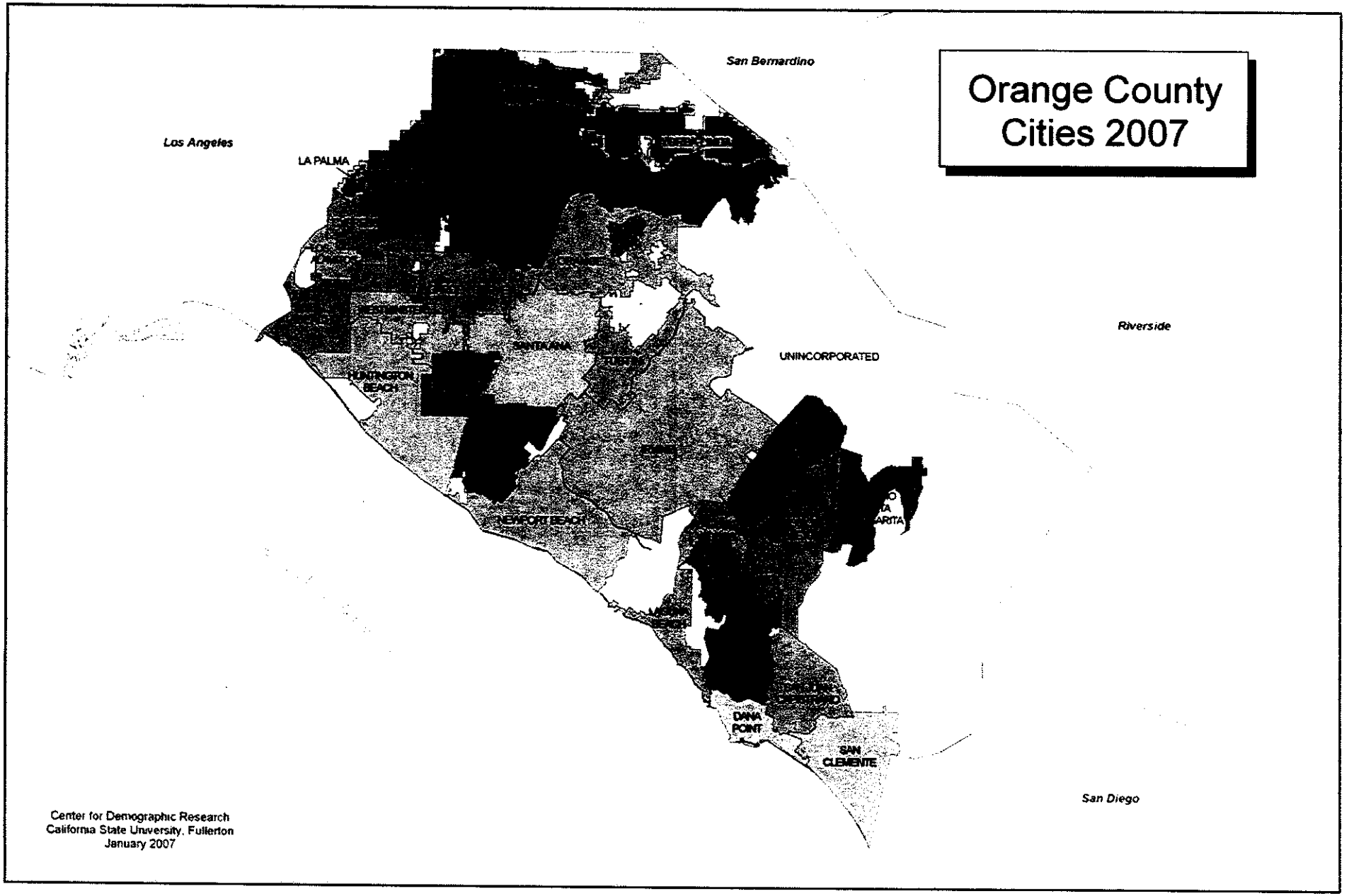
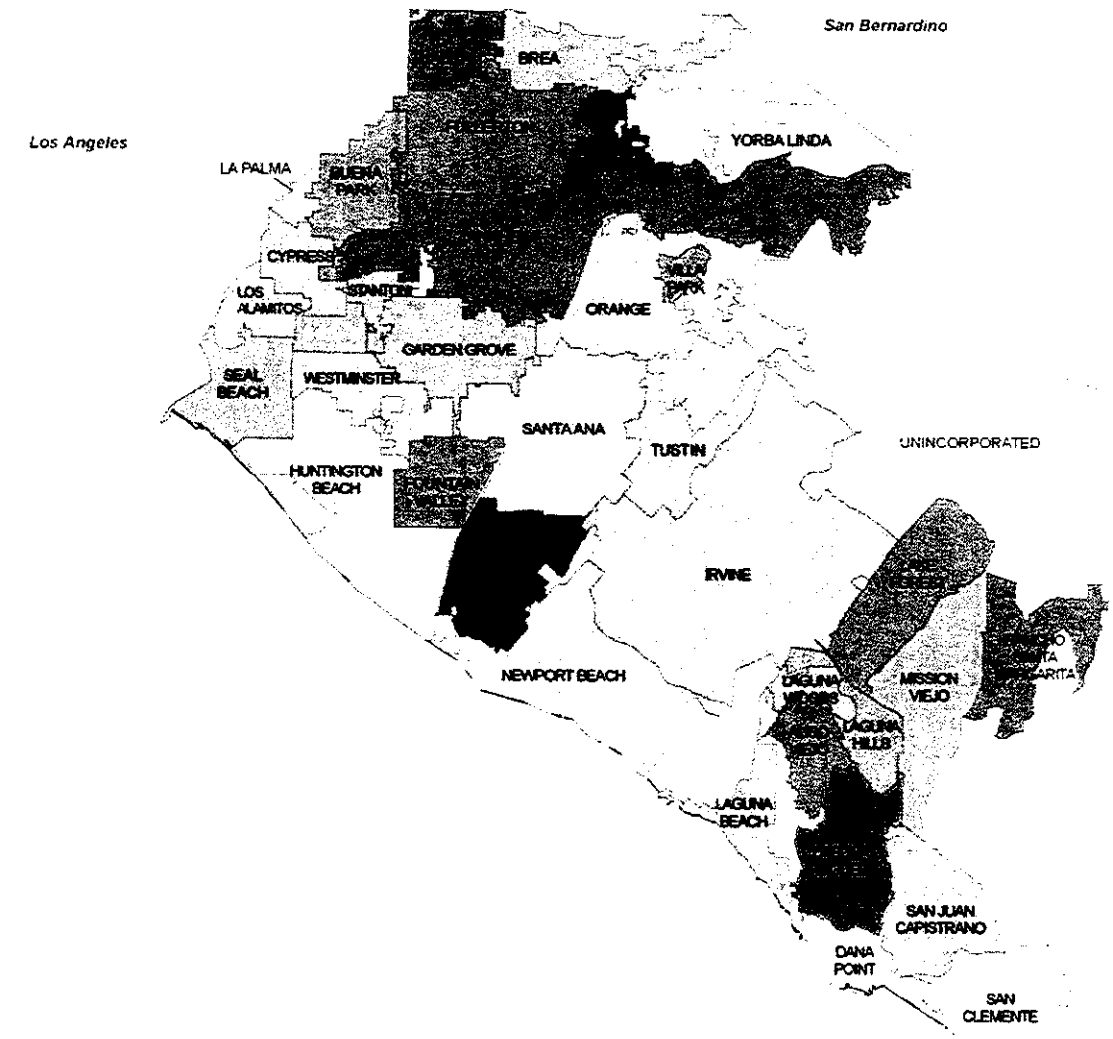

Orange County
Cities 2007
San Bernardino
Los Angeles
LA PALMA
Riverside
UNINCORPORATED
HUNTINGTON BEACH
NEWPORT BEACH
DANA POINT
SAN CLEMENTE
San Diego
Center for Demographic Research
California State University, Fullerton
January 2007

Orange County Cities 2007



Center for Demographic Research
California State University, Fullerton
January 2007

Proposed North County Economic Development Initiative

In light of a 2006 workforce report by the Orange County Business Council ("Orange County 2025: A Wake Up Call?"), future job growth appears to emanate from South County. What do these trends signal for North Orange County?

Questions:
What could North Orange County's economic complexion look like/be comprised of?

What do trends suggest?

Where/what is our competitive advantage?

What role can/should the university play vis-à-vis:

- city economic development managers
- chambers of commerce

Creative Economy
"In today's economy, only organizations that find ways to trap the creativity of their employees are likely to survive." (p. 86; What Business Wants from Higher Education – Oblinger and Verville, Oryx Press, 1998)

Creativity requires:

- Analytical and practical intelligence
- Ability to question assumptions
- Make mistakes (learn from them)
- Ability to take sensible (calculable) risks
- Define/redefine problems
- Toleration of ambiguity

Creative industries/fields:

- Architecture/Interior Design
- Art Galleries
- Communication Arts
- Digital Media
- Entertainment
- Fashion
- Furniture and Accessories
- Product and Industrial Design
- Toys
- Visual and Performing Arts providers (theater/dance and performing arts companies/museums)

Developed by Owen Holmes, Associate Vice President
Public Affairs and Government Relations, July 2007

Excerpted from The Chronicle of Higher Education

September 15, 2006

Regions and Universities Together Can Foster a Creative Economy

By RICHARD FLORIDA

"In most cases, however, communities and universities either ignore each other or engage in peaceful coexistence. To spur local development, communities and universities need to collaborate as partners across a host of issues, such as actively recruiting students into the labor market, working to help retain foreign students, and developing amenities that attract and retain young people.

The old model of a university pumping out research results and educated students, or even commercial innovations and start-up companies, is no longer sufficient for the era of creative-knowledge-based capitalism. Universities and their communities have taken the technology agenda seriously; now they must do the same with talent and tolerance. The places that don't will find the discoveries and talent they produce migrating away. Those that focus on all three T's will realize considerable advantage in generating innovations, attracting and retaining talent, and creating sustained prosperity."

Richard Florida is a professor of public policy at George Mason University and the author of The Rise of the Creative Class *(Basic Books, 2002) and* The Flight of the Creative Class *(Harper Collins, 2005). This essay is based on a longer technical report available at http://creativeclass.org*

How Is the Creative Class Measured?

Richard Florida's measure of creative class, discussed in his book *The Rise of the Creative Class*, included occupations that he judged to entail high levels of creativity. In practice, this turned out to be virtually all occupations where incumbents tend to have high levels of schooling. ERS analysts refined the creative class measure in two ways. First, they used O*NET, a Bureau of Labor Statistics data set on skills generally used in occupations, to identify occupations in Florida's list that typically involve thinking creatively. This skill element is defined as "developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions." Second, the analysts screened out as many occupations as possible that typically require high levels of creativity (such as schoolteachers, judges, and medical doctors) but whose numbers are proportional to the residential population they serve. These refinements resulted in an estimated creative class share of the workforce of 22 percent in 1990 (23 percent in metro areas and 14 percent in nonmetro areas), a much smaller share than the 30 percent found using Florida's original measure. While by no means perfect, the amended measure is closer than Florida's original measure to the conceptual meaning of creative class. Using Florida's original measure, 1990-2004 job growth in nonmetro creative class counties was 30 percent, much lower than the 41 percent found using the revised measure.

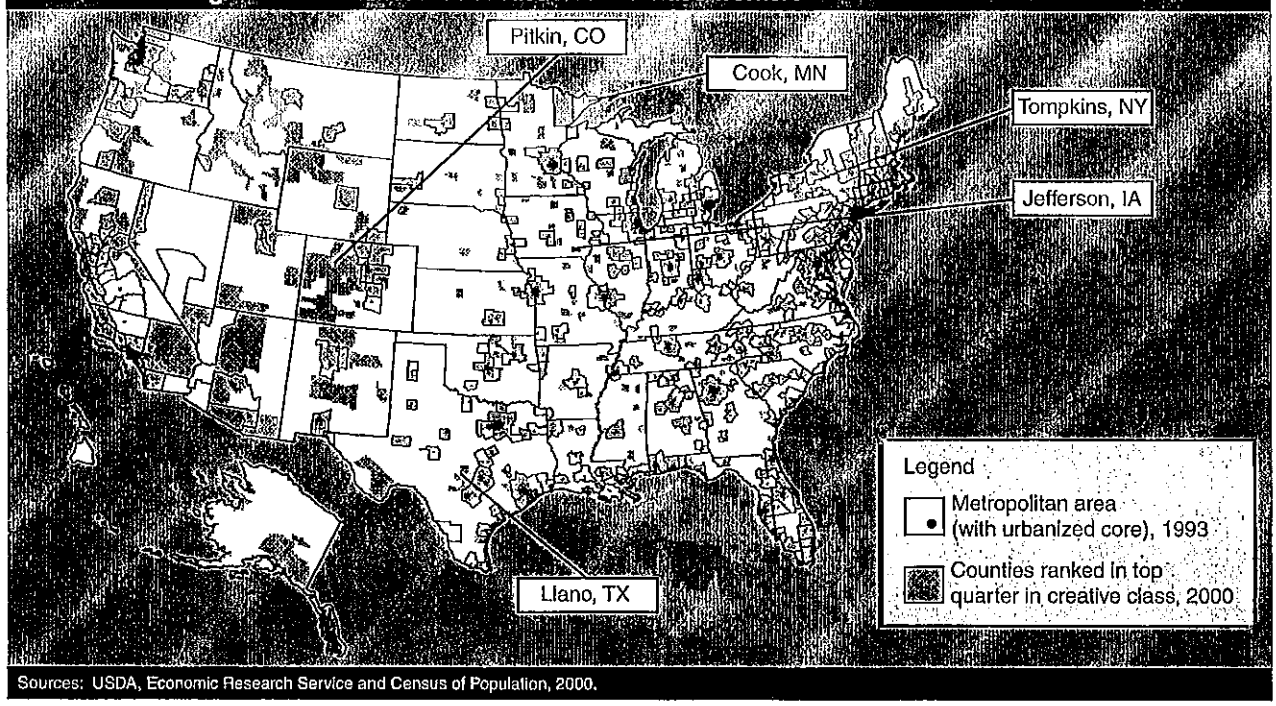
The Creative Class Theory

Many economists and geographers point to high-tech firms, research and development (R&D) activity, and patents as sources of new economic growth, but regional scientist Richard Florida focuses on people, arguing that the knowledge and ideas requisite for economic growth are embodied in occupations involving high levels of creativity. These occupations constitute the "creative class," the ultimate source of economic dynamism in today's "knowledge economy."

The geographic mobility of the creative class is central to Florida's thesis. He argues that people in these occupations tend to seek a high quality of life as well as rewarding work, and they are drawn to cities with cultural diversity, active street scenes, and outdoor recreation opportunities. Good local universities alone will not lead to local economic dynamism as graduates may move to more attractive places upon obtaining their degrees. In this context, the key to local growth is to attract and retain talent, as talent leads to further job creation.

While developed with major metropolitan areas in mind, the creative-class thesis seems particularly relevant to rural areas, which lose much of their young talent as high school graduates leave, usually for highly urban environments. These

Rural counties high in natural amenities attract creative-class workers



Sources: USDA, Economic Research Service and Census of Population, 2000.

High creative-class nonmetro counties gained jobs faster than other nonmetro counties

County type	Creative class counties, 1990	
	Low/middle	High[1]
	Percent change in jobs, 1990-2004	
Metropolitan	31	39
Nonmetropolitan	18	44
Not adjacent to metro	16	40
High-amenity county	26	60
Recreation county	32	61
Not recreation county	16	28
Percent college graduates	16	46

[1] Ranked in top quarter of all counties.
Source: Bureau of Economic Analysis, Regional Economic Information System files.

canoeing area, but it also has the oldest active artist colony in Minnesota. With a playhouse and a music association, it is where "culture merges with woods and water" (Grand Marais Chamber of Commerce).

Do Areas With More Creative Class Show More Creativity?

A critical link in the creative-class argument is that places with a higher concentration of creative occupations actually have more creative activities. One often-used measure of local creativity is the ratio of patents to employment or population. The 1990s patent rate (number of patents in 1990-99 per 1,000 employed in 1990) was, on average, much higher in metro (4.9) than nonmetro counties (1.7)—not surprising given the urban location of research universities and R&D activities. However, within nonmetro areas, the average patent rate was twice as high in creative-class counties (3.3) as in other counties (1.5). Creative-class counties tended to generate more patents whether or not universities were present. Thus, while the aforementioned Tompkins and Jefferson Counties were in the top quarter of all counties ranked by patent rate, so were Llano and Pitkin Counties (although not Cook County).

The adoption of new technologies and ideas is a natural spinoff of knowledge and creativity. Rural economies have few firms making high-tech products, but the incorporation of these products in production and communications is important for competitiveness. While no economy-wide indicators of adoption are available, the 1996 ERS Manufacturing Survey measured the adoption of advanced production and information technologies and new management practices. A scale of 16 adoption items—ranging from computer-assisted design to satellite communications to self-directed work teams—indicates advanced technology use. Those establishments using nine or more practices were considered "high adopters." Branch plants aside (their technology use is likely to be influenced by their headquarters), establishments in nonmetro creative-class counties were more likely to be high adopters (20 percent) than establishments in other nonmetro locations (15 percent). Creative-class presence also made a difference in metro counties.

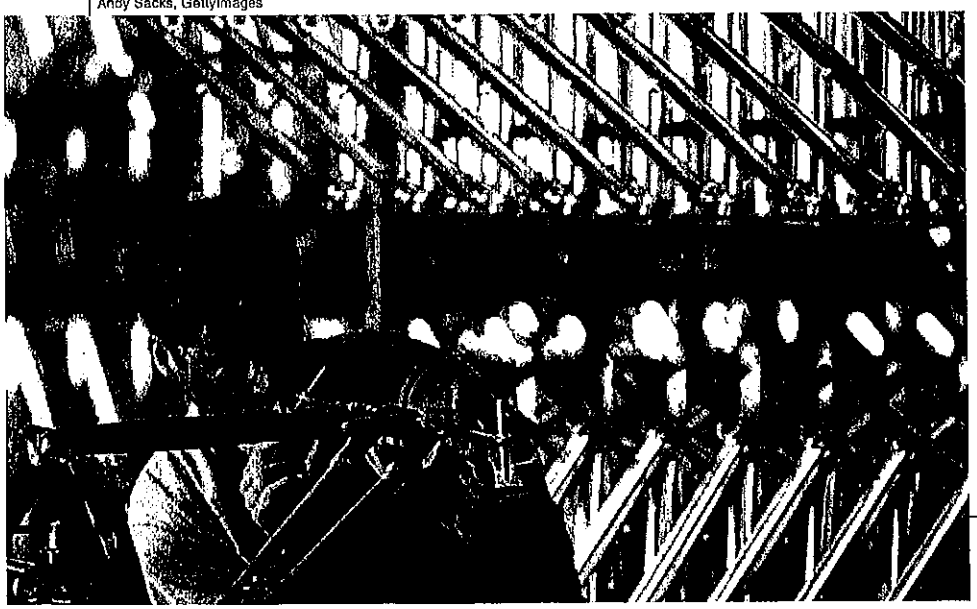
Counties with high proportions of creative-class residents appear to have more creative activity with regard to patents and technology adoption. It is not clear, however, if this simply reflects self-selection (that is, people who invent and/or adopt new technologies and practices may tend to locate in high-amenity, creative-class settings) or if high creative-class environments engender more patenting and technology adoption.

Is the Rural Creative Class Associated With Local Growth?

The creative class was highly associated with growth in rural areas in 1990-2004. Other nonmetro counties grew relatively slowly in the 1990s, but creative-class nonmetro counties tended to gain jobs over the period at a faster rate than their metro counterparts.

While rural creative-class counties may grow because of the presence of the cre-

Andy Sacks, GettyImages



A Fit Workforce for a Flat World

To succeed in a "flat," hyper-competitive global marketplace, Orange County must continue to cultivate a "fit" local workforce.

A popular notion in the contemporary business lexicon is that the world is becoming flatter by the day. Recent "flattening" trends directly affecting Orange County -- innovation and diffusion of information technology throughout workplaces, increased practice of outsourcing and off-shoring, and R&D and business process ventures in India and China -- underscore that our marketplace, and competitive landscape, extends well beyond our county, state and national borders.

How will these trends shape Orange County's key workforce demands? The 2006 *State of the County Workforce* seeks to answer that question not only for this year, but also from a longer-term perspective. For this purpose, included in this year's report is a CD-ROM that forecasts key workforce trends for the County through the year 2025.

What does the future hold for Orange County's economy and workforce? Based on our projections, 2025 will see a substantial change in the composition of our economy. Several key industry clusters will generate rapid growth in employment because of key demographic changes and competitive advantages. At the same time, some of our growth clusters will grow more modestly, while a few clusters are projected to lose ground. Orange County trends forecasted in our 2025 projections include:

- Business and Professional Services employment will grow by 105%, Health Services will grow by 72%, and the Communications and Computer Software clusters will also grow by over 70%.

- Employment in Computer Hardware and Defense/Aerospace could contract considerably. These clusters are especially susceptible to any Orange County and California-specific disadvantages in business climate that may be experienced going forward.

- Other sectors, such as the Biomedical industry and Energy and Environmental clusters are projected to see stable increases over the next two decades.

- Average salaries are expected to grow by 119%, while the price of a median single family home in Orange County is projected to increase far faster.

The demographic face of Orange County will change as well. Today, about 48% of our population is Caucasian. In 2025, Whites will constitute just 34% of the County's population while Latinos will make up 43%. Ethnicity aside, the average county resident will be older. In 2025, people 45 years old and over will constitute about half of the County's population. Today, the same age group accounts for 30% of the population.

2025 may appear to be in the distant future, but it's closer than you might think. Kids who just entered the first grade this year will enter high school in 2014-2015. Many of these students will go onto college in 2018 and graduate with their degree in 2022. What opportunities will await them?

Ten Lowest Literacy Occupations

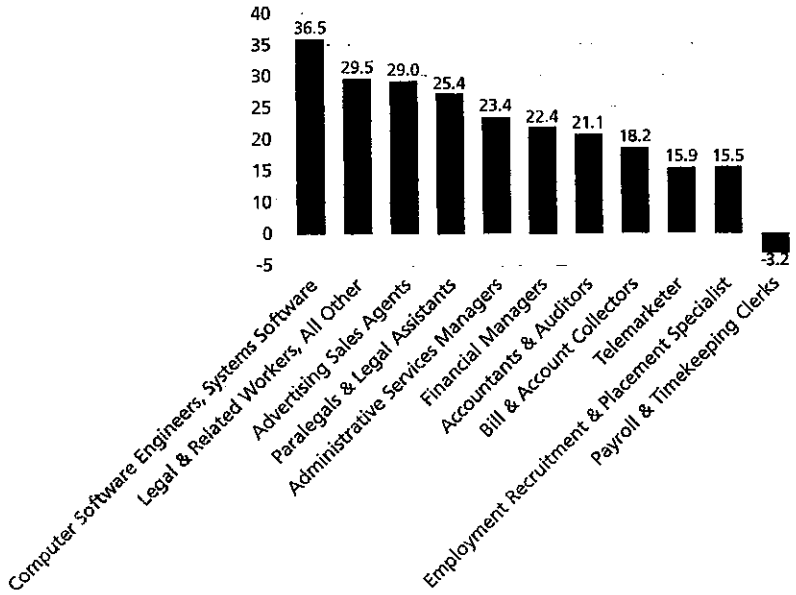
Occupation	% Jobs Low Literacy	% Jobs High Literacy	Orange County Job Openings, 2002-2012	Orange County Average Wage 2005
Health services (e.g. nursing aides)	65%	35%	1,920	$11.15
Miscellaneous farming/fishing/hunting (e.g. farm worker)	63%	37%	150	$8.13
Cleaning equipment handlers/laborers (e.g. construction laborers)	63%	37%	3,080	$14.79
Miscellaneous assembler/operator/fabricator (e.g. textile operator)	61%	39%	2,070	$9.03
Fabricator/assembler/inspector (e.g. welder, cutter, solderer, and brazer)	61%	39%	620	$14.02
Transport operative (e.g. truck drivers, light)	57%	43%	3,470	$12.97
Miscellaneous services (e.g. maids and housekeeping cleaners)	56%	44%	26,950	$8.56
Construction crafts (e.g. carpenters)	49%	51%	9,240	$22.30
Manager/operators in agriculture	49%	51%	120	$19.35
Personal service occupations (e.g. hairdressers)	45%	55%	12,080	$9.77
Total, Ten Lowest Literacy Occupations			**59,700**	**$13.01**

Ten Highest Literacy Occupations

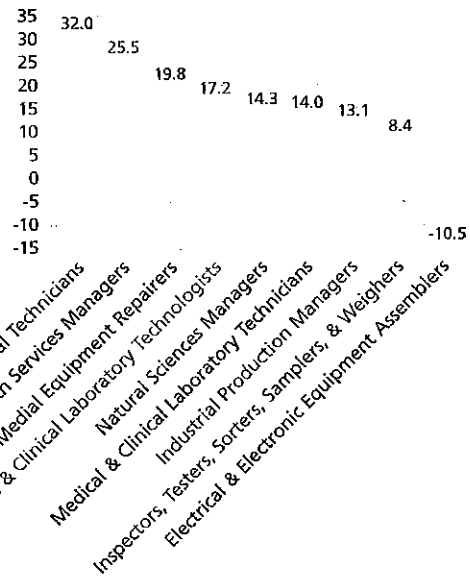
Occupation	% Jobs Low Literacy	% Jobs High Literacy	Orange County Job Openings, 2002-2012	Orange County Average Wage 2005
Math/computer scientists	2%	98%	12,130	$36.78
Miscellaneous health related (e.g. pharmacists)	3%	97%	10,340	$48.49
Accountants/auditors	3%	97%	2,570	$30.18
Architects/surveyors	4%	96%	1,120	$32.26
Natural scientists (e.g. life scientist)	4%	96%	410	$36.00
Health diagnostics (e.g. physicians)	5%	95%	620	$65.95
Engineers (e.g. civil engineer)	10%	90%	2,470	$36.20
Teachers (e.g. secondary school teacher)	10%	90%	7,350	$29.53
Registered nurses	11%	89%	3,770	$32.28
Misc. management (e.g. management analysts)	12%	88%	6,870	$32.34
Total, Ten Highest Literacy Occupations			**47,650**	**$38.00**

Sources: National Center for the Study of Adult Literacy and Learning; California Employment Development Department

Percent Growth of Orange County Business and Professional Services Occupations 2002-2012



Percent Growth of Orange County Biomedical Occupations 2002-2012



Source: California Employment Development Department