

2010
2011



ORANGE
COUNTY
Workforce
Indicators

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2010-2011 WORKFORCE INDICATORS REPORT

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Dear Workforce Development Partner:

Orange County Business Council and the Orange County Workforce Investment Board are pleased to announce the ninth annual "Orange County Workforce: State of the County 2010-2011 Report." In this report, both organizations showcase the fundamental accomplishments the County's workforce system and business community have achieved, as well as reflect on the challenges of a down economy in developing a skilled future workforce.

Last year's report examined Orange County's workforce trends and proposed solutions highlighting critical mass and concentration skills, high growth rates, high multiplier effects and the importance of a competitive advantage. In this 2010 report, Dr. Wallace Walrod focuses on how to create good-paying jobs in the wake of record unemployment. Orange County faces a burgeoning set of challenges including language acquisition, an Achievement Gap among ethnic groups, a dearth of homegrown S.T.E.A.M (Science, Technology, Engineering, Arts and Math) students, and a burgeoning task of life-long learning for older workers--once set to retire—who must remain in the workforce.

As Orange County tries to jump start its besieged economy, we're mindful of the training our future workforce needs to be successful. We must have creative careers, team players, collaborators, diversity, communication and--most importantly--confidence. By instilling these core values, Orange County will exceed expectations, recover faster and be more successful than in the past. Teaching K-16 youth not only the technical skills early in life, but also the creative skills to think outside the box will lead to engaging, challenging and lucrative careers in key growth industry clusters. Orange County businesses best thrive when they collaborate with educators and other workforce partners by forming public-private partnerships such as job shadowing and internships to prepare the workforce for economic recovery.

The theme of this year's conference is "Road to an Innovative Recovery." Orange County is a wonderful place to live, play and work. Building upon a great foundation, Orange County Business Council and the Orange County Workforce Investment Board are committed to creative solutions, educational success and the best in workforce training.

We hope you will gain new understanding from this conference and use its materials as a resource and blueprint for future success in your business, educational institutions, and local government.

A handwritten signature in black ink, appearing to read "Lucy Dunn".

Lucy Dunn
President and CEO,
Orange County Business Council

A handwritten signature in black ink, appearing to read "Peter Agarwal".

Peter Agarwal
Vice President,
Citizens Business Bank
Chairman, OCWIB



JANET NGUYEN

CHAIR, ORANGE COUNTY BOARD OF SUPERVISORS
SUPERVISOR, FIRST DISTRICT

ORANGE COUNTY HALL OF ADMINISTRATION
333 W. SANTA ANA BLVD.
10 CIVIC CENTER PLAZA, SANTA ANA, CALIFORNIA 92701
PHONE (714) 834-3110 FAX (714) 834-5754
Janet.nguyen@ocgov.com



October 13, 2010

On behalf of the Orange County Board of Supervisors, I am pleased to welcome you to the “*Road to Recovery*” Workforce Development Conference and announce the release of the annual *Orange County Workforce Indicators Report*. We share this report with educators, businesses and anyone who is committed to maintaining Orange County as a vanguard in the economic recovery of the state, the nation and indeed, the world.

The *2010-2011 Orange County Workforce Indicators Report* presents workforce needs and movement within the County. It allows educational institutions, businesses and other organizations to analyze, assess, and plan for success today and for the future. Orange County, with our diverse industries, educational resources and communities of innovation, will be a leading force in our economic recovery. In partnership with businesses and our skilled workforce, Orange County will continue to be a vibrant place for its businesses and residents alike.

Congratulations to the Orange County Workforce Investment Board and the Orange County Business Council on the *2010-11 Workforce Indicators Report!*

Sincerely,

JANET NGUYEN
Chair, Board of Supervisors
Supervisor, First District



Richard Porras, AT&T California
Executive Director, External Affairs
1442 Edinger Avenue
Tustin, CA 92780

T: 714.259.6690
F: 714.259.6698
www.att.com

October 13, 2010

On behalf of AT&T, it is a pleasure to welcome you to the 9th annual Workforce Conference.

The word invest means to “furnish freely or naturally with some power, quality, or attribute”. This is an important word at AT&T -because knowledge is power. Investment in workforce development in Orange County is not only an essential tool for the success of our organization, but it is also about global citizenship and corporate social responsibility. To invest means providing high-quality, high paying jobs that leave employees challenged and fulfilled. To invest means supporting the community in which you live and work to ensure a high quality of life now and for the future.

For AT&T, the decision to invest in Orange County’s communities is an easy one. We benefit from a high value return in the form of -fulfilled employees and their families - working towards their life goals.

AT&T is proud to collaborate with the Orange County Business Council (OCBC), an organization that recognizes the importance of education teaching the S.T.E.A.M. Disciplines (science, technology, engineering, arts and math), which are essential to an increasingly diverse and rapidly changing global economy. Through the Workforce Development Program and Latino Educational Initiative, OCBC has placed much needed focus on this aspect of education working with business. In order to ensure economic success, you can’t have one without the other.

This year’s theme is “Road to an Innovative Recovery”. Although the resurgence of the economy has been slower than expected, we continue to invest in educational efforts that will help grow tomorrow’s leaders. This is why we work together, business and educators, to shrink the Achievement Gap, to prevent students from dropping out of high school, and to provide job shadowing and internship programs. We invest to instill confidence, to open their world to new ideas, and eventually, to give back to the community in which they grew up. It is what has made Orange County a wonderful place to live and work.

Sincerely,

Richard Porras
External Director of External Affairs
AT&T
2010 OCBC Chair, Workforce Development Committee

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2010-11 Workforce Indicators Introduction

Road to an Innovative Recovery -- It all comes back to job creation!

Understanding the true magnitude of the problem: The last three years have been the most rapidly evolving economic and workforce environment of our lifetime.

The world we knew has undergone the most radical economic and workforce transformation since at least World War II. Almost 8.5 million Americans have lost their jobs since the start of the "Great Recession". While federal stimulus programs may have blunted some of the short-term pain, these programs may have only postponed the recovery.

Modest economic growth was reported in Spring 2010, but much of that has been fueled by historically low interest rates, the massive U.S. stimulus program, the hiring of temporary Census workers, and a home buyer tax credit. As these temporary measures wind down, home sales have plunged to record lows, the foreclosure rate is edging up past 10% again (with 7.8 million homes already foreclosed on or in delinquency), and consumer confidence has declined to its lowest level since the depths of the recession.

In December 2007, the national unemployment rate was 4.9%. National unemployment stands at 9.6% at September 2010 begins. Broader measures of unemployment, taking into account underemployed workers, discouraged workers, and those who had simply given up looking for work, have been estimated to be at least 16% and probably closer to 20%. American workers are unemployed for prolonged periods of time. The job market for recent graduates is the worst on record.

In California, the downturn hit earlier and has been more severe. In December 2006 the state's unemployment rate stood at 4.6%, so far peaking at 13.2% in January 2010. As of July 2010 the state's rate stood at 12.8%, along the way causing a myriad of related issues, including the state budget crisis and many California businesses closing their doors or moving to other states.

Orange County entered this prolonged, severe recession earlier than most counties and states due to a concentration of subprime and Alt-A mortgage lender employers. The accelerating layoffs in the financial service subsequently had ripple effects on the related local construction and development industries and finally throughout the Orange County economy. From December 2006 through January 2010, Orange County's unemployment rate rose from 3.1 percent to 10.2 percent. By July 2010, Orange County's unemployment rate had only decreased slightly to 9.8%.

Double Dip? New Normal?

As Federal Reserve Chairman Ben Bernanke told Congress on July 21, 2010 “the economic outlook remains unusually uncertain.” The shallow U.S. “recovery” has left investors, consumers, and business executives wondering whether facing a “double-dip” recession, if, indeed we were ever out of one. Governments strain under deficits, consumers and businesses hoard cash in a world of deflation, and consumer confidence declining as workers fear for their jobs.

Whether or not the second leg of a so-called double-dip recession is imminent, it is clear that the U.S. economy, and therefore Orange County’s, will struggle for some time to come. This difficult economic environment will essentially be our “new normal” for some time. The phrase “new normal” was coined by PIMCO in May 2009 to describe a world characterized by high unemployment rates, more regulation, and a shrinking role for the U.S. in the global economy.

Most economists agree there appears to be a fundamental, long-term change in job generating patterns. Data shows that many of the jobs Orange County has lost are gone forever and will not be coming back. In this new reality, traditional approaches, formulas, projections, and tools for workforce development may not work anymore.

But we know one thing for sure. Job creation is key.

Preparing for the New World -- With these challenges come opportunity

“Over the years, the U.S. economy has shown a remarkable ability to absorb shocks of all kinds, to recover, and to continue to grow. Flexible and efficient markets for labor and capital, an entrepreneurial tradition, and a general willingness to tolerate and even embrace technological and economic change all contribute to this resiliency”

Ben Bernanke, Chairman of the Federal Reserve

Only with a deep understanding of how these “new normal” dynamics will uniquely affect Orange County can our region weather the difficult and volatile conditions in the years ahead. New thinking is needed. To address these significant economic, demographic, and workforce changes successfully, Orange County’s workforce and education systems must continue to innovate.

Orange County must develop mechanisms to adapt to economic turmoil, evolving demographics, changing needs of employers for a more skilled workforce in order to remain the economic engine of Southern California. Innovation, entrepreneurship, greater collaboration, expanded and nimble workforce readiness tools are needed as the post-recession economy creates new industries and new occupational skill-sets. Orange County must remain a leader, innovator, and entrepreneur not just in the private sector, but increasingly in the education and workforce development systems so crucial to Orange County’s future success.

The Orange County Workforce Investment Board plays a key role by promoting accountability and engaging a broad group of workforce, education, and business community stakeholders. The OCWIB has begun the difficult task of understanding and responding to the “new normal”, taking stock of Orange County’s assets and liabilities and conducting a frank reassessment of strengths and weaknesses. Some we can change, some we cannot. The 2010-2011 Orange County Workforce Indicators report provides the baseline data to begin to move forward in a new direction.

SPECIAL FEATURE: CLUSTER OVERLAYS

ISSUE STATEMENT

Orange County clusters are substantially fueled and driven by International Trade, Cleantech, Information Technology and Creativity.

BACKGROUND

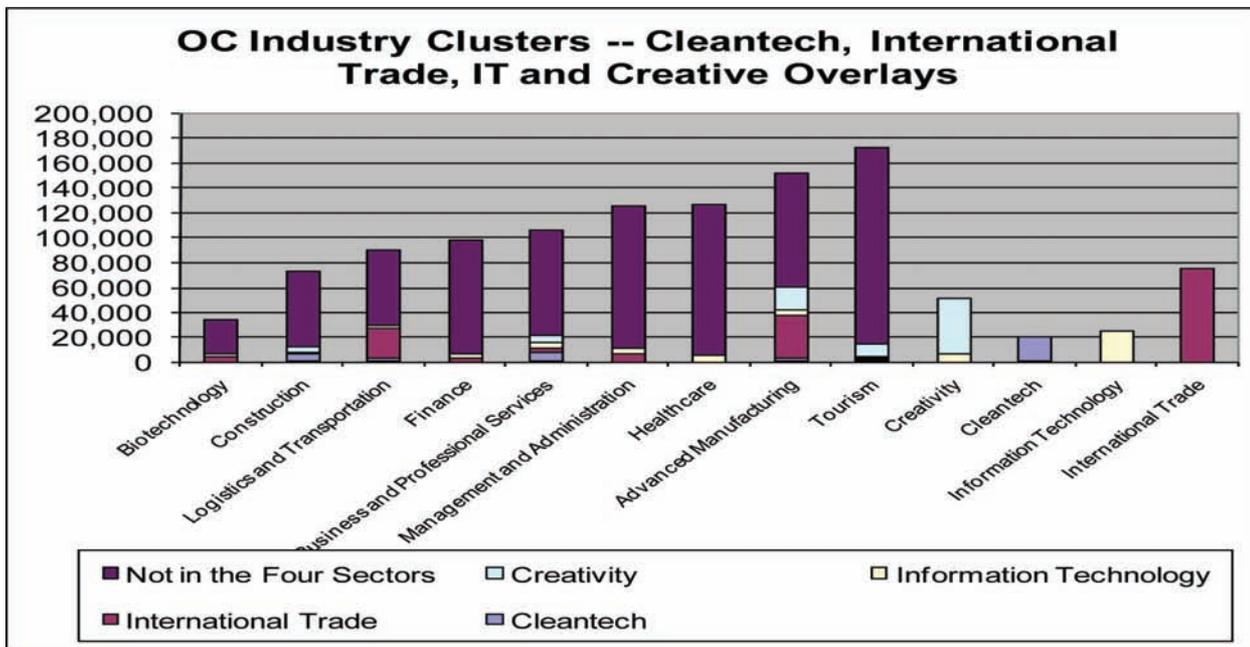
Orange County is in the midst of transition to a knowledge-based, 21st economy. Because of the Great Recession, many of the traditional high-wage jobs of the past have disappeared and will not be coming back. However, new opportunities are emerging creating high wage jobs as a result of social and economic changes in the last decade due to International Trade, Information Technology (IT), Green Technology and the emergence of the importance of the Creative Economy have resulted in a blurring of traditional cluster boundaries.

These four drivers are increasingly important in developing and maintaining competitive advantage in Orange County's clusters,

positively generating value-creating jobs and initiating economic growth. Due to globalization, international trade is accounting for a larger share of economic activity in Orange County where customers for firms may be just as likely to be in Singapore as in San Diego with international trade from Orange County nearly doubling from \$12.6 billion in 1999 to over \$20 billion in 2008. With advances in technological innovation, workers across many industries are far more efficient and productive than in the past where IT allows one worker to perform the work it may have taken ten to do so a decade ago. Energy-efficient good business practices are creating new industries such as solar panel design and installation, renewable energy development, LEED building design, and energy conservation consulting. Finally, the defining attribute underlying all of the above is the need for an increasingly creative workforce prepared to solve problems, brought about by global competition, in new and different ways.



OC Industry Clusters -- Cleantech, International Trade, IT and Creative Overlays



Source: OCBC Analysis of California Employment Development Department, LAEDC, and Next Ten data

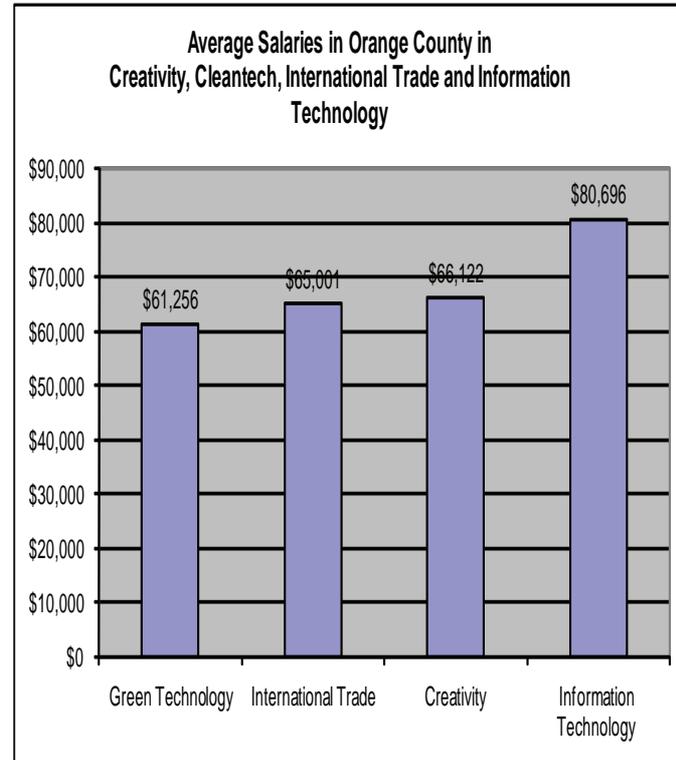
These four drivers overlay and cross-cut our traditional clusters and give us a better understanding of our workforce needs. Education and workforce development professionals have started to understand the importance of these clusters in designing education and development policies to support them. Because of the need for a more sophisticated understanding of economic clusters, OCBC and the OCWIB are beginning to update the way in which we look at clusters. This feature explores these interrelationships and how each of these drivers overlaps and enhances existing cluster industries, creating both horizontal and vertical clusters. For example, while there are firms that are solely IT such as Computer Software and Game Developers such as Blizzard, there are IT functions and occupations within all other clusters. Creativity-oriented occupations are important components across clusters as well, such as architecture/interior design overlapping in both the Business and Professional Services, Construction, and Tourism clusters. Advanced Manufacturing substantially benefits from International Trade, Creativity and Information Technology with over one third of the employment in this cluster coming from these areas. The Logistics and Transportation cluster also benefits from International Trade. Business and Professional Services has approximately 20% of its jobs and Tourism has 8% of its jobs and Healthcare has 4% of its jobs benefiting from Cleantech, International Trade, Information Technology and Creativity. In total, each cluster overlay driver accounted for:

International Trade -- 133,900 jobs
 IT - 59,500 jobs
 Creativity -- 44,500 jobs
 Cleantech - 20,000 jobs

Signs of the importance of these cluster overlays are evident when we analyzed the employment growth and salary data. LAEDC found employment in the Creativity area grew 28.2% in the last five years. Good growth also occurred in Orange County's Cleantech sector, growing by 50% between 1995 and 2008 according to Next Ten, with spectacular growth of 1,875% in the area of Green Transportation area with 1,875% growth driven by new Orange County companies such as Fisker Automotive. Workers in Creativity, Cleantech, International Trade and Information Technology are well paid also. An average salary of \$80,696 in IT is well above the overall average salary in Orange County of \$49,513, followed by Cleantech at \$66,815, \$66,122 in Creativity, and International Trade estimated to be \$65,001.

This special feature is our first attempt at recognizing the importance of cluster overlays. In the next year, OCBC and the OCWIB will continue to work to refine this concept and report regularly on the importance and strategic implications of these drivers to job creation and the future success of the Orange County economy.

Average Salaries in Orange County Cluster Overlays



Source: OCBC Analysis of California Employment Development Department, LAEDC, and Next10 and Los Angeles Economic Development Corporation

ISSUE STATEMENT

Orange County's population is becoming older and there will eventually be a wave of Baby Boomer retirements. Orange County's population will continue to become more diverse.

BACKGROUND

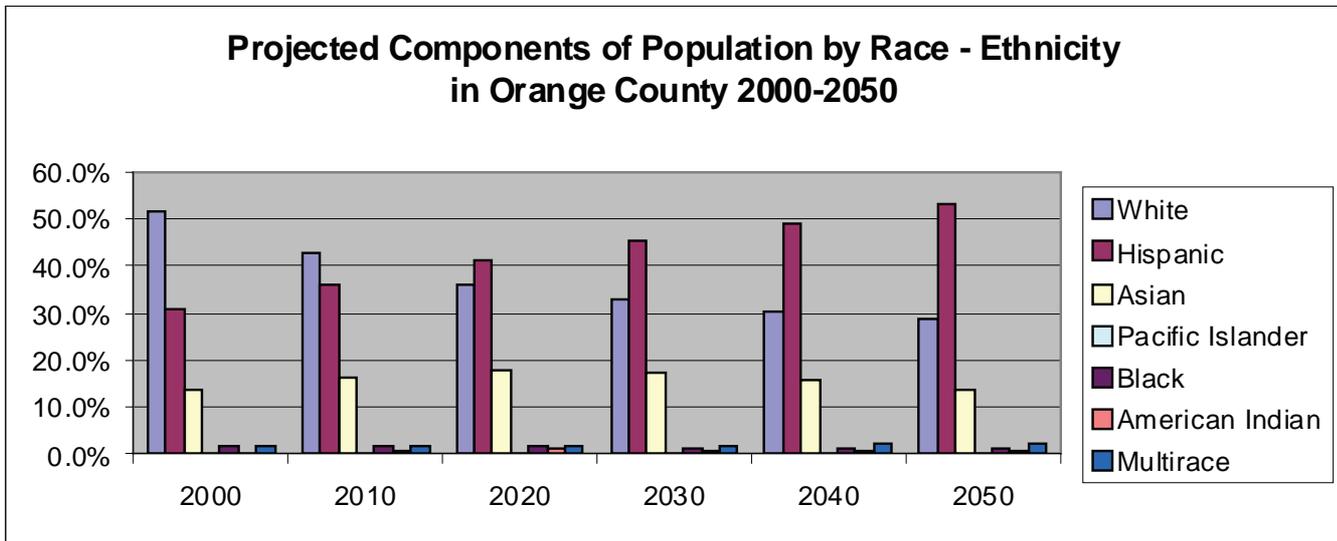
As we past the first decade mark of the Twenty-First Century, the leaders and communities of Orange County need to recognize that the Orange County of the Twentieth Century is no more and an older and more diverse Orange County has taken its place. Over the last several decades and long into the next half of the Twenty-First Century, Orange County's population components are expected to change dramatically in ways that will radically affect the type of community and economy in the region.

Most dramatically, by the year 2050, the age composition of Orange County is projected to become radically older and much less White. Individuals over age 65 made up 9.9 percent of the total population in the county in 2000. In the next 35 years, individuals over 65 will make up 21.2 percent of the County's population. During the same time period, the percent of the population between 25 and 54 years of age will be reduced from 45.8 percent to 34.7 percent.

Furthermore, by 2020, Latinos will be the largest ethnic group in Orange County, comprising 41 percent of the population in 2020, and 53 percent by 2050. This trend is already evident as 71.1 percent of the Latino population is under the age of 34, and 50.3 percent is under the age of 24. Approximately 14.9 percent of the White population is over age 65 while only 3.2 percent of the Latino population is over the age of 65.

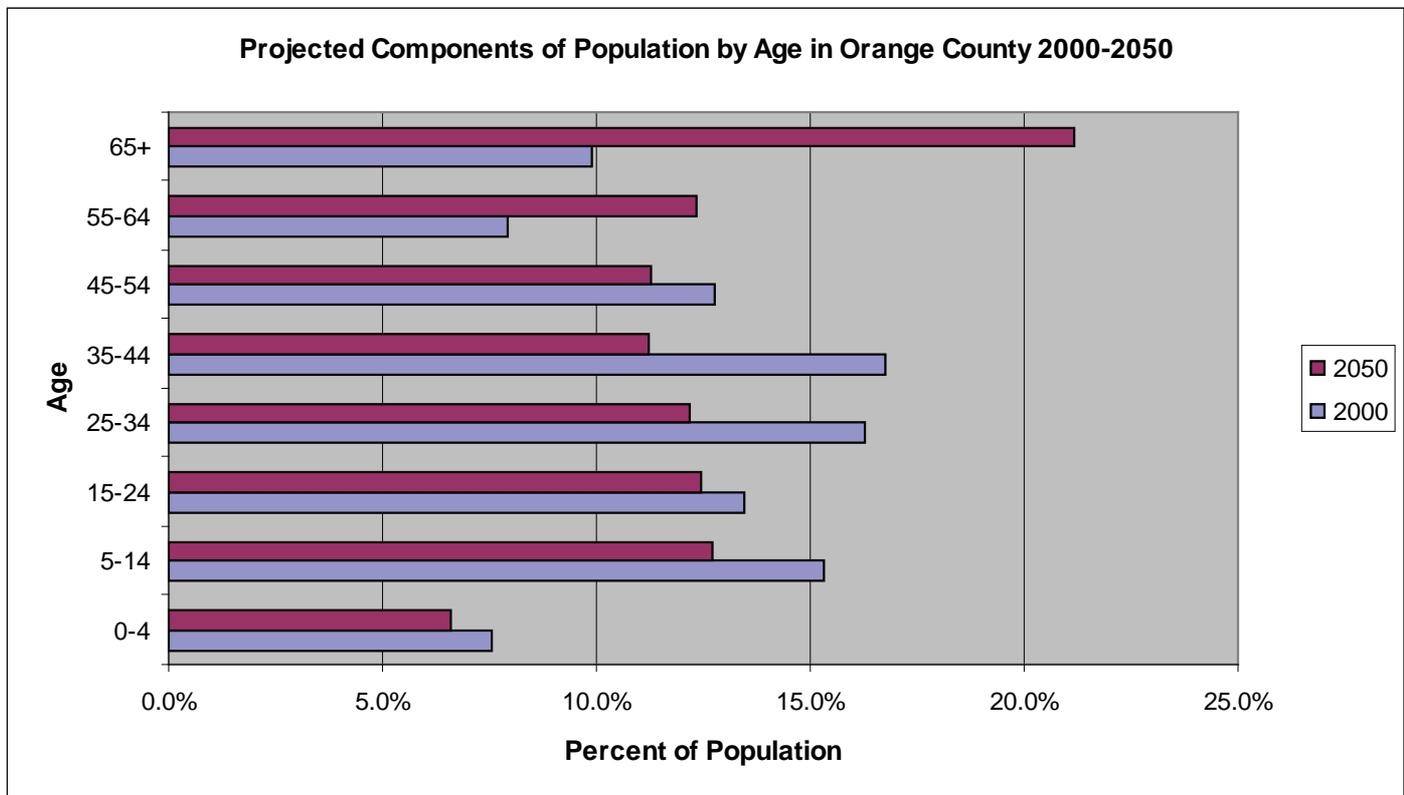
Between 1990 and 2009, over 70 percent of the County's population growth has been through natural increase and less than a third has been from migration. Since 2001, net domestic migration has been negative - more persons moved out of Orange County to other locations in the United States than moved into the County from other locations within the United States. Orange County experienced a similar trend during the 1991-1996 time period. In 1994, 1995, and since 2005, net domestic migration out of the County exceeded international migration into the County resulting in population growth solely through natural increase. In the late 1990s, the domestic migration out of the County reversed itself although the trend toward negative net domestic migration resumed in 2001. With the exception of a slight spike in 2001, overall net migration into Orange County has been declining since 1999. Instead, as shown by the number of births in Orange County, since 2004, the number of actual births is slightly increasing, projected to reach approximately 47,500 per year by 2013.

Projected Components of Population by Race - Ethnicity in Orange County, 2000-2050



Source: State of California, Department of Finance

Projected Components of Population by Age in Orange County, 2000-2050



Source: State of California, Department of Finance

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UNEMPLOYMENT RATES

ISSUE STATEMENT

Orange County needs to create jobs to combat unprecedented high unemployment rates.

WHY IS THIS AN ISSUE?

Orange County has experienced unprecedented high unemployment rates over the last two years. Instead of typically being a percentage point below the national average and often two percentage points below the California average, Orange County has matched the national average and, while still two points below the California average, is at unemployment rates that just a few years ago would have been considered unthinkable for the state.

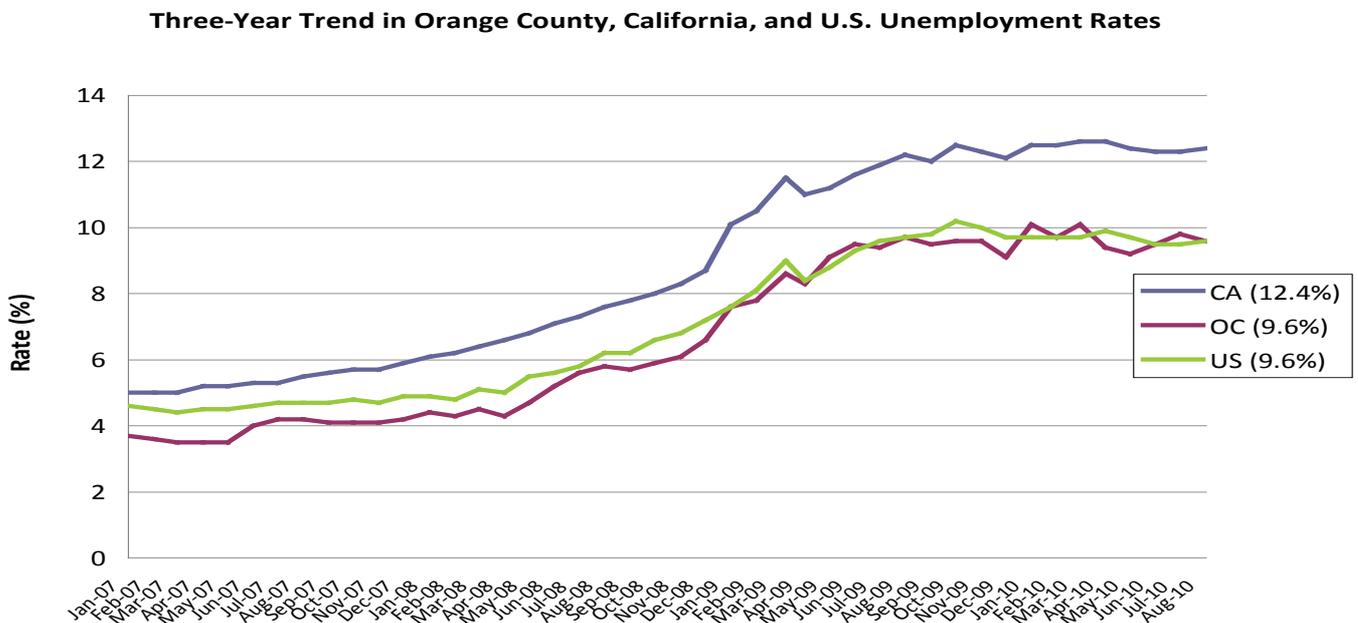
A high quality of life for Orange County residents can not be maintained with unemployment rates rivaling the worst unemployment rates of previous eras and matching the unprecedentedly high unemployment rate of the whole country.

Measuring the continuing transformation of the Orange County economy through this economic slump enables policy makers to better assess the strengths and vulnerabilities of the local economy and capitalize on existing assets and advantages.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Orange County's high unemployment rates are not expected to decrease any time soon so workers need to obtain jobs in industries that are growing and have a future. Industries are defined by the business activities which they perform. These are not necessarily the same labels for the clusters used by the Orange County Workforce Investment Board (see Cluster Analysis below). The employment numbers are the count of all the employees hired by the businesses in that industry regardless of the type of occupation performed by the employee.

Three-Year Trend in Orange County, California, and United States Unemployment Rates



Source: California Employment Development Department

ISSUE STATEMENT

Orange County needs to expand the number of industry clusters demonstrating clear competitive advantage.

WHY IS THIS AN ISSUE?

Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a particular region or local economy. These businesses tend to have higher growth and generate higher wage occupations. These clusters are different from the “industry sectors” described elsewhere in this report. Industry sectors are defined by the hierarchy of the North American Industry Classification System (NAICS), used by the California Employment Development Department.

In an era of global competitiveness and quick economic transformation, policy makers in regions hoping to succeed economically must discover the industry clusters their region possesses and take actions to harness and grow the ones that will result in prosperity for the region. For Orange County to succeed in the future, these steps must be taken here as well.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Historically, Orange County has excelled in high technology industries such as computer software programming, pharmaceuticals and communications—and developed a number of

high tech clusters where the county has had a clear competitive advantage. Orange County has among the highest number of high tech clusters in the nation. Orange County’s number of high-tech industries with an employment concentration above the national average increased from 15 in 2007 to 16 in 2008. Since 2003, Orange County’s cluster concentration has ranged from 15 to 18. Orange County was higher than all our peers for the number of high-tech clusters above the national average.

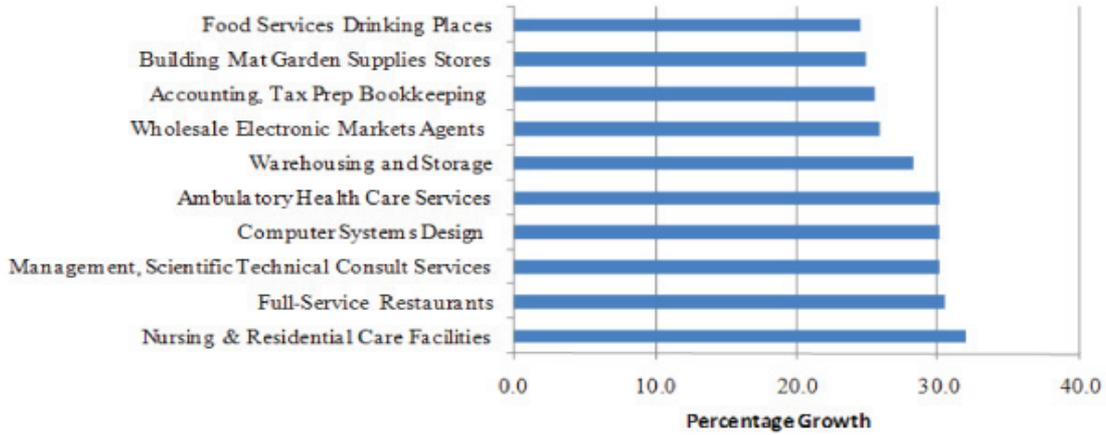


BACKGROUND

According to the California Employment Development Department, the industries that are expected to grow the fastest by 2016 in Orange County are business services, food services and health care. Overall, Orange County employment is expected to increase 13.4 percent from 2006-2016. This projection is much lower than the 18.0 percent expected increase in the previous 2004-2014 projection, showing the impact of the recession in 2008-2009.

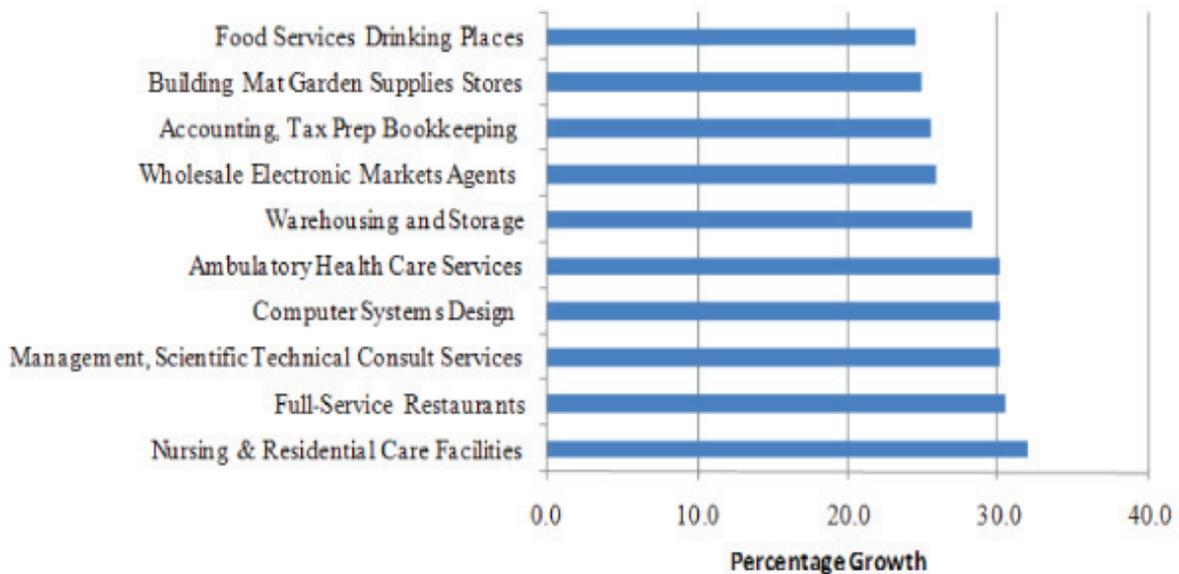
Projections confirm the continuing importance of business and professional services, since this sector is the leading sector in projected absolute number of jobs. This sector was also a leader in both absolute and percentage job growth for the previous projections, covering the period from 2004-2014. When looking at individual industries, the largest growth industries are in food services, administrative and support (business services), and local government/education. When looking at the industries that will generate the largest employment growth as a percentage of their 2006 Orange County employment level, health care, services, and wholesale trade sectors figure prominently among the top ten.

Top 10 Fastest Growing Industries in Orange County by Absolute Growth, 2006-2016



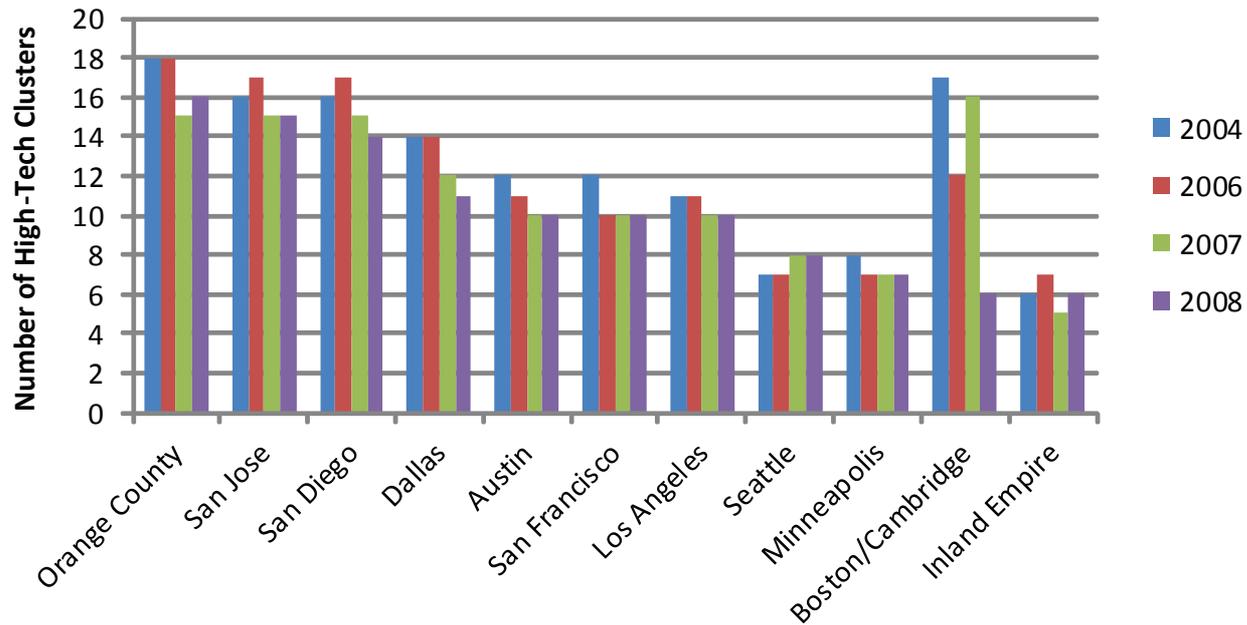
Source: California Employment Development Department

Top 10 Industries in Orange County by Percentage Job Growth, 2006-2016



Source: California Employment Development Department

High-Tech Cluster Diversification: Metro Area Comparison, 2004-2008



Source: Milken Institute

Current Orange County high tech clusters that exceed the national average in concentration of employment:

NAICS	Industry	Location Quotient (national average: 1.0)
3333	Commercial and Service Industry Machinery Manufacturing	1.52
3341	Computer and Peripheral Equipment Manufacturing	2.09
3343	Audio and Video Equipment Manufacturing	3.01
3344	Semiconductor and Other Electronic Component Manufacturing	2.47
3345	Navigational, Measuring, Electromedical, & Control Instruments Manufacturing	2.21
3364	Aerospace Product and Parts Manufacturing	1.11
3391	Medical Equipment and Supplies Manufacturing	2.93
5112	Software Publishers	1.50
5172	Wireless Telecommunications Carriers (except Satellite)	1.46
5173	Telecommunications Resellers	2.72
5174	Satellite Telecommunications	6.96
5181	Internet Service Providers and Web Search Portals	2.12
5182	Data Processing, Hosting, and Related Services	1.02
5413	Architectural, Engineering, and Related Services	1.30
5415	Computer Systems Design and Related Services	1.08
6215	Medical and Diagnostic Laboratories	2.05

CLUSTER EMPLOYMENT

ISSUE STATEMENT

Orange County needs to emphasize growth in high-impact/high-multiplier industries.

WHY IS THIS AN ISSUE?

Approximately three fourths of all Orange County jobs are in the clusters described in this indicator. These clusters were chosen to reflect both key economic drivers of the Orange County economy and industries that are central to workforce development. Understanding employment trends in these clusters can and should influence workforce and economic development policy.

In addition, understanding comparative salary levels and salary growth trends is vital for education and workforce development policy. This information, combined with information from the indicator on cluster employment growth trends, allows workforce development professionals and the business community to understand how the county's economy is performing in terms of generating jobs at differing salary levels. For example, if growth of low-wage jobs is not balanced by growth of high-wage jobs, there will be problems—especially so in a high cost of living location like Orange County.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

The three largest clusters, according to size of employment, are Manufacturing, Tourism, and Management & Administration, which reflects the importance of the service sector in the

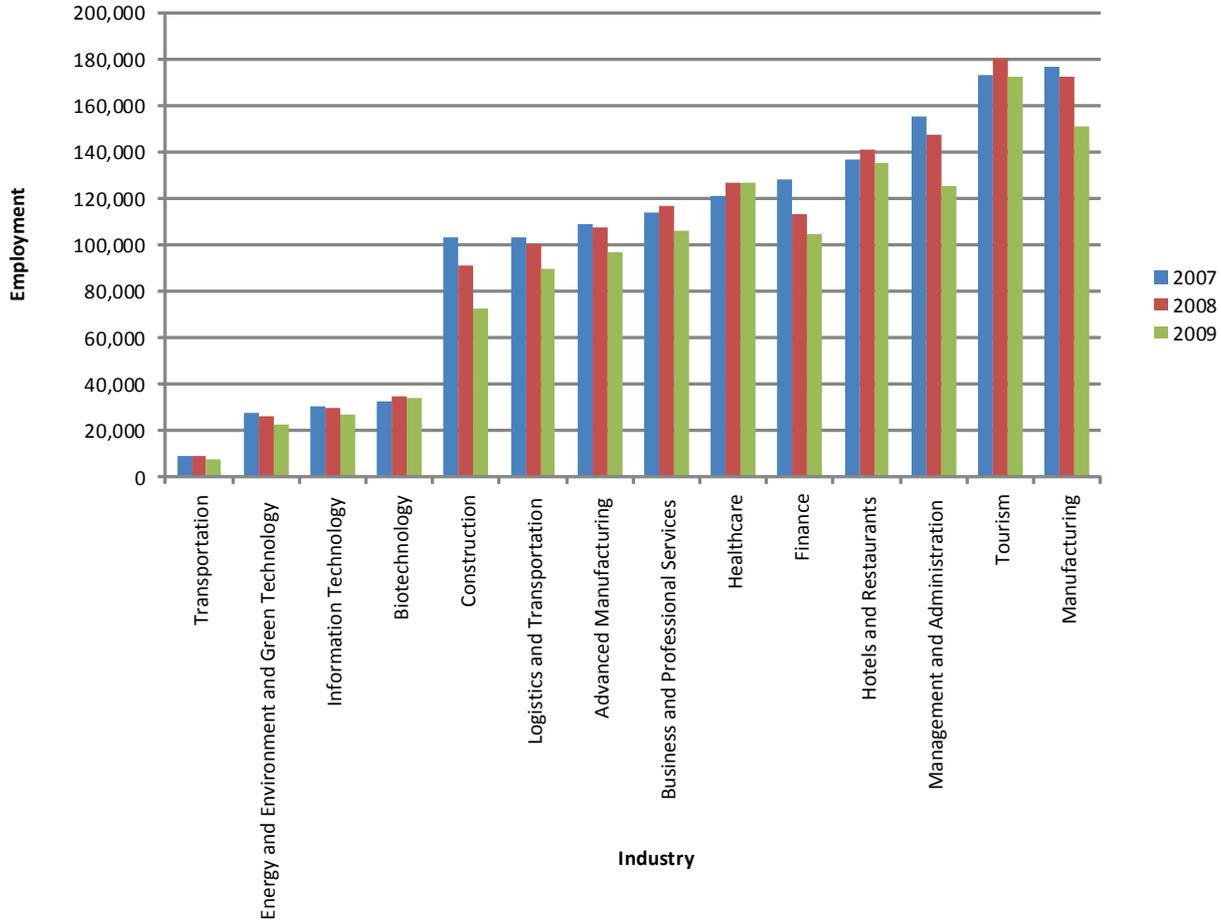
Orange County economy as well as Orange County's continuing strength in manufacturing. Other industries such as finance/insurance/real estate, construction, health care, and business & professional services also play significant roles in the Orange County economy.

Another way of looking at clusters is to examine them by who the beneficiaries of the businesses composed by them are. Local services are businesses such as Educational and Health Services, Leisure and Hospitality, Finance and Insurance and other businesses that provide personal services to the local economy. Business Services are Professional Services, Computer Services and Research and Development Services that provide services to the business world locally and beyond. Infrastructure is about Construction and Hotels and Land Transportation providing housing and movement of goods and people. Manufacturing is the creation of basic goods such as Machinery, and General Transportation Equipment locally and beyond. R&D Intensive Manufacturing is the creation of goods requiring scientific knowledge and application such as Computers, Electronics, Medical Instruments, Pharmaceuticals and Chemicals locally and beyond. Resource Intensive Activities involve the creation of goods based on natural materials such as metal and wood.

Over the last twenty years, Orange County has surged in Local Services and Business Services only to be facing a sharp drop-off in the last couple of years. Infrastructure had a similar increase from the expansion of Construction until the housing bust set in causing an even sharper drop. Manufacturing boomed in the 1990s but then has also suffered since the 2000s. R&D Intensive Manufacturing has been fairly consistent over the last two decades though with a slow and steady decline.

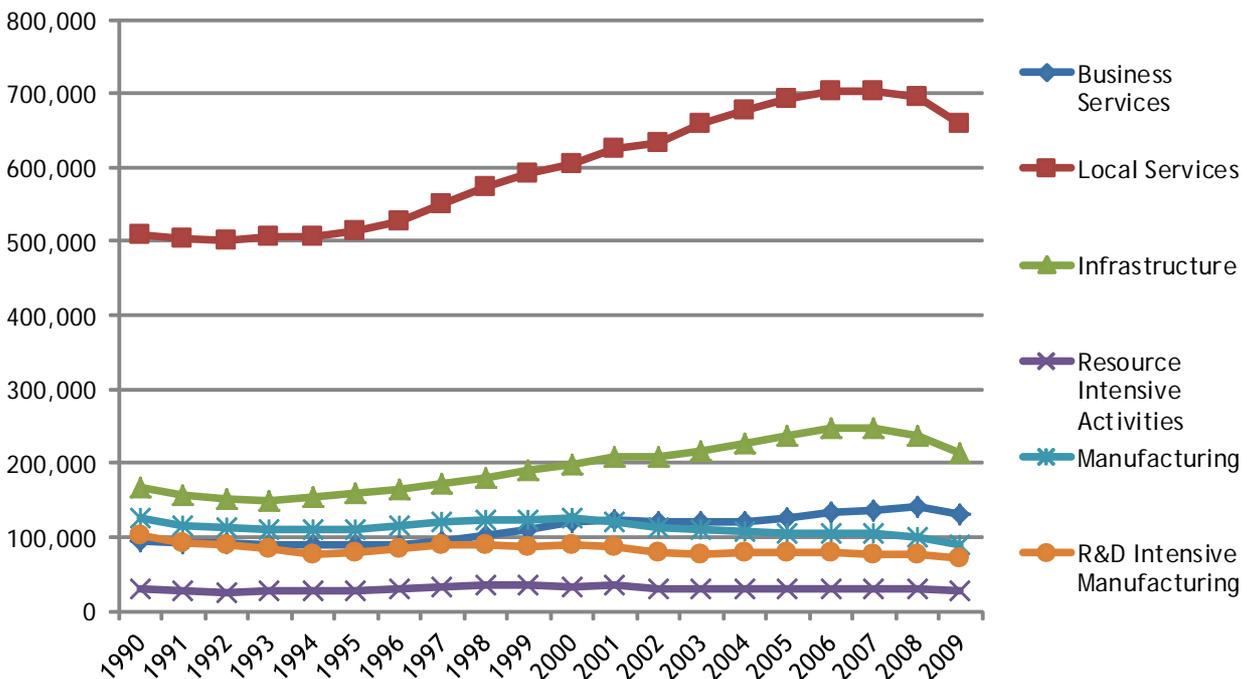


Orange County by Cluster Employment, 2007-2009



Source: OCBC analysis of California Employment Development Department OCEW dataset.

Cluster Employment, 1990-2009



Source: McKinsey Global Institute



CLUSTER SALARIES

ISSUE STATEMENT

Orange County needs to create, grow, attract, and retain more good-paying jobs.

WHY IS THIS AN ISSUE?

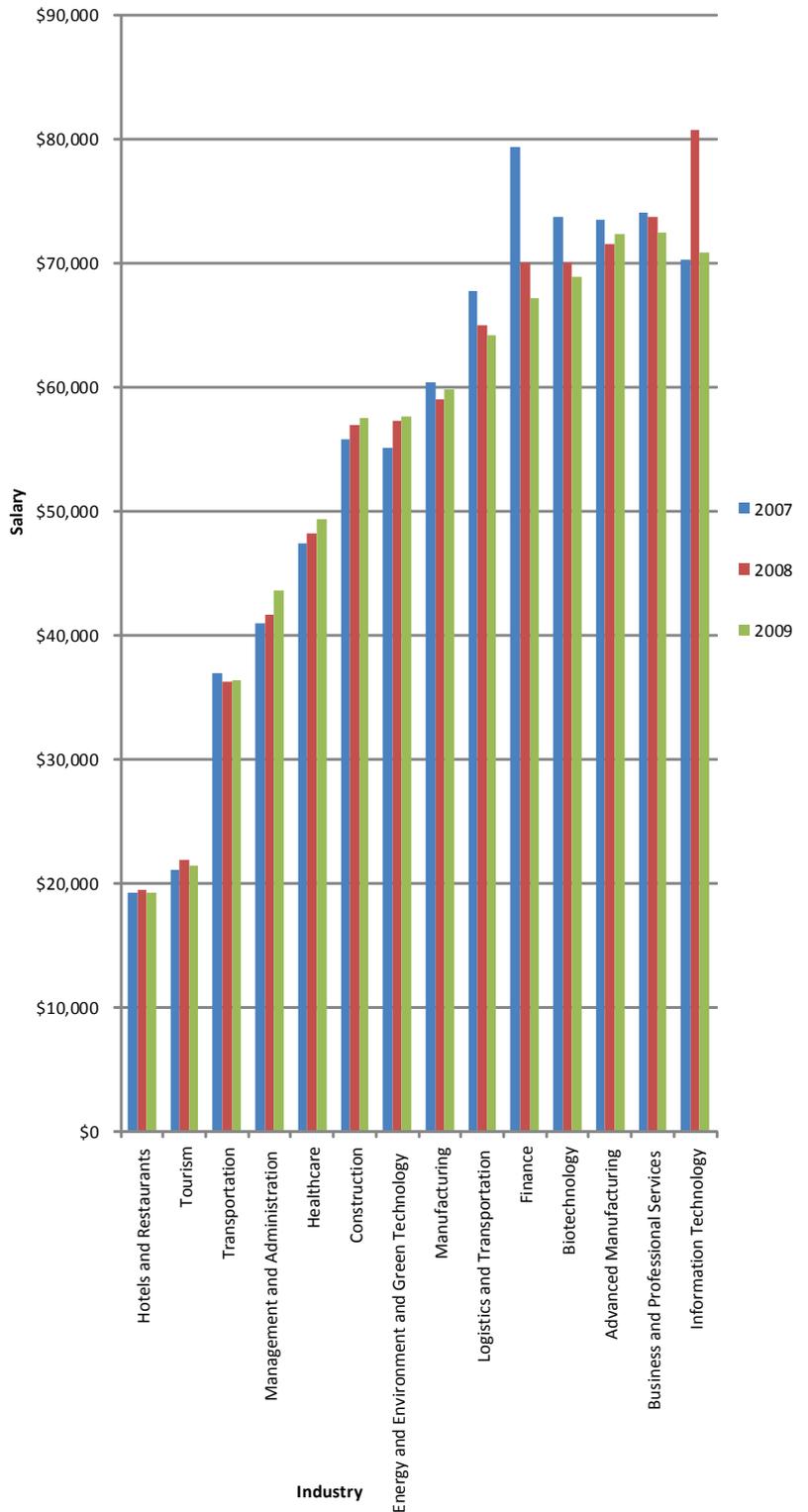
To move forward into the future, Orange County needs to create, grow, attract and retain more good-paying jobs. Orange County residents have come to expect a high quality of life with good public services, economic opportunity and natural beauty. However, all of these require good public policy backed by sufficient tax resources to pay for them when necessary. Without good-paying jobs, the tax base to pay for these will not be there and the quality of life in Orange County will decrease.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Despite the need for good-paying jobs in Orange County, too many of the jobs currently projected to grow over the next several years are lower wage jobs. However, in terms of percentage growth, there are several high wage jobs with a strong demand even if the total number of jobs created is not as high.

Out of the total 224,600 new jobs projected to be added to the Orange County economy from 2006 to 2016, the individual occupations with the highest growth in the number of jobs are “retail salespersons,” “waiters and waitresses, cashiers,” and “customer service representatives.” In terms of percentage growth, the fastest occupational growth

Orange County by Annual Cluster Salary, 2007-2009



Source: OCBC analysis of California Employment Development Department QCEW dataset.

in Orange County will be in “network systems and data communications analysts” (51.8 percent), “home health aides” (46. percent), and “occupational therapists” (45.5 percent). These statistics highlight the dominance of retail and sales jobs in the economy as well as the rapid growth of health care jobs into the future. However, given Orange County’s high cost of living, the high number of low-wage occupations is an area of concern for workforce development professionals. Efforts should be made to provide training in these occupations so employees can gain greater skill development and have the opportunity to rise up the career ladder to higher-wage jobs.

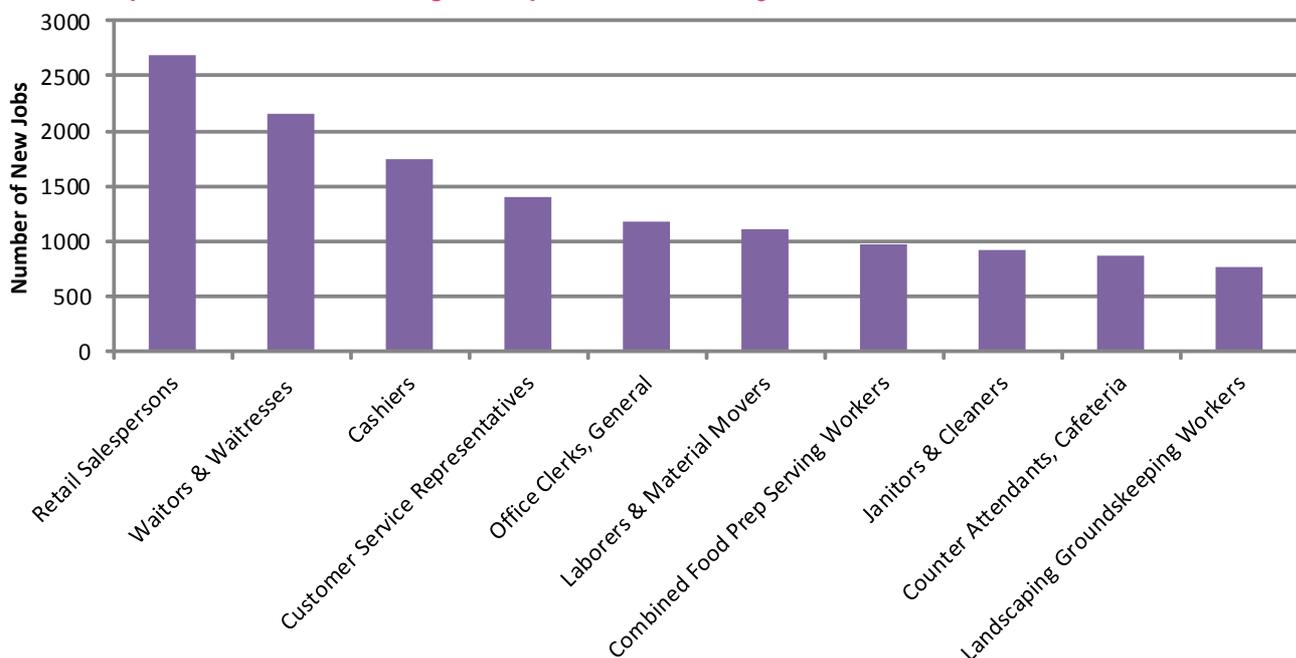
Over the last twenty years, Orange County has surged in Local Services and Business Services only to be facing a sharp drop-off in the last couple of years. Infrastructure had a similar increase from the expansion of Construction until the housing bust set in causing an even sharper drop. Manufacturing boomed in the 1990s but then has also suffered since the 2000s. R&D Intensive Manufacturing has been fairly consistent over the last two decades though with a slow and steady decline.

Note that occupational growth is a measure for specific types of jobs, not growth in the number

of jobs in particular industries. Many occupations are found across several different industries. For example, while the tourism industry may have maids, bellhops, taxi drivers, cooks, managers and executives, only some of these are occupations that are specifically classified as tourism occupations. Therefore, statistics on occupations cannot be compared with statistics on industries (e.g., tourism industry wages are not the same as tourism occupation wages).

The new jobs projected to be created will incorporate a wide variety of education, training, and skill requirements. Three training categories were analyzed: (1) jobs that do not require a high school diploma (i.e., jobs that require short to long-term on-the-job-training or work experience in the related occupation); (2) jobs that require some post-secondary education (i.e., post-secondary vocational education or associate’s degree); and (3) jobs that require a bachelor’s degree or higher educational attainment. It is estimated that over one third of the jobs in Orange County do not require a high school diploma. However, almost a quarter of the jobs require a bachelor’s degree or higher educational attainment and it is these jobs that typically pay higher wages. Over 43 percent of the population age 25 years and older in the

Top 10 Fastest Growing Occupations in OC by Absolute Growth, 2006-2016



Source: California Employment Development Department

City of Santa Ana do not have a high school diploma. In addition, at least 20 percent of the 25 and older populations in the cities of Stanton, Garden Grove, Anaheim, Westminster, and La Habra have not earned a high school diploma. Most of the cities that are lower in educational attainment are clustered in the north and central areas of the county. This contrasts with cities that are higher in resident educational attainment, most of which are located in the southern and western parts of the county.

The lowest educational attainment levels are in the north and central parts of the county while the highest educational attainment rates are in the south and west parts of the county. However, as the maps below show, there is great spatial variation in job requirements than in educational attainment throughout the county. That means that a sizeable number of people need to commute long distances to get to their jobs.

BACKGROUND

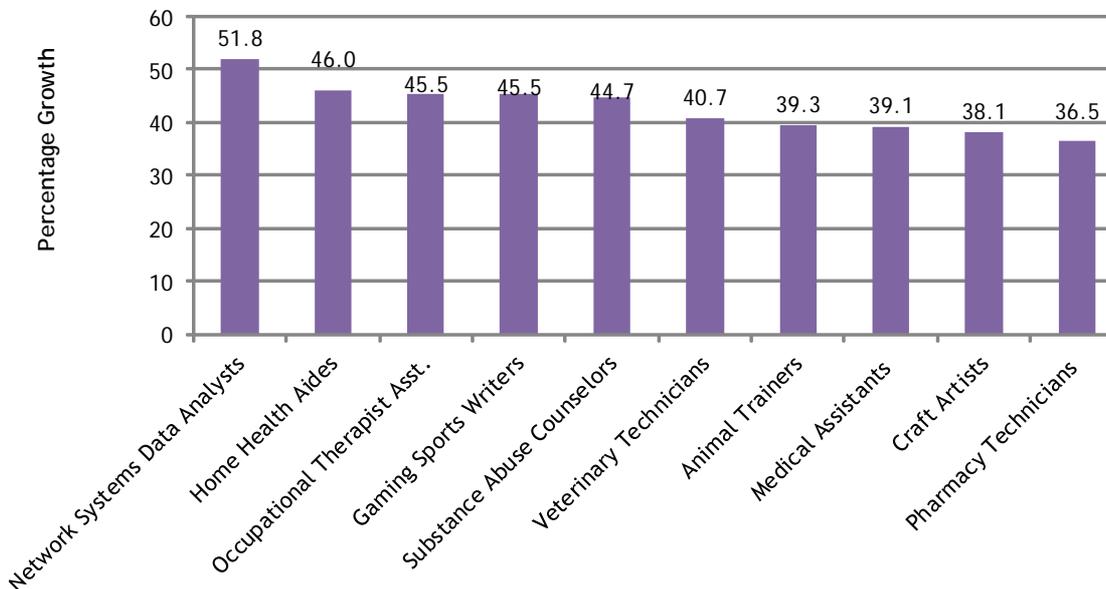
Because much of Orange County’s job growth is in service sector clusters that have low wages and weak wage growth, workforce development policy in those sectors should focus strongly on skills development to provide avenues for wage growth that otherwise might

not exist. Workforce development policy should also attempt to identify skill ladders that can move employees from service sector jobs to jobs in the technology clusters that have higher wages and more rapid wage growth.

All of the clusters show continuing salary growth over the last several years. However, wage growth since 2001 was less than wage growth during the boom years of the 1990s even in the clusters. During the 1990s, economic expansion helped wages grow overall, but especially in these clusters. In the decade following, as the economy declined across the nation and in Orange County, wages have stagnated and in some cases contracted.

Continuing salary growth in some of Orange County’s technology clusters is particularly good news given the economic conditions of recent years. Yet the preponderance of employment growth in relatively low-wage clusters suggests a long-term issue for Orange County’s workforce development policies. These wage trends indicate that the county’s recent economic contraction in some high technology clusters may be on the verge of expansion as growing wages suggest a potential for employment growth over time. Additionally, many of the higher paying clusters report great difficulty in finding skilled workers.

Top 10 Fastest Growing Occupations in OC by Absolute Growth, 2006-2016



Source: California Employment Development Department



2010
2011

ORANGE
COUNTY
Workforce
Indicators

Housing
Cost:
A Workforce
Perspective



WORKFORCE HOUSING

ISSUE STATEMENT

Orange County needs to produce more workforce housing units at all ends of the income spectrum.

WHY IS THIS AN ISSUE?

A high cost of homeownership in Orange County will require some lower-wage workers to either live in crowded conditions within the county or that they commute long distances from locations outside of the county.

Rental housing can provide low- and moderate-income workers with affordable places to live. Lack of affordable rental housing can cause high occupancy levels, leading to crowding and household stress. Less affordable rental housing also restricts the ability of moderate-income renters to save for a down payment on a home, limiting their ability to become home owners and build personal wealth through housing appreciation. Ultimately, a shortage of affordable housing for renters can instigate a cycle of poverty with potentially debilitating effects throughout the county.

In order to understand these issues, indicators are necessary to measure the home purchasing power of the different wage levels in Orange

County. What kind of home can be purchased for different annual incomes? What is the median home price for Orange County compared to peer regions? Furthermore, what is the market rent and Housing Wage for renters?-- the hourly wage a resident would need to afford Fair Market Rent.¹

Out of understanding the housing situation in Orange County better, workforce and economic development policy makers can develop efforts that target higher wage industries and occupations can provide wages that are better suited to Orange County's cost of living.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Orange County has long been one of the most expensive places to find housing in the country. Even with the real estate price collapse, Orange County's home purchase prices are still among the highest in the nation, surpassing some of the peak real estate prices of other places in the country and the peak national average price. Similarly, Orange County's average rents are among the highest in the nation making "low-income" housing in Orange County comparable to the highest income rental housing of most other markets.

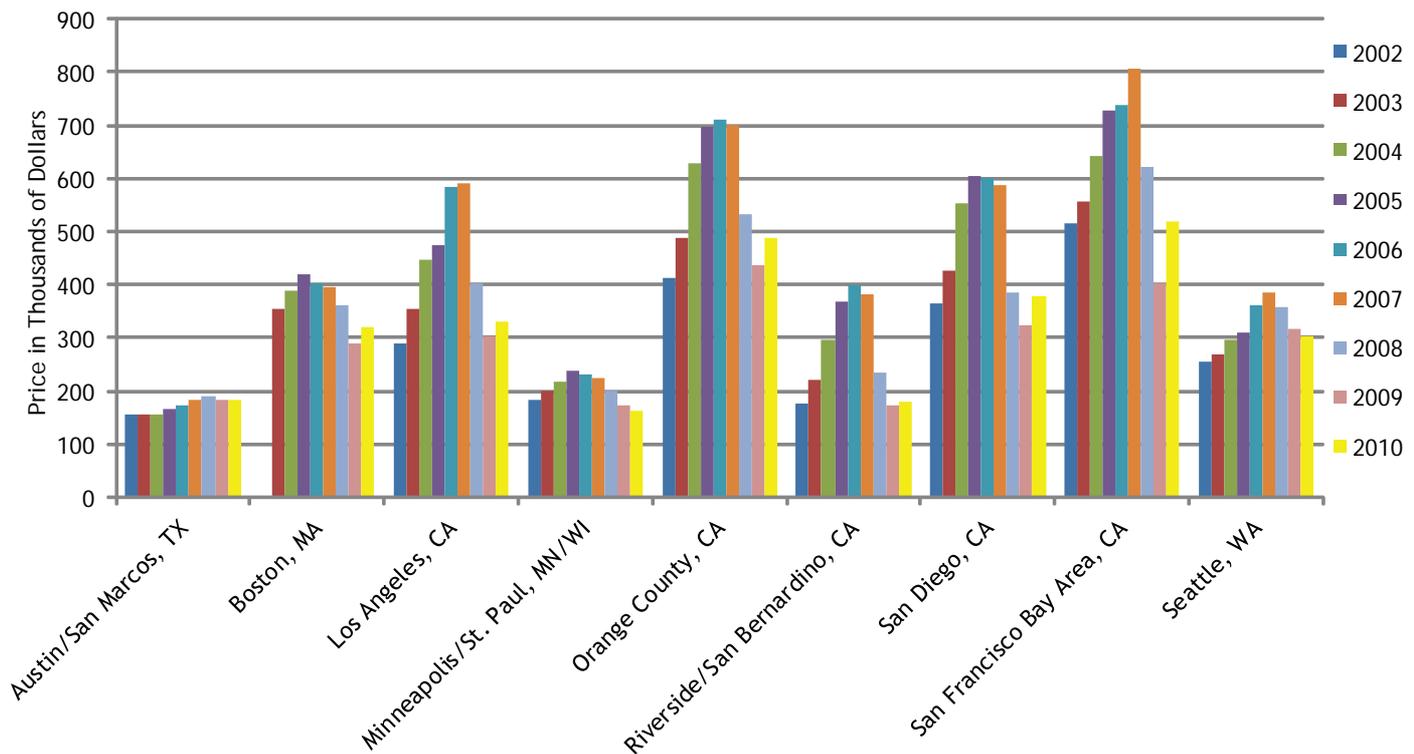
HOME OWNERSHIP

Between July of 2009 and July of 2010, the Orange County median priced home (condos and single family homes) increased 2.8% to \$514,180 according to the California Association of Realtors. After years of massive drops, this increase shows that the recent housing price downturn may be over. However, while prices are increasing, housing is not necessarily booming again and it is not necessarily more affordable for a large number of Orange County residents.

Families making the median family income for Orange County are not able to afford median priced single-family homes in the county. The median family income for a family of four in Orange County in 2010 is approximately \$87,200 and the purchasing power for that

¹ For Orange County, Fair Market Rent is 50th percentile (or median) rent in the market.

Median Single-Family Home Price, Seasonally Adjusted, 2002-2010



Source: National Association of Realtors

Note: Data from National Association of Realtors is of single family home prices while California Association of Realtors data is of all homes, single family as well as condominiums and town-homes.

BACKGROUND

The Housing Wage² for rental homes in Orange County ranges from \$25.69 per hour for a one-bedroom apartment to \$43.38 per hour for a three-bedroom apartment. Orange County's housing wage rates increased since 2000 when housing wages were \$15.23, \$18.85, and \$20.86 for one-bedroom, two-bedroom, and three-bedroom apartments, respectively. This is the first year the housing wage decreased after years of increases that have significantly outpaced inflation. The hourly wage needed for a one-bedroom apartment (\$25.69) is equivalent to an annual income of \$53,435.

level of income is a \$259,000 home. Santa Ana had the lowest median home price for July of 2010 (\$298,500) and Newport Beach had the highest (\$1,187,000), suggesting that the recent large home price declines have been necessary in order to begin closing the gap between home prices and household incomes for many Orange County residents.

When compared to peer regions, Orange County has the second highest median single-family home prices. The median single family home price in Austin, Texas for 2007 (\$182,500) was around \$300,000 less than the prices in Orange County. This suggests that employers in Orange County may have a more difficult time retaining or attracting high quality workers than other similar communities.

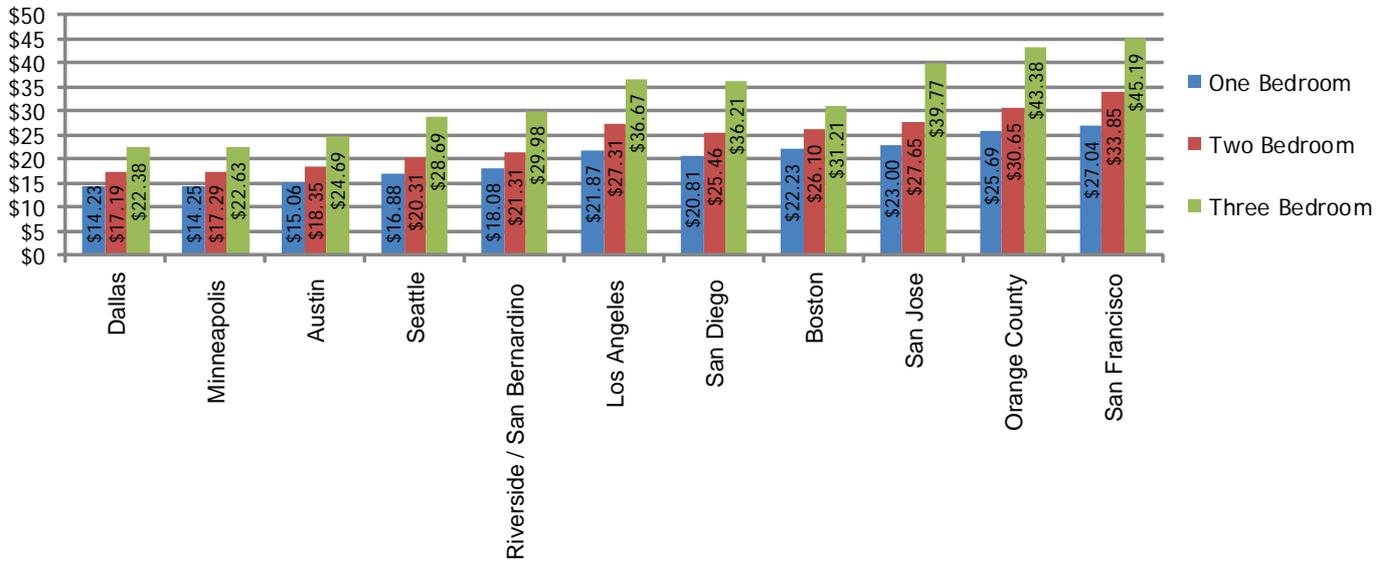
² "Housing Wage" is defined by the National Low Income Housing Coalition. Housing wage is the wage necessary to afford housing for the specified conditions (e.g. "2 bedroom home").

Renting in Orange County, 2003-2010

Fair Market Rent	2003	2004	2005	2006	2007-08	2009	2010
One Bedroom	\$1,098	\$1,098	\$1,161	\$1,238	\$1,330	\$1,296	\$1,336
Two Bedroom	\$1,317	\$1,317	\$1,392	\$1,485	\$1,595	\$1,546	\$1,594
Three Bedroom	\$1,885	\$1,885	\$1,992	\$2,125	\$2,282	\$2,188	\$2,256
Estimated Orange County Median Family Income	\$74,200	\$74,200	\$75,700	\$78,300	\$84,100	\$86,100	\$87,200

Source: National Low Income Housing Coalition

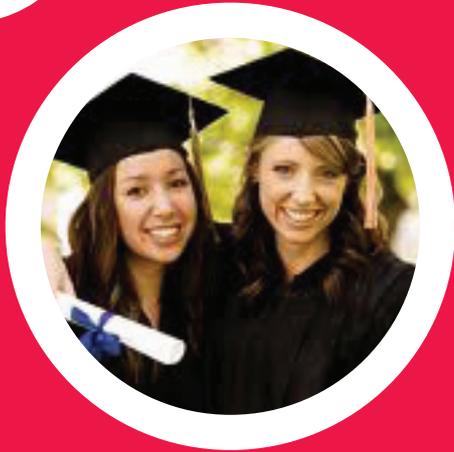
Hourly Wage Need to Afford Fair Market Rent (Regional Comparison, 2009)



Source: National Low Income Housing Coalition

2010

2011



ORANGE
COUNTY
Workforce
Indicators

Workforce
& Demand
& Supply:
Education

ISSUE STATEMENT

Orange County needs more high school graduates prepared to go to college, especially amongst our Latino students.

WHY IS THIS AN ISSUE?

In an Orange County where much more of the White population is older and retired and much of the student population is Latino and Asian, for Orange County to continue to maintain a high quality of life and continue as an engine for economic growth for the benefit of everyone, more students of color need to be college educated and excel in the math and sciences.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Too many Orange County high school graduates

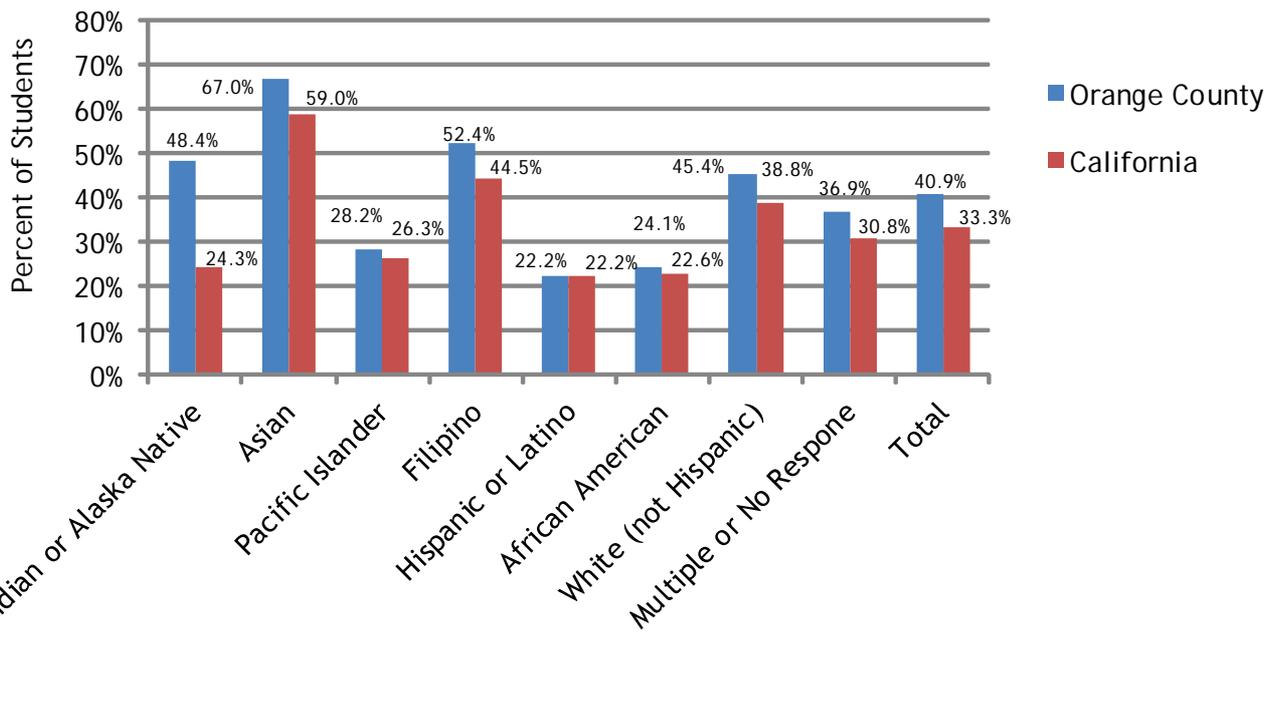
have not taken the required courses to be eligible to enter a California State University (CSU) or University of California (UC) school and too few actually go to college. The gaps are especially apparent examining these statistics by ethnicity showing that Latino high school students and graduates are most behind.

BACKGROUND

College Eligibility

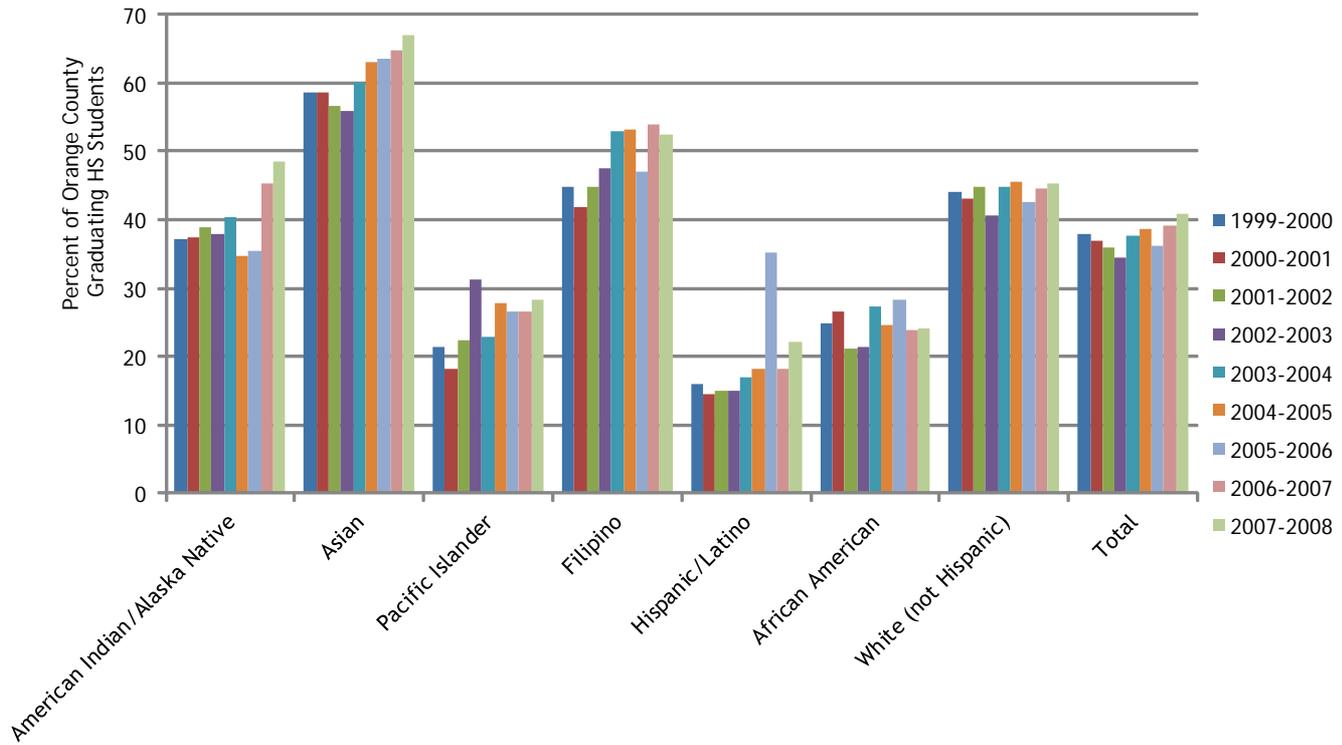
Preparing for this future begins today because a college education or related skill certification is increasingly important for many Orange County jobs, today and tomorrow. However, to gain entry to most four-year universities, high school students must complete the necessary course work and perform well on standardized tests. The minimum UC/CSU College Requirements are as follows:

UC/CSU Eligible Graduates, Comparison to State, 2007-2008



Source: California Department of Education, Educational Demographics Unit

UC/CSU Eligible Graduates, Comparison to State, 2007-2008



Source: California Department of Education, Educational Demographics Unit

- 4 years of College Preparatory English
- 3 years of College Preparatory Mathematics (Algebra, Geometry, Intermediate Algebra)
- 2 years of College Preparatory Foreign Language
- 2 years of College Preparatory History (1 year World History, 1 year U.S. History)
- 2 years of College Preparatory Lab Science (1 year Biological Science, 1 year Physical Science)
- 1 year of College Preparatory Visual and Performing Arts
- 1 year of College Preparatory Elective

While not every student in high school needs to be college-bound, more of them need to be college-bound than statistics currently show. Approximately 40 percent of Orange County high school students have completed

the minimum required class for entry into the UC/CSU university systems. The average college eligibility for the county increased from 39.1 percent in 2006-2007 to 40.9 percent in 2007-2008. The increase in the 2007-2008 school year is a trend in the right direction after decreasing from 43.4 percent in 2005-2006 to 39.1 percent in 2006-2007. However, examining these statistics by race and ethnicity reveals a much more troubling picture. While there was a dramatic increase in the number of Hispanic students eligible for UC/CSU Admission, rising from 18.2 percent in 2004-2005 to 35.1 percent in 2005-2006, it reversed back to 18.1 percent eligibility for 2006-2007 and 22.2 percent in 2007-2008.¹

When compared to the entire state, Orange County is equal to or has higher percentages of students in all ethnic/racial groups that are taking the necessary courses for UC/CSU eligibility. In previous years, Orange County had

¹ Starting in 2006-2007, the California Department of Education used a new system for tracking individual students, allowing for greater accuracy in data collection. Instead of collecting data by school, data is collected through following outcomes by individual students even when they transfer to other schools. The newer number is considered to be more accurate by the California Department of Education.

been lower than the state for college eligibility of Hispanics, African-Americans and Pacific Islanders. But much more needs to be done.

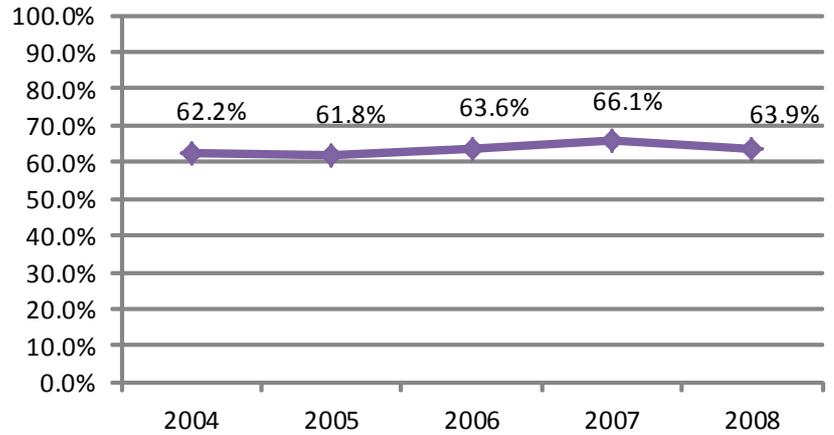
College Attendance

With about 40 percent of Orange County high school students eligible to enter a CSU or UC university, over the last six years only about 63 percent of those students actually attended college. In 2008, 63.9 percent of high school students in Orange County enrolled at a public California university or college. While a small additional percentage of students may have entered a private university in California or out-of-state, the vast majority of California high school students that go to college go to California public universities in the UC, CSU, or community college system.

In fact, out of the Orange County high school students that attend a California public college, approximately two thirds of them go to community colleges. Approximately 20 percent attend at CSU and the remaining 15 percent attend a UC system college.

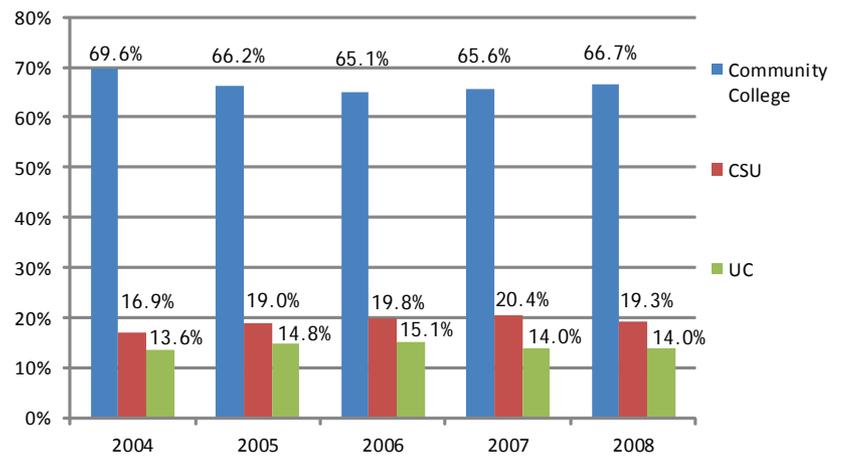
However, there are differences in where high school students of different ethnicities attend college. While the majority of all college attending high school graduates in Orange County go to community colleges, for Asians, in 2008, even as 51.1% attended community college, 20.1% attended a CSU but almost 29% attended a UC College. For White Students, 66.4% attended a community college, 22.2% attended a CSU and 11.4% attended a UC. For Latino students, 77.7% attended a community college, 15.2% attended at CSU and only 7.1% attended a UC. The result of these statistics is obvious as UC schools have a disproportionately high share of Latino students.

College Attendance Rate of Orange County High School Students



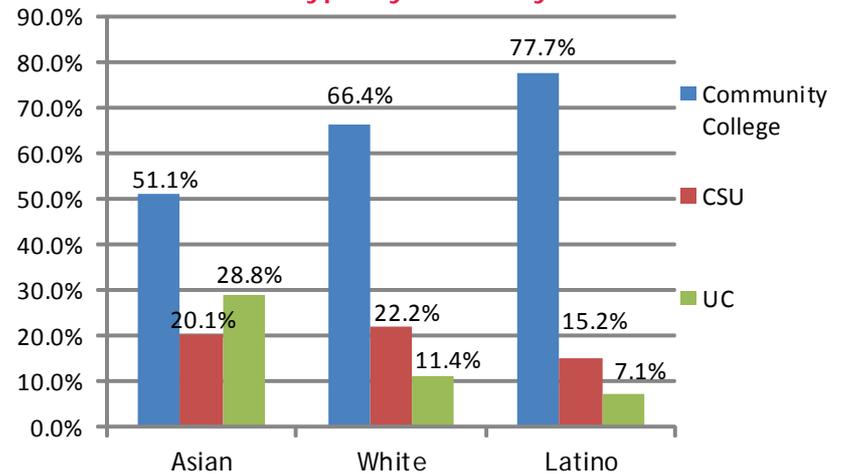
Source: Orange County Department of Education

California Public College Attendance Site of College-Attending High School Students



Source: Orange County Department of Education

2008 California Public College Attendance Type by Ethnicity



Source: Orange County Department of Education



ENROLLMENT & ACHIEVEMENT IN STEM

ISSUE STATEMENT

Orange County's jobs of the future will require a higher number of STEM (Science, Technology, Engineering, Mathematics) proficient students than is currently being prepared.

WHY IS THIS AN ISSUE?

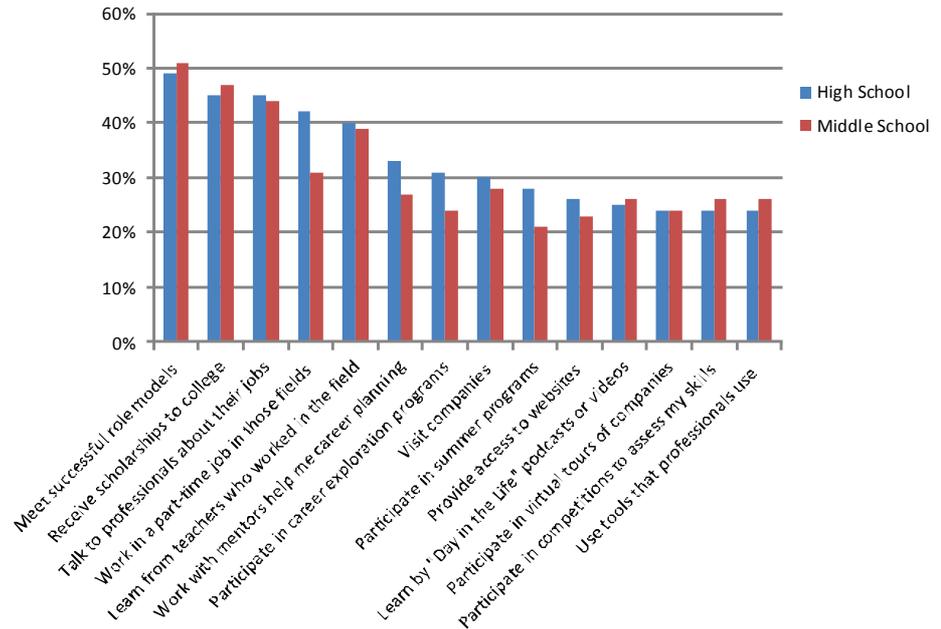
As Orange County's student population becomes more diverse, our students need to obtain the education and career preparation necessary to participate and compete in Orange County's increasingly high-tech economy. A higher number of students who are ready for college and with prospective science and math majors make it easier for Orange County high-tech firms to recruit local talent to grow their businesses.

If our educational system does not prepare enough students in the science, technology, engineering and mathematics (STEM) fields, Orange County companies that need employees with math and science skills may consider leaving for other locations that provide for their desired workforce. Even if they do not leave, many may resort to recruiting workers from outside the county, while Orange County students will fail to obtain high-growth, high-paying jobs. This potential mismatch can lead to widespread economic and social dislocation leading to a two-tiered economy and increased economic segregation.

Students in Orange County know this. Recent surveys by Project Tomorrow reveal that 22

Which of the following would help increase your interest in a career you might be thinking about?

While many students want to have a career involving STEM, too few are translating this interest into action. The Project Tomorrow survey asked students what they would like to have to learn more about STEM careers.



Source: Orange County Department of Education

percent of high school students and 18 percent of middle school students are “definitely interested” in pursuing careers in science, technology, math or engineering. Another 34 percent of high school students and 39 percent of middle school students “may be” interested in a career in these fields, particularly if they are provided more information about prospective occupations. With 56 percent of high school students and 57 percent of middle school students interested in a career involving science, technology, engineering and mathematics, policy makers, school administrators and civic leaders should enhance curriculum in these fields to ensure this interest results in more STEM careers from Orange County students.

The first step in doing requires civic leaders to routinely evaluate the performance of schools in these arenas. Examining enrollment

in STEM courses, evaluating standardized test performance (SAT, Advanced Placement) and comparing school performance enable education stakeholders to evaluate the quality of instruction in Orange County schools against state and national averages. An informed assessment of our local schools' strengths and weaknesses relative to California and U.S. averages is critical for designing policies and allocating resources to improve the performance of local schools.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Despite the interest in STEM careers, not enough Orange County high school students enroll in upper level math and science courses; enroll and pass Advanced Placement (AP) exams; and perform well on student achievement tests (STAR) in math and sciences. Enrollment in upper level math and sciences is less than 20 percent of high school students. Enrollment in AP classes is between 1 percent and 6 percent. The percentage of students achieving "advanced" or "proficient" in upper level math was 20 percent for algebra and 61 percent for advanced math. As for upper level science, it was 40 percent

for chemistry and 49 percent for biology. While these percentages generally exceed state averages and are increasing, for a high tech economy, these numbers are not sufficient.

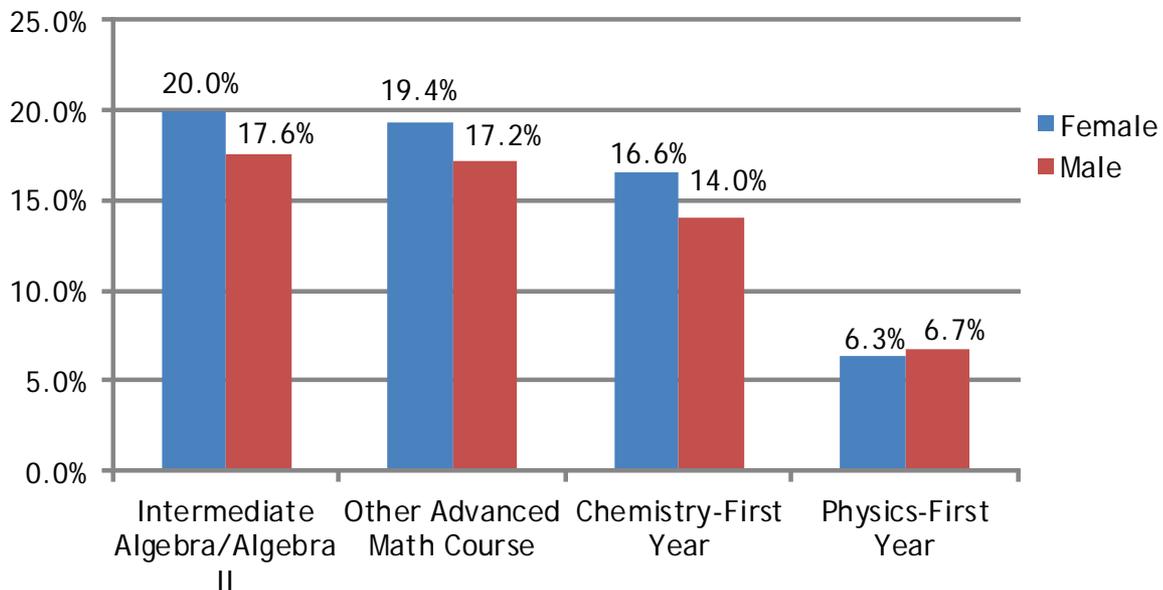
There is better news on Academic Performance Index (API) scores, SAT scores and High School Exit Exam scores. The statewide performance goal for schools to aspire to is 800, and with an overall API district average of 810 in 2009, Orange County schools have collectively met the target. In addition, Orange County students scored higher on the SAT than students in the nation, state, and most peer metropolitan areas. Also, every school district in Orange County, except for Santa Ana, exceeds the statewide high school exam pass rate with a county upward trend since 2001.

BACKGROUND

Enrollment in Upper Level Math and Science Courses

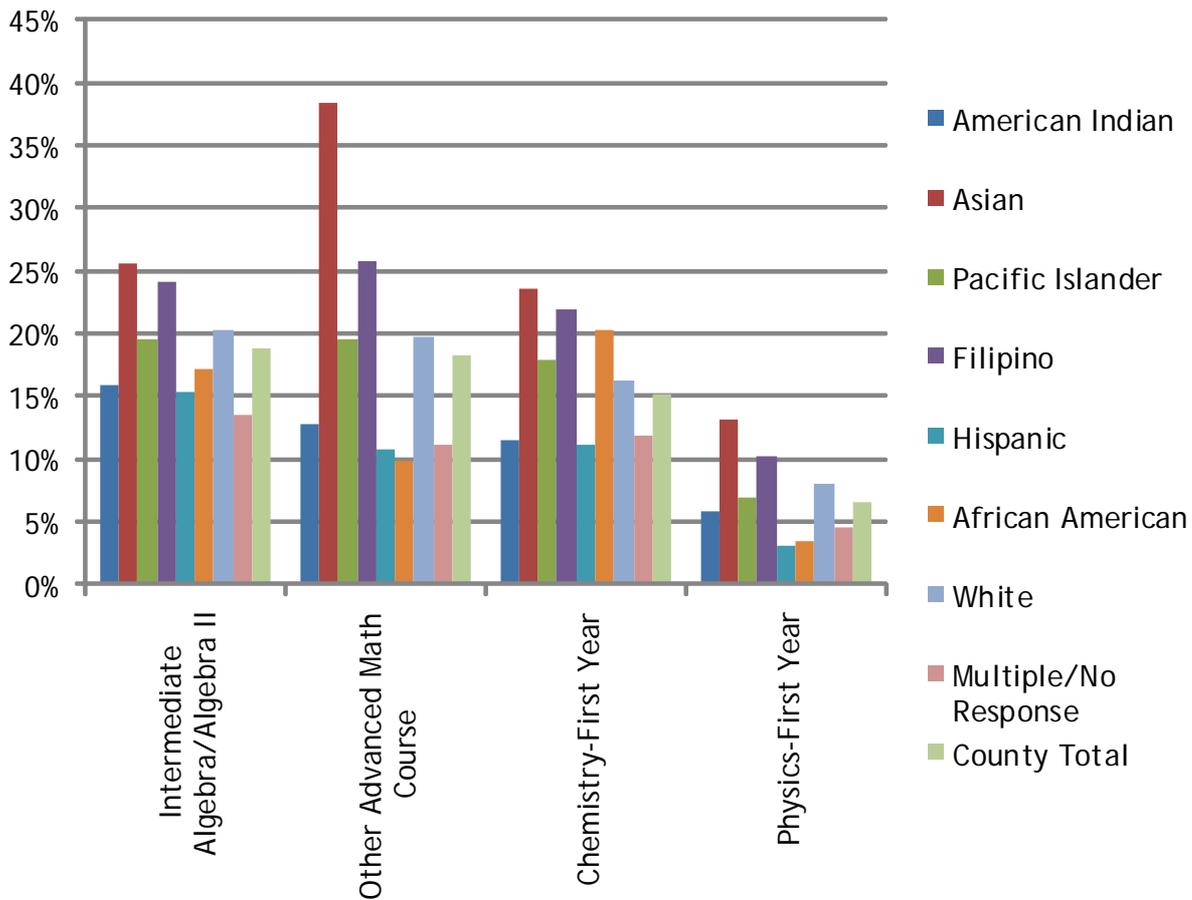
Enrollment of Orange County students taking upper level math and science courses are a low proportion of the student population (typically less than one in five students), but exceed state

Enrollment in Upper Level Science and Math Courses by Gender, 2008-2009



Source: California Department of Education, Educational Demographics Unit

Enrollment in Upper Level Math and Science Classes by Ethnicity, 2008-2009



Source: California Department of Education, Educational Demographics Unit

averages and are higher than in previous years. Approximately 18.8 percent take courses in intermediate algebra, 18.3 percent take courses in advanced math, 15.2 percent take first year chemistry and 6.5 percent take first year physics. Enrollment in intermediate algebra and chemistry is up from 2007-2008 and enrollments in other advanced math and physics is down.

A higher percentage of female students took intermediate algebra, advanced math, and first year chemistry than male students. Only in first year physics is there a higher number of male students to female students.

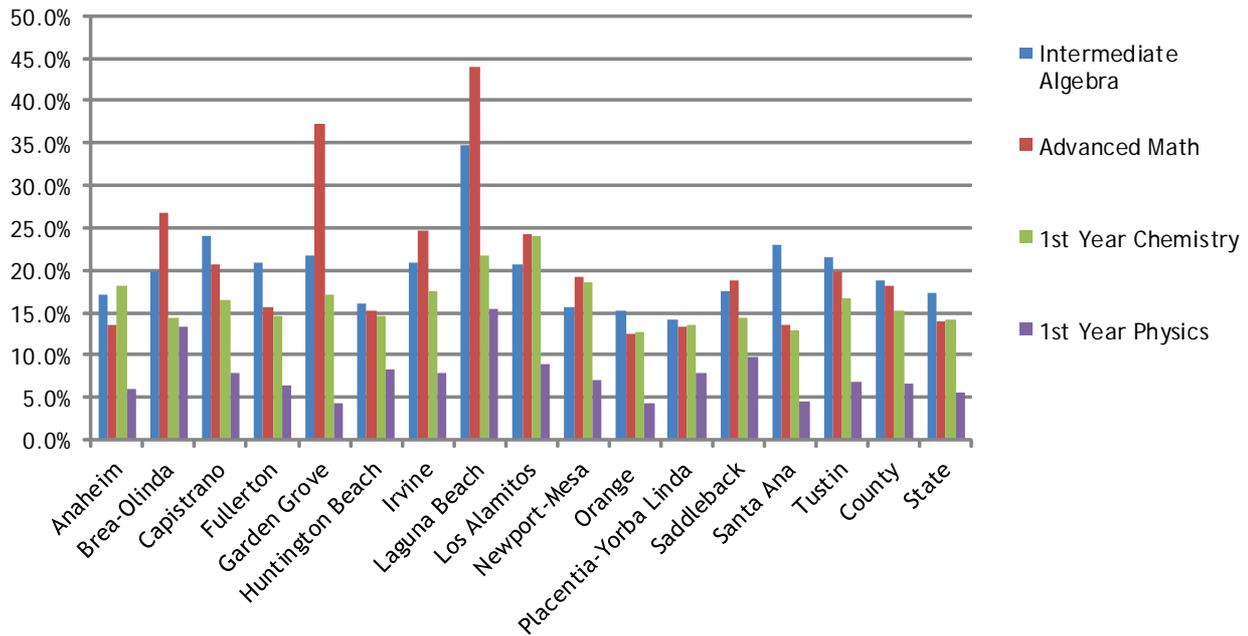
However, the gap in enrollment in upper level science and math courses by ethnicities is cause for concern. The highest percentages of students taking upper level math and science courses in Orange County are in the Asian, Filipino, and White populations; the lowest percentages

of students are in the Hispanic, American Indian, and African American populations.

Furthermore, there are differences in enrollment in upper level math and sciences courses by district. In 2008-2009, some districts such as Laguna Beach had 34.7 percent of students enrolled in intermediate algebra and 44.0 percent enrolled in advanced math. Others, such as Placentia-Yorba Linda had 14.2 percent in Intermediate Algebra and 13.4 percent in advanced math.

In 2008-2009, 24.0 percent of Los Alamitos, 21.8 percent of Laguna Beach, and 18.7 percent of Newport-Mesa enrolled in first year chemistry. In Laguna Beach, 15.4 percent enrolled in first year physics. However, in Orange, 12.4 percent enrolled in first year chemistry, and in Garden Grove only 4.3 percent enrolled in First Year Physics.

Enrollment in Upper Level Math and Science by District, 2008-2009



Source: California Department of Education, Educational Demographics Unit

Advanced Placement Course Enrollment

In addition, students who have taken Advanced Placement courses have an advantage in college since they can obtain college credit while in high school. Having already obtained course credit often enables students to pursue more advanced college courses, which makes it easier for them to major in disciplines such as mathematics, physics, computer science or chemistry.

Orange County enrollment in Advanced

Orange County AP Math and Sciences Enrollment Percent of Total 11th and 12th Grade Enrollment, 2006-2009

AP Courses	2006	2007	2008	2009
Computer Science A	0.79%	0.71%	0.82%	0.74%
Computer Science AB	0.18%	0.15%	0.18%	0.15%
Calculus AB	4.47%	4.87%	4.86%	4.88%
Calculus BC	0.78%	1.06%	1.18%	1.33%
Statistics	2.92%	2.98%	3.30%	3.30%
General Biology	3.75%	4.15%	4.49%	4.55%
General Chemistry	2.56%	2.34%	2.29%	2.19%
Physics B	2.21%	2.40%	2.06%	2.46%
Physics C	0.50%	0.34%	0.34%	0.44%
Environmental Science	1.36%	1.42%	1.93%	2.08%

Source: California Department of Education, Educational Demographics Unit

Placement courses in science and math is the highest of all Southern California counties but trails those of Northern California.

Of Orange County 11th and 12th graders:

- Approximately 1.0 percent took AP Computer Science
- 6.2 percent took AP Calculus
- 3.3 percent took AP Statistics
- About 4.5 percent took AP Biology
- Almost 2.2 percent AP Chemistry
- About 2.9 percent took AP Physics
- Almost 2.0 percent took Environmental Science

A higher percentage of students in San Francisco, Santa Clara, and Alameda counties took AP courses. The percentage of Orange County students taking AP courses in science and math exceeds those of Los Angeles, San Diego, Riverside, and San Bernardino counties.

Student Achievement

Orange County achievement in math and science exceeds the state rates of achievement in all math and science subjects measured.

In 2009-2010 approximately 20 percent of Orange County 11th graders showed advanced or proficient achievement in algebra compared

to 14 percent for statewide 11th graders. Almost two-thirds (65 percent) of Orange County 11th graders showed advanced or proficient achievement in Summative High School Math compared to 50 percent for the state.

In the sciences, 42 percent of Orange County 11th graders showed advanced or proficient achievement in chemistry in comparison to 29 percent for the state. In biology/life sciences, 59 percent of Orange County 11th graders showed advanced or proficient achievement, in comparison to 46 percent for the state.

Grade 11 Test Achievement Orange County In Comparison to California, 2009-2010

	Algebra II	Summative High School Math	Chemistry	Biology/ Life Sciences
OC	20%	61%	42%	54%
CA	14%	50%	29%	46%

Source: California Department of Education

The majority of Orange County 11th graders show only basic, below basic and far below basic achievement in math and science. The percentage of students showing advanced achievement in math and science ranged from 3 percent for Algebra II to 27 percent for Summative High School Math. On the other end of the spectrum, the percentage of students far below basic ranged from 17 percent for Algebra

Grade 11 Test Achievement by Subject, 2009-2010

	Algebra II	Summative High School Math	Chemistry	Biology/ Life Sciences
% Advanced	3%	27%	17%	31%
% Proficient	17%	36%	25%	28%
% Basic	32%	21%	38%	27%
% Below Basic	30%	14%	13%	8%
% Far Below Basic	17%	2%	8%	6%

Source: California Department of Education

II to 2 percent for Summative High School Math. Examining these statistics by gender shows that male students tend to perform better in math and sciences than female students even though more female students are enrolling in math and science courses. However, in 11th grade biology/life sciences, female students outperformed male students in ranking advanced

Grade 11 Standardized Test Results of Orange County Females, 2009-2010

	Inter-mediate Algebra II	Summa-tive HS Math	Chemistry	Biology/ Life Sciences
% Advanced	3%	22%	13%	30%
% Proficient	16%	36%	23%	26%
% Basic	33%	23%	41%	30%
% Below Basic	32%	16%	15%	9%
% Far Below Basic	16%	3%	8%	6%

Source: California Department of Education

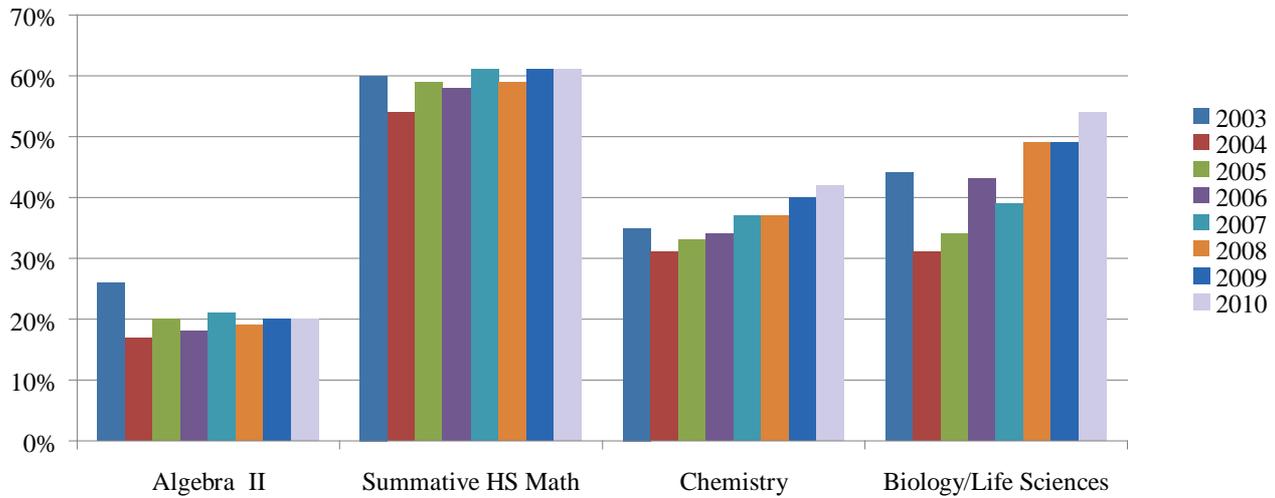
Orange County's scores in math and science achievement appear to be increasing. The most recent academic years of testing show increases in Algebra II, Summative High School Math, Chemistry, and Biology/Life Sciences but in math, they are below where they were in 2003.

Grade 11 Standardized Test Results of Orange County Males, 2009-2010

	Inter-mediate Algebra II	Summa-tive HS Math	Chemistry	Biology/ Life Sciences
% Ad-vanced	4%	32%	22%	29%
% Profi-cient	19%	36%	26%	23%
% Basic	32%	19%	35%	26%
% Below Basic	29%	11%	10%	11%
% Far Below Basic	17%	2%	7%	11%

Source: California Department of Education

Grade 11 Test Achievement in Math and Sciences “Advanced” and Proficient,” 2003-2010



Source: California Department of Education

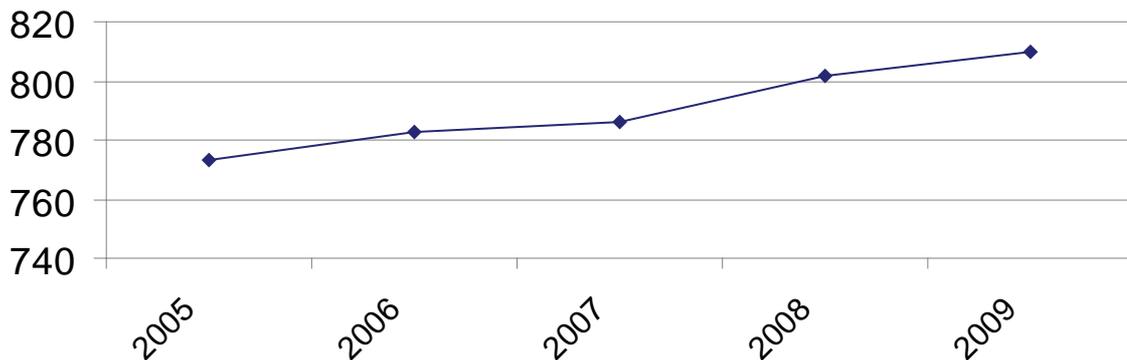
Academic Performance Index

Looking at schools as a whole shows improvement as well. School performance is a key measure of whether students in a particular school district and Orange County as a whole are gaining the knowledge necessary to succeed in the modern global economy. The overall environment of a school sets the expectations and standards for students. Schools with high scores have a self-reinforcing standard of greater academic achievement. Such achievement is necessary for students to be well prepared to obtain higher education and skills to succeed in an advanced economy such as Orange County.

The following data is based on averaging the API scores for high schools in each district. Each individual school receives a score and a target for the following year. The API scores for the high schools in each district are averaged to show the API score for the district.

High schools in Orange County had an overall API score of 801 in 2008 and 810 for 2009. The statewide performance goal for schools to aspire to is 800, and Orange County schools have collectively met the target.

Orange County Average Academic Performance Index Scores 2005-2009



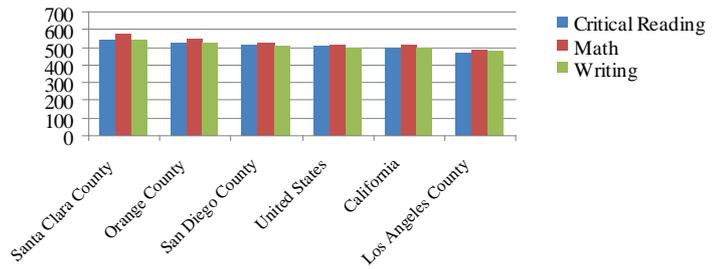
Source: California Department of Education, Educational Demographics Unit

SAT Scores

SAT performance also reveals encouraging information. Orange County students scored higher on the SAT than students in the nation, state, and most peer metropolitan areas. Of the counties used for a comparison, only Santa Clara County had average scores that were above Orange County.

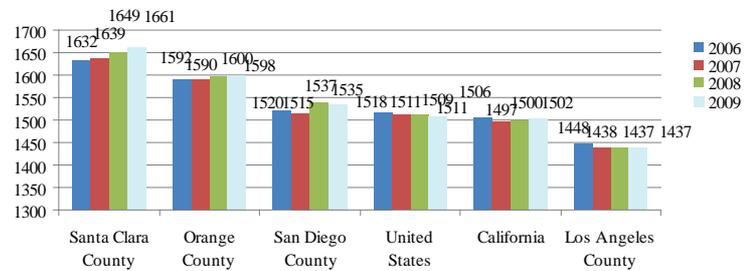
Irvine Unified School District reports the highest average reading/writing/math combined score for the county in the 2008-2009 school year, while Santa Ana Unified School District has the lowest average score. With the exception of Santa Ana, Garden Grove, and Anaheim, all of the school districts in Orange County have average scores above both the California and national average SAT scores for 2008-2009.

SAT Scores, 2009



Source: California Department of Education, Educational Demographics Unit

SAT Scores, 2006-2009



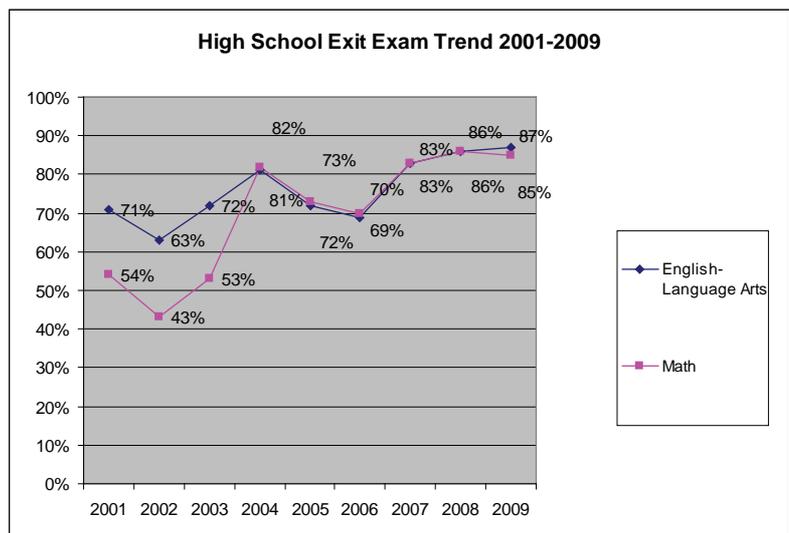
Source: California Department of Education, Educational Demographics Unit

High School Exit Exam Performance

In addition, students in Orange County are required to take exit exams in order to graduate. Exit exams are a valuable tool available for measuring cumulative student achievement against their peers in other school districts. The dropout rate alerts decision makers about where the education system has failed students.

Every school district in Orange County, except for Santa Ana, exceeds the statewide high school exam pass rate. Overall, the county experienced a general upward trend since 2001. Approximately 87% of Orange County students passed the Math portion of the exam and 85% passed the English-Language Arts portions of the exam in comparison to 80% who passed Math and 79% who passed English Language Arts for the state.

High School Exit Exam Pass Rate, 2001-2009



Source: California Department of Education, Educational Demographics Unit

ACHIEVEMENT GAPS BY SCHOOL DISTRICT

ISSUE STATEMENT

Orange County needs to lower the achievement gap between the highest and lowest performing Orange County School Districts.

WHY IS THIS AN ISSUE?

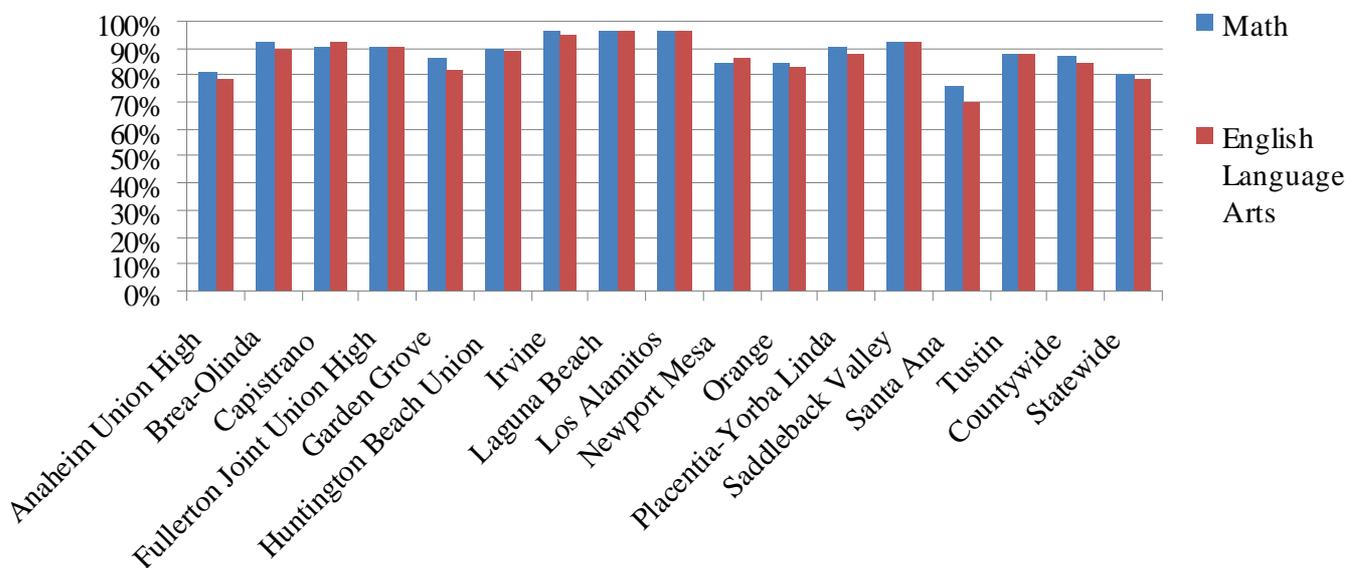
Despite overall trends showing increasing student achievement in Orange County in areas like Academic Performance Index scores, SAT scores and High School Exit Exam pass rates, a closer look at the data shows that within the county, some school districts are excelling while others are lagging behind. Furthermore, the lowest performing school districts are among the largest in Orange County and are the school districts with the largest Latino and Asian population which are the ethnic groups that will make up the majority of Orange County's future workforce.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

There are significant differences in student outcomes between school districts in Orange County. For example, for the High School Exam Pass rate, every school district in Orange County exceeds the statewide high school exam pass rate, except Santa Ana Unified, the largest school district in Orange County with over 57,000 students. Overall, the county experienced a general upward trend since 2001 but Santa Ana has remained essentially constant. Approximately 87% of Orange County students passed the Math portion of the exam and 85% passed the English-Language Arts portions of the exam in comparison to 80% who passed Math and 79% who passed English Language Arts for the state. However, in Santa Ana, the pass rate is 76% for Math and 70% for English Language Arts.

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High School Exit Exam Pass Rate by District, 2009



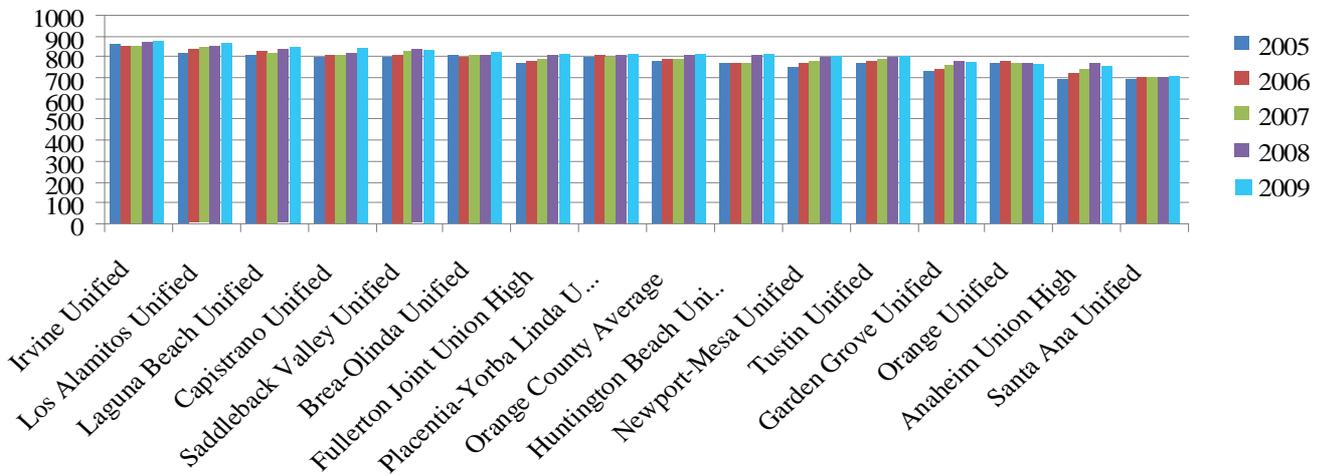
Source: California Department of Education, Educational Demographics Unit

Academic Performance Index

For the Academic Performance Index scores, high schools in Orange County had an overall API score of 801 in 2008 and 810 for 2009. The statewide performance goal for schools to aspire to is 800, and Orange County schools have collectively met the target. In 2009, high schools in Irvine (878), Los Alamitos (870), Laguna Beach (850), Capistrano (837), Saddleback (833), Brea-Olinda (820), Fullerton (814) Placentia-Yorba Linda (812), Huntington Beach (809), Newport Mesa (808), and Tustin (805) met or exceeded this target.

However, of the six largest school districts in Orange County, four of them have the lowest scores-- Garden Grove (780), Orange (768), Anaheim (759) and Santa Ana (714).

Orange County API Scores, 2005-2009

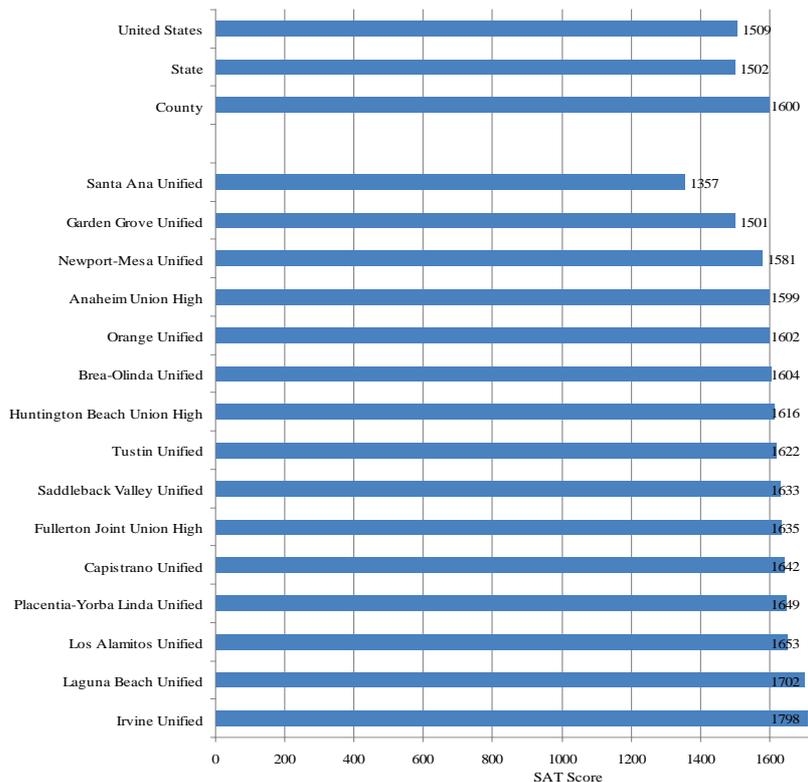


Source: California Department of Education, Educational Demographics Unit

SAT Scores

Examining SAT scores reveals the same pattern. Irvine Unified School District reports the highest average reading/writing/math combined score for the county in the 2008-2009 school year, while Santa Ana Unified School District has the lowest average score. With the exception of Santa Ana, Garden Grove, and Anaheim, all of the school districts in Orange County have average scores above both the California and national average SAT scores for 2008-2009.

Average Total SAT Scores by School District, 2009



Source: California Department of Education, Educational Demographics Unit



ENGLISH LEARNERS

ISSUE STATEMENT

Orange County needs to progress more rapidly in language - more students need to become fluent in English more rapidly.

WHY IS THIS AN ISSUE?

Understanding the magnitude and trends regarding limited English-speaking students in our schools is important because Orange County should have an accurate picture of factors driving educational performance. Proper resources can then be assigned to address the fundamental need of language skills for students. Furthermore, showing the progress students make in learning English bolsters confidence that students are acquiring the essential skills necessary for academic, social, and ultimately, financial prosperity.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Orange County has the highest percentage of English Learners among Southern California counties. Orange County had 27.9% of students classified as English Learners in 2008-2009. This is slightly lower than the 28.4% of 2007-2008. Orange County leads all other Southern California counties in the percentage of English Language learners. Orange County had a slight decrease after an increase 2007-2008 following consistent decreases since 2002-2003.

Santa Ana Unified School District has the highest percentage of English Language Learners with 56.1% of its students designated as English Language Learners. Garden Grove was second with 46.5% Every other school district in Orange County is below the county average with Los Alamitos at the lowest percentage of 2.7%.

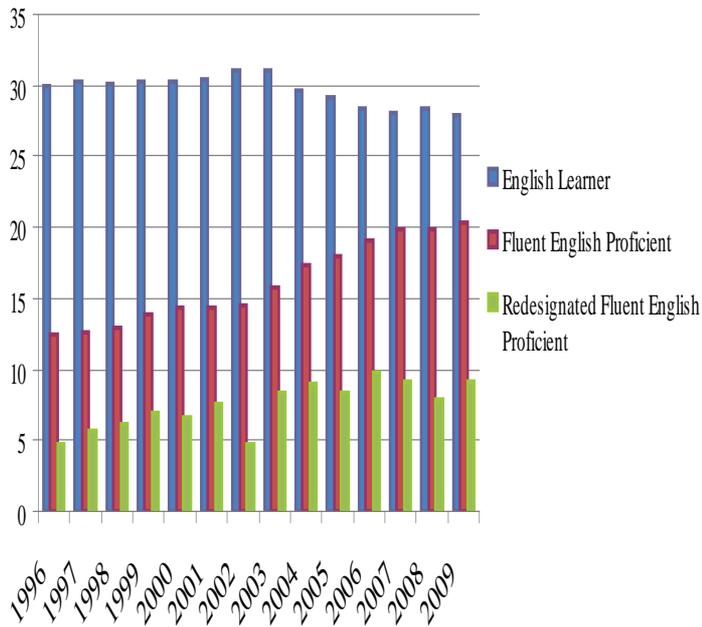
The percentage of students re-designated from English Learner* to Fluent English Proficient** has experienced a steady rise between 1995-1996 and 2005-2006, with a slight decrease starting in 2006-2007. However, the number of students considered initially Fluent English Proficient grew in the 2007-2008 school year rising from 14.5% in 2002-2003 to 20.4% in 2008-2009.

* English Learners students are those students for whom there is a report of a primary language other than English on the state-approved Home Language Survey and who, on the basis of the state approved oral language (grades K-12) assessment procedures and including literacy (grades 3-12 only), have been determined to lack the clearly defined English language skills of listening comprehension, speaking, reading, and writing necessary to succeed in the school's regular instructional programs.

** Fluent English Proficient students whose primary language is other than English and who have met the district criteria for determining proficiency in English (i.e., those students who were identified as FEP (Fluent English Proficient) on initial identification and students redesignated from Limited-English-Proficient (LEP) or English learner (EL) to FEP). Redesignated Fluent to English Proficient students are the percent of students redesignated from English Learners to Fluent English Proficient status since the last count of English proficiency of students (annually). The percent is calculated by dividing the number of redesignated students by the prior year's English Learners count then multiplying by 100.

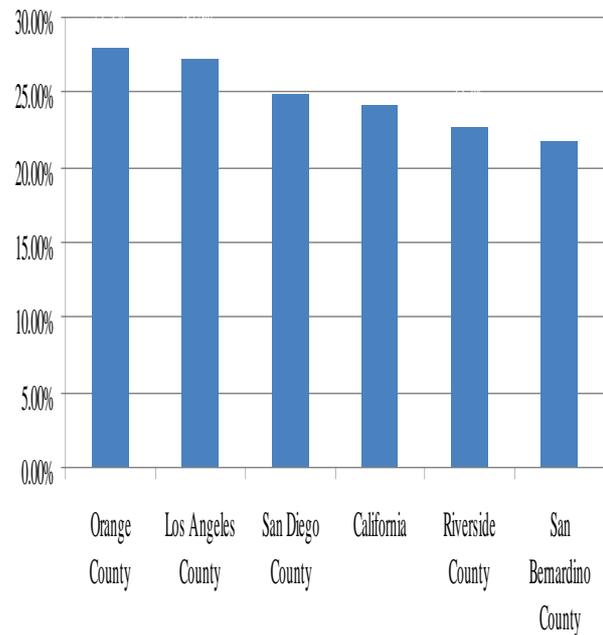
Note: Numbers do not total 100% in the figure above because each category is an independent measure of English language ability in each district.

English Language Learners Orange County, 1996-2009



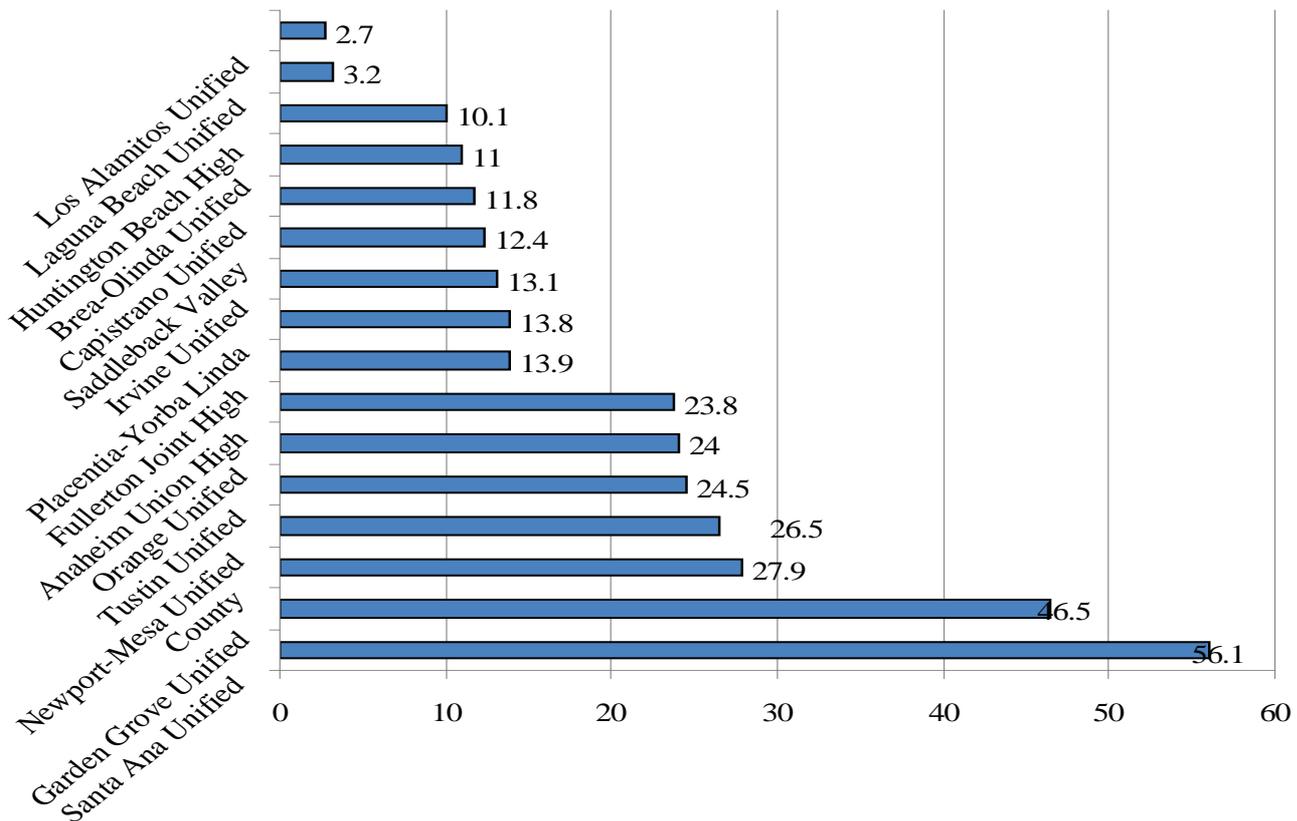
Source: California Department of Education, Educational Demographics Unit

English Learners as a Percent of Total Enrollment, 2008-2009



Source: California Department of Education, Educational Demographics Unit

Percentage of English Learners by District, 2009



Source: California Department of Education, Educational Demographics Unit



DROPOUT RATES

ISSUE STATEMENT

Orange County needs to progress more rapidly in preventing dropouts.

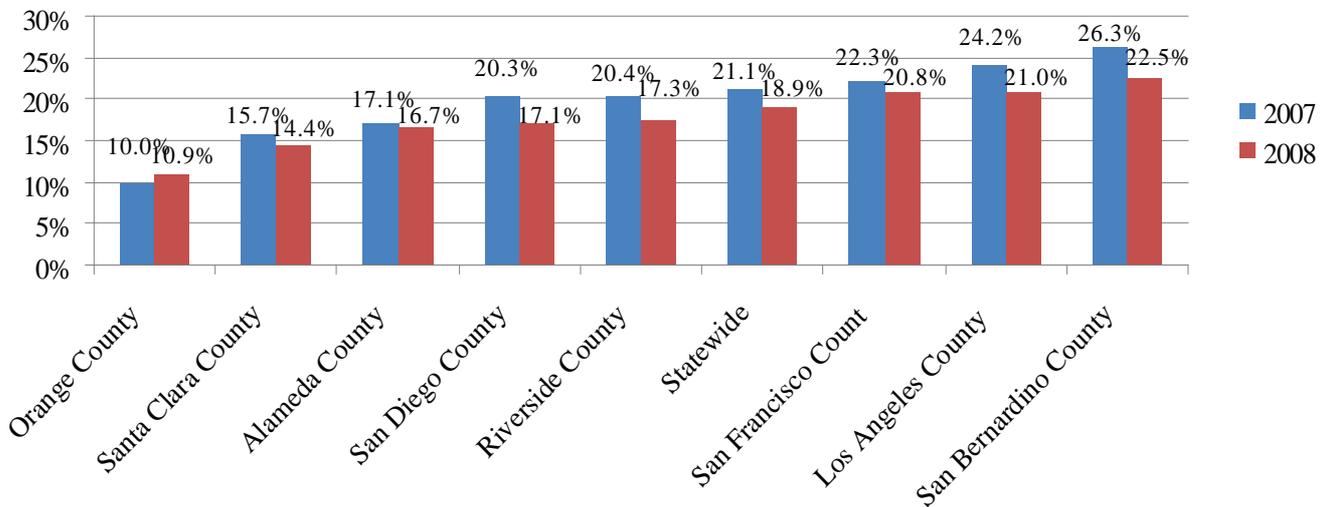
WHY IS THIS AN ISSUE?

The future of Orange County's economy hinges greatly on the quality of education our high school students receive. If our schools fail to prepare students for success in an increasingly competitive business climate, our economic prosperity will not be sustainable long-term. Exit exams are a valuable tool available for measuring cumulative student achievement against their peers in other school districts. The dropout rate alerts decision makers about where the education system has failed students.

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

Orange County has the lowest dropout rate of the major urbanized counties in California. Orange County is at 11.2% in 2008—down from 12.0% in 2007. Orange County's dropout rate is approximately half of the dropout rate for the state. It is four percentage points below its nearest competitor, Santa Clara County.

Adjusted Grade 9-12 Four Year Derived Drop-Out Rate, 2007-2008



Source: California Department of Education, Educational Demographics Unit

2010
2011



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Lasting
Impacts
of the Great
Recession

PREVIEW OF THE NEW "NEW ECONOMY"

ISSUE STATEMENT

Many of the jobs lost during this recession are permanently lost and not expected to ever be reinstated.

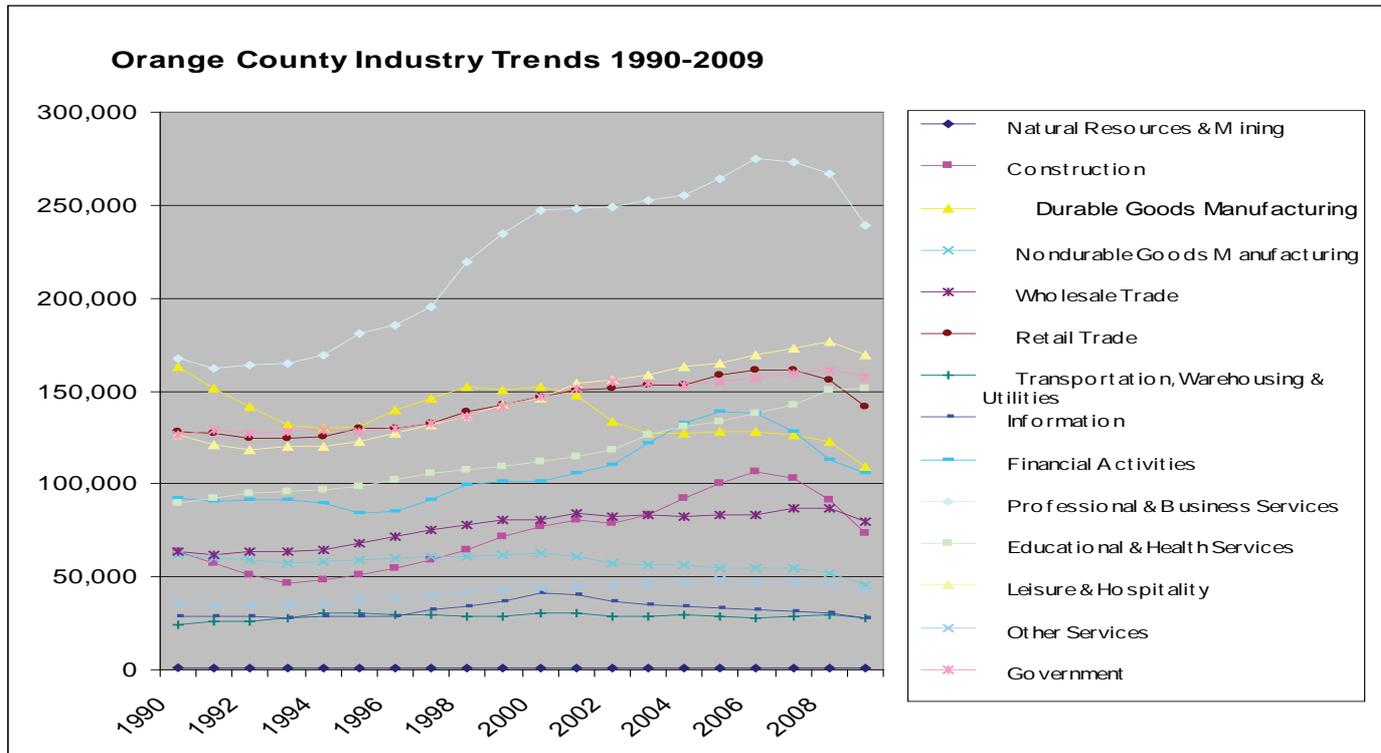
WHY IS THIS AN ISSUE?

The Great Recession starting in 2007 and continuing through 2010 signals a fundamental transformation of the Orange County, State and National economy. No longer can we expect a naturally expanding economy built upon an assumption that Orange County's high quality of life, established high tech industrial development, educated population and proximity to Latin America and Asia will inevitably lead to growing living standards and future prosperity. Even when the Great Recession ends, the impacts will be felt forever. Having experienced one radical economic transformation at the end of the Cold War in the early 1990s, Orange County now faces a similar reassessment of what the "new normal" is and adjusting to the fact that many of the jobs lost during this recession will not be coming back. Given this reality, what will the new "New Economy" in Orange County be built on?

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

At the end of the Cold War in the early 1990s, Orange County faced a fundamental transition in its industrial composition with the downsizing of defense and aerospace businesses and the redeployment of math and science oriented employees and resources towards computer hardware manufacturing and computer programming.

Orange County Industry Trends, 1990-2009



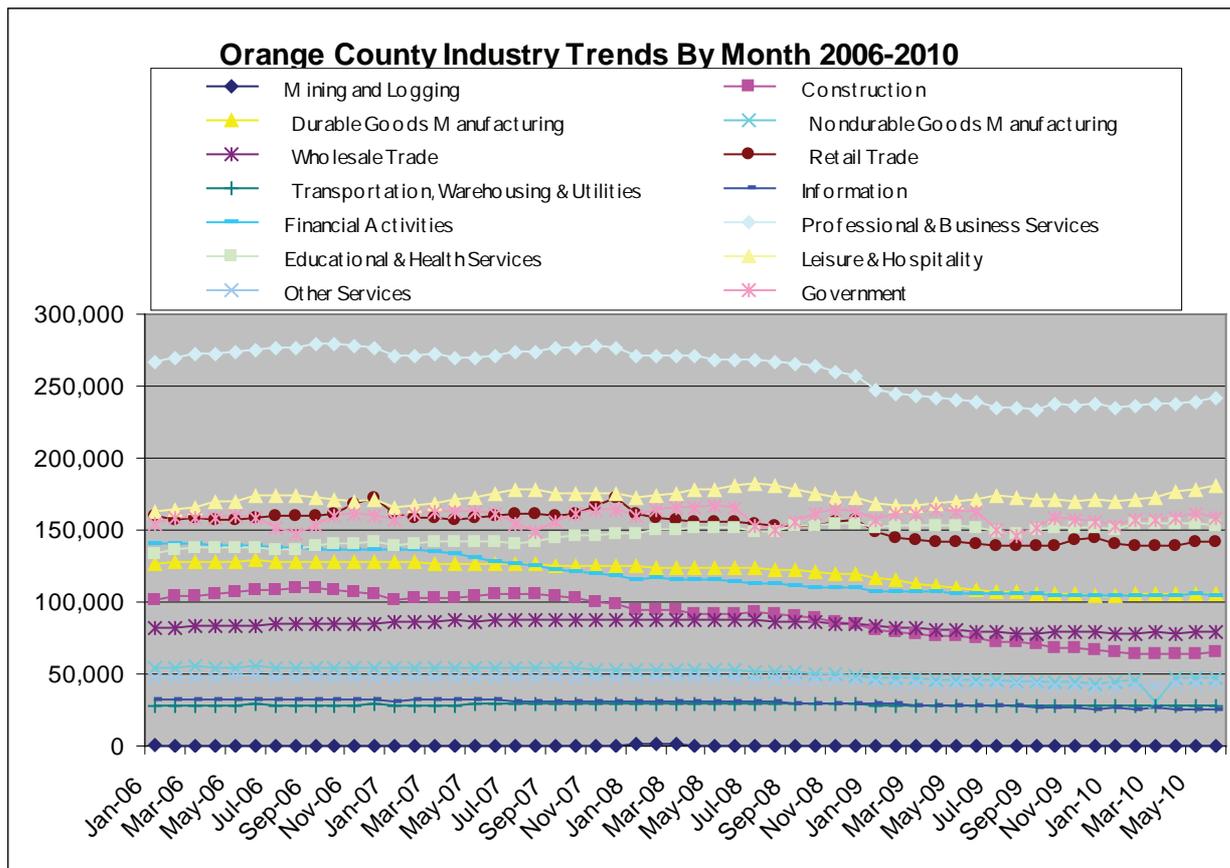
Source: California Employment Development Department

BACKGROUND

Out of this the Information Technology industry was born and durable goods manufacturing in Orange County returned to numbers last seen in the 1980s. However, the story of the 1990s and 2000s became the rapid emergence of Orange County as Business Services hub with employment surging from approximately 175,000 to over 275,000 by 2007. The Leisure and Hospitality/Tourism industry also expanded and Education and Health Services marched forward.

The onset of the Great Recession in 2007 has now once again scrambled Orange County employment and portends a new era. While the total size of Business and Professional Services cluster means that this industry will long remain important in Orange County, the 15% drop in employment between 2006 and 2009 suggests many of the jobs of this industry are no longer viable options. The resurgence in Durable Goods Manufacturing in the 1990s stalled in the in the early 2000s only to further decline as the Great Recession took hold in 2007 with a 36% drop from the peak in 2000. Construction surged 128% between 1993 and 2006 only to collapse by 44% since that time by 2009 with ongoing shrinkage into 2010. Financial Activities collapsed 30% since 2006 as well. Meanwhile Education and Health Services and Tourism march forward with ongoing growth even the face of Orange County-wide job losses exceeding 150,000 since 2006.

Orange County Trends by Month, 2006-2010



Source: California Employment Development Department

A closer look at employment trends by industry on a month-to-month basis since 2006 shows the continuing decline of Construction, Durable Goods Manufacturing and Financial Activities. These job losses since 2006 appear to be permanent.



OCCUPATIONAL TURNOVER

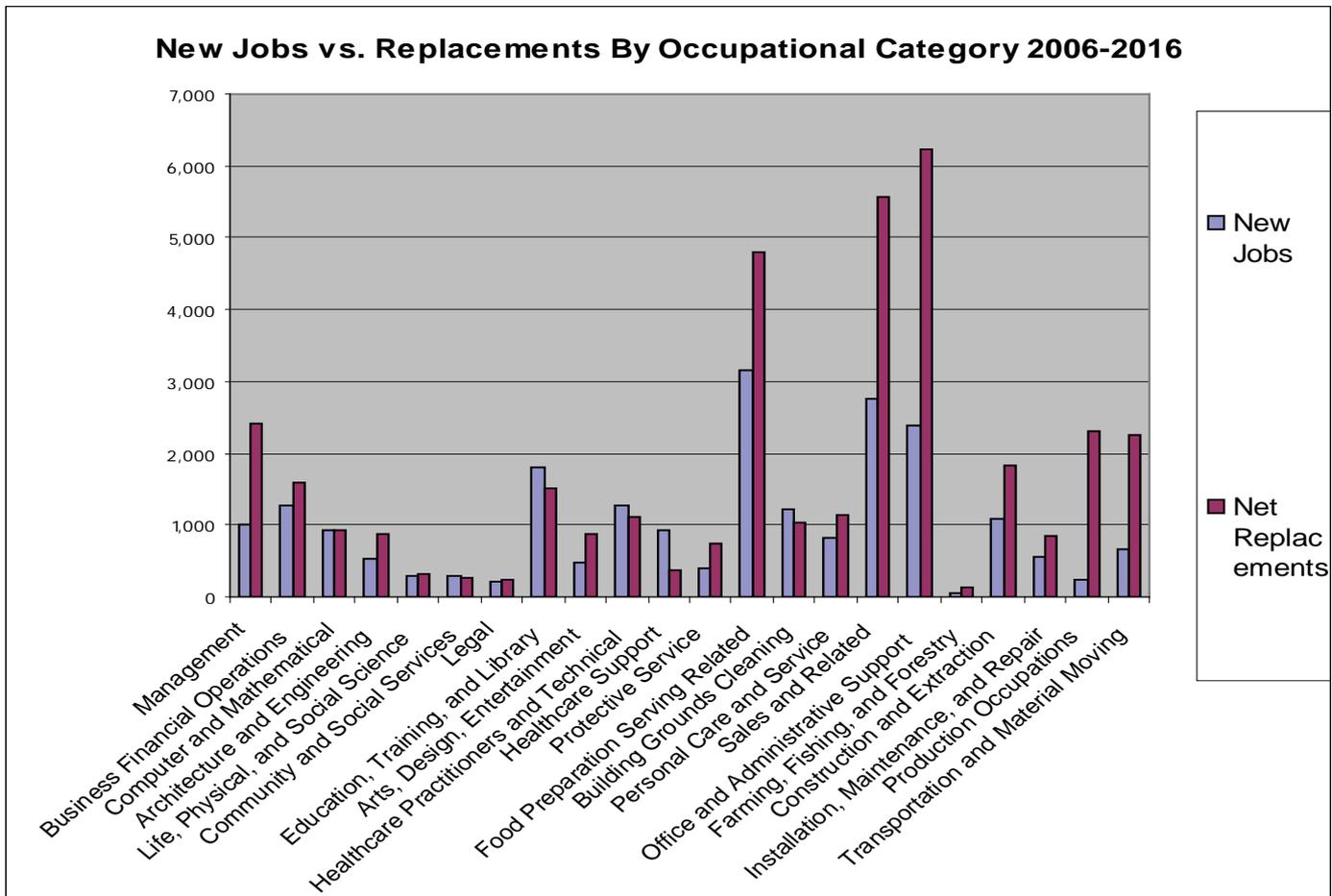
ISSUE STATEMENT

More older workers that had been projected to retire are needing/choosing to continue to work even as youth and young workers entering the workforce hoping to take their places face unprecedented challenges -- historically high unemployment rates, a lack of good-paying entry level job opportunities.

WHY IS THIS AN ISSUE IN ORANGE COUNTY?

As a result of the Great Recession, many older workers that had planned on retiring no longer are able to retire—they can not afford it. But even more so, as the Baby Boomers—the largest generation in American history—age, there are not enough similarly educated workers available to replace them. Job growth has slowed due to economic conditions and the lack of replacement workers with necessary skills has meant older workers need to keep working. As a region built out starting in the 1950s when the Baby Boomers were born and continuing today as the Baby Boomers age, Orange County needs to adjust to their continuing presence in the workforce. In the earlier eras of their parents, at the age they are approaching they would be retiring into prosperity. Instead, they are staying the workforce even as younger generations of Orange County residents clamor for their place in the workforce and prosperity they grew up expecting but can not have yet.

New Jobs vs. Replacements By Occupational Category 2006-2016



Source: California Employment Development Department

HOW DO WE KNOW THIS ISSUE EXISTS IN ORANGE COUNTY?

The California Employment Development Department conducted analyses projecting the number of new and replacement jobs by occupational categories between 2006 and 2016. The data shows that most job openings by 2016 in most occupational categories are not from new job creation, but from replacement job openings from people expected to retire. With the Great Recession, however, many of these retirements will not happen but many of these “replacement jobs” are now actually Baby Boomers staying in their jobs longer than expected.

The likely holdovers in “replacement jobs” are especially concentrated in the lower wage entry level jobs in Office and Administrative Support (Median Annual Wage--\$33,322), Sales (Median Annual Wage--\$29,636), and Food Preparation (Median Annual Wage--\$18,465). Thus “Starter Jobs” for youth and younger workers instead become the “Survival jobs” of aging Baby Boomers seeking an income wherever they can find it since their retirement savings and housing equity are no longer enough for them to survive on without working anymore.

With historically high unemployment rates, youth and younger workers are stuck in a holding pattern either outside of the workforce unemployed and living at home, or postponing the work-world through continuing education. While higher education is often good for the economy in the long-run, the in meantime, life is more difficult for these individuals and they may be that much further behind in preparing for their own retirements some day. Today’s younger workers mature and experience a lower quality of life than their parents did; this will be a severe challenge in Orange County’s future.

Median Annual Wage by Occupational Category

	Median Annual Wage
Management	\$101,226
Business and Financial Operations	\$61,136
Computer and Mathematical	\$74,131
Architecture and Engineering	\$75,229
Life, Physical, and Social Sciences	\$60,985
Community and Social Services	\$46,331
Legal	\$96,066
Education, Training, and Library	\$54,535
Arts, Design, Entertainment, Sports, and Media	\$45,305
Healthcare Practitioners and Technical	\$68,696
Healthcare Support	\$26,048
Protective Service	\$30,392
Food Preparation and Serving Related	\$18,465
Building and Grounds Cleaning and Maintenance	\$21,129
Personal Care and Service	\$21,641
Sales and Related	\$29,636
Office and Administrative Support	\$33,322
Farming, Fishing, and Forestry	\$21,706
Construction and Extraction	\$44,196
Installation, Maintenance, and Repair	\$41,541
Production Occupations	\$26,043
Transportation and Material Moving	\$23,960

Source: California Employment Development Department

2010
2011



ORANGE
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Indicators





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Dr. Wallace Walrod, Project Director, Orange County Business Council
Alicia Berhow, Orange County Business Council
Dan Nasitka, Orange County Business Council
Estela Marie Lactao Go, Orange County Business Council
Roger Morton, Orange County Business Council

Orange County Business Council
2 Park Plaza, Suite 100
Irvine, CA 92614
www.ocbc.org



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