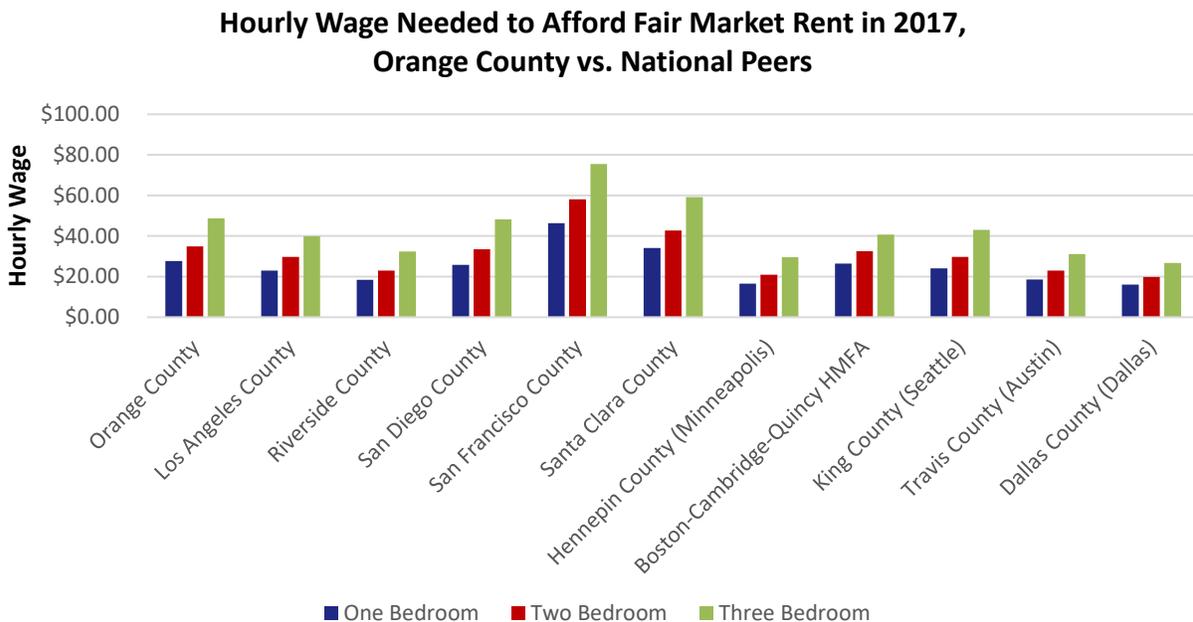
Source: California Association of Realtors, Housing Affordability Index

High home prices have made renting the only option for many Orange County residents, and as a result has driven monthly rents to new highs. According to Zillow, a leading real estate and rental marketplace, the median rental price for a two-bedroom apartment in Orange County grew from \$1,735 in January 2013 to \$2,435 in March 2018, an increase of \$700 or 40 percent. County rents have consistently trended upward for the past five years.



Source: Zillow

These skyrocketing rental prices have priced many residents out of Orange County’s rental market. According to the National Low Income Housing Coalition’s 2017 Out of Reach Report, the estimated renter median household income in Orange County was \$53,403, with the annual income needed to afford a one-bedroom and two-bedroom apartment at \$57,440 and \$72,520 respectively. A worker making minimum wage would have to work 105 hours per week to afford a one-bedroom apartment or 133 hours per week to afford a two-bedroom apartment. Orange County’s minimum wage is \$11.00 per hour, while workers would need to make \$27.62 per hour to afford a one-bedroom apartment or \$34.87 to afford a two-bedroom apartment.

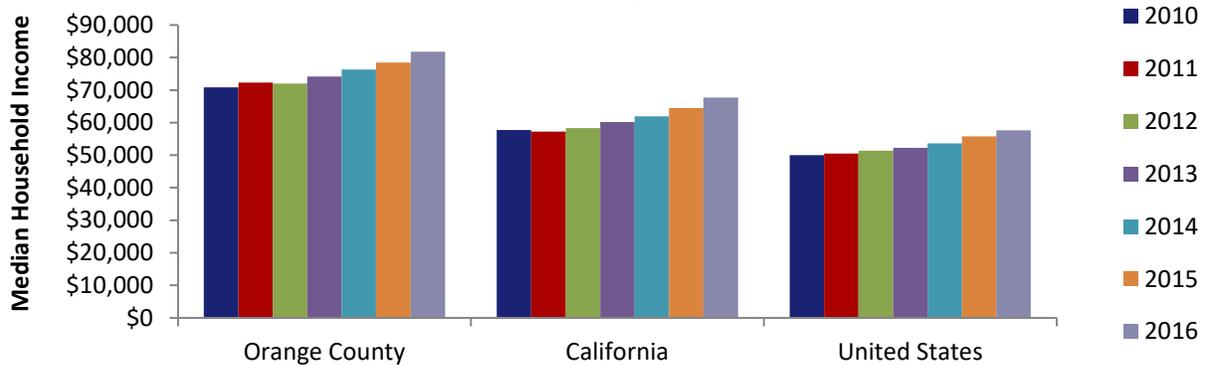


Source: National Low Income Housing Coalition, 2017 Out of Reach Report

Orange County Wage Overview

Recent wage growth has helped mitigate Orange County’s high home prices to a certain extent. The U.S. Census Bureau’s 2016 American Community Survey measured the county’s median household income at \$78,245, more than \$14,000 above the state’s median income and almost \$23,000 above the nation’s median income. However, the county’s median household income is growing at a lower rate (2.1 percent) than the state (3.2 percent) or nation (2.7 percent) as a whole.

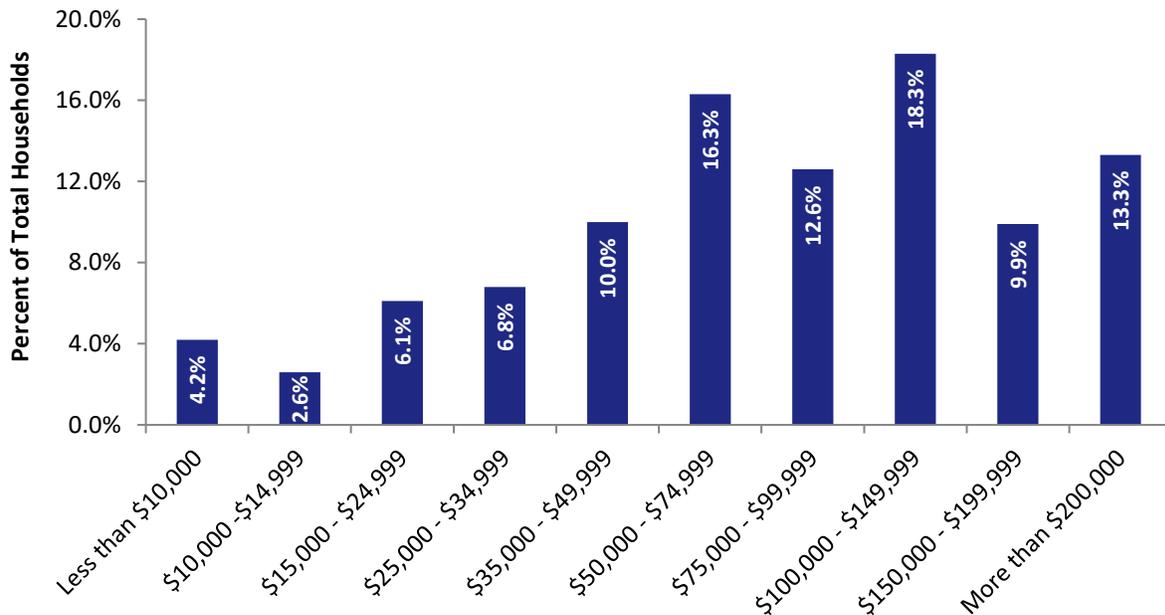
Orange County, California, and U.S. Median Household Income Comparisons



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

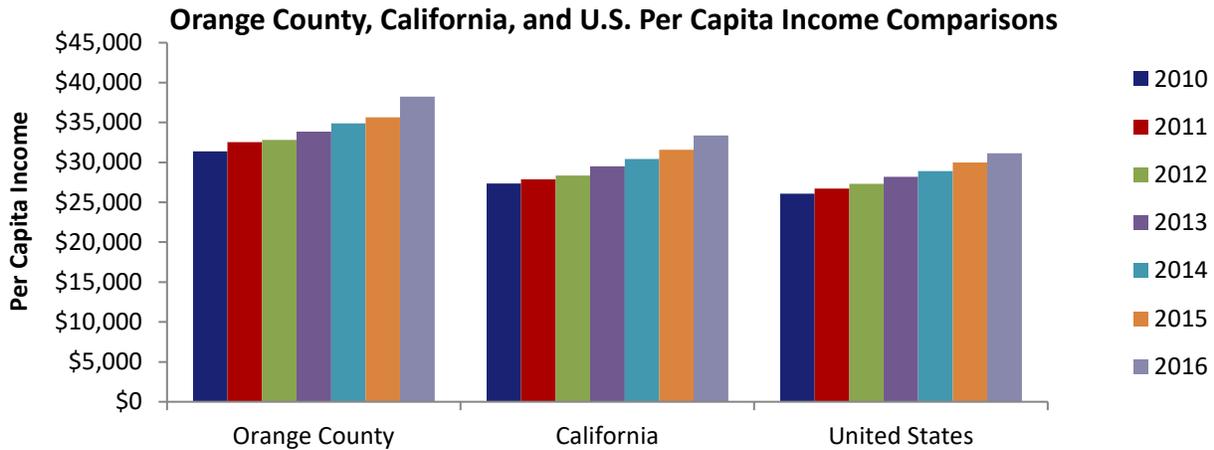
The following chart illustrates median household income distribution in Orange County. 18.3 percent of households made between \$100,000 and \$149,999 in 2016.

Orange County Median Household Income Distribution, 2016



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

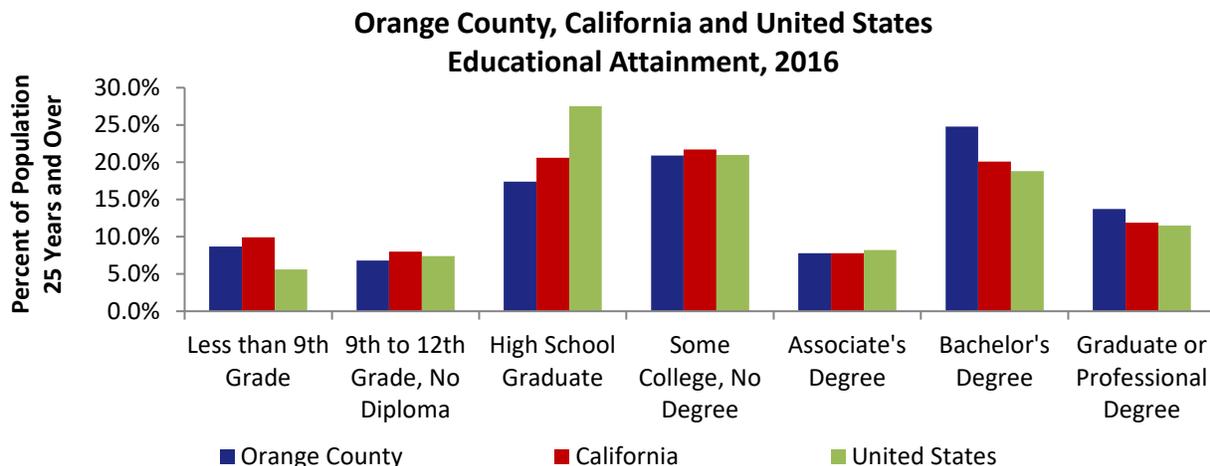
In 2016, the per capita income in Orange County totaled \$38,247, representing a growth of 7.3 percent or \$2,596 over 2015 levels, while the state-level per capita income reached \$33,389 and the national per capita income level totaled \$31,128. This makes Orange County’s per capita income \$4,858 or 14.5 percent above the state’s per capita income level and \$7,119 or 22.9 percent above the national per capita income level. Overall, from 2010 to 2016, Orange County’s per capita income had an annual average increase of \$1,146 or 3.4 percent.



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

Orange County Educational Attainment Overview

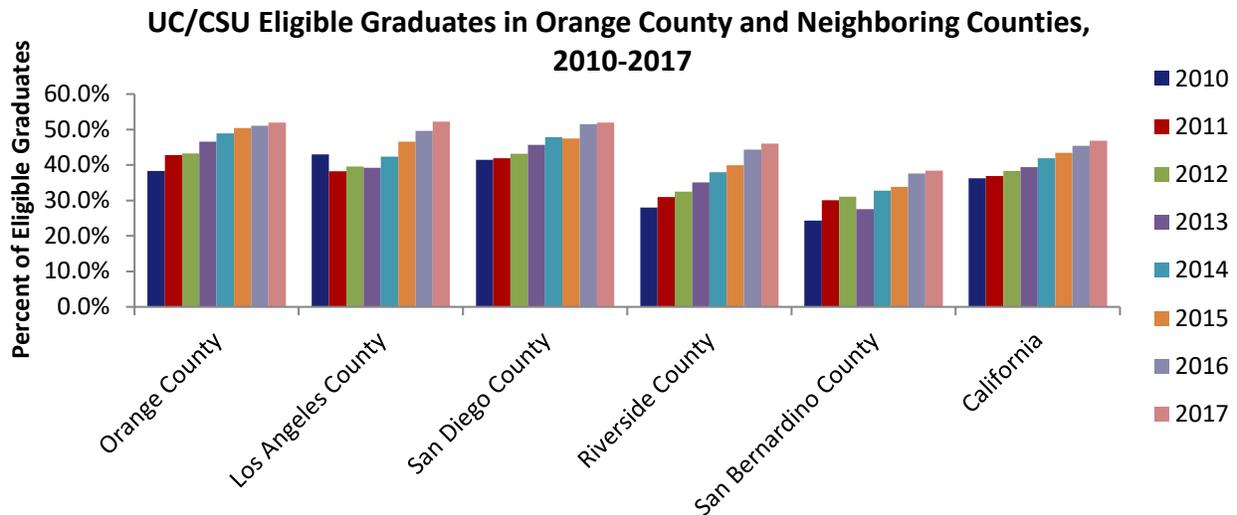
The wage difference between Orange County and the rest of the state and nation stems from a variety of factors, such as education. Orange County has a higher percentage of college graduates than California or the United States as a whole.



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

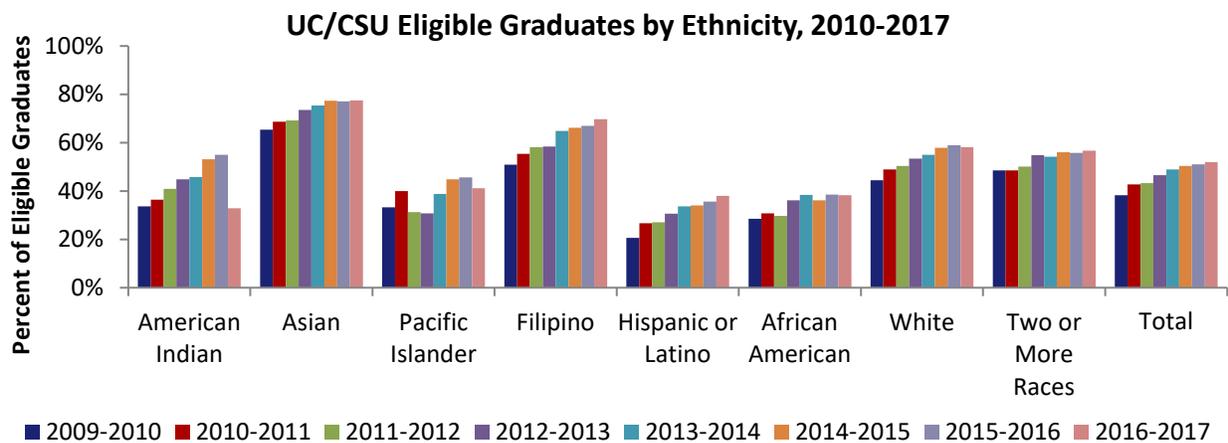
Orange County’s high rate of educational attainment is due in a large part to its excellent educational system. 52 percent of the county’s 2016 high school graduates are University of California (UC)/California State University (CSU) eligible, compared to only 46.8 percent of graduates at the state level. Partnerships

with local universities such as the University of California, Irvine, Chapman University, and California State University, Fullerton, have played an important role in enabling county educators to prepare students for the transition to colleges and universities.



Source: California Department of Education, DataQuest

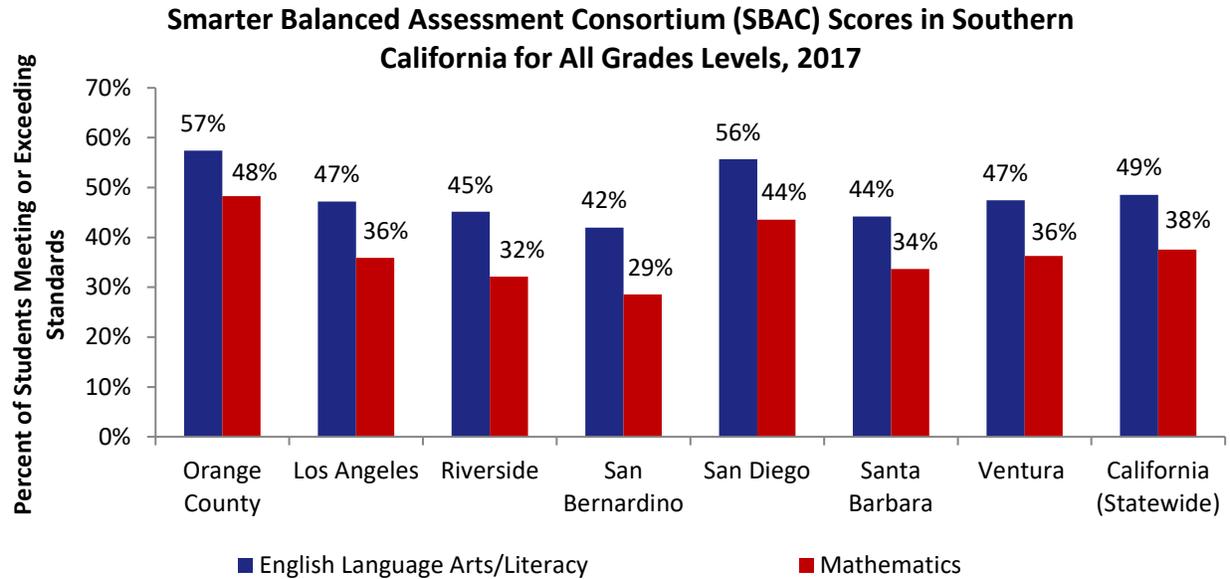
In 2016, Orange County had Southern California’s second highest percentage of UC/CSU graduates, trailing only San Diego County. The following chart shows the UC/CSU eligibility rates for various county ethnic groups. While the Hispanic or Latino group has historically struggled in this metric, targeted college preparation and English language programs have helped this group make significant progress over the past decade.



Source: California Department of Education, DataQuest

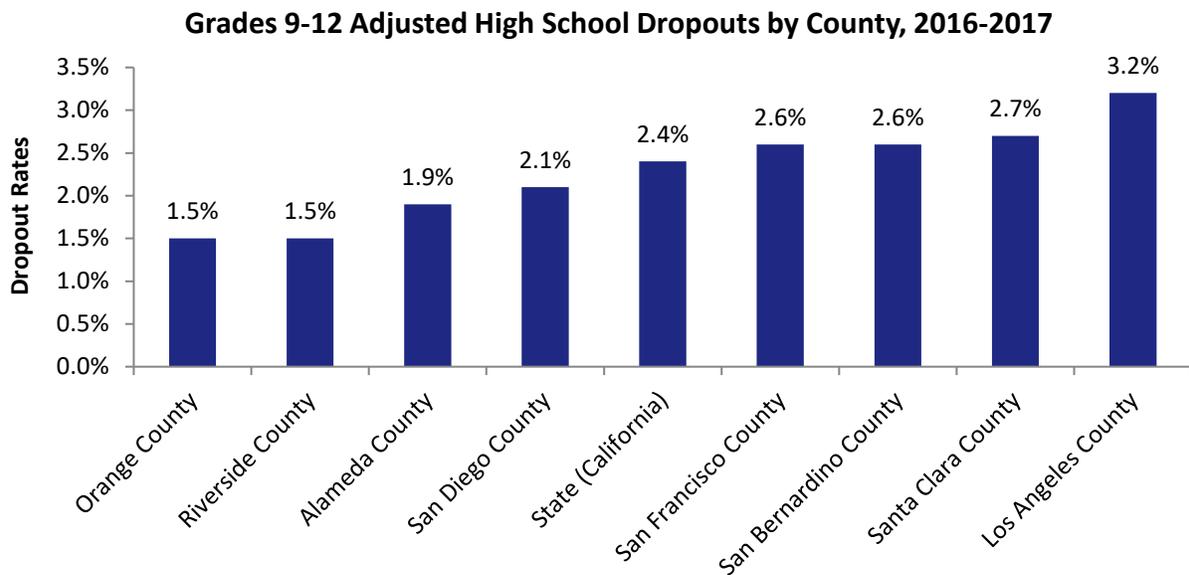
Overall, Orange County K-12 students performed fairly well in 2017. According to the California Assessment of Student Performance and Progress (CAASPP), which conducts the Smarter Balanced Assessments Consortium (SBAC) of proficiency in English Language Arts/Literacy and Mathematics, Orange County had a higher rate of students meeting or exceeding standards than any other county in Southern California. 57 percent of Orange County students met or exceeded standards in English

Language Arts/Literacy, compared to 49 percent at the state level, and 48 percent of county students met or exceeded Mathematics standards compared to only 38 percent at the state level.



Source: California Department of Education, Smarter Balanced Assessment Consortium

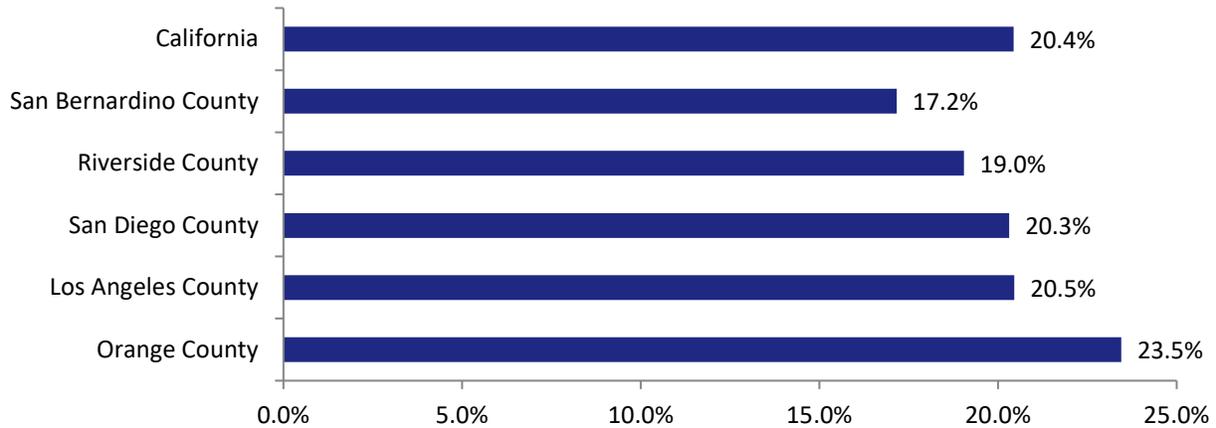
Furthermore, Orange County had a dropout rate of only 1.5 percent during the 2016-2017 school year, which was the lowest in the state tied with San Diego County. This low rate highlights the relative success of Orange County’s educational system and provides further evidence that Orange County students are well-prepared for both the workforce and post-secondary educational programs.



Source: California Department of Education, DataQuest

Despite having comparatively high SBAC scores and comparatively low dropout rates, Orange County’s educational system still faces one major challenge, the state’s highest percentage of English Language Learners. According to the California Department of Education, 23.5 percent of the county’s K-12 students were English Language Learners (ELL) in 2017-2018 compared to 20.4 percent at the state level.

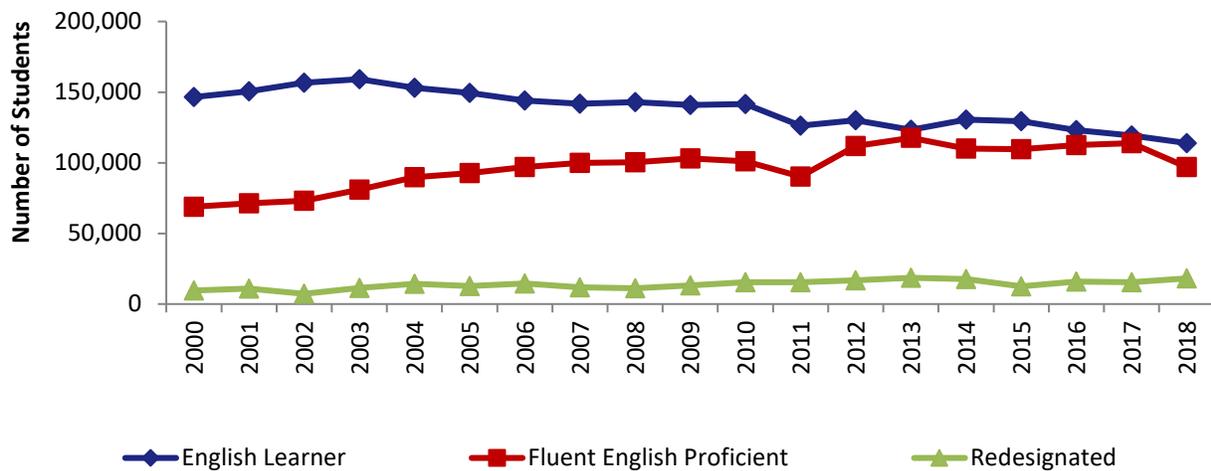
English Language Learners as a Percent of Total Enrollment, 2017-2018



Source: California Department of Education, DataQuest

ESL education is a major priority for schools located in the county; the following chart illustrates the significant progress made in this direction since the year 2000. The closing gap between English Learners and Fluent English Proficient students is a particularly encouraging indicator.

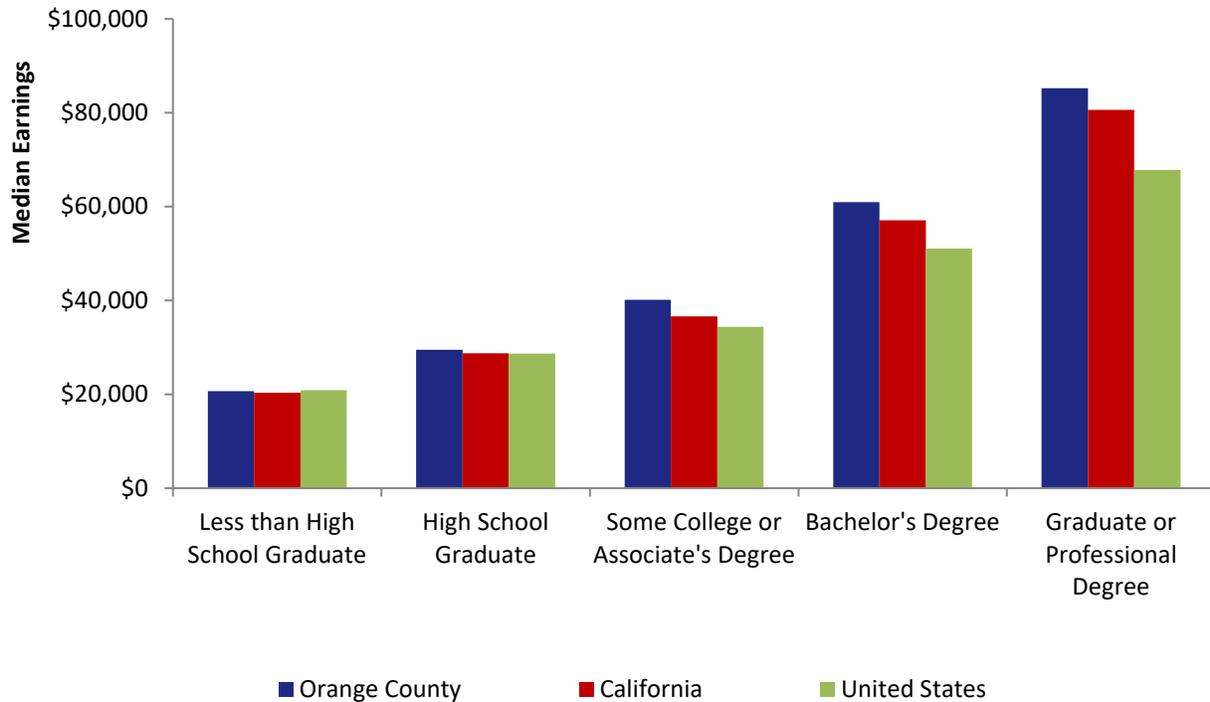
English Learners, Fluent English Proficient and Redesignated Students in Orange County, 2000-2018



Source: California Department of Education, DataQuest

The chart below illustrates one major benefit of higher education, the positive relationship between educational attainment and median income, which holds true at the county, state and national level. For example, Orange County residents with a Bachelor’s degree earn a median wage of \$31,470 more than residents with only a high school diploma.

Orange County, California, and United States Median Earnings by Educational Attainment, 2016



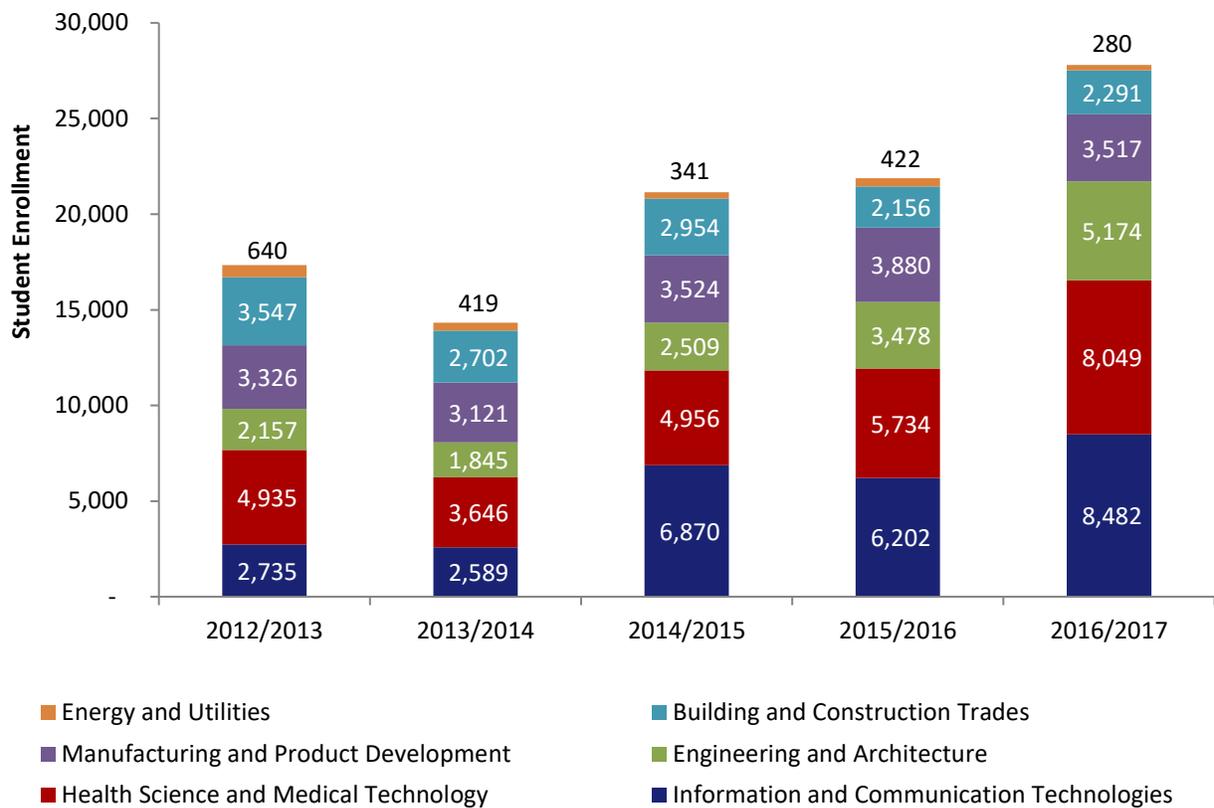
Source: U.S Census Bureau, American Community Survey

Enrollment in STEM-related courses at Orange County colleges and universities has steadily increased over the past five years, with the most significant growth occurring in Information and Communication Technologies, Health Science, Medical Technology and Engineering and Architecture. This trend further highlights the county’s innovative and highly-educated population and will contribute to the growth of several key industry clusters in the region. It will also play an important role in addressing the Skills Gap faced by many local businesses.

Between 2013 and 2017, the largest growth in STEM-related course enrollment came from Information and Communication Technologies, where enrollment levels increased from 2,735 to 8,482. Health Science and Medical Technology, which had the second highest enrollment of students in 2017, also experienced significant growth at a slower pace, while enrollment of students in Engineering and Architecture courses grew 140 percent, from 2,157 students to over 5,000 students, between 2013 and 2017. Two STEM-related fields saw enrollment declines, Energy and Utilities courses decreased by 56.3 percent, and Building and Construction Trades decreased by 35.4 percent.

The makeup of Orange County’s key industry clusters means that employment growth in the Information and Communication Technologies and Health Science and Medical Technology sectors is an indicator of a strong and continually developing pipeline of potential employees for local employers. Despite the increasing level of employment in Construction industries, the drop in enrollment of Building and Construction Trades programs signifies a potential lack of qualified candidates in the near future. In order to help ensure a steady stream of workers, workforce development organizations, employers, and academia must take on a cohesive and collaborative approach at highlighting the benefits associated with these types of jobs. The significant potential career growth and progression associated with the Construction industry are marketable characteristics that can be promoted to help drive potential jobseekers and employment towards that sector.

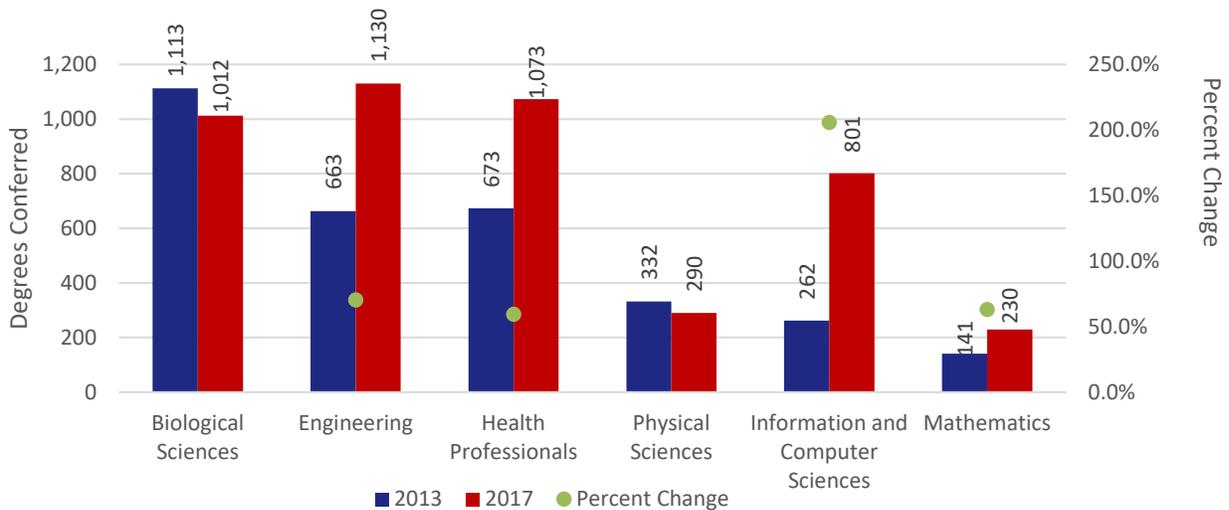
**Orange County Student Enrollment in STEM-Related Courses
(College and University Level)**



Source: Economic Modeling Specialists Intl.

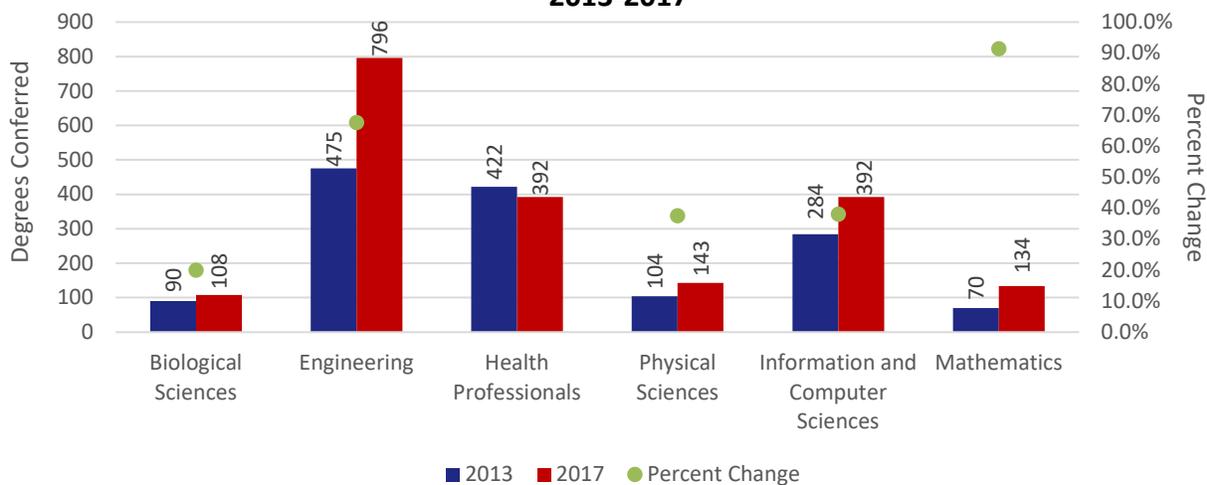
Orange County has experienced a significant increase in college enrollment since 2004, a trend partially attributed to the impacts of the Great Recession, which encouraged many residents to continue their education instead of facing a difficult job market. The three largest local universities – The University of California, Irvine; California State University, Fullerton; and Chapman University – awarded a total of 4,536 Bachelor’s degrees and 1,965 graduate degrees in 2017, a significant increase over 2013 levels as seen in the following chart, which highlights STEM-related degrees. Overall, the number of STEM-related undergraduate degrees awarded by county universities has increased 42.5 percent since 2013 while the number of STEM-related graduate degrees has increased 36 percent over the same time period.

STEM-Related Undergraduate Degrees Conferred at Orange County Universities, 2013-2017



Source: California State University, Fullerton; Chapman University; and University of California, Irvine

STEM-Related Graduate Degrees Conferred at Orange County Universities, 2013-2017



Source: California State University, Fullerton; Chapman University; and University of California, Irvine

Orange County's universities contribute to a strong business environment in at least two ways: by developing the county's well-educated workforce, which has been a major competitive advantage for decades, and by directly driving innovation and entrepreneurship through programs such as UCI Applied Innovation.

UCI's Applied Innovation program provides a link between campus innovation and Orange County's business community. It supports job creation and economic growth by:

- Linking local entrepreneurs to university innovations and talent.
- Providing larger corporations the ability to tap into the university's research capabilities.
- Connecting investors with promising startups.

UCI's Applied Innovation program works in partnership with several other programs, including ANTrepneur Center, BioENGINE, Experts-in-Residence, I-Corps @ UCI, POP Grants, Tech Surge, and Wayfinder Incubator.

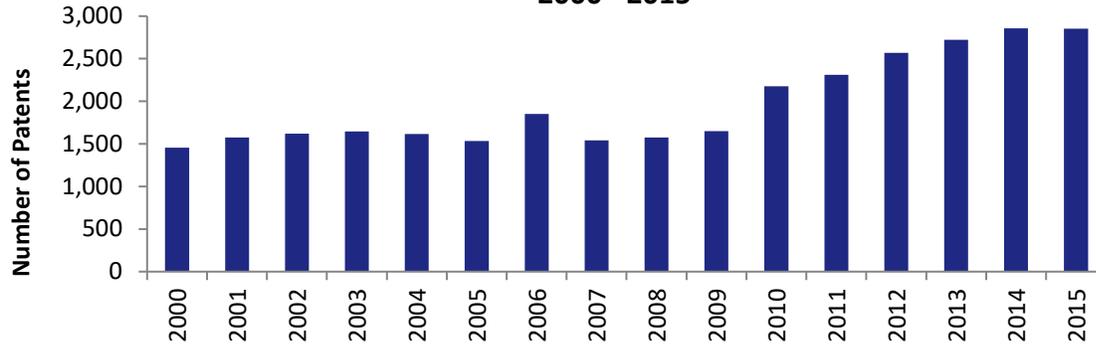
Other similar programs include Chapman University's Launch Labs Application, part of the Chapman University Ralph W. Leatherby Center for Entrepreneurship and Business Ethics, which strives to produce business-ready graduates with entrepreneurial skillsets through personalized education, training, and hands-on experience. Launch Labs is an incubator for Chapman University undergraduates, graduates, faculty, staff, and alumni, which provides support to entrepreneurs in the development and startup phases of their business cycles.

California State University, Fullerton (CSUF), has the CSUF Startup Incubator, which helps entrepreneurs launch new and innovative business concepts. In order to participate, entrepreneurs submit an application and undergo a series of meetings with CSUF Startup Incubator staff. Once accepted, participants become six month "Residents," meeting with CSUF Startup Incubator staff and a Startup Coach chosen from a pool of 600 mentors. Residents create a Startup Plan that includes the business's launch, the development of marketing strategies, the creation of business plans, and the development of a startup team. After the initial Startup Plan has been created, Residents will regularly meet with their Startup Coach and CSUF Incubator Staff to further develop their strategies for advancing and launching their business plans. Residents are also invited to participate in Startup Reviews, where they present their progress and plans for development to a panel of professionals and successful entrepreneurs in order to obtain feedback and make connections.

Building a strong relationship between educational institutions and local businesses, as exemplified by these three programs, benefits local entrepreneurs and drives regional innovation and business formation. One measure of how these relationships contribute to innovation is patent growth, which has consistently trended upward over the past decade.

According to the U.S. Patent and Trademark Office, a total of 2,851 patents originated in Orange County in 2015; this generated a total of 31,541 patents since 2000, which made it the eighth most innovative county in the United States.

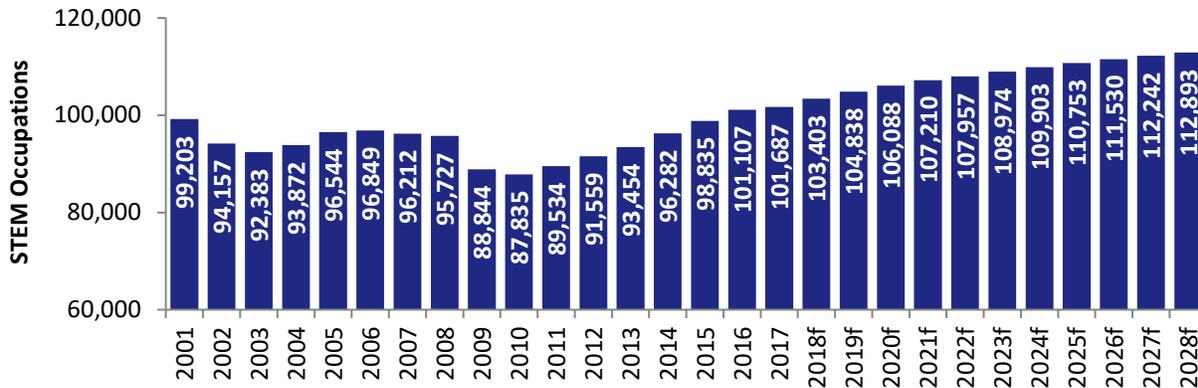
Orange County Annual Patents and Year-Over-Year Patent Growth, 2000 - 2015



Source: U.S. Patent and Trademark Office

Orange County’s many workers in STEM-related occupations also contribute to its regional innovation. According to Emsi, Orange County had just over 100,000 STEM-related jobs in 2017, an increase of 16 percent since 2010. Looking forward, Emsi estimates that STEM-related employment in Orange County will grow to a forecasted 112,893 by 2028, an increase of more than 11,000 jobs or 11 percent from present levels.

Total Estimated and Forecasted STEM Occupations in Orange County, 2001 - 2028f



Source: Economic Modeling Specialists Intl.

The largest employers in Orange County for STEM-related positions includes Anthem, Inc. which posted 2,214 STEM-related job postings between September 2016 and April 2018, followed by the University of California system with 1,277 unique STEM-related job postings and CoStar Group, Inc. with 1,243 unique STEM-related job postings.

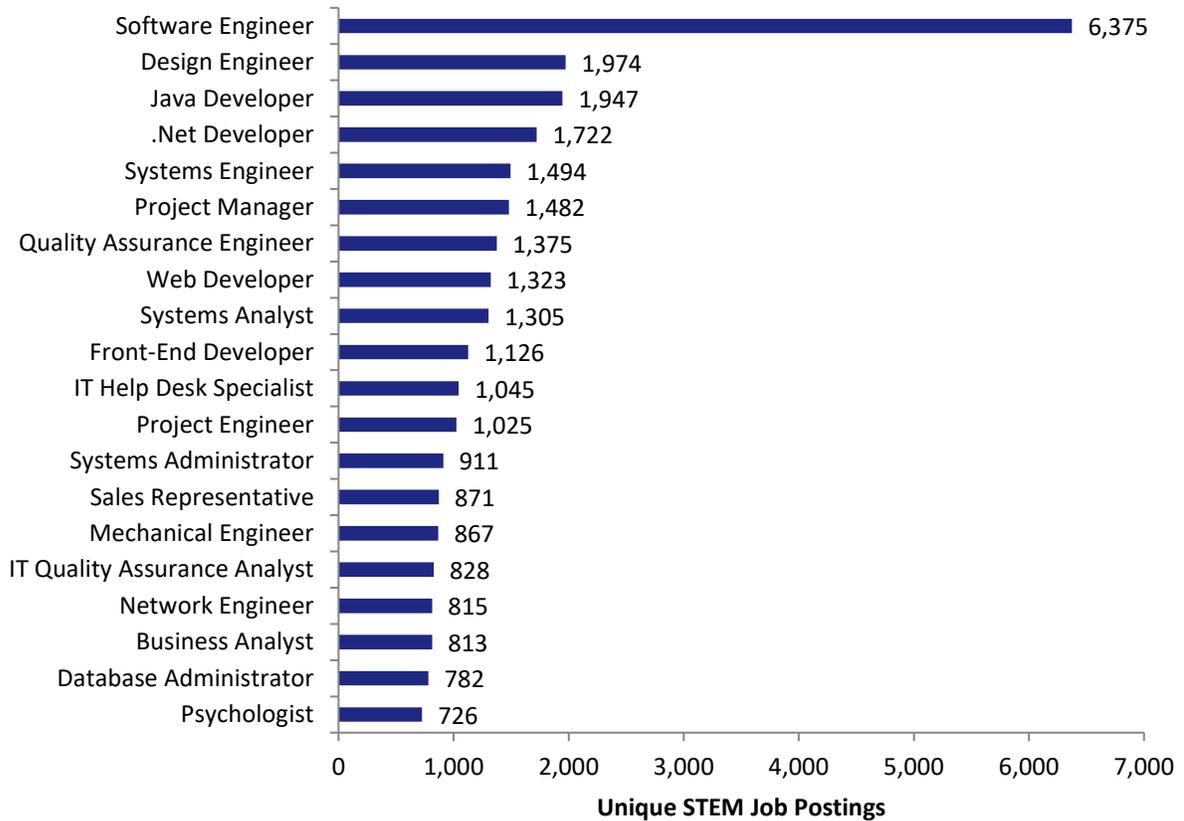
**Top 20 Employers by Job Postings for STEM-Related Occupations
(September 2016 - April 2018)**



Source: Economic Modeling Specialists Intl.

In terms of unique job postings by actual job title in Orange County, the largest number of job postings was for Software Engineers, which had 6,375 unique job postings between September 2016 and April 2018. Other occupations with significant numbers of job postings included Design Engineers with 1,974 and Java Developers with 1,947.

**Unique STEM-Related Job Postings in Orange County by Job Title
(September 2016 - April 2018)**

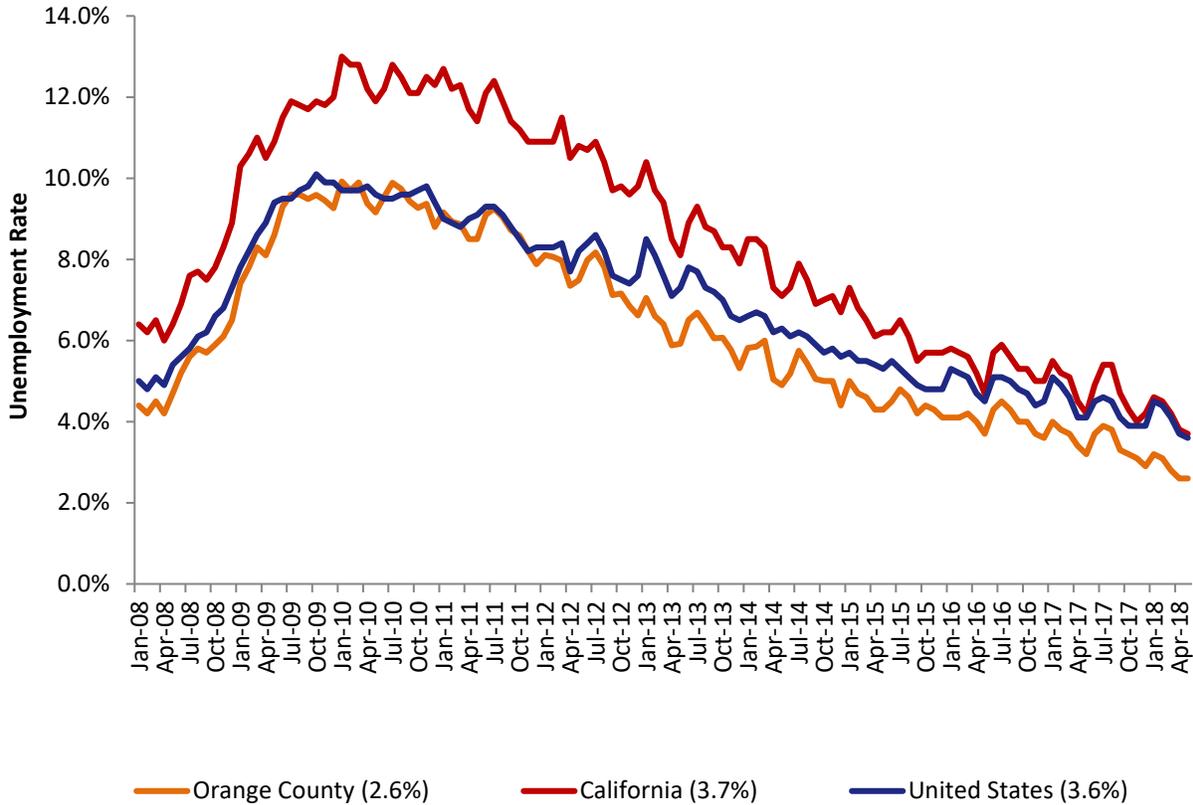


Source: Economic Modeling Specialists Intl.

Industry and Occupational Employment and Wages

After hitting a record low of 2.9 percent in December 2017, Orange County’s unemployment remained low at 3.1 percent the next month, following a trend of rising employment at the state and national level. The county’s unemployment rate hit a new record low of 2.6 percent in May 2018; county unemployment was significantly below the state (3.7 percent) and national (3.6 percent) levels.

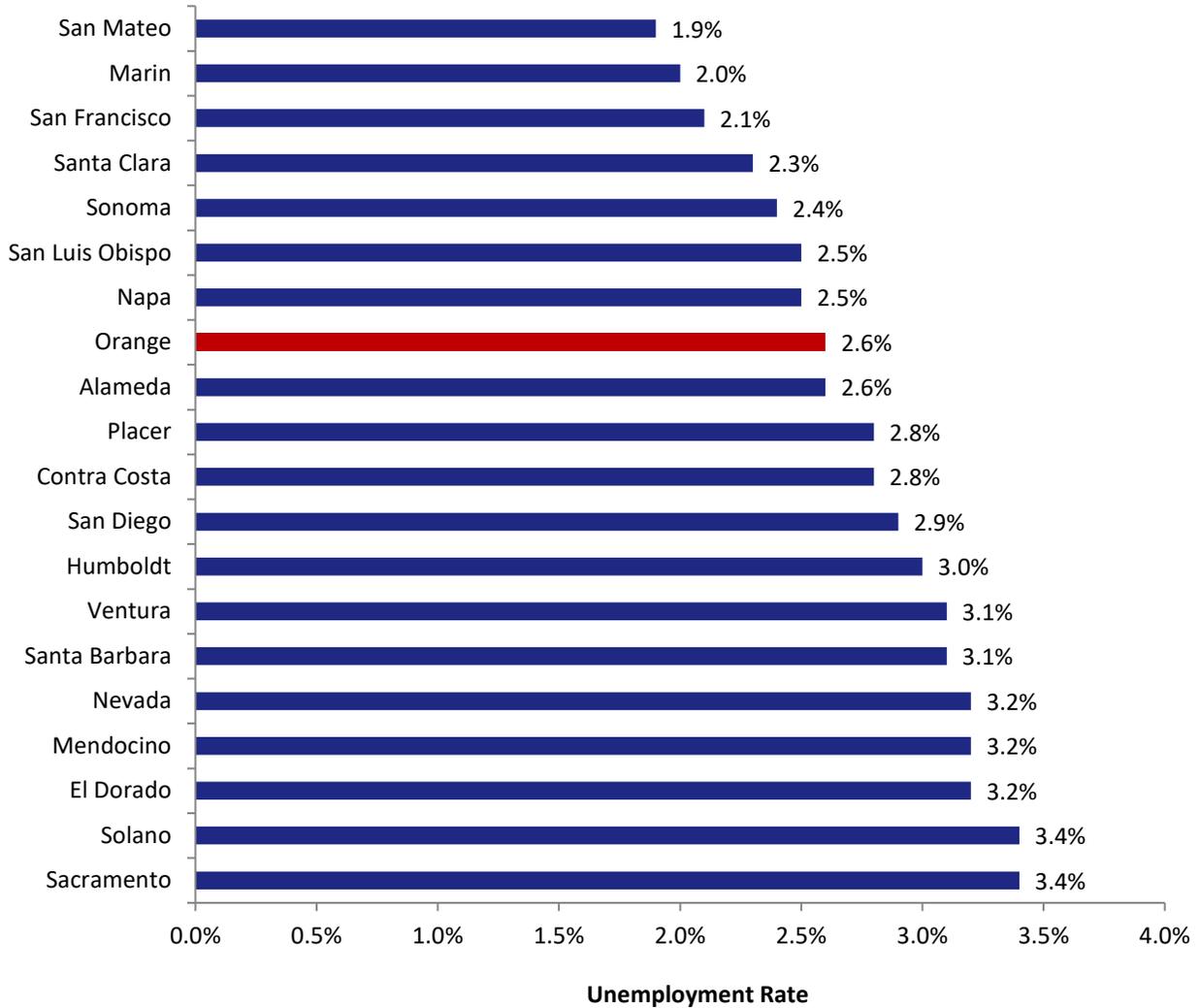
Orange County, California, and U.S. Unemployment Rate Trends



Source: California Employment Development Department

Orange County had the lowest unemployment rate in the Southern California region and the eighth lowest unemployment rate in the state in May 2018, behind San Mateo (1.9 percent), Marin (2.0 percent), San Francisco (2.1 percent), Santa Clara (2.3 percent), Sonoma (2.4 percent), Napa (2.5 percent) and (San Luis Obispo (2.5 percent) counties.

20 Lowest Unemployment Rates by California County, May 2018



Source: California Employment Development Department

The strength and resilience of Orange County’s employment base and economy can be seen in the chart below, which illustrates its worker inflow and outflow. According to a study conducted in 2017 by Jones Lang LaSalle, Orange County has a positive worker inflow, which means that more workers commute to Orange County from neighboring counties than vice versa. Orange County’s largest differential was with Riverside: 107,507 Riverside residents commute to Orange County for work while only 38,488 Orange County residents work in Riverside, which leaves a differential of 69,019 workers. A similar trend is seen with San Bernardino, where 74,222 San Bernardino residents commute to Orange County for work while only 37,733 Orange County residents travel to San Bernardino for employment leaving a differential of 36,489. Overall, a total of 656,924 workers commute to Orange County for employment while only 490,111 Orange County residents travel outside the county for work, providing a positive differential of 166,813 workers. These statistics show how Orange County’s unique high wage and high cost of living environment encourages many workers to live in less expensive areas and commute to work.

Daily Worker Flows to and from Orange County			
County	Worker Inflow	Worker Outflow	Worker Differential
Los Angeles	326,187	-312,035	14,152
Riverside	107,507	-38,488	69,019
San Bernardino	74,222	-37,733	36,489
San Diego	62,684	-37,069	25,615
Other	86,324	-64,786	21,538
Totals:	656,924	-490,111	166,813

Source: Jones Lang LaSalle, Orange County Research 2017

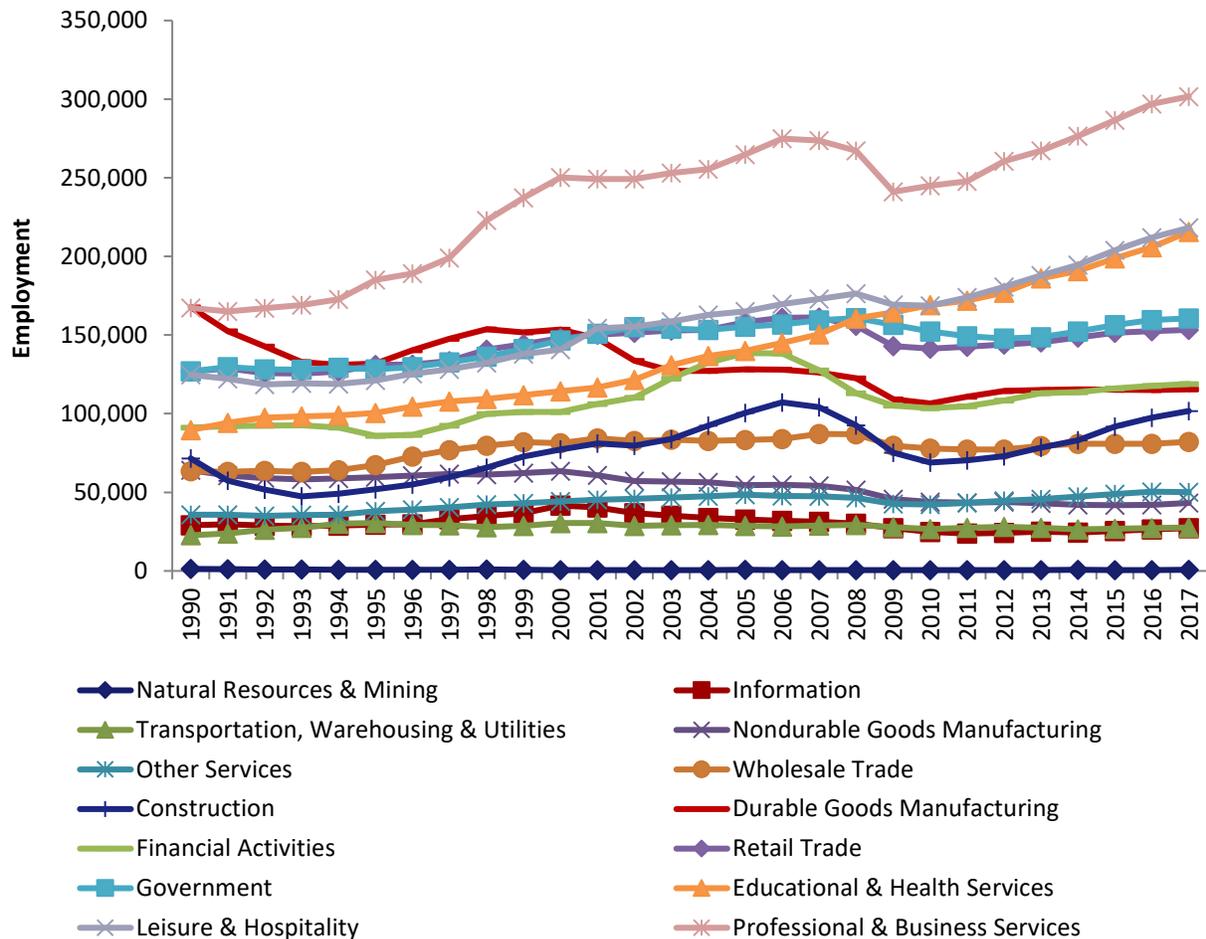
Orange County had a labor force of approximately 1,559,800 individuals as of May 2018, with 1,558,700 employed and 41,100 unemployed. The county’s largest industries include Professional and Business Services, which accounts for 19.7 percent of total employment, followed by Educational and Health Services which accounts for 14.4 percent, and Leisure and Hospitality which accounts for 14.3 percent. These three industries also saw the largest employment growth over the past year, adding 8,900; 9,000; and 3,000 workers, respectively. Educational and Health Services had the largest growth on a percentage basis at 4.2 percent, followed by Professional and Health Services at 4.2 percent, Professional and Business Services at 3.0 percent, and Construction at 2.1 percent.

Year-Over-Year Industry Sector Overview				
Industry Sectors	May 2017	May 2018	Change (#)	Change (%)
Mining and Logging	700	700	0	0.0%
Information	27,300	27,400	100	0.4%
Transportation, Warehousing & Utilities	27,200	27,900	700	2.6%
Nondurable Goods Manufacturing	43,600	42,700	-900	-2.1%
Other Services	50,500	49,700	-800	-1.6%
Wholesale Trade	82,600	82,400	-200	-0.2%
Construction	100,900	103,000	2,100	2.1%
Durable Goods	115,200	113,000	-2,200	-1.9%
Financial Activities	119,000	117,800	-1,200	-1.0%
Retail Trade	150,900	149,300	-1,600	-1.1%
Government	165,600	166,000	400	0.2%
Leisure & Hospitality	219,300	222,300	3,000	1.4%
Educational & Health Services	216,100	225,100	9,000	4.2%
Professional & Business Services	298,000	306,900	8,900	3.0%

Source: California Employment Development Department

However, some industries have stagnated since 1990: Natural Resources and Mining, Information, Transportation, Warehousing and Utilities, and Nondurable Goods Manufacturing. Anemic growth in the Information industry would seem especially troubling, considering the economy’s national shift from a production-based economy to an information-based economy. These figures, however, may underestimate employment in the Information industry because many Information Technology (IT) jobs are classified in the Professional and Business Services category.

**Orange County
Annual Industry Trends, 1990-2017**



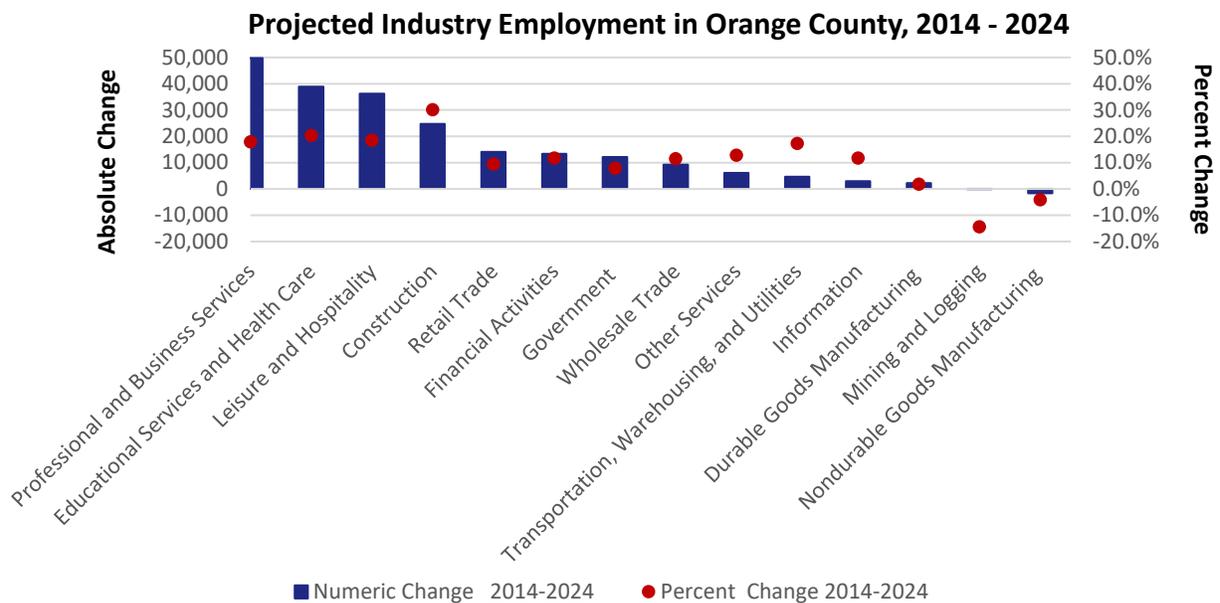
Source: California Employment Development Department

The most recent wage data from the California Employment Development Department (EDD) is from the fourth quarter of 2017, when the Orange County industries with the highest average wages were Finance and Insurance \$12,552, Utilities \$113,880 and Information \$109,408. Real Estate and Rental and Leasing saw the largest increase, \$16,276, followed by Management of Companies and Enterprises \$8,632 and Construction \$5,044. Overall, Orange County industries had an average wage of \$74,172 in Q4 2017, which represents an increase of 2.7 percent (almost \$2,000) over Q4 2016.

Year-Over-Year Change in Industry Wages in Orange County, 2016-2017				
Industry	Q4 2016 Average Wages	Q4 2017 Average Wages	Absolute Change	Percent Change
Accommodation and Food Services	\$23,660	\$24,024	\$364	1.5%
Agriculture, Forestry, Fishing & Hunting	\$34,060	\$36,296	\$2,236	6.6%
Other Services, Ex. Public Admin	\$38,168	\$38,896	\$728	1.9%
Educational Services	\$38,844	\$41,028	\$2,184	5.6%
Arts, Entertainment, and Recreation	\$43,004	\$44,824	\$1,820	4.2%
Administrative and Waste Services	\$43,472	\$45,656	\$2,184	5.0%
Health Care and Social Assistance	\$54,080	\$55,068	\$988	1.8%
Construction	\$71,968	\$77,012	\$5,044	7.0%
Wholesale Trade	\$89,180	\$87,724	-\$1,456	-1.6%
Mining	\$109,980	\$92,612	-\$17,368	-15.8%
Real Estate and Rental and Leasing	\$77,168	\$93,444	\$16,276	21.1%
Professional and Technical Services	\$100,672	\$101,556	\$884	0.9%
Management of Companies/Enterprises	\$93,132	\$101,764	\$8,632	9.3%
Information	\$107,432	\$109,408	\$1,976	1.8%
Utilities	\$110,240	\$113,880	\$3,640	3.3%
Finance and Insurance	\$120,016	\$123,552	\$3,536	2.9%
Average:	\$72,192	\$74,172	\$1,979	2.7%

Source: California Employment Development Department, Quarterly Census of Employment and Wages

The California Employment Development Department (EDD) predicts that the Professional and Business Services will add an estimated 49,800 jobs by 2024 with Healthcare 38,900 and Leisure and Hospitality 36,200 growing the most. It predicts that the fastest growing industries by percentage will be Construction (30.1 percent) followed by Educational Services and Health Care (20.4 percent) and Leisure and Hospitality (18.6 percent). Only two Orange County industries, Mining and Logging and Nondurable Goods Manufacturing, are expected to lose jobs by 2024, and overall county employment is expected to increase by 227,900 (14.2 percent) to a 2024 total of 1,829,000 workers.



Source: California Employment Development Department

U.S. Cluster Mapping, a project led by the Institute for Strategy and Competitiveness at Harvard Business School and funded by the U.S. Department of Commerce, Economic Development Administration (EDA), surveys industry clusters at the county level to highlight regional competitive advantages. Industry clusters are regional concentrations of interconnected supplementary and complimentary industries, such as the film and entertainment industry in Los Angeles or the wine industry in Napa Valley. They represent concentrations of similar businesses reinforced by organizations such as educational institutions which allow for information and processes to be shared and supported. Cluster formation allows for increased efficiency, innovation, and growth, strengthening competitive advantages.

Understanding these clusters will allow local stakeholders and policymakers to make more informed decisions about long-term economic planning. Orange County’s most concentrated industry cluster is Medical Devices (classified under Advanced Manufacturing), which employs 18,625 workers, 7.4 percent of the industry’s national employment. The sector’s location quotient, the ratio of an industry’s share of total employment relative to its share of national employment, was 5.83 percent higher than in any other county in the United States.

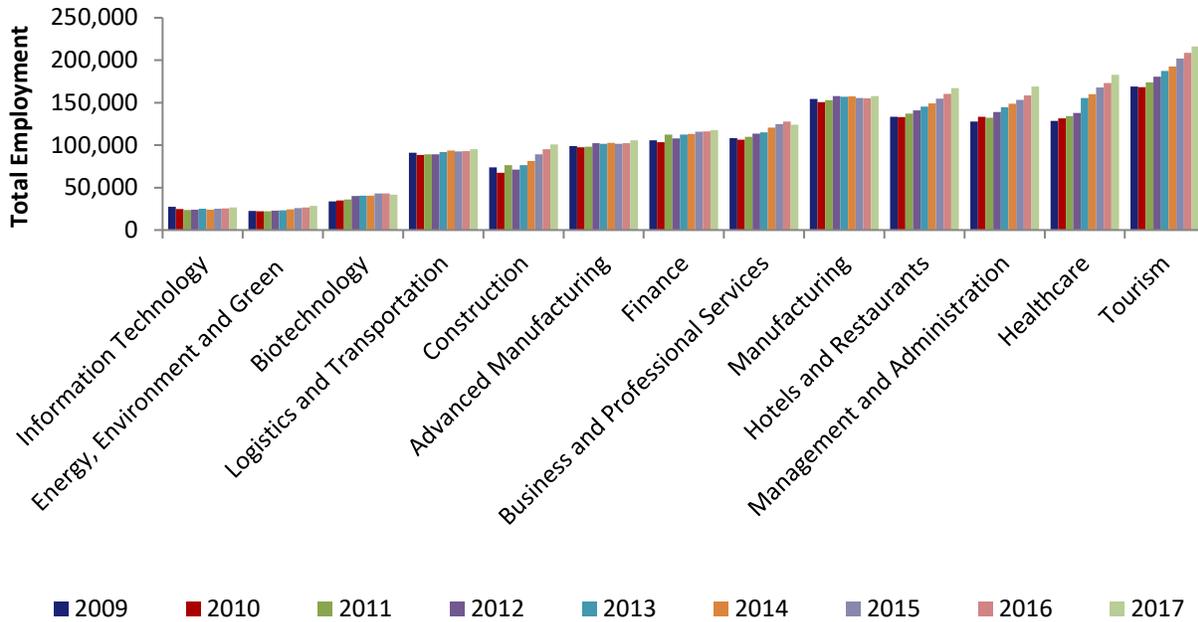
Orange County’s strong active wear (sun, surf, skate) sector makes Apparel its second most concentrated industry cluster; Apparel in Orange County accounts for three percent of national industry employment. The following chart shows Orange County industry clusters with a higher-than-average location quotient. Industries such as Medical Devices, Biopharmaceuticals, Information Technology, and Aerospace and Defense are especially important because they drive innovation and provide high-skill, high-wage jobs for county residents.

Industry	Orange County Employment	Share of National Employment	Cluster Rank in the US	Cluster Location Quotient
Medical Devices	18,625	7.4%	1	5.83
Apparel	3,745	3.0%	3	2.35
Biopharmaceuticals	6,623	2.7%	6	2.15
Information Technology (IT)	26,041	2.4%	5	1.92
Hospitality	76,013	2.4%	5	1.89
Aerospace and Defense	12,610	2.4%	11	1.88
Lighting	6,377	2.2%	4	1.72
Metalworking	10,737	2.2%	6	1.72
Recreational Goods	3,159	2.1%	3	1.63
Financial Services	38,169	2.0%	7	1.56
Distribution and Ecommerce	94,574	1.6%	5	1.30
Printing	7,536	1.6%	3	1.25
Marketing	19,362	1.5%	9	1.14

Source: U.S. Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School

The largest industry cluster by employment included Tourism with 216,308 employees followed by Healthcare with 182,908 employees and Management and Administration with 168,980 employees. The industry clusters with the largest year-over-year growth are Management and Administration, which added 10,578 employees, Healthcare (added 9,650 employees), and Tourism (added 7,666 employees). On a percentage basis, the largest growth occurred in Management and Administration (6.7 percent), Construction (6.2 percent), and Healthcare (5.6 percent). Overall, industry cluster employment totaled 1,533,208 in 2017, representing a total growth of 38,919 jobs or 2.6 percent since 2016.

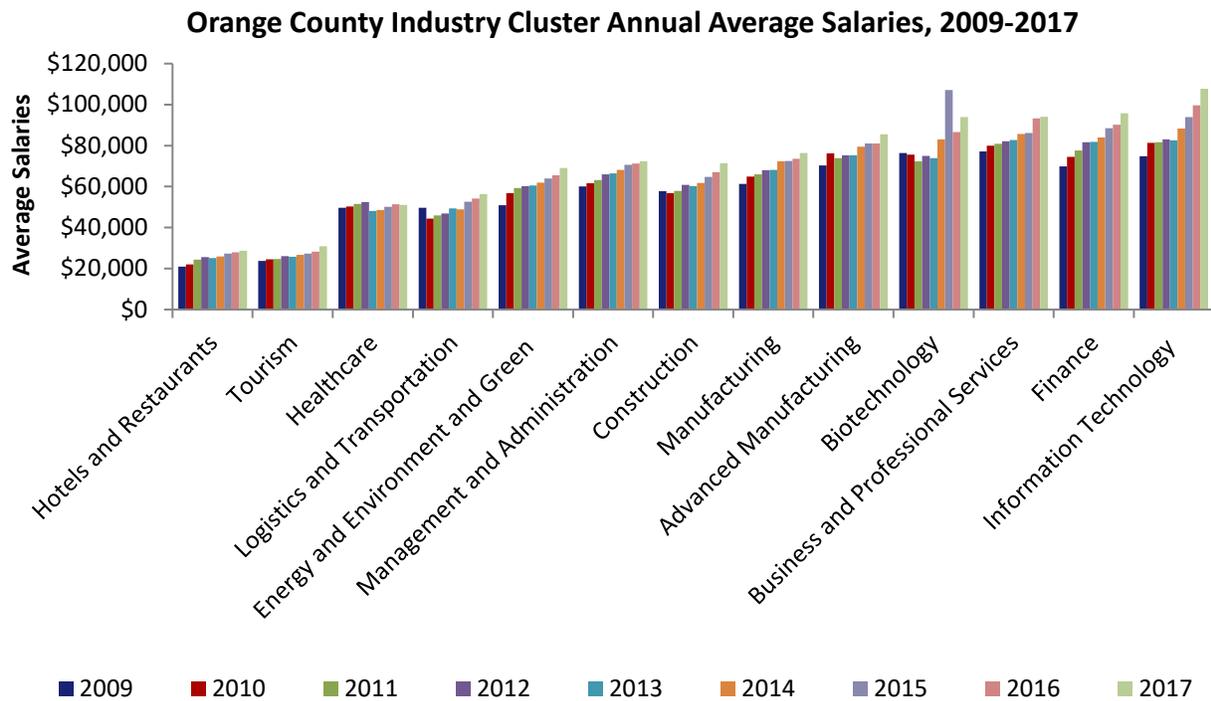
Orange County Industry Cluster Annual Average Employment, 2009-2017



Source: California Employment Development Department, Quarterly Census of Employment and Wages

The Information Technology industry cluster had the highest annual wages at \$107,705 followed by Finance at \$95,751 followed by Business and Professional Services at \$94,003 in 2017. In terms of wage growth since 2016, the largest absolute wage growth was in Information Technology at \$8,021, followed by Biotechnology, where wages grew by \$7,285, and Finance at \$5,609. The largest year-over-year percentage growth occurred in Tourism (9.1 percent), followed by Biotechnology (8.4 percent), and Information Technology (8.0 percent).

In terms of year-over-year percent wage growth since 2016, the largest came from Tourism where wages expanded by 9.1 percent, followed by Biotechnology (grew by 8.4 percent), and Information Technology (grew by 8.0 percent). Overall, the average industry cluster wage in Orange County was \$71,786 in 2017, an increase of \$3,319 or 4.8 percent since 2016.



Source: California Employment Development Department, Quarterly Census of Employment and Wages

The Bureau of Labor Statistics measured Orange County’s total occupational employment at 1,616,220 in 2017, an increase of 3.4 percent – or more than 53,000 jobs – over the previous year. Orange County’s three largest occupational groups were:

- Office and Administrative Support (258,760 jobs)
- Sales and Related (171,900 jobs)
- Food Preparation and Serving Related (157,620 jobs)

Personal Care and Service saw the largest year-over-year growth, adding more than 20,000 jobs for an increase of 45.7 percent. Other groups with significant growth included Food Preparation and Serving Related, Community and Social Services, and Transportation and Material Moving. Several occupational groups lost jobs, such as Office and Administration support and Life, Physical and Social Science. The following chart shows recent changes in employment for Orange County’s major occupational groups.

Orange County Occupational Employment Overview				
Occupational Title	2016 Emp.	2017 Emp.	Change (#)	Change (%)
Office and Administrative Support	263,330	258,760	-4,570	-1.7%
Production	104,910	103,640	-1,270	-1.2%
Management	100,990	100,140	-850	-0.8%
Life, Physical, and Social Science	12,700	11,940	-760	-6.0%
Farming, Fishing, and Forestry	1,890	1,340	-550	-29.1%
Legal	12,770	12,880	110	0.9%
Protective Service	24,550	24,840	290	1.2%
Architecture and Engineering	37,830	38,140	310	0.8%
Healthcare Support	34,600	35,130	530	1.5%
Computer and Mathematical	54,790	55,490	700	1.3%
Building, Grounds Cleaning and Maintenance	53,150	53,950	800	1.5%
Installation, Maintenance and Repair	45,850	47,610	1,760	3.8%
Community and Social Services	17,070	19,220	2,150	12.6%
Arts, Design, Entertainment, Sports and Media	23,540	25,720	2,180	9.3%
Construction and Extraction	71,760	74,720	2,960	4.1%
Healthcare Practitioners and Technical	73,460	76,540	3,080	4.2%
Business and Financial Operations	109,150	112,550	3,400	3.1%
Education, Training, and Library	78,220	81,750	3,530	4.5%
Sales and Related	167,660	171,900	4,240	2.5%
Transportation and Material Moving	79,780	86,720	6,940	8.7%
Food Preparation and Serving Related	150,080	157,620	7,540	5.0%
Personal Care and Service	45,050	65,620	20,570	45.7%
Total	1,563,130	1,616,210	53,080	3.4%

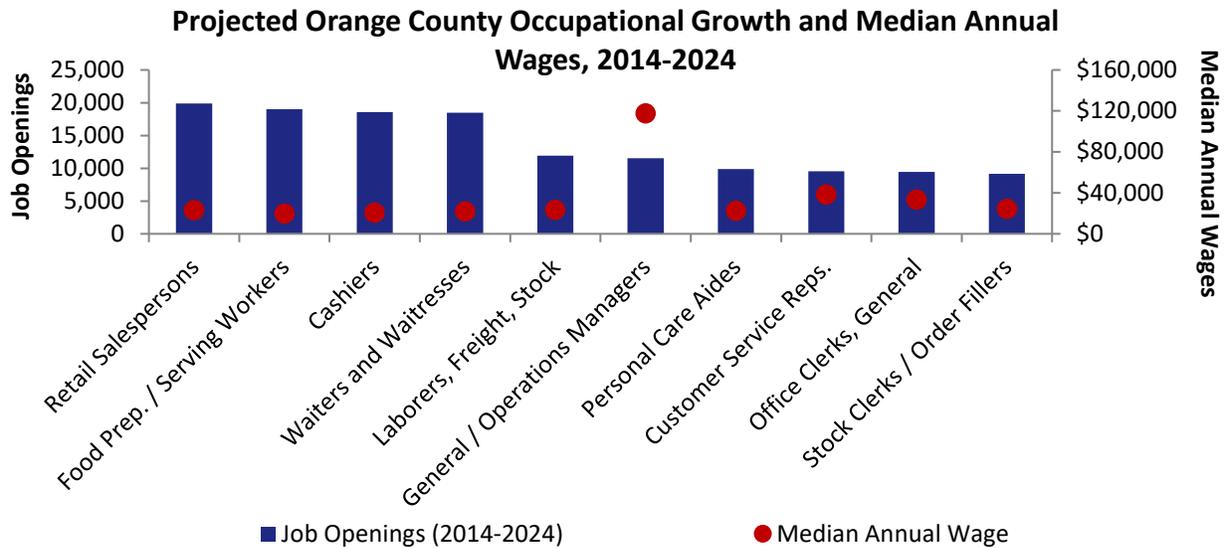
Source: California Employment Development Department

Orange County occupational groups had an average wage of \$61,555 in 2017, an increase of 3.2 percent or just under \$2,000 from the previous year. Groups with the highest average wages included Legal (\$137,890), Management (\$135,380), and Computer and Mathematics (\$95,160), while groups with the lowest wages included Personal Care and Service (\$27,540), Food Preparation and Serving Related (\$27,690) and Farming, Fishing, and Forestry (\$29,750). Legal occupations saw the largest absolute wage growth (\$18,450). A few occupational groups saw wage decreases from 2016 to 2017, such as Arts, Design, Entertainment, Sports and Media, and Personal Care and Service.

Orange County Occupational Wages Overview				
Occupational Title	Average Wages (Q1 2016)	Average Wages (Q1 2017)	Change (\$)	Change (%)
Arts, Entertainment, Sports, and Media	\$57,530	\$55,790	-\$1,740	-3.0%
Personal Care and Service	\$28,050	\$27,540	-\$510	-1.8%
Community and Social Services	\$54,900	\$54,430	-\$470	-0.9%
Sales and Related	\$46,910	\$46,820	-\$90	-0.2%
Life, Physical, and Social Science	\$74,350	\$74,390	\$40	0.1%
Architecture and Engineering	\$92,490	\$92,560	\$70	0.1%
Computer and Mathematical	\$94,780	\$95,160	\$380	0.4%
Business and Financial Operations	\$80,570	\$81,010	\$440	0.5%
Office and Administrative Support	\$40,920	\$41,570	\$650	1.6%
Installation, Maintenance, and Repair	\$50,810	\$51,780	\$970	1.9%
Food Preparation and Serving-Related	\$26,660	\$27,690	\$1,030	3.9%
Education, Training, and Library	\$63,100	\$64,290	\$1,190	1.9%
Production	\$35,080	\$36,420	\$1,340	3.8%
Building/Grounds Cleaning/Maintenance	\$29,480	\$30,870	\$1,390	4.7%
Healthcare Support	\$34,630	\$36,430	\$1,800	5.2%
Transportation and Material Moving	\$32,000	\$33,850	\$1,850	5.8%
Construction and Extraction	\$54,400	\$56,800	\$2,400	4.4%
Farming, Fishing, and Forestry	\$27,190	\$29,750	\$2,560	9.4%
Healthcare Practitioners and Technical	\$88,020	\$90,640	\$2,620	3.0%
Protective Service	\$49,880	\$53,160	\$3,280	6.6%
Management	\$131,200	\$135,380	\$4,180	3.2%
Legal	\$119,440	\$137,890	\$18,450	15.4%
Total	\$59,654	\$61,555	\$1,901	3.2%

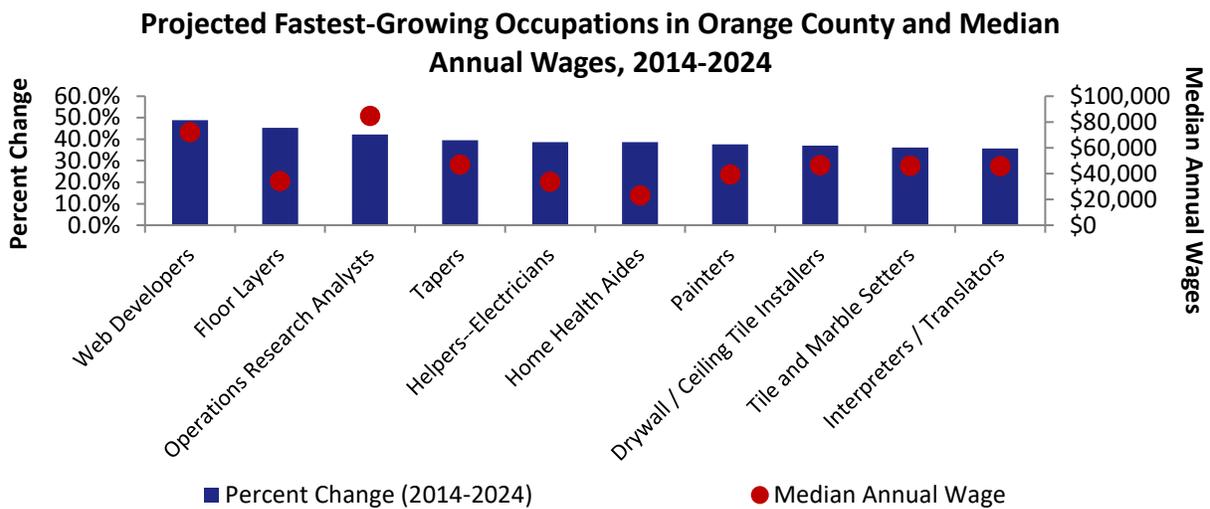
Source: California Employment Development Department

Orange County’s overall employment and wage growth can mask significant variations in the quality of new jobs. The EDD predicts that the county’s fastest growing occupations between 2014 and 2024 will pay lower-than-average wages: Retail Salespersons, Food Preparation, Serving Workers, and Cashiers. These occupations had 2016 average wages of \$23,199, \$19,875 and \$20,851, respectively, all well below average. Only one of the county’s ten fastest growing occupations, General and Operations Managers, requires a Bachelor’s degree, while the generally low-skill requirements for the other nine occupations make them especially vulnerable to automation. These jobs, however, remain important to the county’s economy because they often serve as entry-level jobs that help young workers develop skills necessary to advance in their careers.



Source: California Employment Development Department

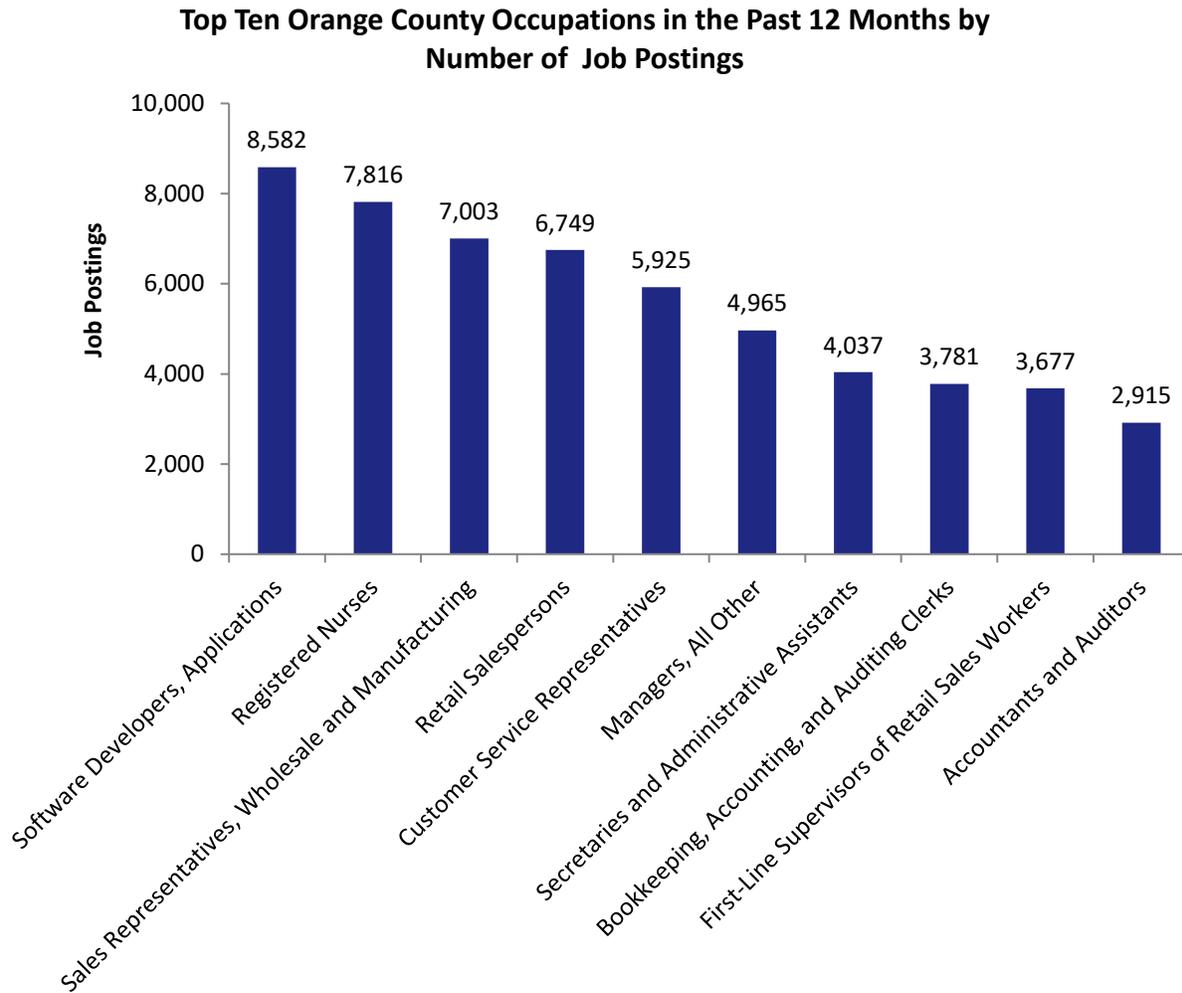
Orange County’s fastest growing jobs by percentage, as shown in the following graph, tend to be relatively high-skill, high-paying jobs. The Web Developers occupation is expected to grow faster than any other county occupation by 2024, followed by Floor Layers and Operations Research Analysts.



Source: California Employment Development Department

In-Demand Occupations, Skills, and Education in Orange County

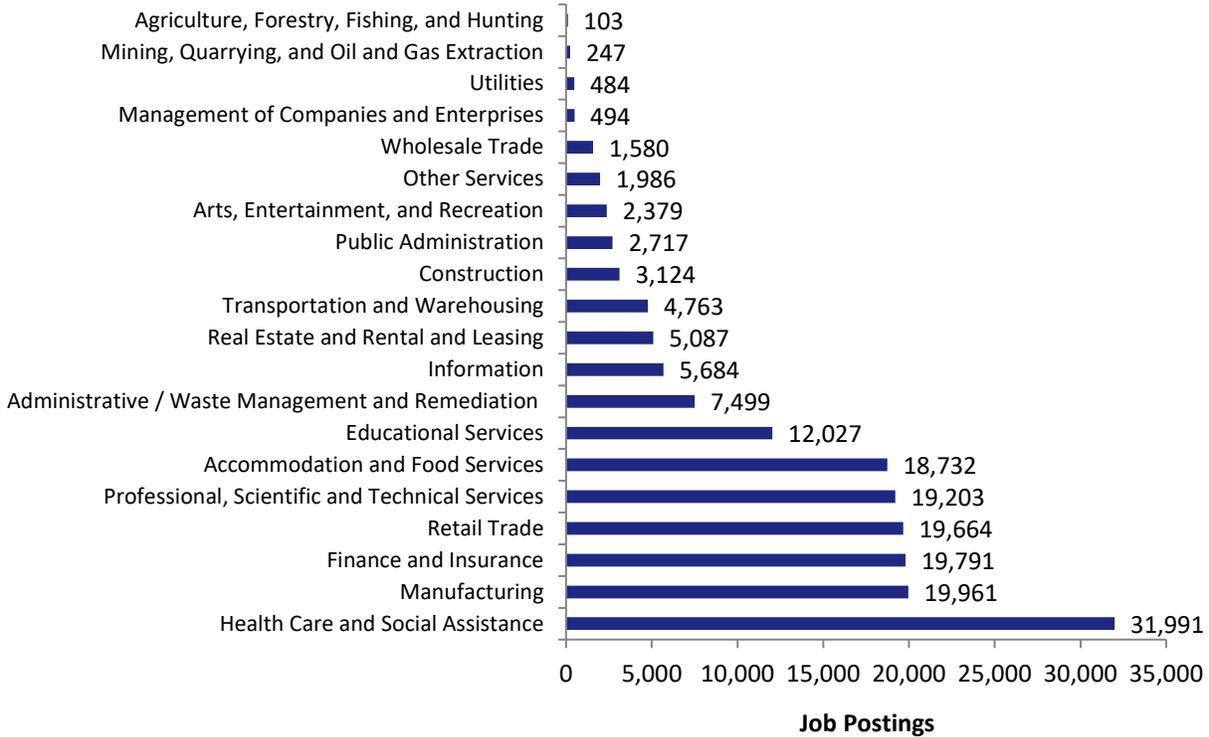
According to Burning Glass’ Labor Insights, Orange County has seen approximately 235,851 job postings over the past twelve months; the most in-demand occupations include Registered Nurses, Software Developers, Applications and Retail Salespersons, as seen in the following graph.



Source: Burning Glass, Labor Insights

Healthcare and Social Assistance had more job postings in the past twelve months than any other Orange County industry. In general, the industries with the most job postings correlate with the California Employment Development Department’s predictions in regards to identifying the industries that will drive county job growth in the near future including Healthcare, Leisure and Hospitality, and Professional and Business Services.

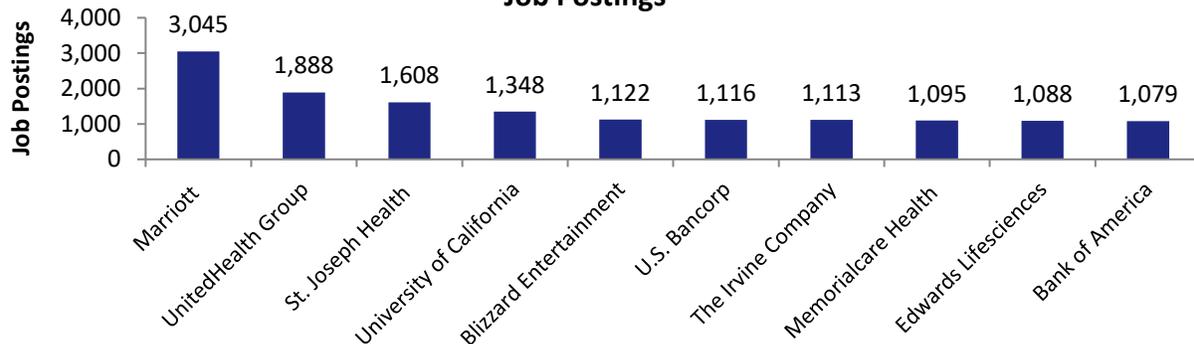
Orange County Job Postings in the Past 12 Months by Industry



Source: Burning Glass, Labor Insights

Marriott International, Incorporated had more job postings (2,715) than any other organization; St. Joseph Health System the University of California also had more than 2,000 postings. Orange County’s top ten job posting organizations reflect the county’s integral and growing industries such as Healthcare, Tourism, Education, and Professional and Business Services.

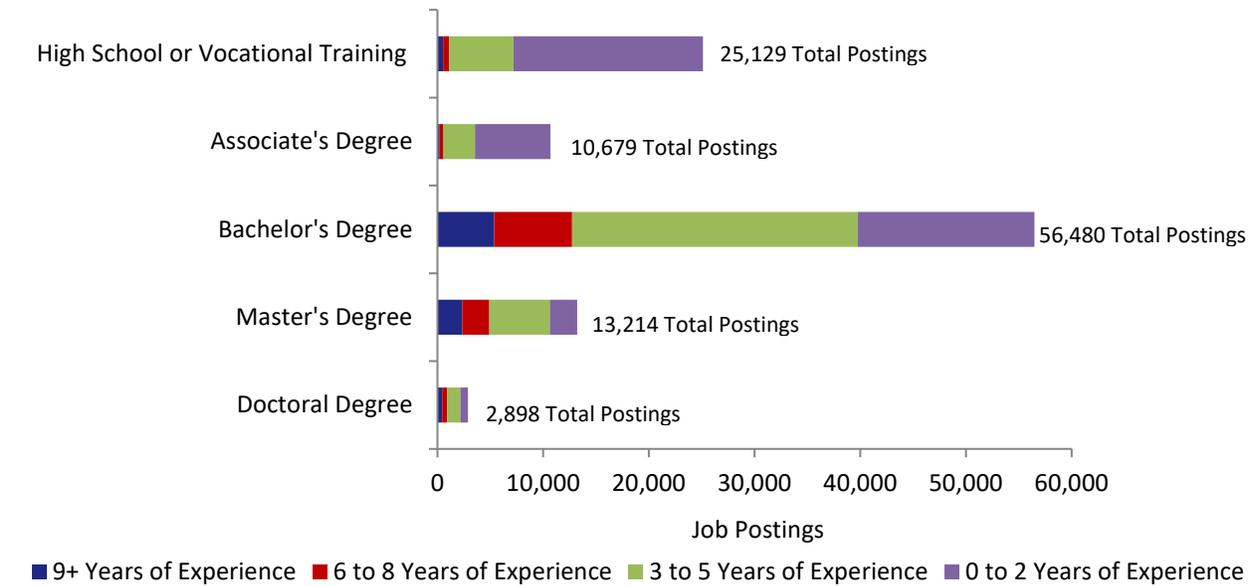
Top Ten Employers in Orange County in the Past 12 Months by Job Postings



Source: Burning Glass, Labor Insights

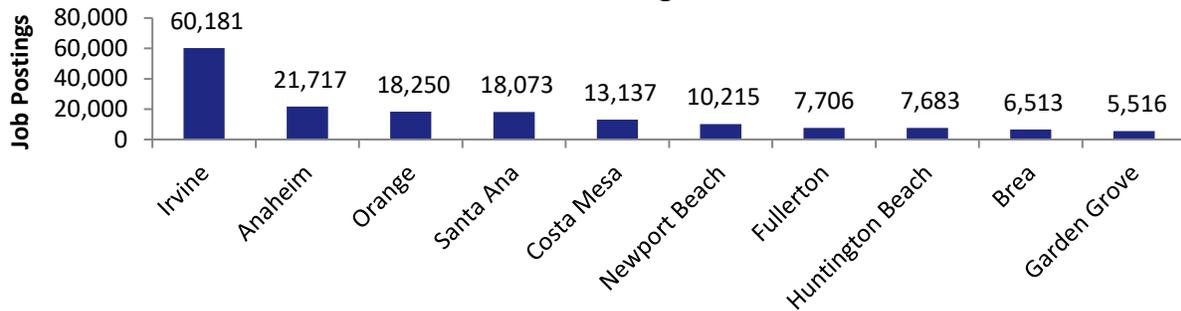
Burning Glass also tracks job postings by educational requirements, which highlights how educational attainment affects opportunities in the job market as well as shifts in the job market itself. As seen in the following chart, individuals with Bachelor’s degrees had the highest levels of job opportunity with 54,730 job postings requiring at least a Bachelor’s degree; job postings requiring Bachelor’s degrees and three to five years of experience were the most common with a total of 26,508. Job postings requiring Associate’s degrees and Master’s degrees had nearly the same amount of job postings at 13,456 and 12,053, respectively.

Orange County Job Postings in the Past 12 Months by Educational and Experience Requirements



Irvine had more job postings (56,584) than any other city in Orange County and accounted for almost a quarter of the county’s total job postings. Anaheim, which had less than half as many job postings as Irvine, came in second place, followed by Orange, and Santa Ana. Several competitive advantages contribute to Irvine’s strong labor market, including its central location, access to transportation, and a strong business environment.

Top Ten Orange County Cities by Job Postings in the Past 12 Months by Job Postings



Burning Glass’ job posting data also records in-demand skills. The most important specialized skills include software such as the Microsoft Office suite, as well as Customer Service and Scheduling, while the most important baseline skills include many soft skills such as Communication Skills, Teamwork/Collaboration, and Building Effective Relationships. The increasingly cross-functional and interconnected nature of workplaces requires individuals to develop and maintain “in demand” skills on a more frequent and regular basis than in the past, requiring continuing education and training throughout their careers.

Top Ten Skills in Orange County in the Past 12 Months by Job Postings			
Specialized Skills	Job Postings	Baseline Skills	Job Postings
Customer Service	40,356	Communication Skills	76,440
Teamwork/Collaboration	35,767	Microsoft Excel	36,107
Sales	28,166	Organizational Skills	34,149
Scheduling	26,762	Problem Solving	29,196
Budgeting	19,302	Detail-Oriented	28,428
Project Management	17,512	Microsoft Office	27,683
Customer Contact	15,410	Writing	25,406
Retail Industry Knowledge	15,082	Planning	24,594
Accounting	13,251	Computer Literacy	22,158
Repair	10,676	Building Effective Relationships	21,871

Source: Burning Glass, Labor Insights

Top Ten Skills in Orange County in the Past 12 Months by Job Postings			
Software/Programming Skills (Excluding Microsoft Office Products)	Job Postings	Skill Clusters	Job Postings
SQL	9,092	Basic Customer Service	57,250
Software Development	5,971	Microsoft Office / Productivity Tools	42,904
Oracle	5,145	General Sales	34,697
Java	4,963	Scheduling	26,762
Software Engineering	4,573	General Administrative and Clerical	24,606
Enterprise Resource Planning (ERP)	4,539	Project Management	20,550
SAP	4,492	Budget Management	19,713
JavaScript	4,350	Administrative Support	17,324
Microsoft C#	3,817	Business Process and Analysis	17,196
Word Processing	3,570	People Management	17,094

Source: Burning Glass, Labor Insights

The charts below explore the relationship between salary, education, and vulnerability to automation. The table highlights the occupations which have been deemed as having low risk to automation in Orange County with the most job postings, the average salaries, and the percent of those postings which required at least a Bachelor’s degree in the last twelve months. Overall, the top ten low-risk occupations by job postings had 48,902 job postings in the last twelve months with mean salaries averaging \$108,177 and 79% of postings requiring at least a Bachelor’s degree.

Job Postings, Mean Salaries, and Educational Requirements for Occupations with Low Risk of Automation in the past 12 Months in Orange County			
Occupations	Job Postings	Mean Advertised Salary	Percent of Job Postings Requiring Bachelor's Degrees
Registered Nurses	9,154	\$73,493	54%
Software Developers, Applications	8,582	\$112,527	95%
Computer Occupations, All Other	7,125	\$91,792	91%
Managers, All Other	5,635	\$85,073	87%
First-Line Supervisors of Retail Sales Workers	3,677	\$45,227	49%
Human Resource Specialists	2,905	\$56,628	83%
Sales Managers	2,863	\$94,339	88%
Financial Managers	2,645	\$111,379	91%
Medical and Health Services Managers	2,576	\$79,978	76%
Marketing Managers	2,184	\$96,708	95%
Total/Average	47,346	\$84,714	81%

Source: Burning Glass, Labor Insights

Looking at job postings by occupations that are deemed being at high risk of automation in Orange County provides a much different picture. Overall, in the past 12 months the top ten high-risk occupations by the number of job postings included 29,950 job postings providing mean annual salaries averaging \$38,489 with only 25 percent of those occupations requiring a Bachelor’s degree.

Job Postings, Average Salaries and Educational Requirements for Occupations with High Risk of Automation in the past 12 Months in Orange County			
Occupations	Job Postings	Average Advertised Salary	Percent of Job Postings Requiring Bachelor's Degrees
Retail Salespersons	6,749	\$42,171	14%
Secretaries and Administrative Assistants	4,037	\$42,025	42%
Bookkeeping, Accounting, and Auditing Clerks	3,781	\$44,294	42%
Accountants and Auditors	3,644	\$68,693	99%
Combined Food Preparation and Serving Workers	2,293	\$32,096	0%
Cooks, Restaurants	1,901	\$29,225	0%
Office Clerks, General	1,735	\$50,000	18%
Waiters and Waitresses	1,572	\$35,391	0%
Receptionists and Information Clerks	1,456	\$34,535	16%
Cashiers	1,414	\$29,588	0%
Total/Average	28,582	\$40,802	23%

Source: Burning Glass, Labor Insights

The data highlighted above shows that occupations which require higher levels of educational attainment have a variety of advantages over jobs with lower requirements: higher annual salaries, more job opportunities, and less vulnerability to automation. While low-skill, low-wage positions have seen significant recent job growth, a trend expected to continue for the short-term future, higher-skill job opportunities will likely see faster growth moving forward.

This dichotomy highlights a major issue affecting not only Orange County, but the nation as a whole, the Skills Gap. If not solved, this problem can have a domino-effect as employers, unable to fill open positions, move elsewhere in search of a deeper talent pool, resulting in decreases in economic activity and career development opportunities in the region. Therefore, regional policymakers and stakeholders should take proactive steps to address the Skills Gap before the problem grows.

Red Zone Analysis in Orange County

An important part of the CEDS five-year plan is identifying underperforming census tracts and cities in Orange County and creating strategies, programs, and policies to improve conditions in these disadvantaged areas. Census tracts and cities qualify as disadvantaged Red Zones if the unemployment rates are 2.0 percentage points above the national average and the per capita incomes are less than 80 percent of the national average. The U.S. Census Bureau’s 2016 American Community Survey measured the national unemployment rate at 7.4 percent and the national per capita income at \$29,829, which means that Red Zones will have an unemployment rate higher than 9.4 percent and a per capita income of less than \$23,863.

While no city as a whole in Orange County qualified as a Red Zone area, a number of census tracts did. Overall, 55 census tracts in Orange County were identified as Red Zone areas which represents an increase of three census tracts since the 2017 CEDS update which utilized the 2015 American Community Survey data. Despite this small increase in Red Zone designations, the current number still represents a decrease in the number of Red Zones compared to when the 2013 five-year CEDs was created, when 71 Red Zone census tracts existed in the region. The largest number of Red Zones by city are in Anaheim (12), followed by Santa Ana (10), and Fullerton (7).

Despite having the largest number of Red Zone census tracts, Anaheim was able to decrease the number of Red Zones over the past year; similar decreases were experienced in Costa Mesa, Garden Grove, Huntington Beach, and Irvine, which all managed to raise one of their census tracts out of Red Zone status. Multiple Orange County cities, on the other hand, added a Red Zone tract, including Fullerton, La Habra, Midway City, Orange, Seal Beach and Westminster. Santa Ana saw the largest increase in Red Zone tracts, adding two after losing seven between 2016 and 2017. While improvements can and should be made across the county to ensure that all communities are able to grow and expand, local stakeholders and policymakers should keep a strong focus on cities that have the highest number of Red Zones, such as Anaheim, Santa Ana, and Fullerton.

Number of Red Zone Census Tracts by Orange County City, 2013-2018

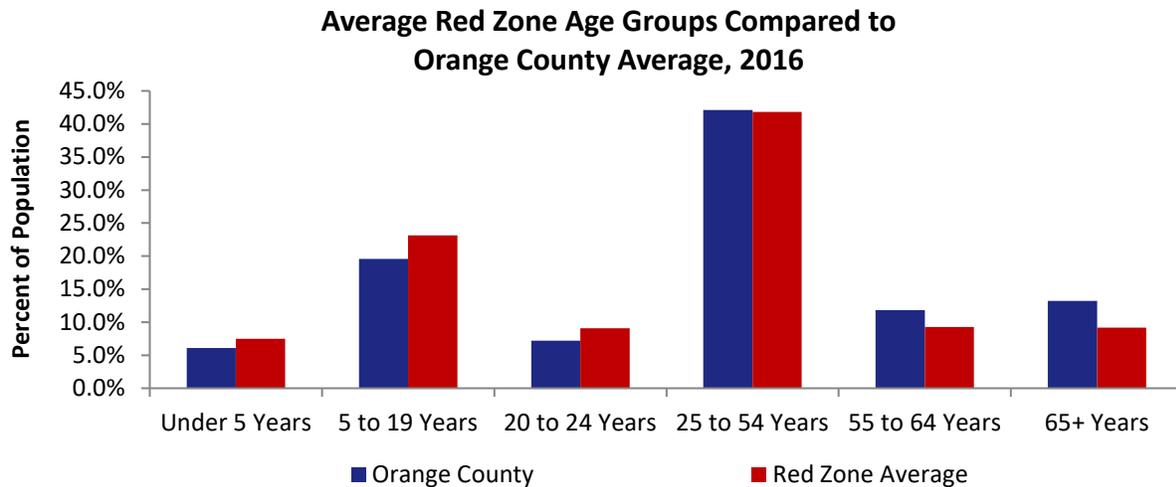
Red Zone Tracts	2013	2014	2015	2016	2017	2018
Anaheim	19	22	18	22	13	12
Buena Park	1	2	2	0	0	0
Costa Mesa	1	3	3	2	3	2
Fullerton	4	6	7	6	6	7
Garden Grove	14	10	11	9	7	6
Huntington Beach	1	1	1	1	1	0
Irvine	0	0	1	1	2	1
La Habra	0	2	3	4	4	5
Mission Viejo	0	0	1	0	0	0
Midway City	0	0	0	0	0	1
Orange	2	1	1	1	0	1
Placentia	2	2	1	1	1	1
Santa Ana	18	18	13	15	8	10
San Juan Capistrano	0	0	1	0	1	1

Seal Beach	0	0	0	0	0	1
Stanton	4	5	5	5	4	4
Westminster	5	6	4	4	2	3
Total	71	78	72	71	52	55

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

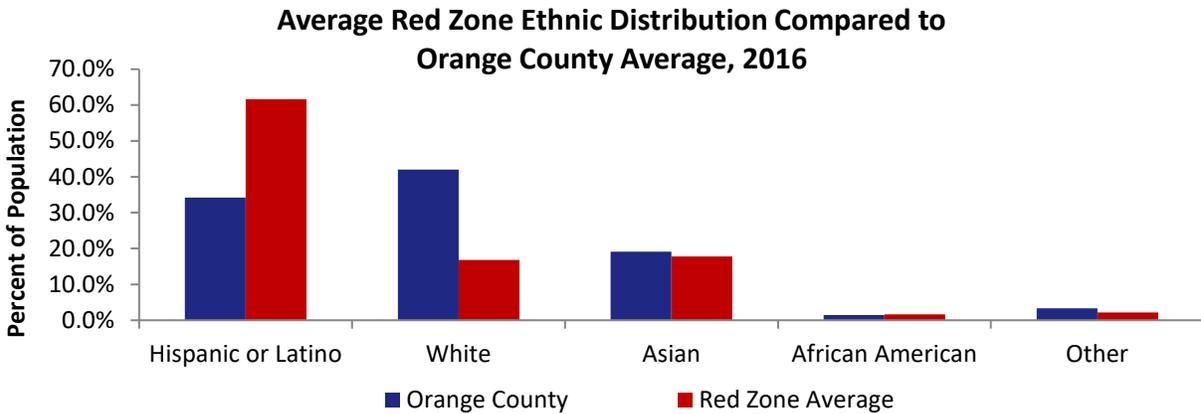
A Closer Look at Red Zone Residents

Orange County Red Zones differ from more prosperous areas in several ways. First, Red Zone residents in Orange County are typically younger, which is likely due to a larger number of young families located in the region. According to the U.S. Census Bureau’s recent American Community Survey release, approximately 32.9 percent of the population is under the age of 24 years while 39.7 percent of Red Zone residents are under the age of 24. 25 percent of overall county residents are 55 or older, compared to only 18.5 percent of Red Zone residents. This dichotomy provides one insight into the economic struggles of Red Zone areas, as younger professionals tend to make lower salaries and have a greater likelihood of being between jobs, and may be one of the contributing factors which help explain these areas’ lower per capita incomes and higher levels of unemployment.



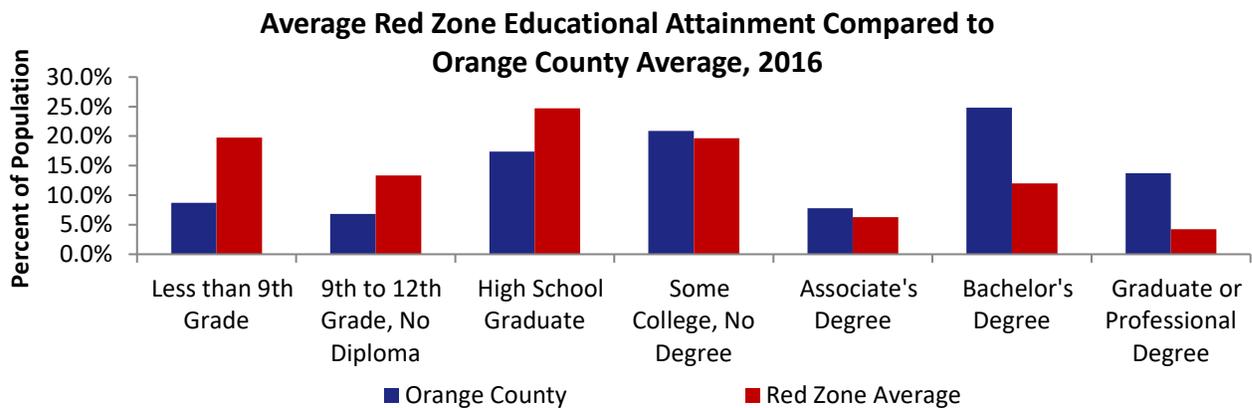
Source: U.S. Census, American Community Survey

Red Zone residents are also more diverse than the county as a whole, with more Hispanic residents. While increased diversity leads to a number of significant competitive advantages, it also creates several complications, especially for relatively young populations. As mentioned previously, Orange County has the highest proportion of English Language Learners of any Southern California County, with a substantial population concentrated in or in-proximity to Red Zone census tracts.



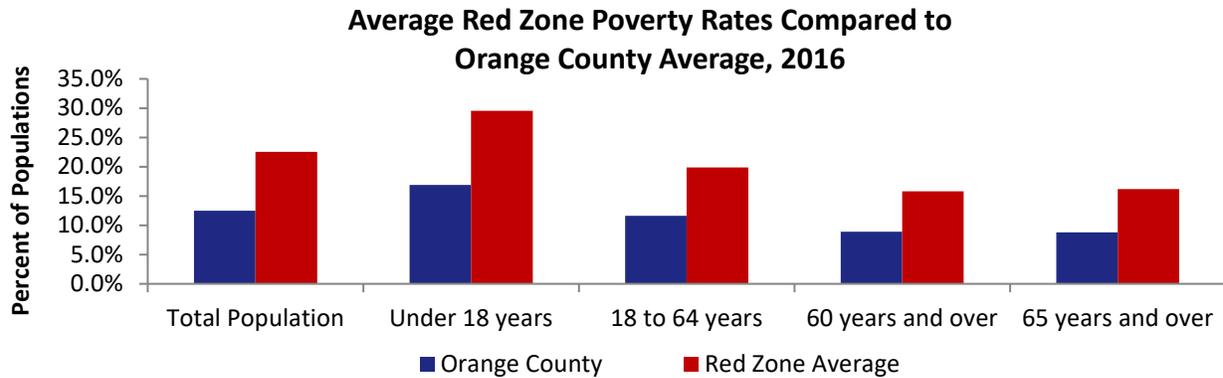
Source: U.S. Census, American Community Survey

While Orange County has made significant improvements in supporting English Language Learners in recent years, it is important to note the large variances in educational attainment between Orange County as a whole and these Red Zone areas. In 2016, 33.1 percent of Red Zone residents did not have their GED or high school diploma compared to only 15.5 percent of Orange County residents. Additionally, 24.7 percent of Red Zone residents had only graduated high school compared to 17.4 percent of the Orange County average. As seen in the following graph, Red Zone residents are also less likely to earn advanced degrees than the average Orange County resident; 38.5 percent of overall county residents hold a Bachelor’s degree or higher compared to only 16.3 percent of Red Zone residents.



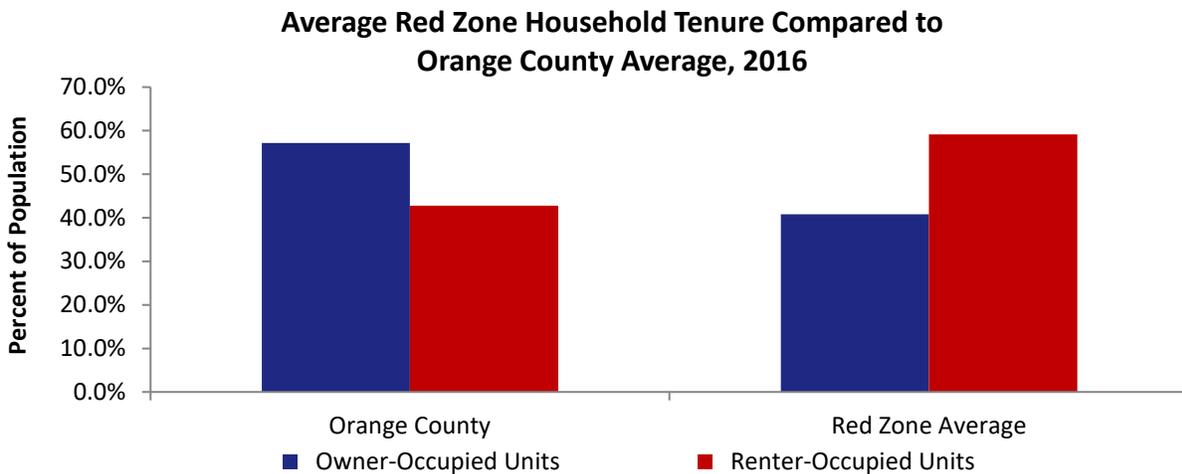
Source: U.S. Census, American Community Survey

The most recent poverty data from the U.S. Census’s 2016 American Community Survey illustrates the stark difference between Orange County as a whole, which has a poverty rate of 12.5 percent, and Red Zones, which have a poverty rate of 22.6 percent. Red Zone areas have much higher poverty rates for all age groups. The largest difference was in the Under 18 Years age group, which had a poverty rate of 16.9 percent in the county as a whole and almost 30 percent in Red Zone areas. Child poverty has a number of significant consequences, such as students dropping out of school for employment to support family or care for younger siblings. This greatly limits these children’s future opportunities and contributes to a generational poverty cycle that can become difficult to break. While poverty rates tend to decrease with age, the lifelong ramifications of child poverty means that local stakeholders and policymakers should prioritize strategies to solve this problem.



Source: U.S. Census, American Community Survey

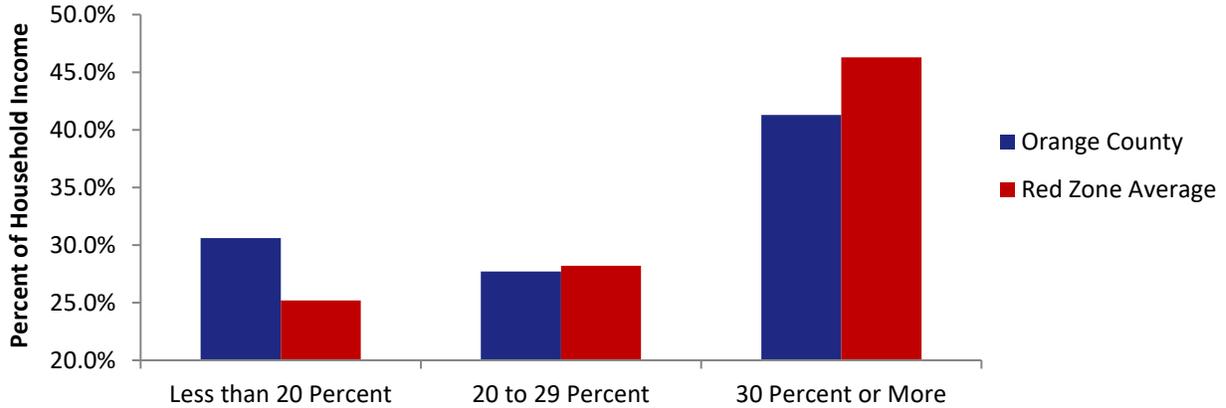
Home ownership rates show another large discrepancy between Red Zone residents and other Orange County residents. Residents of Red Zone areas tend to be younger and make lower salaries than the average Orange County resident, which means that they often face more difficulties when buying a home, a challenged exacerbated by the county’s extremely expensive and limited housing market. As seen in the following graph, only 42.8 percent of Red Zone residents own their own home, compared to 57.2 percent of overall county residents. In addition to home affordability concerns, rental prices are also skyrocketing across Orange County. In fact, both home prices and rental rates are increasing faster than incomes, which means that many county families are forced to spend a greater proportion of their incomes on housing, reducing the ability to save.



Source: U.S. Census, American Community Survey

The graph below highlights the percentage of income spent on housing by Orange County residents and Red Zone residents in 2016, reinforcing the previously mentioned affordability concerns. Many financial experts adhere to the “golden rule” that individuals should not spend more than 30 percent of one’s income on living expenses; 41.3 percent of county residents and 46.3 percent of Red Zone residents spend more than this on housing.

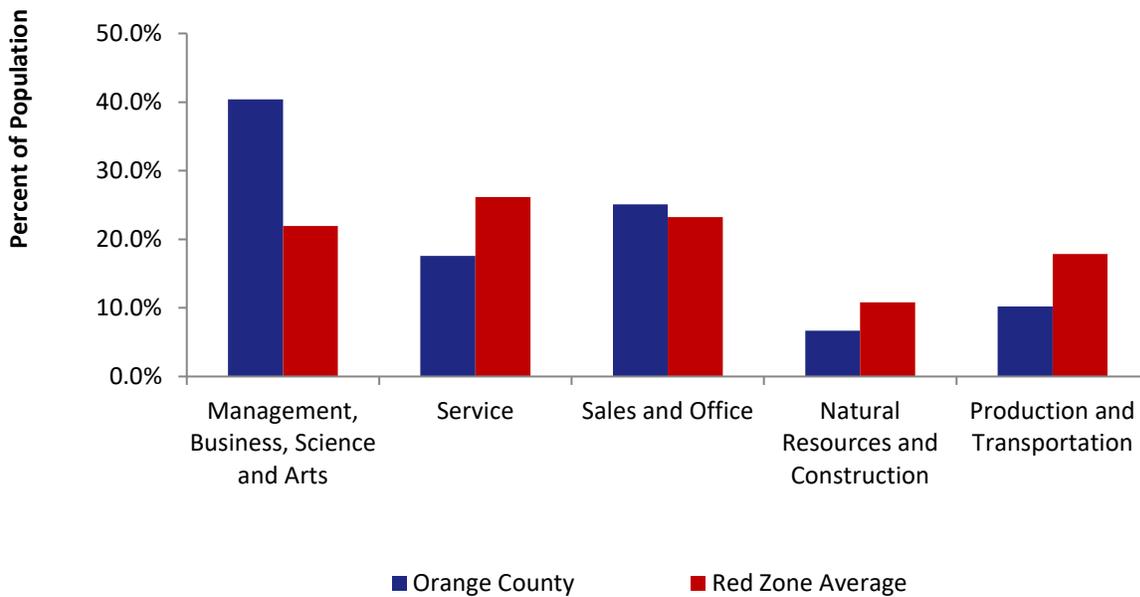
Percent of Household Income Spent on Living Expenses by Orange County Residents and Red Zone Residents, 2016



Source: U.S. Census, American Community Survey

Red Zone residents have higher concentrations of employment in Service-related industries, Natural Resources and Construction and Production and Transportation than the county as a whole, as seen in the following graph. The Management, Business, Science and Arts group has the largest gap, employing 40.4 percent of county residents but only 21.9 percent of Red Zone residents. Many of the occupations within this industry group require STEM-related educational backgrounds and provide comparatively higher wages than Service-related occupations suggesting that education is the key to giving Red Zone residents access to these high-skill, high-wage occupations.

Average Red Zone Employment by Major Industry Group Compared to Orange County Average, 2016

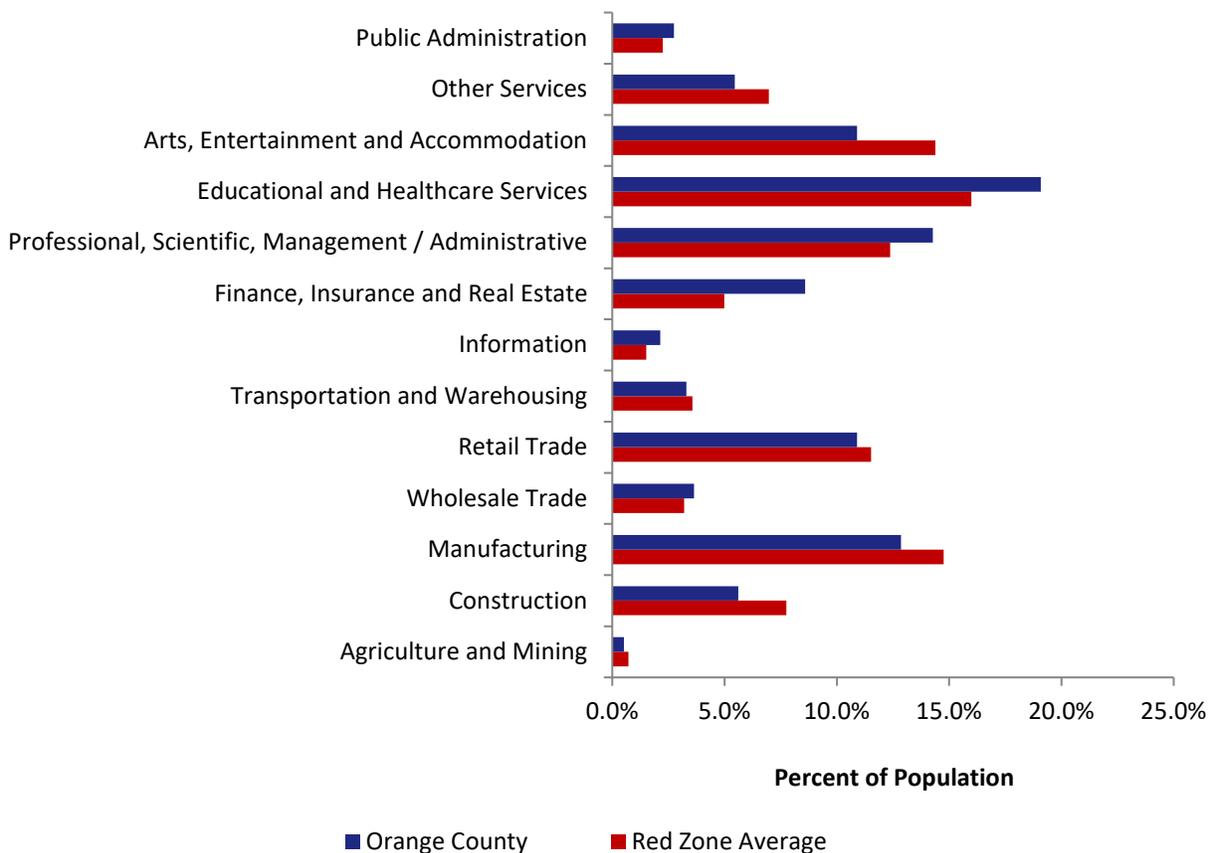


Source: U.S. Census, American Community Survey

The graph below highlights the percent of population employed by major industry in both Red Zones and Orange County as a whole. Overall, Red Zone residents have noticeably higher levels of employment in Arts, Entertainment and Accommodation, Construction, Manufacturing, Other Services, Retail Trade, and lower levels of employment in Educational and Healthcare Services, Finance, Insurance and Real Estate, and Professional, Scientific and Management/Administrative industries than the county average.

Educational attainment is a major factor here, as many of the industries concentrated in Red Zone areas tend to require lower-than-average levels of education and pay lower-than-average wages. As previously mentioned, the Burning Glass data shows the dramatic impact of educational attainment on Red Zone residents' career prospects. While four-year colleges and universities may be prohibitively expensive for many Red Zone residents, other education and training programs such as technical certifications or Associate's degrees can also give them access to better opportunities. Local stakeholders and policymakers must take every opportunity to increase the accessibility of these programs in the county's most disadvantaged communities.

Average Red Zone Employment by Industry Compared to Orange County Average, 2016



Source: U.S. Census, American Community Survey

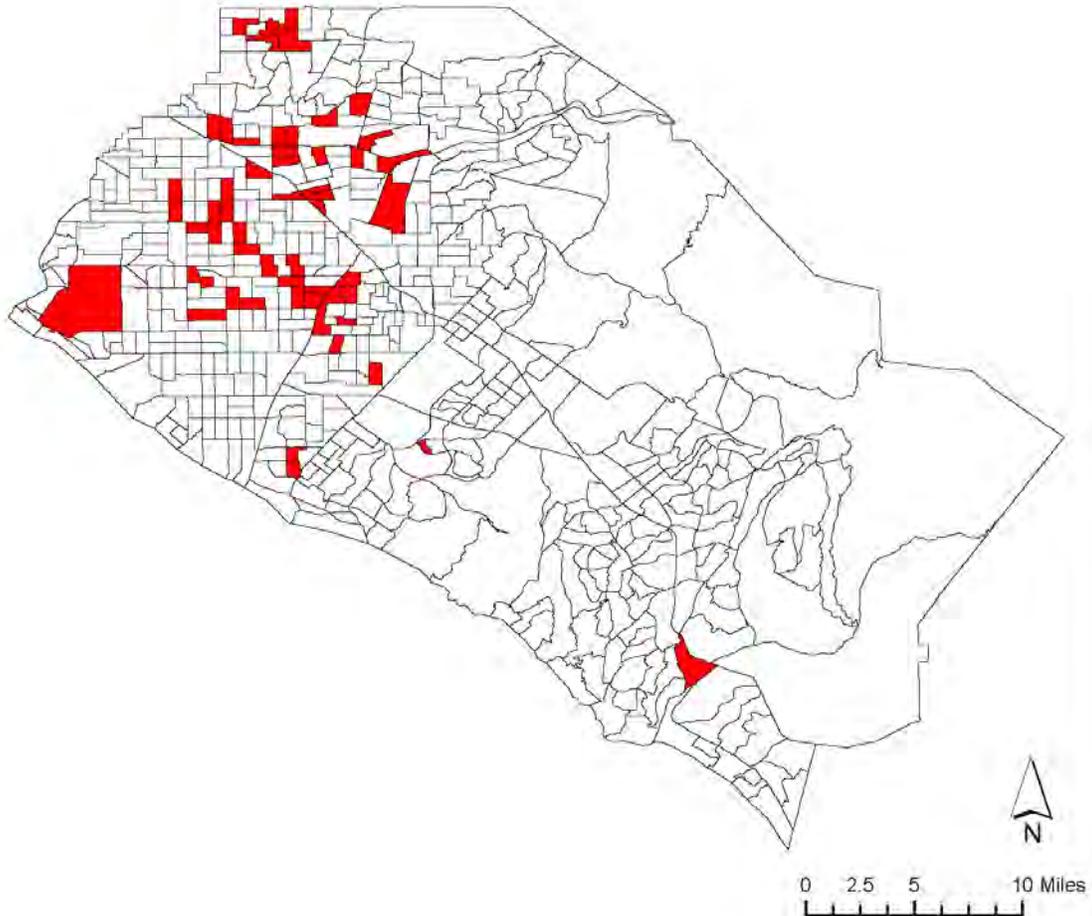
The table below provides a comparative view of Orange County occupational employment and Red Zone occupation employment by the proportion of residents in these occupations.

Proportion of Occupational Employment by Orange County and Red Zone Residents			
Occupations	Orange County	Red Zone	Difference
Management, Business, Science, and Arts	40.4%	21.6%	-18.8%
Management, Business, and Financial	18.3%	9.3%	-9.0%
Management	12.3%	6.0%	-6.3%
Business and Financial Operations	6.0%	3.3%	-2.7%
Computer, Engineering, and Science	6.6%	3.5%	-3.0%
Computer and Mathematical	3.2%	1.6%	-1.6%
Architecture and Engineering	2.6%	1.7%	-0.9%
Life, Physical, and Social Science	0.8%	0.3%	-0.5%
Education, Legal, Community Service, Arts, Media	10.5%	5.9%	-4.7%
Community and Social Services	1.3%	1.0%	-0.3%
Legal	1.4%	0.5%	-0.9%
Education, Training, and Library	5.3%	2.7%	-2.6%
Arts, Design, Entertainment, Sports, and Media	2.5%	1.7%	-0.9%
Healthcare Practitioner and Technical	5.0%	2.8%	-2.1%
Health Diagnosing and Treating Practitioners	3.6%	1.6%	-2.0%
Health Technologists and Technicians	1.3%	1.2%	-0.1%
Service	17.6%	26.7%	9.1%
Healthcare Support	1.5%	2.3%	0.8%
Protective Service	1.6%	1.5%	0.0%
Fire Fighting and Prevention, and Other Protective	1.1%	1.3%	0.2%
Law Enforcement Workers including Supervisors	0.5%	0.2%	-0.3%
Food Preparation and Serving Related	5.8%	8.2%	2.4%
Building and Grounds Cleaning and Maintenance	4.2%	9.0%	4.8%
Personal Care and Service	4.5%	5.7%	1.2%
Sales and Office	25.1%	23.4%	-1.7%
Sales and Related	12.5%	10.4%	-2.1%
Office and Administrative Support	12.6%	13.0%	0.4%
Natural Resources, Construction, and Maintenance	6.7%	10.6%	3.9%
Farming, Fishing, and Forestry	0.3%	0.6%	0.3%
Construction and Extraction	4.0%	7.0%	3.0%
Installation, Maintenance, and Repair	2.4%	3.0%	0.6%
Production, Transportation, and Material Moving	10.2%	17.7%	7.5%
Production	5.9%	10.6%	4.7%
Transportation	2.2%	3.2%	0.9%
Material Moving	2.1%	3.9%	1.8%

Source: U.S. Census, 2016 American Community Survey

Orange County Red Zone Census Tracts, 2018

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

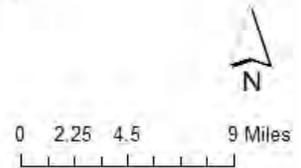
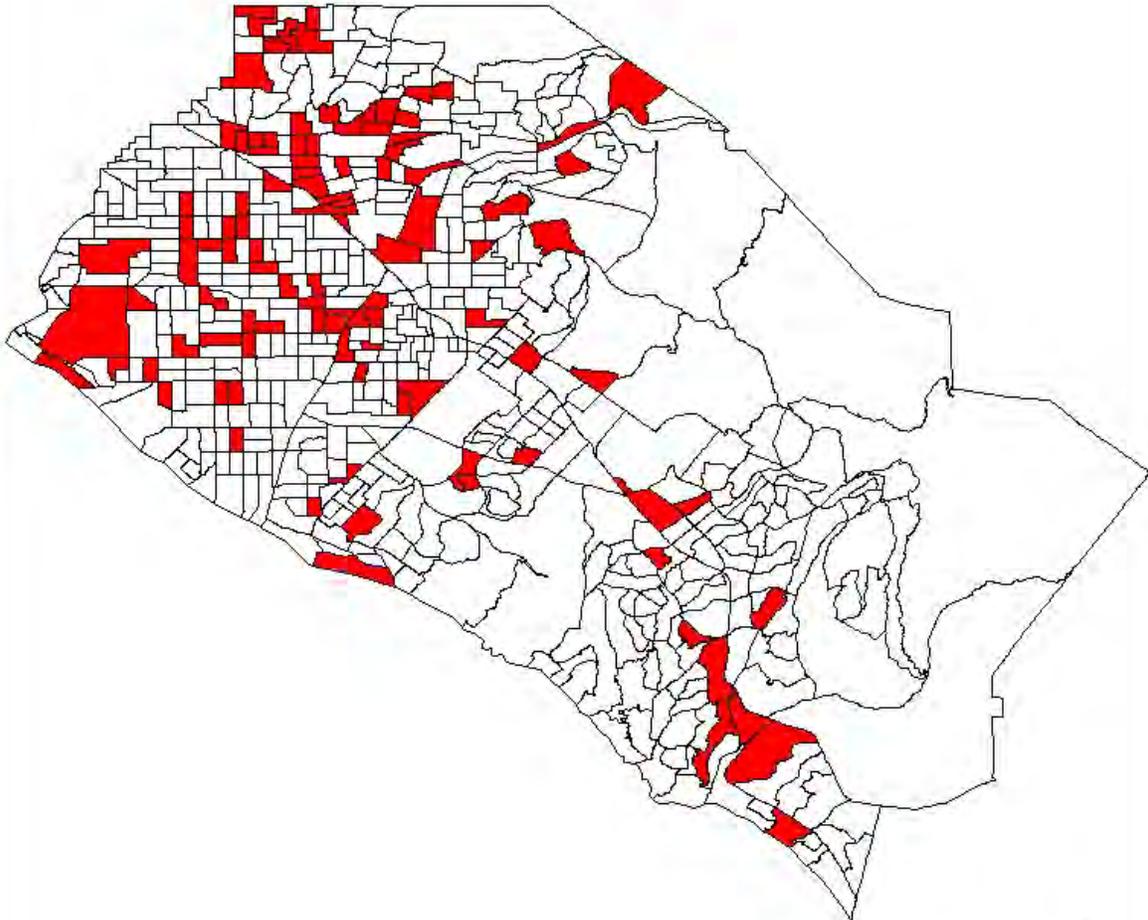


Map Source: Orange County Business Council, March 2018

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

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

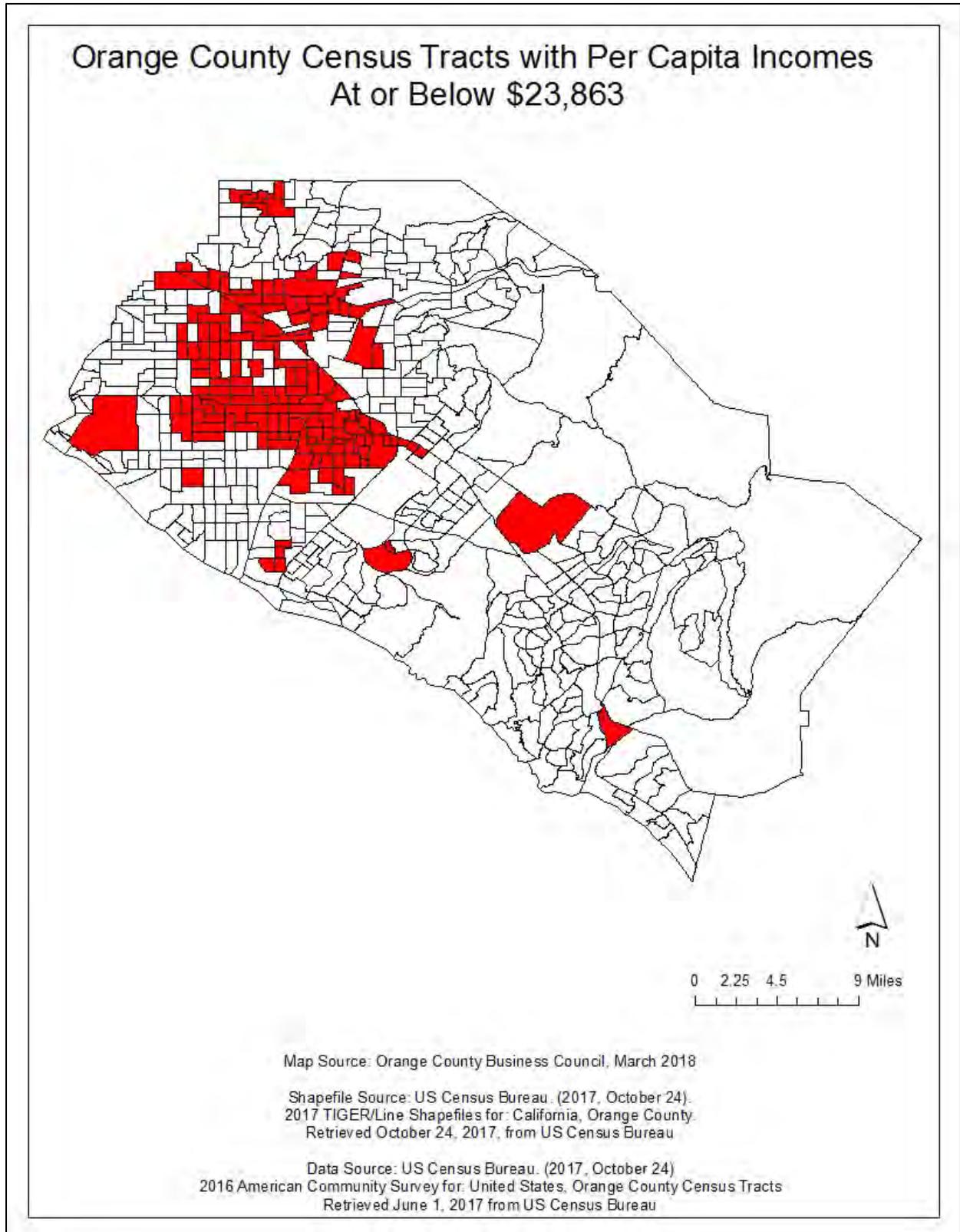
Orange County Census Tracts with Unemployment Rates At or Above 9.40%



Map Source: Orange County Business Council, March 2018

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

Data Source: US Census Bureau. (2017, October 24)
2016 American Community Survey for: United States, Orange County Census Tracts
Retrieved June 1, 2017 from US Census Bureau



Transportation and Infrastructure in Orange County

Orange County's continued population growth will increase pressure on its transportation and infrastructure systems, especially in rapidly growing cities such as Irvine, facing increased traffic congestion. To address this issue, the Orange County Transportation Agency (OCTA) has implemented a number of programs to reduce commute times and overall congestion in the region, most notably OC Go.

The original Measure M, a half-cent sales tax investment, ran from 1991 to 2011 and provided nearly \$4 billion in transportation funding. County voters renewed the tax for another 30 years in 2006; the Measure M2 program, recently renamed OC Go, will generate an estimated \$13.5 billion for transit, infrastructure and environmental investment by 2041. OC Go's priorities are:

- Upgrading freeways and fixing major freeway interchanges.
- Maintaining streets and roads, and synchronizing traffic signals throughout the county.
- Creating an integrated transit system.
- Protecting Orange County's environment.
- Mitigating the impact of freeways by protecting space while also streamlining the permitting process.

For the period of 2017 through 2027, the Updated Next 10 Plan will be based on ten deliverables intended to provide guidance on program and project delivery. These projects include:

Freeways

- Deliver \$3.1 billion of freeway improvements approved through construction.
- Invest approximately \$1.2 billion more in revenues bringing the completed freeway program improvements to \$4.3 billion.
- Continue to fund the Freeway Service Patrol (FSP), a team of tow trucks that travel Orange County freeways to help motorists with disabled vehicles (Project N).

Streets and Roads

- Allocate nearly \$1 billion: \$400 million in competitive funding to local jurisdictions to expand roadway capacity and synchronize signals (Project O and P) and nearly \$600 million in flexible funding to local jurisdictions to help maintain aging streets or for use on other transportation needs as appropriate (Project Q).
 - Complete the remaining three grade separation projects.

Transit

- Extend Metrolink service from Orange County to Los Angeles County, contingent upon cooperation and funding participation from route partners, and complete six rail station improvements.
- Complete design and construction, secure vehicles and begin operating the OC Streetcar (Project S) and work with local agencies to consider recommendations from planning studies to guide development of future transit connections.
- Provide up to \$115 million in funding to expand mobility choices for seniors and persons with disabilities (Project U).
- Work with local agencies to develop a plan for community circulator projects to provide grant opportunities for local agencies to implement more efficient local transit services (Project V).

- Allocate up to \$7 million in funding to improve the top 100 busiest bus stops and support the modernization of the bus system to enhance the customer experience (Project W).
- Ensure the ongoing preservation of purchased open space which provides comprehensive mitigation of the environmental impacts of freeway improvements and higher-value environmental benefits in exchange for streamlined project approvals.
- Work with the Environmental Cleanup Allocation Committee to develop the next tiers of water quality programs with a goal of providing up to \$40 million in grants to prevent the flow of trash, pollutants, and debris into waterways from transportation facilities. In addition, focus on improving water quality on a regional scale that encourages partnerships among the local agencies as part of the Environmental Cleanup Program (Project X).

The table below provides a list of current and completed Measure M2 Projects.

Orange County Transportation Authority - Measure M2 Construction Projects			
Project	Stage	Description	Completion Date
C	Complete	I-5, Avenida Vista Hermosa to Pacific Coast Highway	Complete
D	Complete	I-5, Ortega Interchange	Complete
E	Complete	SR-22, Access Improvements	Complete
G	Complete	SR-57 NB, Katella Avenue to Lincoln Avenue	Complete
G	Complete	SR-57 NB, Orangethorpe Avenue to Yorba Linda Boulevard	Complete
G	Complete	SR-57 NB, Yorba Linda Boulevard to Lambert Road	Complete
H	Complete	SR-91 WB, I-5 to SR-57	Complete
I	Complete	SR-91 WB, SR-55 to Tustin Avenue Interchange	Complete
J	Complete	SR-91, SR-55 to SR-241	Complete
J	Complete	SR-91, SR-241 to SR-71	Complete
O	Complete	Kraemer Boulevard Grade Separation	Complete
O	Complete	Lakeview Avenue Grade Separation	Complete
O	Complete	Orangethorpe Avenue Grade Separation	Complete
O	Complete	Placentia Avenue Grade Separation	Complete
O	Complete	Tustin Ave/Rose Drive Grade Separation	Complete
R	Complete	Sand Canyon Grade Separation	Complete
R	Complete	Rail-Highway Grade Crossing Safety Enhancement	Complete
R	Complete	San Clemente Beach Trail Safety Enhancements	Complete
R	Complete	Laguna Niguel/Mission Viejo Metrolink Station Americans with Disabilities Act (ADA) Ramps	Complete
R	Complete	San Clemente Pier Station Lighting	Complete
R	Complete	Tustin Metrolink Station Parking Structure	Complete
R,T	Complete	Anaheim Regional Transportation Intermodal Center (ARTIC)	Complete
A	Design, Advertise & Award	I-5, SR-55 to SR-57	2020
B	Environmental	I-5, I-405 to SR-55	2018

C,D	Construction	I-5, Avenida Pico to Avenida Vista Hermosa/Avenida Pico Interchange	2018
C	Environmental	I-5, Pacific Coast Highway to San Juan Creek Road	2018
C,D	Design, Advertise & Award	I-5, SR-73 to Oso Parkway/Avery Parkway Interchange	2023
C,D	Design, Advertise & Award	I-5, Oso Parkway to Alicia Parkway/La Paz Road Interchange	2023
C	Design, Advertise & Award	I-5 Alicia Parkway to El Toro Road	2023
D	Environmental	I-5, El Toro Interchange	2019
F	Design, Advertise & Award	SR-55, I-405 to I-5	2023
F	Environmental	SR-55, I-5 to SR-91	2020
G	Conceptual	SR-57 NB, Lambert Road to Tonner Canyon Road	2023
G	Environmental	SR-57, Orangewood Avenue to Katella Avenue	2018
I	Environmental	SR-91, SR-55 to SR-57	2019
J	Environmental	SR-91, SR-241 to I-15	TBD
K	Design-Build	I-405, SR-73 to I-605	2023
L	Environmental	I-405, I-5 to SR-55	2018
M	Environmental	I-605, Katella Interchange	2018
O	Construction	Raymond Avenue Grade Separation	2018
O	Construction	State College Blvd Grade Separation	2018
R	Environmental	17 th Street Railroad Grade Separation	2018
R	Environmental	Anaheim Canyon Metrolink Station Improvements	2020
R	Construction	Fullerton Transportation Center Improvements	2018
R	Construction	Orange Transportation Center Metro link Parking Structure	2019
R	Design, Advertise & Build	Placentia Metrolink Station Improvements and Parking Structure	2020
R	Design, Advertise & Build	Laguna Niguel to San Juan Capistrano Metrolink Station Passing Siding Project	2020
S	Design, Advertise & Build	OC Streetcar	2020
N	Pending	Freeway Service Patrol	TBD
O	Pending	Regional Capacity Program	TBD
P	Pending	Regional Traffic Signal Synchronization Program	TBD
Q	Pending	Local Fair Share Program	TBD
U	Pending	Mobility Choices for Seniors and Persons with Disabilities	TBD
V	Pending	Community Based Transit/Circulators	TBD
W	Pending	Safe Transit Stops	TBD
X	Pending	Environmental Cleanup Program	TBD

Source: Orange County Transportation Authority

The State of Orange County’s Infrastructure, 2016

Infrastructure has a direct impact everyday lives of every Orange County resident—from the water residents drink, to the schools children attend, and to the roads and rails traveled. Infrastructure is vital to the economy, security, recreation, and safety.

The Orange County Branch of the American Society of Civil Engineers (ASCE) released the 2016 Report Card for Orange County’s Infrastructure on July 21, 2016.

Twelve working committees of public and private sector infrastructure and engineering experts undertook a collaborative effort to evaluate the overall condition of twelve different Orange County infrastructure sectors. Orange County received an overall grade of C+ in 2016, outperforming the national infrastructure grade of D+. Despite outperforming the nation as a whole, Orange County and its infrastructure agencies need to continue to improve the county’s infrastructure, as it will have a significant positive effect on the lives of county residents, visitors, and commuters.

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

Source: Orange County Branch of the American Society of Civil Engineers (ASCE)

AVIATION: GRADE A-

- Despite nearing the current negotiated passenger limit of 10.8 million annual passengers until 2020, general aviation and military aviation demand still falls short of total capacity.
- The condition of John Wayne Airport is excellent.

ELECTRIC POWER: GRADE C-

- While rate increases approved by the California Public Utilities Commission for Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) are adequate for maintenance at minimum reliability standards, the increased stress that the County’s growing population places on power infrastructure (especially during the summer months) means that these increases may fall short of the required funding to fully replace and upgrade the region and county-wide facilities.

FLOOD CONTROL AND LEVEES: GRADE C-

- Orange County levees have a generally fair condition and local agencies continue to work with Federal Emergency Management Agency (FEMA) and the United States Army Corps of Engineers (USAC) to meet their standards. The county still has a funding shortfall of \$2.7 billion for upgrades needed to bring regional flood control facilities up to current standards, which will present a significant challenge going forward.

GROUND TRANSPORTATION: GRADE C

- As Orange County's population and workforce continues to grow, there is a significant need for an additional \$133 million funding per year from local and regional sources to maintain and improve the current transportation network. This will help to elevate and enhance the quality of life, as well as help to support economic growth in the region.

NATURAL GAS: GRADE B-

- Regulated by the California Public Utilities Commission (CPUC), the Southern California Gas Company (SoCalGas) remains the nation's largest natural gas distributor with an estimated 21.6 million customers in more than 500 communities. The natural gas system provides fuel for home heating, cooking, manufacturing, generating electricity, powering vehicles (including trucks and buses) throughout Southern California.

OIL: GRADE B-

- Despite the increasing use of electric vehicles, Orange County vehicles still consume approximately three million gallons of transportation fuels per day. Orange County's transportation fuel supply is susceptible to shocks from unplanned refinery outages because California is an "energy island."

PARKS, RECREATION, AND ENVIRONMENT: GRADE C+

- Orange County Parks, Recreation, and Environment received a C+ grade in 2016, the same as the previous year. The county operates 22 regional parks, while each of its 34 cities operates and maintains its own local parks. An estimated investment of \$525 million in parks across the county would be required to raise this grade to a B.

SCHOOL FACILITIES: GRADE C

- Orange County has a total of approximately 600 school facilities across thirteen elementary school districts, three Union High School Districts, and twelve Unified School Districts; combined, these schools serve almost 500,000 students. While the condition of school facilities has declined in recent years due to a lack of funding, a decreasing student enrollment trend has eased demand to expand or add new facilities.

SOLID WASTE: GRADE B

- Orange County's per resident disposal rate is comparable to the national average at 4.5 pounds per resident per day. Public education and awareness has greatly increased recycling efforts and will be essential towards reaching the State's goal of 75% recycling.

SURFACE WATER QUALITY: GRADE D+

- While surface water quality and storm water quality infrastructure is currently manageable, additional investment will be needed to improve the County's capacity to mitigate potential problems in the future.
- This will require a cohesive, innovative approach by a number of agencies to manage future supply and treatments in order to meaningfully raise this grade.

WASTEWATER: GRADE B

- While current upgrades and improvements to meet state and federal requirements are ongoing, current infrastructure assets and their respective workforces are well-managed and staffed. In order to maintain this high-level grade and mitigate any future potential stressors, wastewater infrastructure must continue to be inspected, rehabilitated, and replaced to meet performance and management criteria.

WATER SUPPLY: GRADE B

- Despite the previously worrying drought, Orange County and its residents have made significant strides in replenishing current supply levels. Water supply infrastructure is currently well-maintained and multiple agencies are planning significant capital improvement projects in the future to enhance supply over the next three to five years. However, the groundwater basin that serves the northern two-thirds of Orange County has two areas that present an ongoing concern; the Orange County Water District is working with regulatory agencies for a long term cleanup solution because water conservation is essential, not just to Orange County, but to the entire state.

Review and Effectiveness of Previous CEDS Report

The previous CEDS Report highlighted four benchmarks to measure the strategy's success:

- Creating 50,000 new jobs between June 2013 and June 2018.
- The County must undertake two Red Zone specific Economic Investments Projects involving Infrastructure and Transit-Transportation Centers.
- Creating at least 5,000 new jobs in Orange County's Construction, Manufacturing, and Financial Services industries between June 2013 and June 2018.
- Increase Private Sector Investments in Orange County.

Orange County has already left the first goal far behind, creating approximately 153,800 non-farm jobs between June 2013 and January 2018. As for the second goal, Orange County has undertaken a number of economic investment projects targeted at Red Zones including:

- The Anaheim Regional Transportation Intermodal Center (ARTIC), a 16-acre transportation hub, opened in 2014 with freeway, rail, bus, taxi, and bike access, as well as parking and dining options. ARTIC's central Anaheim location enables it to serve both the city as a whole and its Red Zone areas. Anaheim has more Red Zones than any other Orange County city and increased access to transportation will help residents of these areas find gainful employment and access needed resources.
- The Santa Ana/Garden Grove Fixed Guideway project, expected to be completed by 2020, will provide a new streetcar line, OC Streetcar, between the Santa Ana Regional Transportation Center (SARTC), and a new multi-modal transit hub on Harbor Boulevard in Garden Grove; the OC Streetcar will connect 18 pre-existing OCTA bus routes. This project, which has been awarded approximately \$12 million from Project S and additional funds, will begin construction in 2018 and when completed, will provide much-needed public transportation in central Orange County.
- The Orange County Transportation Authority Board of Directors launched the OC Bus 360 program in 2015. This program focuses on providing better service and bus routes in high-demand areas by reallocating existing resources, providing multiple ticket programs such as the Summer Youth Pass and express route fares, and improving branding to attract new riders. While ridership continues to decline across the county, areas in which the OC Bus 360 system were implemented saw ridership increase by 10.4 percent year-over-year. This highlights the success already experienced by the program and demonstrates that infrastructure programs, especially those serving Red Zone areas of the county, can be improved through strategic planning.

Employment growth has been uneven across Orange County industries. The table below highlights employment changes in Construction, Manufacturing and Financial Services between June 2013 and January 2018.

Orange County Employment Change in Construction, Manufacturing and Financial Activities			
Industry	Jun-13	Jan-18	Absolute Change
Construction	78,800	102,400	23,600
Manufacturing	158,000	156,900	-1,100
Financial Activities	113,800	119,300	5,500

Source: California Employment Development Department

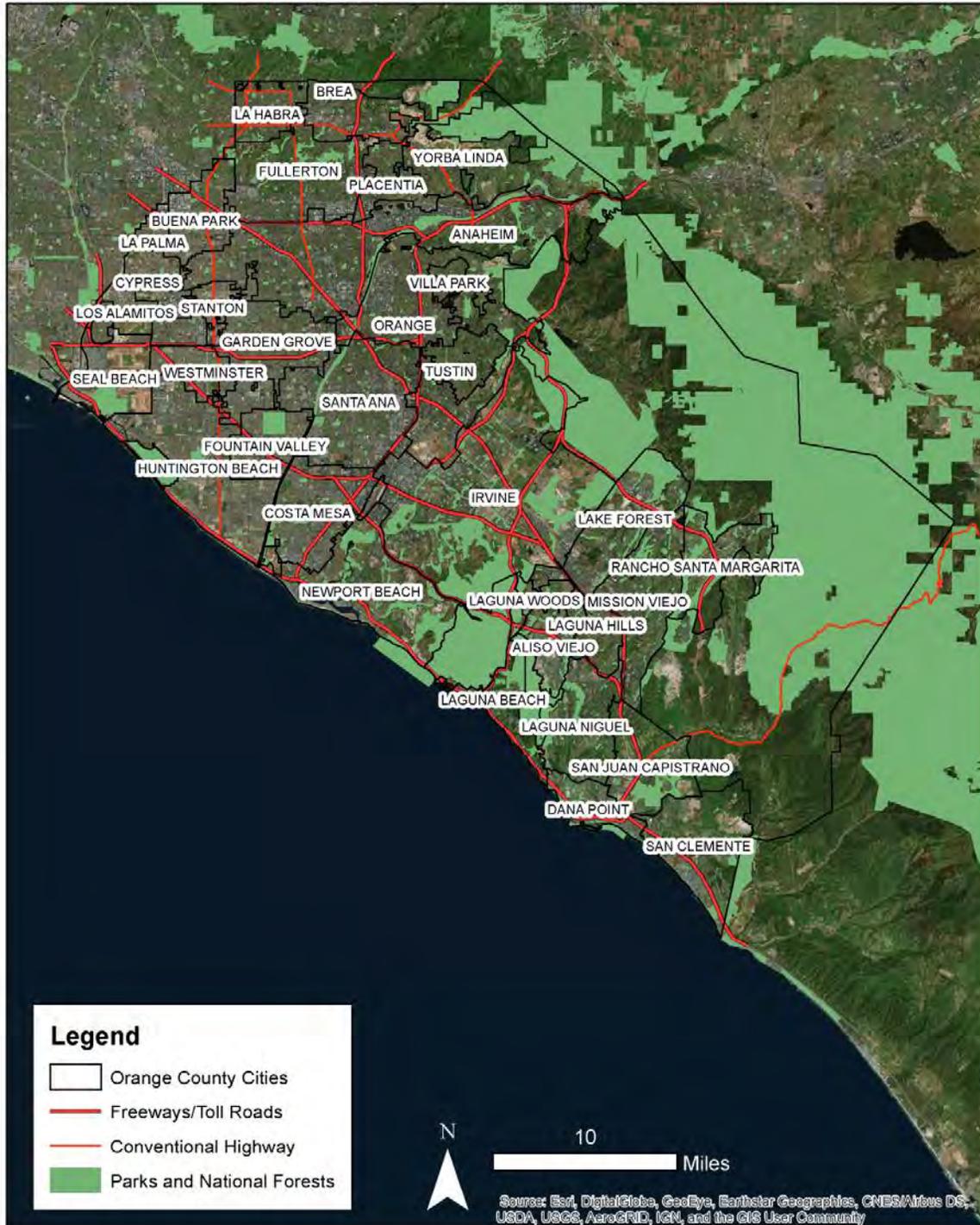
Two of the three industries were able to meet the employment goals set out in the original CEDS. Construction employment, supported by a booming housing market, rose dramatically by 23,600 jobs, surpassing the 5,000 job increase goal. Employment within the Financial Activities industry also surpassed its job creation goal, adding 5,500 new jobs since June 2013. A significant portion of growth within the Financial Activities sector was focused in Credit Intermediation and Related Activities, Non-Depository Credit Intermediation, and Real Estate, while job losses were recorded in Insurance-related industries.

The fourth and final benchmark used to measure the CEDS success was encouraging new private-sector investments in Orange County. As highlighted in the previous CEDS update, it is estimated that \$50 million in private investment will come to Orange County once the CEDS is fully and successfully implemented.

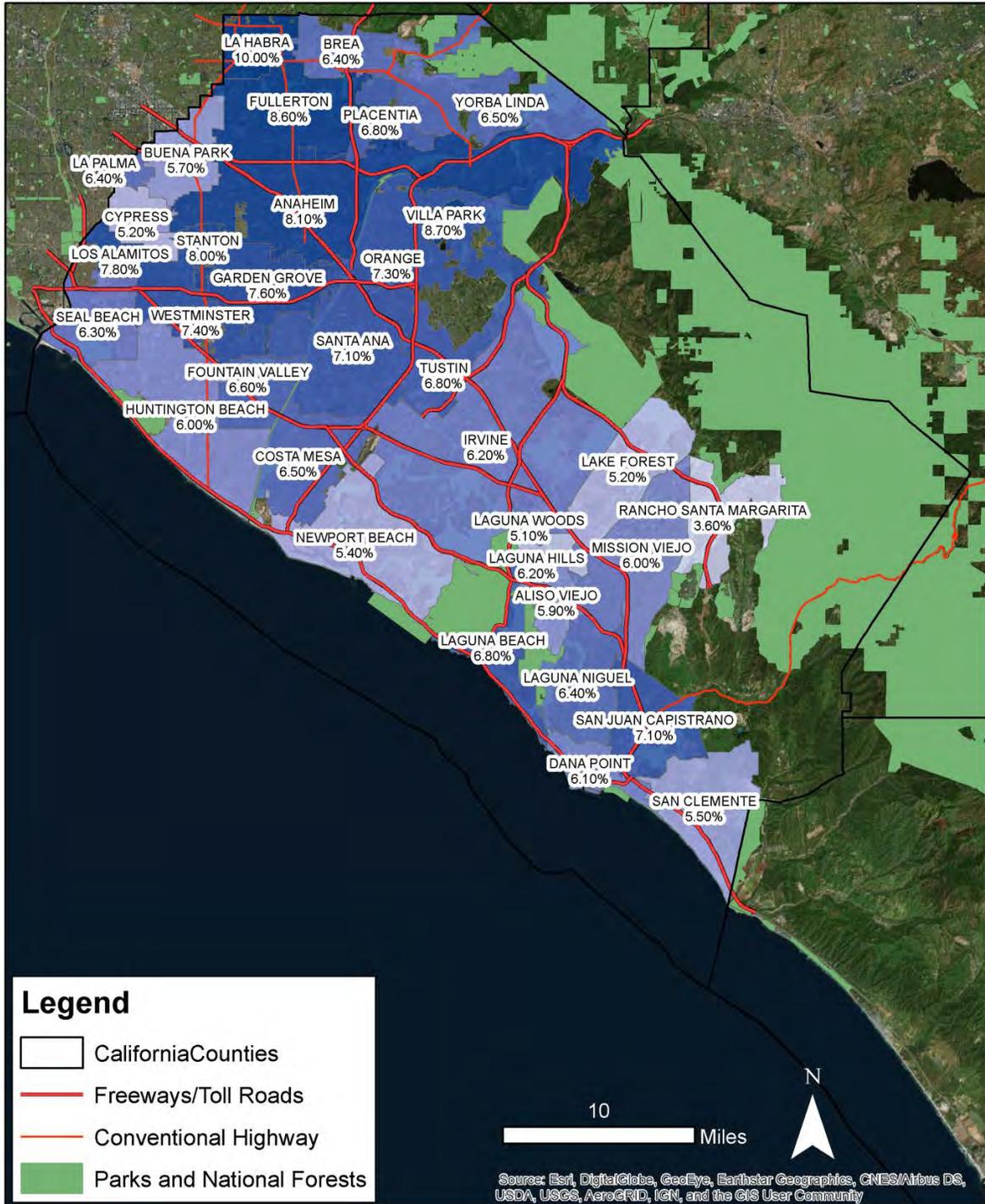
With the exception of an overall decrease in employment of Manufacturing employment by 1,100 between June 2013 and January 2018, Orange County was able to meet all the goals set out in the 2013-2018 CEDS. These accomplishments illustrate the effectiveness of a cohesive and properly implemented Comprehensive Economic Development Strategy backed and supported by partners dedicated to economic growth and prosperity in the region. While the county, like every county in the nation, is still vulnerable to inevitable events such as the Great Recession, local stakeholders and policymakers have built a strong foundation for Orange County’s future.

Overall, Orange County has experienced tremendous economic activity and growth in recent years while being supported by the 2013-2018 Comprehensive Economic Development Strategy. Improvements in employment levels, wages, and educational attainment have all contributed to improving the quality of life for Orange County residents. In order to ensure this momentum continues, the 2019 CEDS Report highlights the positive trends supporting overall growth in the region while shining a spotlight on areas in need of support and improvement. In doing so, local policymakers, employers and educators are able to assess the best and most impactful strategies aimed at leveraging the region’s strengths while improving on potential weaknesses. Successful implementation of the 2019 CEDS Report’s strategies will require a cohesive and collaborative approach from all stakeholders to continue economic improvements and an increased quality of life for all Orange County residents.

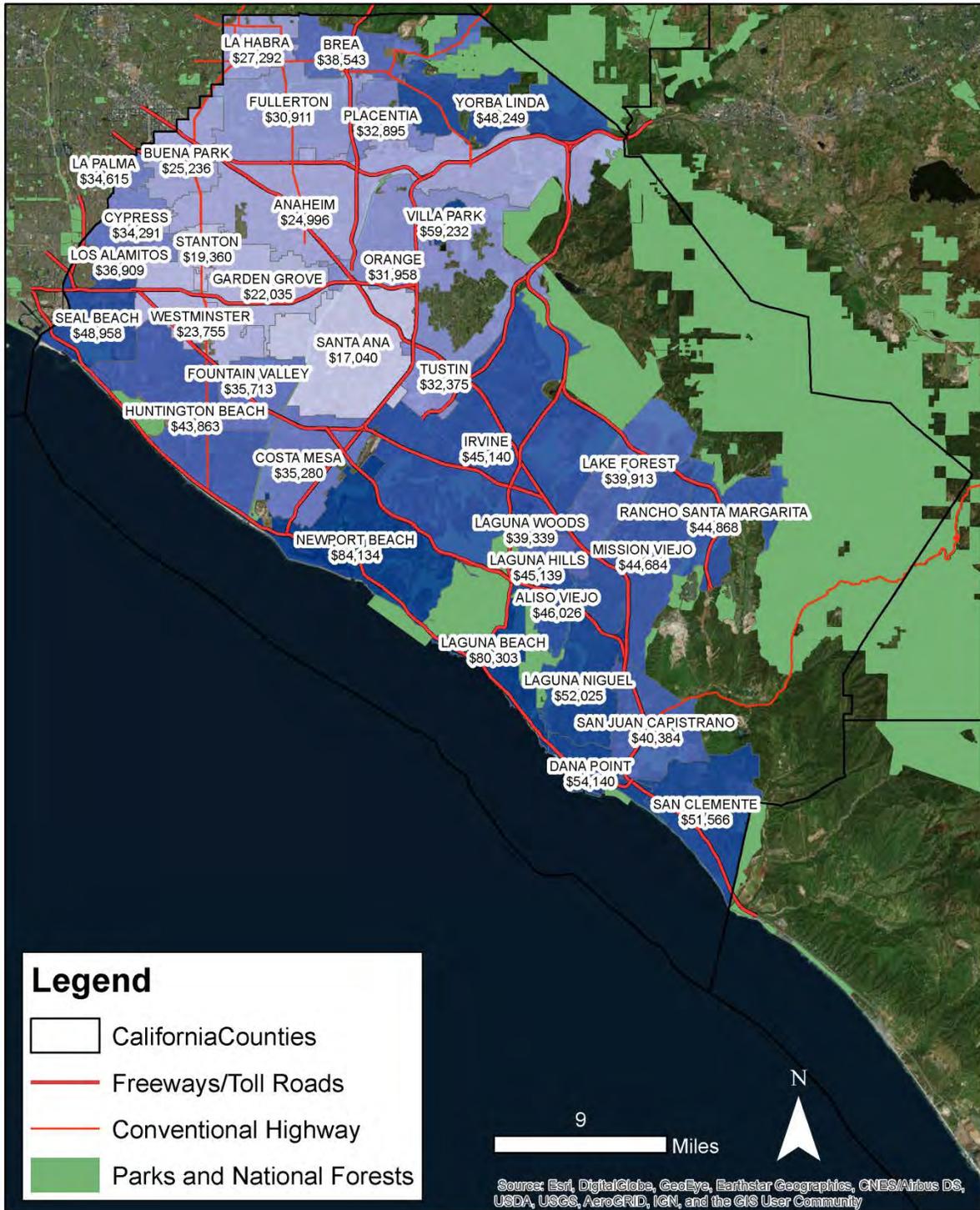
Map of Orange County and its Incorporated Cities



Orange County Cities by Unemployment Rate 2016 U.S. Census American Community Survey



Orange County Cities by Per Capita Income 2016 U.S. Census American Community Survey



Appendix A – Orange County Cities Updates

City of Buena Park Project Summary

Project Name: Crescent Avenue Sewer

Project Dates: TBD

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

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

Other Agencies Involved: None

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

Cost Estimate: \$2.6 million

City of Buena Park Project Summary

Project Name: Relocation of the Buena Park Woman's

Club Project Dates: TBD

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

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

Other Agencies Involved: None

Operating Budget Impact: TBD

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



KEY NOTES

- 1 EXISTING CHURCH
- 2 HISTORIC HOUSE (WHITAKER JAYNES)
- 3 HISTORIC HOUSE (BACON)
- 4 CALIFORNIA WELCOME CENTER
- 5 CAFE
- 6 NEW COURTYARD
- 7 RAISED PATIO
- 8 RELOCATED WOMEN'S CLUB
- 9 EXISTING ROSE GARDEN

**thirtieth
street
architects
inc.**
2821 newport blvd. newport beach,
california 92663 (949)673-2643

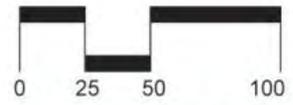


BEACH BLVD.

10TH STREET



SCALE: 1"=30'-0"





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

7 NOVEMBER 2016

thirtieth
street
architects
inc.

City of Garden Grove Project Summary

Project Name: BN Hotel Group

Projected Dates: Start of Construction – 3rd Quarter 2019

Description: BN Hotel Grove LLC is developing property at 13650 Harbor Boulevard with a new Home 2 Suites hotel. Business development and business attraction efforts continue to promote reinvestment and beautification along the South Harbor Boulevard corridor.

Purpose/Justification: The project is expected to create 40-50 new permanent jobs.

Other Agencies Involved: None

Operation Budget Impact: The initial phase of the development improvements cost is approximately \$5.9 million and the gross revenue generated from this development is approximately \$1 million to \$1.5 million in Transient Occupancy Tax, and approximately \$16,000 to \$36,000 in sales tax.

Cost Estimate: The total cost of this development is approximately \$35 million to \$40 million.



City of Garden Grove Project Summary

Project Name: Cottage Industries (Re-Imagine Downtown)

Projected Dates: Start of Construction – 2nd Quarter 2019

Description: Cottage Industries is a commercial project located in the heart of the Downtown Garden Grove that would provide for the adaptive reuse and transformation of twelve (12) older craftsman-style homes into eclectic, artesian eateries and retail uses. This project is slated to start construction in 2nd Quarter 2019.

Purpose/Justification: Cottage Industries is expected to create 50 to 100 new jobs.

Other Agency's Involved: None

Operation Budget Impact: \$50,000 annually to the City in property and sales tax revenues.

Cost Estimate: The total cost of this development is approximately \$6 million to \$10 million.



City of Garden Grove Project Summary

Project Name: Garden Grove KIA (South Harbor Boulevard)

Projected Dates: Complete Construction by 1st Quarter 2019

Description: Garden Grove Automotive, Inc. (GGA) is expanding to a new dealership location at 13731 Harbor Boulevard, Garden Grove, California with plans to open and operate the Garden Grove Kia at this new site. Business development and business attraction efforts continue to promote reinvestment and beautification along the South Harbor Boulevard corridor.

Purpose/Justification: The project is expected to create 40 new permanent full-time jobs via the development of the New KIA Dealership.

Other Agencies Involved: None

Operation Budget Impact: At completion, the project is anticipated to generate \$150,000 to \$300,000 annually in property and sales tax revenues.

Cost Estimate: The total cost of the new Garden Grove KIA project is approximately \$12 million to \$16 million.



City of Garden Grove Project Summary

Project Name: Grove District Public Improvements

Projected Dates: 2018 – On Going

Description: The proposed project encompasses development of public infrastructure improvements including: street and traffic operational enhancements; pedestrian and accessibility parkway improvements; and, storm drain improvements along Harbor Boulevard from the northerly City boundary (Chapman Avenue) to the southerly City boundary (Westminster Avenue) to integrate and enhance development opportunities.

The proposed construction involve the development of public infrastructure improvements which includes: roadway improvements, relocation of water mains, sewer line improvements, removal of utility pipes, installation of new traffic signals, construction of way finding and monument signs, construction of new curb and gutter, median improvements and landscaping, construction of bus stop/pedestrian areas, street lighting, installation of street furniture, and creation of area monuments and entrance signs.

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

Other Agencies Involved: None

Operation Budget Impact: The project is estimated to generate an additional \$5 million to \$15 million annually.

Cost Estimate: The total cost of the public infrastructure project is approximately \$45 million to \$50 million.



City of Garden Grove Project Summary

Project Name: New Age Brookhurst LLC (Brookhurst Place Phase II)

Projected Dates: Start of Construction - 3rd Quarter 2019

Description: The New Age Brookhurst LLC is a public-private partnership with the City of Garden Grove and New Age Brookhurst (the “Developer”). The Brookhurst Place development would be constructed in phases and at completion, would be comprised of up to 700 residential units including up to 120 affordable units and up to 80,000 square feet of commercial/retail and restaurant space. Brookhurst Place Phase I consisting of 180 residential units was completed in July 2018. Brookhurst Place Phase II will consist of the remaining residential units and associated commercial/retail development.

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

Other Agencies Involved: Successor Agency to the Garden Grove Agency for Community Development

Operation Budget Impact: The project is estimated to generate an additional \$3.1 million in gross property tax annually.

Cost Estimate: The total cost of this development is approximately \$45 million to \$50 million.



City of Garden Grove Project Summary

Project Name: New Age Garden Grove, LLC (Site B2)

Projected Dates: Start of Construction – 3rd Quarter 2019

Description: The former Garden Grove Agency for Community Development and New Age Garden Grove, LLC-2 entered into a Disposition and Development Agreement that provided for development of 2.5 acre site consisting of a new resort with approximately 180 rooms. The proposed project would incorporate an additional 5-acre site to the west as an expansion thereby increasing the new resort to total approximately 500 rooms.

The project is located on the west side of Harbor Boulevard and north of Twintree Lane.

Purpose/Justification: The project is expected to create new 200 to 545 permanent jobs.

Other Agencies Involved: Successor Agency to the Garden Grove Agency for Community Development

Operation Budget Impact: The Project could generate up to \$4.8 million in Transient Occupancy Tax and \$70,000 to \$300,000 in tax increment annually.

Cost Estimate: The total cost of this development is approximately \$60 million to \$400 million.



City of Garden Grove Project Summary

Project Name: SteelCraft Garden Grove (Re-Imagine Downtown)

Projected Dates: Start of Construction – 3rd Quarter 2018

Description: SteelCraft Garden Grove is an outdoor urban eatery made with repurposed shipping containers. The project totals approximately 15,000 square feet of retail/restaurant space adjacent parking spaces.

Purpose/Justification: SteelCraft Garden Grove is expected to create 85 to 150 new jobs.

Other Agencies Involved: None

Operation Budget Impact: At completion, the project is anticipated to generate \$85,000 annually in property and sales tax revenues.

Cost Estimate: The total cost of this development is approximately \$4 million to \$6 million.



City of Garden Grove Project Summary

Project Name: Willowick Golf Course (Public Infrastructure)

Projected Dates: 2019 – On Going

Description: The Willowick Golf Course is located at 3017 W. 5th Street in the City of Santa Ana and is owned by the City of Garden Grove. The 18-hole golf course site is comprised of eight separate parcels totaling approximately 102 acres.

The Cities of Garden Grove and Santa Ana are in collaboration to redevelop the Willowick site. Joint efforts are underway in the areas of community engagement and visioning for the site. It is anticipated reuse of the Willowick site would require construction of new public infrastructure and upgrades to existing public infrastructure improvements in Garden Grove. Public Infrastructure improvements may include but not limited to: street and traffic operational enhancements; pedestrian and accessibility parkway improvements; storm drain improvements; roadway improvements; relocation of water mains; sewer line improvements; removal of utility pipes; installation of new traffic signals; construction of new curb and gutter; median improvements; landscaping; street lighting; and, signage.

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

Other Agencies Involved: City of Santa Ana

Operation Budget Impact: The project is estimated to generate an additional property and sales tax.

Cost Estimate: The total cost of the public infrastructure for the Willowick Reuse project is unknown at this time.



City of Irvine Project Summary

Project Name: One Irvine Project

Dates: 2018 to TBD

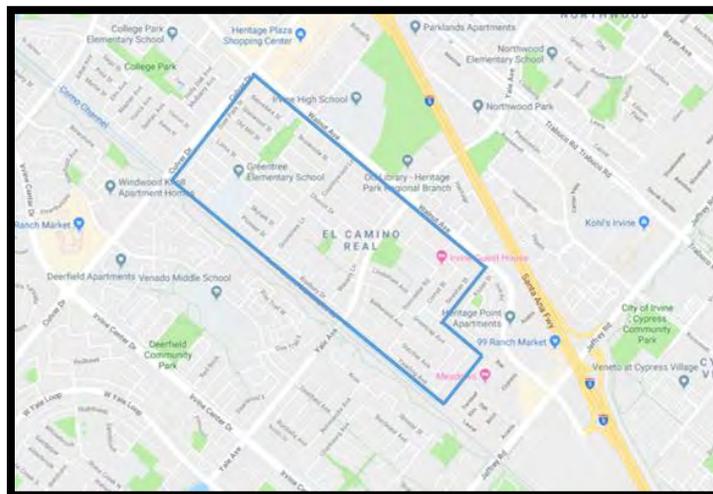
Description: As the City of Irvine nears its 50th anniversary, some of the original neighborhoods are experiencing physical decline. Based on the broken window theory, the City of Irvine is forming a multi-departmental task force including Public Safety, Community Development, Community Services, and Public Information Office to define the City's vision and objectives for each neighborhood and to bring existing City resources to address identified needs.

Purpose/Justification: The objectives of One Irvine include: Improving communication between residents and City staff across multiple departments resulting in a more effective and efficient delivery of services; facilitate the preservation of a safe, attractive, and sustainable Irvine through partnership with our residents and other stakeholders; build a sense of neighborhood pride to empower residents to maintain and improve their homes and public spaces; enhance and promote the maintenance of real property and improve the livability, appearance, social, and economic conditions of the community; demonstrate the City's commitment to support all Irvine neighborhoods; develop an action plan that can inform the City's existing plans and programs, including the Capital Improvement Program and the General Plan.

Other Agencies Involved: N/A

Operating Budget Impact: TBD

Cost Estimate: TBD



Map of the first *One Irvine* focus area for Fiscal Year 2018-19

City of Laguna Beach Project Summary

Project Name: Laguna Canyon Road Utility Undergrounding and Active Transportation Elements

Project Dates: 2019 to 2025

Description: Improve the safety of Laguna Canyon Road between El Toro Road and Canyon Acres Drive by placing overhead utilities underground and utilizing that space for creating sidewalks, bike lanes, pathways, and traffic signals with crosswalks for improved access to transit facilities within the right-of-way.

Purpose / Justification: Six million visitors per year travel to Laguna Beach, and over 40,000 vehicles per day traverse the two-lane highway. Overhead utility poles line the edges of Laguna Canyon Road very close to the vehicle lanes creating a safety hazard. Removing the poles and wires and utilizing that space for active transportation elements where none exist today will improve the safety of all that travel Laguna Canyon Road, including workers commuting to Laguna Beach from other cities in the region. The Laguna Beach workforce industry includes, retail, hotels, restaurants, healthcare, education, and construction.

Other Agencies Involved: Caltrans, Southern California Edison and OCTA

Operating Budget Impact: TBD

Cost Estimates: The preliminary cost estimate is approximately \$100 million.



City of Laguna Hills Project Summary

Project Name: Multi-Use Trail from Alicia Parkway to Indian Hill Lane

Project Dates: Pending Funding

Description: Construction of a dual trail system of an off-street Class I Bikeway and a walking/hiking trail from the City's Community Center and along the Laguna Hills High School to an adjacent neighborhood for access improvements to the High School and Community Center.

Purpose/Justification: This project will extend the Laguna Hills Trail System to meet the needs of the adjacent neighborhoods for walkability and bicycling to public facilities and transit access. The project will encourage exercise and alternative travel modes. The project is immediately adjacent to an AB 1550 designated low income area and a SCAG identified Environmental Justice Area. An easement will be required for a portion of this trail.

Other Agencies Involved: None

Operating Budget Impact: Routine maintenance of trail and landscape – minimal cost.

Cost Estimates: Construction cost estimate of \$1 million.



City of Mission Viejo Project Summary

Project Name: Mission Viejo Core Area / Oso Creek Pedestrian Paseo Project

Dates: 2018- 2021

Description: The overall project is a new pedestrian link through the Village shopping center connecting Marguerite Parkway, directly across from the City's Civic Center, to Oso Creek and the adjacent trail system east of the shopping center. The new pedestrian paseo will include a park area for active use and seating, as well as a courtyard area between existing buildings, large enough for kiosk and similar size temporary commercial uses and active use/lounging. Adjacent to Oso Creek an amphitheater will accommodate lounging or active use by large groups, with views of Oso Creek and a view deck over the Creek that can also serve as a stage. Seating and recreating opportunities will be provided throughout. A bridge over Oso Creek, to an existing trail on the east side, is included as a later phase component of the project.

Purpose / Justification: To improve accessibility within the Core Area and increase use of the commercial centers, the Civic Center, and the Oso Creek trail system by providing resident and customer amenities that attract and connect the various uses in the area.

Other Agencies Involved: None

Operating Budget Impact: TBD

Cost Estimates: TBD



City of Placentia Project Summary

Project Name: Transit Oriented District & Old Town Placentia Revitalization and Multi-Modal Infrastructure Project

Project Dates: 2020

Description: The City has embarked on an exciting journey to create a Transit Oriented Development Packing House District as well as an Old Town Placentia Revitalization Project that will incorporate several infrastructure improvements. These two project concepts are adjacent to each other as well as the proposed Metrolink station and parking structure. As such, the City will merge the streetscape and infrastructure details included in both of these projects to provide a seamless downtown experience for residents and visitors.

Purpose/Justification: To improve and support multi-modal transportation and pedestrian activated neighborhoods by creating new and wider sidewalks, roads, traffic flow improvements, traffic signal, infrastructure improvements, bike lanes, utility infrastructure improvements, and pedestrian safety amenities.

Other Agencies Involved: The Orange County Transportation Authority (OCTA) will be constructing the new Metrolink Station and the 246-space parking structure.

Operating Budget Impact: \$13.4 million

OCTA Cost: \$29.4 million

Potential Tiger Grant Funding: \$12 million

Total Cost Estimates: \$54.8 million



City of Santa Ana Project Summary

Project Name: 3rd and Broadway Development Opportunity

Project Dates: 2018 to 2021

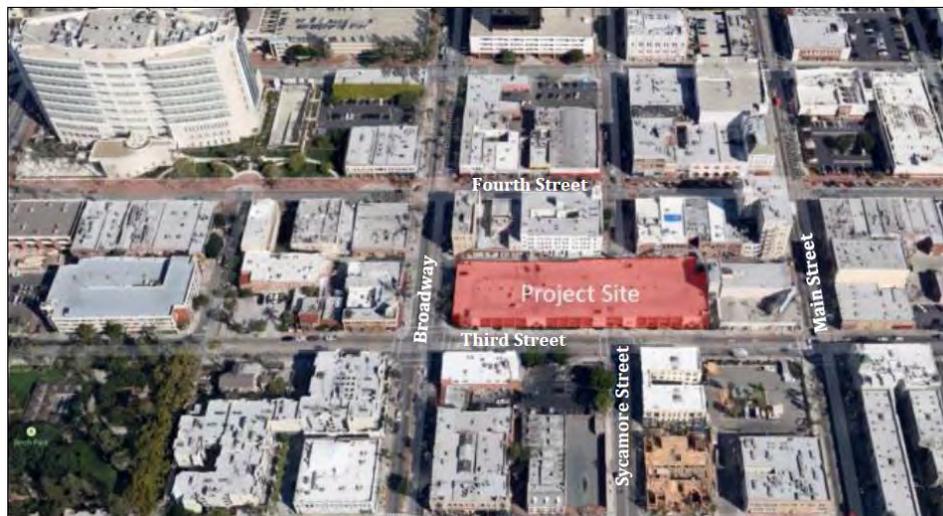
Description: The City constructed the 440-space parking garage located on 3rd Street and Broadway in the early 1980s. The three-level garage is situated on approximately 61,243 square feet of land area and encompasses approximately 146,000 square feet of building area. The 3rd Street Garage is not currently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

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

Other Agencies Involved: N/A

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

Cost Estimates: TBD



City of Santa Ana Project Summary

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

Project Dates: TBD

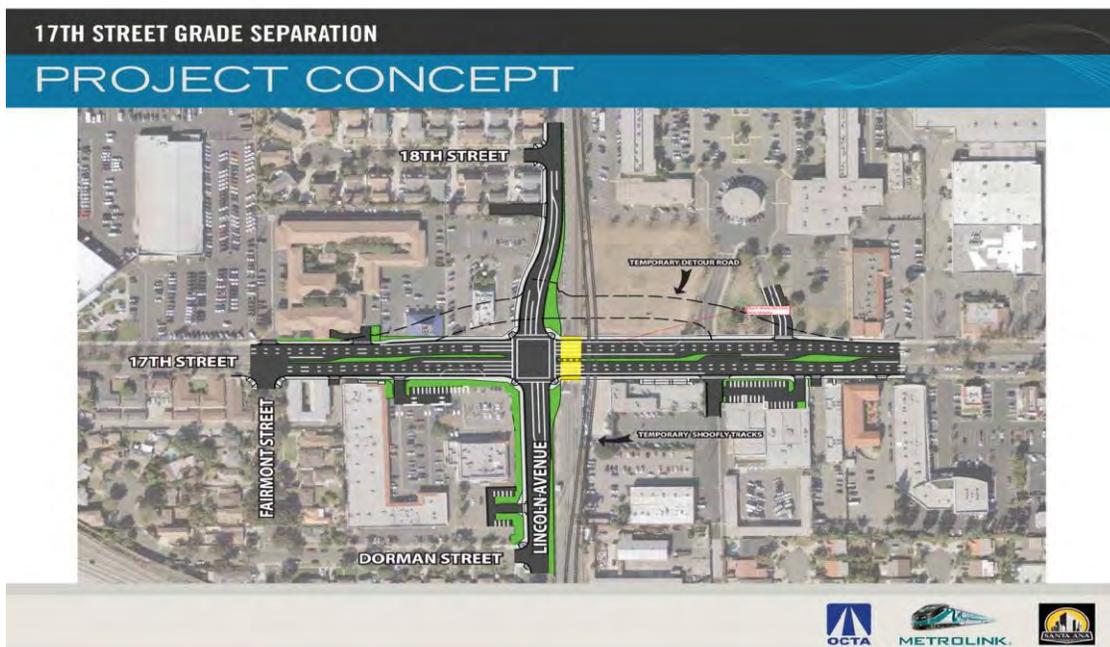
Description: The project proposes to grade separate the existing 17th St. and Lincoln intersection from the OCTA Metrolink at-grade railroad crossing. The grade separation will eliminate the at-grade crossing of 17th Street and the OCTA Metrolink tracks to improve pedestrian and bicycle user safety,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

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

Other Agencies Involved: OCTA/Metrolink

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

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



City of Santa Ana Project Summary

Project Name: Alton Avenue Overcrossing at SR-55

Project Dates: TBD

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

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

Other Agencies Involved: City of Irvine/Caltrans

Operating Budget Impact: N/A

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



City of Santa Ana Project Summary

Project Name: “AMI-Automated Meter Infrastructure”

Project Dates: 2018 to 2020

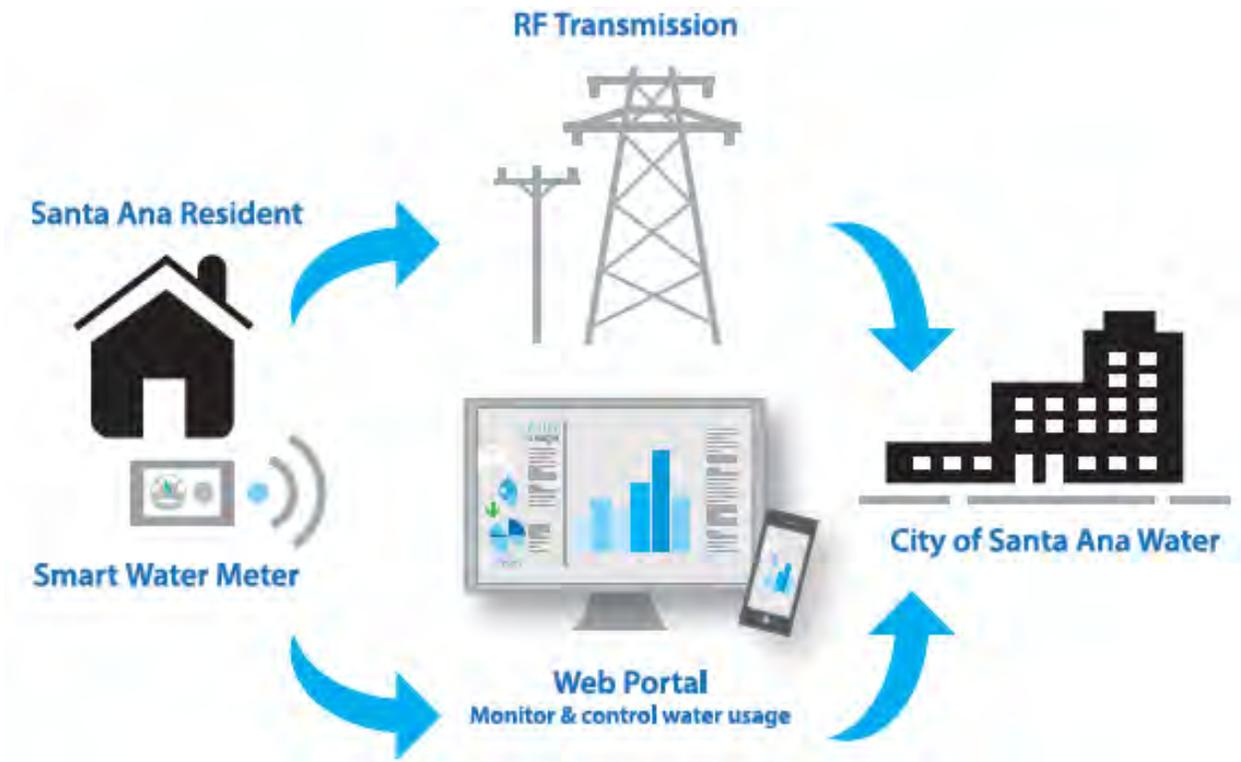
Description: An important initiative for the City of Santa Ana is implementing a more efficient system to read water meters called Automated Meter Infrastructure (AMI). It would replace the City’s current manual readings for nearly 45,000 meters. AMI uses two-way communication over a secure wireless network between each residential or business smart meter and the City. Water consumption data is automatically sent to a central computer system via radio frequency (RF) transmission. Water customers would have access to a web portal where they could track their water consumption and other detailed information via a computer or smart phone.

Purpose/Justification: Manual meter reads are dated and cannot meet the City’s future needs. AMI is an initiative that will advance Santa Ana’s vision for a smart city. It is aligned with the City’s strategic plan to make greater use of technology to increase operational efficiencies and quality of services. The City conducted a feasibility study in 2016 and the business case to implement an AMI system is indisputable. Approximately 80% or more of the city’s current meters need replacement and the \$7.5 million capital expenditure required to replace these meters is unavoidable whether or not AMI is implemented. Implementing AMI now will effectively capture \$9.9 million and accelerate meter change out in a shorter period of time. The benefits to the City include real time data to support rate changes, regulatory compliance and water conservation efforts; better water system demand auditing and analysis; reduced human errors related to manual readings; increased billing and staffing efficiencies; improved operational maintenance; recovered non-revenue water loss estimated at \$2.9 million; reduced worker injuries and accidents; job creation, and better customer service. For water customers, AMI would save water and lower utility bills with early leak detection; offer self-service and more engagement via web- or smartphone-based portals; promote online bill payment; and provide hourly data of water usage and conservation.

Other Agencies Involved: N/A

Operating Budget Impact: Ongoing maintenance and operational cost for the AMI system is \$3.3 million over 18 years.

Cost Estimates: The cost estimate to implement AMI is \$13.3 million. Factoring in the \$9.9 million cost benefit of AMI by eliminating non-revenue water losses, reducing meter reading errors, and increasing operational and billing efficiencies, the effective net cost totals \$6.7 million. Funding sources identified for the capital, operations and maintenance of this project include: a revenue bond, a private loan (e.g., Hollman & Finch Financing), state revolving fund (e.g., IBank), vendor financing and a public-private partnership.



City of Santa Ana Project Summary

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

Dates: TBD

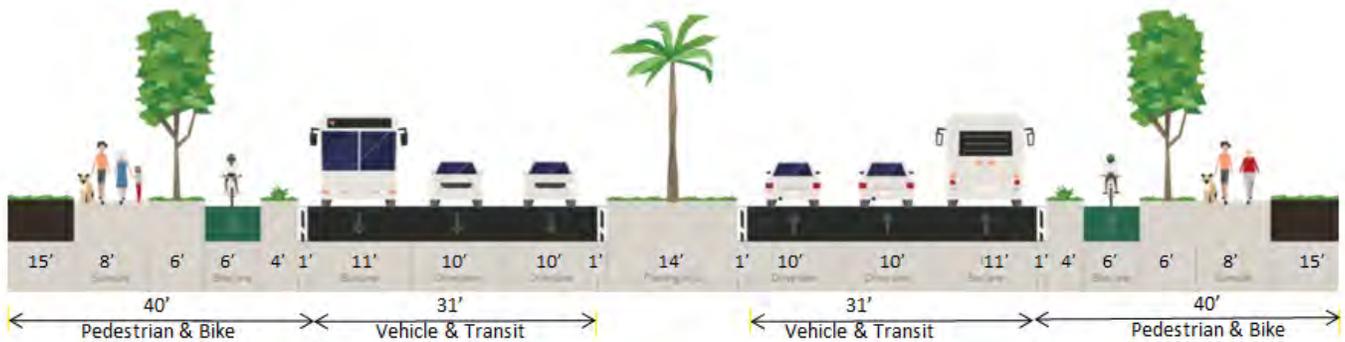
Description: Improvements include landscaped medians; landscaped buffers for pedestrians in the parkways; protected bike lanes; storm drain improvements; undergrounding overhead utilities; upgrade of street lighting and the building of sound walls where necessary. The street will also be widened from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

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

Other Agencies Involved: OCTA

Operating Budget Impact: N/A

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



City of Santa Ana Project Summary

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

Project Dates: TBD

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

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

Other Agencies Involved: City of Irvine

Operating Budget Impact: N/A

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

Example Drawing or Photo if available: N/A

City of Santa Ana Project Summary

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

Project Dates: 2015 to 2023

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

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

Other Agencies Involved: OCTA/Caltrans

Operating Budget Impact: N/A

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



City of Santa Ana Project Summary

Project Name: “Fill It From The Tap”

Project Dates: 2018 to 2020

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

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

Other Agencies Involved: N/A

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

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



Water Pitcher Giveaways + Insert Card



Drink It From The Tap
A Healthier Beverage Choice

Did you know that sugar-sweetened beverages play a major role in weight gain and obesity? That's right! Soft drinks, and even fruit juices, are loaded with sugar.

According to experts, consuming sugary drinks has increased 500% in the past 50 years and it is the single largest source of added sugar in our diets.

Understanding these health risks, you may want to rethink your beverage choices and reach for water instead. There are many health benefits to drinking water:

- It increases energy & relieves fatigue
- It promotes weight loss
- It flushes out toxins
- It boosts your immune system
- It improves your skin complexion
- It maintains regularity

Drinking water will also save you money, particularly if you drink it from the tap. Drinking tap water over bottled water is proven to be more affordable, safer and better for the environment.

Tap vs Bottled Water

If you were to drink eight glasses of water a day from a Santa Ana tap, it would cost you only 66 cents a year. However, you could spend an average 2,200 times as much, roughly \$1,475 a year, by drinking that same amount in bottled water.

Soft Drinks vs Fruit Juice

Take a look at the nutrition for a 12-ounce (333 ml) serving of Coca Cola and Apple Juice:

- Coca Cola: 149 calories and 40 grams of sugar (18 teaspoons)
- Apple Juice: 155 calories and 39 grams of sugar (18 teaspoons)

Tap vs Bottled Water

8 glasses x 365 = 66¢

Newsletter Articles

Poster Contest + Social Media Promotion



T-Shirt Giveaways

City of Santa Ana Project Summary

Project Name: Grand Avenue Grade Separation (OCTA Lead)

Project Dates: TBD

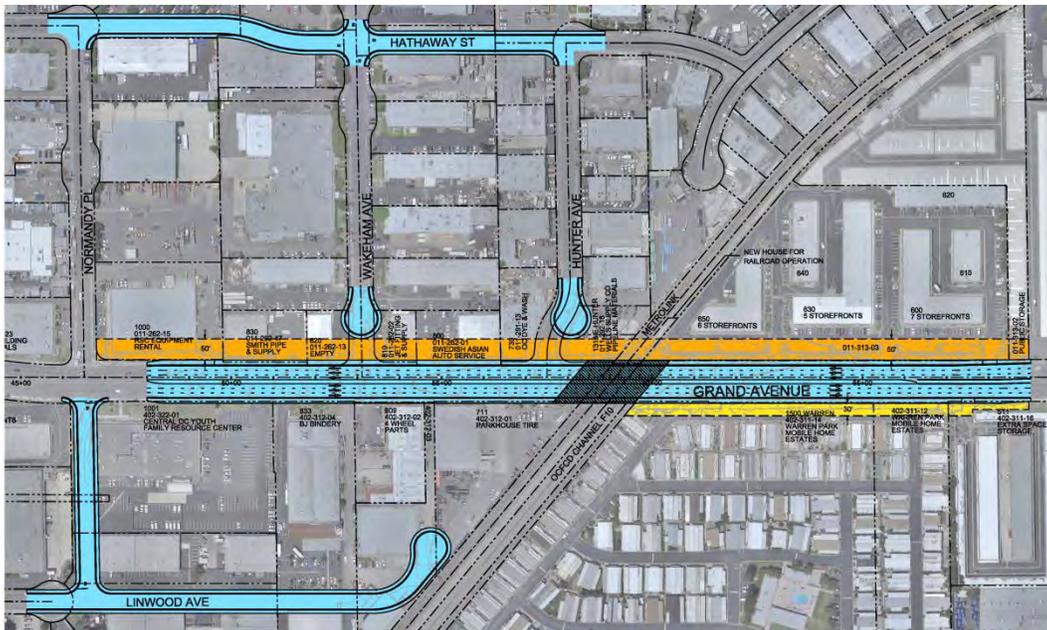
Description: The project proposes to grade separate the existing Grand Avenue from the OCTA Metrolink at-grade railroad crossing. The grade separation will eliminate the at-grade crossing of Grand Avenue and the OCTA Metrolink tracks to improve pedestrian and bicycle user safety, enhance traffic operations,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

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

Other Agencies Involved: OCTA/Metrolink

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

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



City of Santa Ana Project Summary

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

Project Dates: TBD

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

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

Other Agencies Involved: OCTA/Caltrans

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the Grand Avenue Improvements is \$66 million. Funding sources TBD.



CITY OF SANTA ANA



GRAND AVENUE IMPROVEMENTS
4TH STREET TO 17TH STREET

City of Santa Ana Project Summary

Project Name: OC Streetcar

Project Dates: 2018 to 2021

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

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

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

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

Cost Estimates: The preliminary cost estimate for the OC Streetcar is \$408 million (year of expenditure). Funding sources identified for this project, including capital and operations and maintenance, include Measure M as well as Federal Transit Administration New Starts, Federal Congestion Mitigation and Air Quality Improvement, and State Cap-and-Trade.



City of Santa Ana Project Summary

Project Name: Safe Mobility Santa Ana

Project Dates: 2016 to 2025

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

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

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

Other Agencies Involved: OCTA, CalTrans

Operating Budget Impact: N/A

Cost Estimates: \$43 million for full implementation



City of Santa Ana Project Summary

Project Name: Santa Ana Blvd. Grade Separation

Project Dates: TBD

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

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

Other Agencies Involved: OCTA/Metrolink

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

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



City of Santa Ana Project Summary

Project Name: Warner Avenue Improvements – Main Street to Grand

Avenue Project Dates: 2009 to 2021

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

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

Other Agencies Involved: N/A

Operating Budget Impact: N/A

Cost Estimates: The preliminary cost estimate for the total project is \$80 million. Funding sources for the design and right of way of Phase 1 from Main Street to Oak Street and the design of Phase 2 from Oak Street to Grand Avenue are from Measure M as well as traffic impact fees. There is no current funding for the right of way or construction phases.



City of Santa Ana Project Summary

Project Name: Willowick Golf Course

Project Dates: 2019 to Ongoing

Description: The Willowick Golf Course is located at 3017 W 5th Street in the City of Santa Ana and is owned by the City of Garden Grove. The 18-hole golf course site is comprised of eight separate parcels totaling approximately 102 acres.

The Cities of Garden Grove and Santa Ana are in collaboration to redevelop the Willowick site. Joint efforts are underway in the areas of community engagement and visioning for the site. It is anticipated reuse of the Willowick site would require construction of new public infrastructure and upgrades to existing public infrastructure improvements in Garden Grove. Public Infrastructure improvements may include but not limited to: street and traffic operational enhancements; pedestrian and accessibility parkway improvements; storm drain improvements; roadway improvements; relocation of water mains; sewer line improvements; removal of utility pipes; installation of new traffic signals; construction of new curb and gutter; median improvements; landscaping; street lighting; and, signage.

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

Other Agencies Involved: City of Garden Grove

Operating Budget Impact: The project is estimated to generate an additional property and sales tax.

Cost Estimates: The total cost of the public infrastructure for the Willowick Reuse project is unknown at this time.



City of Westminster Project Summary

Project Name: Bolsa Row Infrastructure

Project Dates: 2018 to 2022

Description: The City recently approved a mixed use development located in the heart of the Little Saigon cultural and business district. The project will include approximately 200 new residential units, 40,000 square feet of retail, a banquet facility, and mid-size hotel. The City is looking to contribute to the infrastructure to support the development and serve the adjacent business district.

Purpose/Justification: The project is expected to generate 240 permanent jobs, and bring new investment to this area, which is home to hundreds of locally-owned, and minority-owned businesses. The hotel and banquet facility will help boost tourism, benefitting these businesses.

Other Agencies Involved: Southern California Edison

Operating Budget Impact: TBD

Cost Estimates: Roughly \$5 million in infrastructure improvements for traffic flow and underground utilities that will benefit the Little Saigon district as a whole.



City of Westminster Project Summary

Project Name: Navy Rail Corridor

Project Dates: 2019 to 2025

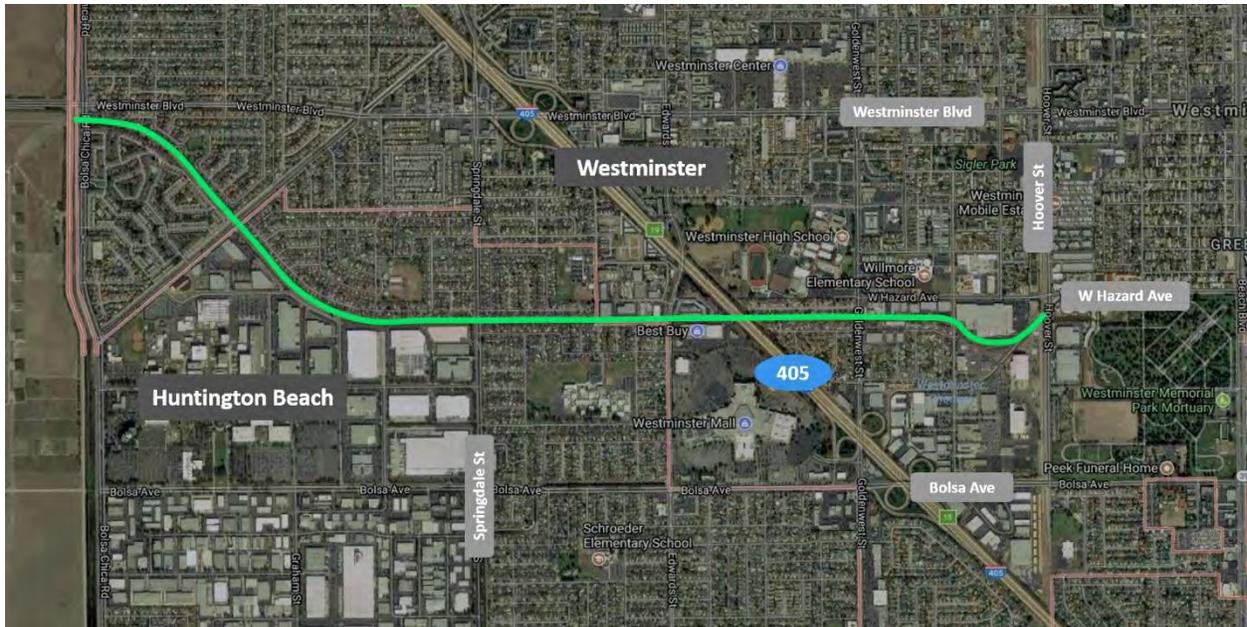
Description: For several decades, the US Navy operated a short rail line through Westminster, from roughly Bolsa Chica Road and Westminster Boulevard to Hoover Street and Hazard Avenue. After discontinuing the line a few years ago, the Navy dedicated its easement to the City of Westminster and City of Huntington Beach (the line runs through sections of both cities). The City of Westminster would like to construct an underground water line, consistent with the easement, and improve the surface area with a service road and basic landscaping. Additionally, there may be opportunity for certain flood control measures on the corridor as well.

Purpose/Justification: The underground waterline along the property would provide much-needed potable water system security.

Other Agencies Involved: OC Flood Control, City of Huntington Beach

Operating Budget Impact: TBD

Cost Estimates: TBD



City of Westminster Project Summary

Project Name: Rehabilitation of Congested Arterial Streets within Westminster

Project Dates: 2018 to 2020

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

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

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

Operating Budget Impact: TBD

Cost Estimates: TBD



Bolsa Ave within Little Saigon Area

City of Yorba Linda Project Summary

Project Name: Savi Ranch Infrastructure Improvements

Project Dates: 2019 to 2029

Description: Savi Ranch is a major destination for retail and businesses within the City, providing close to 60% of the City's sales tax revenue. The Savi Ranch area includes a mix of uses including retail, office, medical, light industrial and most recently the introduction of affordable housing. The location is the only exposure the City has to a major interstate (along the 91 Freeway) and is a key point of entry from Riverside County into Orange County. Although already a busy destination site, there are parcels within Savi Ranch that are underutilized. From 2013 to 2015, the City worked with consultants, property owners, businesses and other stakeholders to develop a Vision Plan for Savi Ranch. In April 2015, the City Council approved a Land Use and Mobility Plan which defined a range of uses intended to be added to the area along with future public improvements that would be necessary to service the increased energy envisioned for the 158-acre business park. The Vision Plan identified a wide range of short-, mid-, and long-term mobility improvements including 1) widening of Yorba Linda Blvd and Savi Ranch Parkway and 2) a secondary access point for the Savi Ranch area.

Purpose/Justification: Completion of infrastructure improvements could result in an added 1.4 million square feet of retail, office and business uses, as well as 150 to 300 additional housing units. The expansion of Savi Ranch has the potential to create approximately 500 to 1,500 new jobs.

Other Agencies Involved: Widening projects - possible coordination with City of Anaheim

Operating Budget Impact: TBD

Cost Estimates: Widening projects \$22.8 million; secondary access TBD

