

# The Next Decade: Industries and Occupations for the Los Angeles Workforce



## EXECUTIVE SUMMARY



This report was commissioned by the City of Los Angeles Workforce Investment Board and was made possible through federal Workforce Investment Act funds administered by the U.S. Department of Labor.

The City of Los Angeles Workforce Investment Board would like to thank Labor Secretary Hilda Solis for her support of the City's workforce development efforts.

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This report was prepared by the Economic and Policy Consulting Practice of the Los Angeles County Economic Development Corporation (LAEDC).

As the Southern California region's premier economic development organization, the mission of the LAEDC is to attract, retain and grow businesses and jobs in the regions of Los Angeles County, as well as to identify trends and to effect positive change on the local economy.

The LAEDC Consulting Practice offers unbiased, fee-based custom economic and policy research for public agencies and private firms. The Consulting Practice focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in water, transportation, infrastructure and environmental policy. Projects are selected based on their relevance to the *L.A. County Strategic Plan for Economic Development* and the potential for the research to shape policy that supports the LAEDC mission.



ANTONIO R. VILLARAIGOSA  
MAYOR

February 14, 2011

Dear Friends,

With unemployment in the City of Los Angeles at 14 percent at the end of 2010, it is vitally important that we do everything possible to create a business environment that encourages job growth and fund initiative that provide workers with the skills required for these new employment opportunities. "The Next Decade: Industries and Occupations for the Los Angeles Workforce" is a critical step in the process.

This report describes the major industry clusters in the Southland that will likely expand their operations and add living wage jobs over the next 10 years. The City of Los Angeles Workforce Investment Board (WIB) and its myriad partners (community colleges, non-profit agencies, employer associations, economic development organizations, labor unions, etc.) will now use the report's findings to adopt strategic workforce development policies and undertake joint workforce development programs.

I want to commend the WIB for its foresight in commissioning the report, which was prepared by the Los Angeles Economic Development Corporation.

I also want to comment the WIB for its efforts to date in overseeing an integrated workforce development delivery system of 18 WorkSource/One-Stop Career Centers, 13 OneSource/Youth Opportunity Centers, and an online career and hiring website (JobsLA.org).

This system has assisted over 171,000 jobseekers in securing employment and advancing their careers, 15,700 youth through summer job, internship and work experience placements, and 1,400 businesses and employers with staffing and recruitment services.

For additional information on the City's workforce development system and to view the full report, please visit [www.wib.lacity.org](http://www.wib.lacity.org).

Very truly yours,

ANTONIO R. VILLARAIGOSA  
Mayor





January 2, 2011

Dear Colleagues:

On behalf of the City of Los Angeles Workforce Investment Board (WIB), I'm pleased to present the report, *The Next Decade: Industries and Occupations for the Los Angeles Workforce*.

Produced by the Los Angeles County Economic Development Corporation, *The Next Decade: Industries and Occupations for the Los Angeles Workforce* provides an industry cluster analysis for the Los Angeles County in general and the WIB's Service Delivery Area. The report provides a basis upon which the WIB can focus its efforts and where to invest its limited resources for sector training for Los Angeles workers.

This report provides the foundation for which we will use to analyze and forecast population growth and employment projections for 2010 through 2020, identify promising industries for job growth and retention, export-orientation and industries that serve the population, and provide the critical intelligence for these strategic decisions.

We all wait with great anticipation when our economy will recover from this economic malaise. While we can't predict when or how quickly the national economic recovery will happen, we can prepare ourselves for future opportunities. Here locally, we must be proactive and provide our workforce with the requisite training and education they need to compete for the jobs of tomorrow; we must invest in our workforce if we are to remain a globally competitive region.

Together – business, labor, education and government – must work in partnership to achieve our mission to develop policy and strategy to ensure that the business community has access to a trained workforce and workers have access to quality jobs.

Thank you for your continued support and interest in workforce development. For more information on the WIB's efforts, please visit [www.wib.lacity.org](http://www.wib.lacity.org). We look forward to working with the community to achieve our shared goals.

Sincerely,

A handwritten signature in cursive script that reads "Charles Woo".

Charles Woo, Chair  
City of Los Angeles Workforce Investment Board



# The Next Decade: Industries and Occupations for the Los Angeles Workforce

In partnership with Mayor Antonio Villaraigosa and the Los Angeles City Council, the City of Los Angeles Workforce Investment Board (WIB) provides vision, coordination and direction for the City's workforce development activities. The Board develops policy and strategy to ensure businesses have access to a trained workforce and workers have access to quality jobs.

Funded primarily through the federal U.S. Department of Labor Workforce Investment Act (WIA), the WIB oversees the City's \$45 million workforce delivery system of 18 WorkSource Centers for Adults and 13 OneSource Centers for youth. These career centers offer a wide range of employment-related services to both job seekers and employers.

A primary strategy of the WIB is to develop and invest in sector-based training programs. By commissioning the Los Angeles County Economic Development Corporation (LAEDC) to create *The Next Decade: Industries and Occupations for the Los Angeles Workforce*, the WIB seeks to identify regional industries that are promising to target for job retention and expansion efforts and investment in sector training programs.

This report provides an economic overview of Los Angeles County in general and of the City WIB Service Delivery Area (SDA) in particular to provide a basis upon which the board can focus its efforts. We provide an industry cluster analysis of the economic base of the region, highlighting differences between Los Angeles County and the City WIB SDA, and prepare a ten-year employment forecast at the county level, highlighting those industries which are expected to grow.

Using the forecast and data on each industry's presence and strength in the City WIB SDA, we identify those industries which are most promising to target for job retention and expansion efforts. For each identified target industry, we provide detailed occupational data.



## City of Los Angeles Workforce Investment Board Service Delivery Area

The City of Los Angeles Workforce Investment Board service delivery area (City WIB SDA) stretches across vast areas of Los Angeles County, from the Port of Los Angeles in the south to Sylmar in the north, and from West Hills in the west to the I-710 in the east.



Sources: LA City WIB; ESRI

Because the City WIB SDA covers a very large geographic area encompassing a variety of socio-economically diverse communities, we identify the following sub-regions, defined by contiguous zip codes: the Valley, Hollywood/West Los Angeles City, Downtown, East Los Angeles City, South Los Angeles City, and Harbor Gateway.<sup>1</sup>

Population and Income (2010) Los Angeles County and City of Los Angeles WIB SDA Sub-Regions					
	Population *	Households	Average Household Size	Median Household Income	Per Capita Income
The Valley	1,652,267	550,934	2.96	\$61,073	\$29,331
Hollywood/ West LA	1,082,130	454,770	2.32	48,011	31,387
South City of LA	814,082	223,932	3.59	33,527	13,241
East City of LA	502,828	142,234	3.48	41,498	15,890
Harbor Gateway	267,973	85,558	3.08	49,585	19,849
Downtown LA	107,641	36,239	2.4	18,142	16,250
<b>City of Los Angeles WIB SDA</b>	<b>4,426,921</b>	<b>1,493,667</b>	<b>2.9</b>	<b>\$49,009</b>	<b>\$24,456</b>
<b>Los Angeles County</b>	<b>10,240,505</b>	<b>3,292,577</b>	<b>3.06</b>	<b>\$54,755</b>	<b>\$24,448</b>

\* The population of the WIB SDA exceeds the population of the City proper since the service delivery area extends beyond the City's boundaries.  
Source: ESRI BAO

Household size is on average smaller in the City WIB SDA than in Los Angeles County but ranges substantially across sub-regions, from rather small households in Hollywood/West LA City and downtown to larger households in South Los Angeles.

Median household income is approximately ten percent lower in the City WIB SDA than in Los Angeles County, but per capita income is approximately the same.

Compared to Los Angeles County, the share of the population with at least a high school diploma (or higher) is slightly smaller in the WIB SDA, but the region has a relatively larger share with a bachelor's degree or higher.

Educational Attainment of Population 25 Years and Older (2010) Los Angeles County and City of Los Angeles WIB SDA				
	Los Angeles County		City of LA WIB SDA	
	Number	% of total	Number	% of total
No High School Diploma	1,546,460	24.3	756,537	27.4
High School Graduate	1,431,907	22.5	579,827	21.0
Some College, No Degree	1,126,433	17.7	452,818	16.4
Associate Degree	432,754	6.8	162,904	5.9
Bachelor's Degree	1,196,438	18.8	530,128	19.2
Graduate / Professional Degree	623,675	9.8	281,630	10.2
<b>Total *</b>	<b>6,364,031</b>	<b>100</b>	<b>2,761,083</b>	<b>100</b>

\* May not sum due to rounding  
Source: ESRI BAO

<sup>1</sup> Socio-economic and demographic data for these sub-regions, along with maps showing their geographic definition, appear in the Appendix.

## Industry Clusters

We review the overall size, performance and characteristics of the economic base of Los Angeles County by analyzing its industrial structure as organized into industry clusters.

We identify fifteen export-oriented industry clusters that are the key drivers of the regional economy, and six population-serving industry clusters which, while not traditionally considered targets for development, are significant employment generators.

Cluster Employment (2008) Los Angeles County and City of Los Angeles WIB SDA				
	Los Angeles County		City of LA WIB SDA	
	Number	% of total	Number	% of total
<b>Export-Oriented Industry Clusters</b>				
Health Services and Biomedical	364,157	8.7	148,750	7.9
Professional and Business Services	267,898	6.4	142,389	7.5
Entertainment	262,011	6.3	155,987	8.2
Wholesale Trade	159,127	3.8	52,664	2.8
Technology	151,009	3.6	47,489	2.5
Higher Education	130,697	3.1	63,761	3.4
Materials and Machinery	120,262	2.9	32,933	1.7
Goods Movement	115,198	2.8	57,946	3.1
Fashion Design, Manufacturing, Wholesaling	104,175	2.5	59,263	3.1
Financial Services	103,973	2.5	50,503	2.7
Tourism and Hospitality	84,436	2.0	36,699	1.9
Food Products	63,544	1.5	22,596	1.2
Furniture and Home Furnishings	35,720	0.9	11,024	0.6
Automotive Manufacturing and Wholesaling	22,688	0.5	6,503	0.3
Jewelry Manufacturing and Wholesaling	6,567	0.2	5,306	0.3
<b>Export-Oriented Clusters Total</b>	<b>1,991,462</b>	<b>47.8</b>	<b>893,812</b>	<b>47.2</b>
<b>Population-Serving Industry Clusters</b>				
Retail Trade	418,264	10.0	160,370	8.5
Food Services and Drinking Places	286,974	6.9	121,356	6.4
Construction	145,652	3.5	56,523	3.0
Real Estate	54,226	1.3	26,314	1.4
Repair and Maintenance	40,948	1.0	16,479	0.9
Waste Management and Remediation Services	9,016	0.2	2,874	0.2
<b>Population-Serving Clusters Total</b>	<b>955,080</b>	<b>20.6</b>	<b>383,916</b>	<b>20.3</b>
<b>Non-classified industries</b>	<b>1,222,157</b>	<b>31.6</b>	<b>614,970</b>	<b>32.5</b>
<b>Total *</b>	<b>4,168,699</b>	<b>100.0</b>	<b>1,892,698</b>	<b>100.0</b>

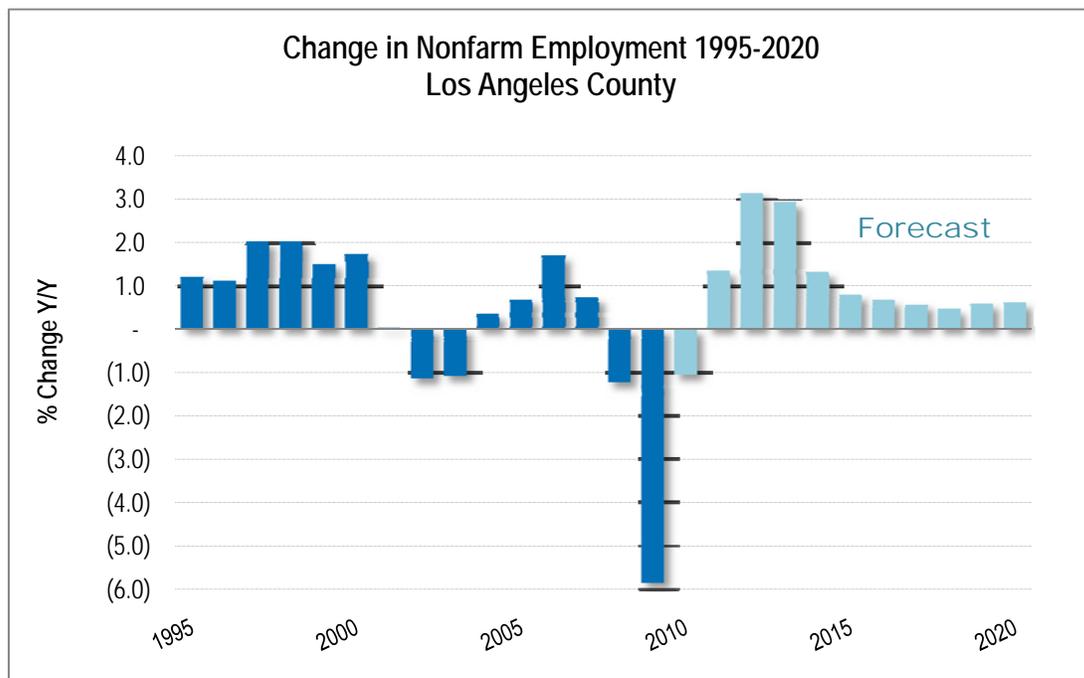
\* May not sum due to rounding  
Sources: CA EDD; LAEDC

At the county level, the Health Services and Biomedical industry cluster is the largest, employing 364,157 people in 2008. In terms of relative size, this was not the largest cluster in the City of LA WIB SDA, though it employed 148,750 people. The largest cluster in the WIB SDA was the Entertainment cluster, employing 155,987 people.

For each industry cluster, we report the number of establishments, the employment, the total payroll and the total output in Los Angeles County in 2008 (the most recent year for which data is available). We provide a breakdown of employment in the cluster by industry (or sub-industry) and we report the average annual wage by industry (or sub-industry) at the county level. In addition, we report the number of establishments, the total employment and total output in each cluster in the City WIB SDA, and employment by industry (or sub-industry).

## Employment Forecast

We present population and employment projections for Los Angeles County. Using these projections, we estimate job creation potentials for the county and for the City WIB SDA, and discuss the presence of county industry employment in the City WIB SDA.



Sources: California Employment Development Department; Moody's Economy.com; LAEDC

Our nonfarm employment forecast for Los Angeles County can be described as follows:

- The county's economy entered a severe recession in December of 2007, with an employment decline of 1.2 percent in 2008 and an estimated 5.9 percent decline in 2009. Employment is expected to continue to fall in early 2010 before recovering, with a year-over-year loss of 1.1 percent.
- Employment will recover in 2011 with a growth rate of 1.3 percent, and rebound with 3.2 percent growth in 2012 and 2.9 percent in 2013.

- After 2013, economic growth is forecast to continue to be positive but to decelerate from the rapid pace of the post-recession recovery period. In 2014, the forecast growth in employment is 1.3 percent, falling to 0.8 percent in 2015.
- Over the longer term, the economy in Los Angeles County is forecast to grow at its trend rate of approximately 0.6 percent.

Most industry sectors will follow this general contour of post-recession recovery followed by moderation. However, there are differences among industries. Recovery strength in many cases is determined by the magnitude of the industry’s decline during the recession. Broadly, Los Angeles County’s economic growth over the forecast period will be powered by the post-recession recovery, led in large part by service-providing industries such as professional and business services, educational and health services, and leisure and hospitality, as well as by construction.

Employment Growth in Los Angeles County by Sector: History and Forecast						
Industry Sector	Annual Average Percent Change					
	1995-00	2000-05	2005-10 <sup>1</sup>	2010 <sup>1</sup> -15	2015-20	2010 <sup>1</sup> -20
Total Nonfarm Payroll Employment	1.7	-0.2	-1.2	1.9	0.6	1.2
Goods Producing Industries	0.1	-3.5	-5.1	1.6	-0.3	0.6
Natural Resources and Mining	-4.0	1.8	2.6	0.7	-2.1	-0.7
Construction	3.1	2.5	-7.1	3.1	1.5	2.3
Manufacturing - Durable Goods	-0.2	-5.1	-4.6	2.0	-0.4	0.8
Manufacturing - Nondurable Goods	-0.8	-5.1	-4.5	0.2	-1.6	-0.7
Service Providing Industries	2.2	0.5	-0.6	2.2	0.7	1.4
Wholesale Trade	1.3	0.0	-1.9	2.0	0.1	1.0
Retail Trade	1.6	1.1	-1.5	1.2	-0.3	0.4
Transportation, Warehousing, Utilities	2.4	-1.5	-1.7	0.8	-0.8	0.0
Information	5.0	-3.2	0.4	0.9	0.3	0.6
Financial Activities	0.1	1.7	-2.4	2.1	1.1	1.6
Professional and Business Services	2.6	-0.4	-2.0	3.1	1.0	2.1
Educational and Health Services	2.3	2.5	2.3	2.7	1.4	2.1
Leisure and Hospitality	2.2	1.8	0.3	2.8	1.2	2.0
Other Services	1.3	0.6	-1.0	1.6	0.0	0.8
Government	1.6	0.1	-0.0	0.6	0.7	0.7

<sup>1</sup> Employment data for 2009 included in this period are preliminary; data for 2010 are forecasts.  
Sources: California Employment Development Department; Moody's Economy.com; LAEDC

Service-providing industries are in aggregate expected to grow at an average annual rate of 1.4 percent between 2010 and 2020, higher than goods-producing industries which will grow at an average annual rate of 0.6 percent.

## Target Industries

To identify potential target industries in the City WIB SDA for job retention and expansion efforts, we derive two composite indices: the first composite index is indicative of industry performance in Los Angeles County using four criteria:

- Projected employment growth rate in Los Angeles County from 2010 to 2020
- Industry size in Los Angeles County, as measured by employment level in 2008
- Average wages in Los Angeles County in 2008
- Projected job creation in Los Angeles County from 2010 to 2020

Our second composite index is indicative of industry performance in the City WIB SDA using three criteria:

- Industry size in the City WIB SDA, as measured by employment level in 2008
- Job creation in the City WIB SDA from 2001 to 2008
- Relative concentration of the industry in the City WIB SDA, as measured by the location quotient in 2008

Each of these measures provides an indication of whether an industry has the potential to be an attractive target for job retention. For the purposes of this exercise, we evaluate only private industries.

Using our two indices, we identify industries that are most likely to be good targets for job retention activities, including both export-oriented and population-serving industries. Several are large industries with good growth potential, but the list also contains smaller industries with a relatively strong concentration in the City WIB SDA or those that we believe have growth potential.

Identified Target Industries	
NAICS Industry Sector	NAICS
Professional and Technical Services	541
Ambulatory Health Care Services	621
Hospitals	622
Nursing and Residential Care Facilities	623
Social Assistance	624
Motion Picture and Sound Recording Industries	512
Manufacturing: Fabricated Metal Products	332
Manufacturing: Machinery	333
Manufacturing: Computer and Electronic Products	334
Manufacturing: Electrical Equipment and Appliances	335
Wholesalers: Durable Goods	423
Wholesalers: Nondurable Goods	424
Electronic Markets and Agents and Brokers	425
Warehousing and Storage	493
Construction of Buildings	236
Heavy and Civil Engineering Construction	237
Specialty Trade Contractors	238
Administrative and Support Services	561
Waste Management and Remediation	562
Educational Services	611
Repair and Maintenance	811

## Occupational Analysis

For each of the twenty-one target industries, we examine the occupational composition by *major* occupational group, including broad descriptive categories such as production occupations, management occupations and business and financial operations occupations. We also report *detailed* occupations for those major occupational groups with sufficient employment share. Education and training requirements are provided, along with median annual earnings in Los Angeles County for each detailed occupation and the total number of people employed in this occupation across all industries in Los Angeles County.

The largest occupational group in Los Angeles County is office and administrative support occupations, making up more than 19 percent of all employment in the county in 2009, or 763,810 jobs. Sales and related occupations is the second-largest group with ten percent of all jobs. The highest-paid on average were legal occupations, followed closely by management occupations.

Employment by Major Occupational Group (May 2009) Los Angeles County				
SOC	Occupation Group Title	Employment	% of total employment	Median annual earnings
11-0000	Management occupations	228,020	5.8	\$ 117,780
13-0000	Business and financial operations occupations	207,570	5.2	71,190
15-0000	Computer and mathematical science occupations	86,850	2.2	80,000
17-0000	Architecture and engineering occupations	73,990	1.9	85,430
19-0000	Life, physical and social science occupations	38,360	1.0	69,080
21-0000	Community and social services occupations	56,740	1.4	49,910
23-0000	Legal occupations	39,990	1.0	122,050
25-0000	Education, training and library occupations	264,540	6.7	55,950
27-0000	Arts, design, entertainment, sports and media occupations	118,260	3.0	75,420
29-0000	Healthcare practitioners and technical occupations	175,960	4.4	79,110
31-0000	Healthcare support occupations	96,640	2.4	28,200
33-0000	Protective service occupations	110,710	2.8	51,220
35-0000	Food preparation and serving related occupations	318,080	8.0	21,490
37-0000	Building and grounds cleaning and maintenance occupations	101,600	2.6	26,740
39-0000	Personal care and service occupations	94,860	2.4	26,460
41-0000	Sales and related occupations	393,490	9.9	37,990
43-0000	Office and administrative support occupations	763,810	19.3	35,910
45-0000	Farming, fishing and forestry occupations	3,010	0.1	25,310
47-0000	Construction and extraction occupations	116,720	3.0	48,870
49-0000	Installation, maintenance and repair occupations	119,020	3.0	45,950
51-0000	Production occupations	283,250	7.2	30,850
53-0000	Transportation and material moving occupations	270,740	6.8	32,030

Source: BLS: Occupational Employment Statistics Survey, May 2009

We report the top 50 detailed occupations in Los Angeles County by employment, the top five of which are listed here, along with the median annual earnings in Los Angeles County.

Because each detailed occupation may be common to many industries, the exhibit provides a list of those industries which employ each occupation (listed in order of employment in May of 2009). Industries which are among our identified targets are *italicized*.

Top 5 Detailed Occupations by Employment (May 2009) Los Angeles County					
Rank	SOC	Occupation title	Employing industries	Total employment in LAC	Median annual earnings
1	41-2031	Retail salespersons	Retail stores; motor vehicle dealers; florists; <i>employment services</i> ; electronic shopping and mail-order houses; <i>wholesalers</i> ; telecommunications carriers; museums and historical sites.	114,890	\$ 20,730
2	43-9061	Office clerks, general	Local and state government; <i>colleges and universities</i> ; elementary and secondary schools; <i>temporary employment services</i> ; <i>hospitals</i> ; real estate offices; <i>offices of physicians</i> ; <i>accounting services</i> ; <i>legal services</i> ; insurance agencies; management of companies; insurance carriers; <i>management and technical consulting services</i> ; <i>construction</i> ; <i>computer systems design services</i> ; <i>architectural and engineering services</i> ; banks and credit unions; <i>service to buildings</i> .	107,170	27,060
3	41-2011	Cashiers	Retail stores; restaurants; movie theatres; amusement parks and arcades; <i>automotive repair and maintenance</i> ; local government; <i>hospitals</i> ; spectator sports; performing arts companies.	92,130	19,130
4	53-7062	Laborers and freight, stock, and material movers, hand	<i>Temporary employment agencies</i> ; <i>warehousing and storage</i> ; couriers; <i>wholesalers</i> ; general and specialized freight trucking; building material dealers; <i>motion picture and video industries</i> ; grocery stores; furniture stores; building equipment contractors.	73,940	22,560
5	11-1021	General and operations managers	Management of companies; <i>management and technical consulting services</i> ; <i>computer systems design services</i> ; local government; <i>architectural and engineering services</i> ; grocery stores; <i>electronic markets</i> ; <i>construction</i> ; <i>administrative services</i> ; restaurants; <i>accounting services</i> ; retail stores; insurance agencies; <i>advertising services</i> .	67,790	108,670

The single largest detailed occupation is retail salespersons, with 114,890 employed in Los Angeles County in May of 2009 with median annual earnings of \$20,730. As shown, this occupation is common to many industries. The second largest detailed occupation is general office clerks, with almost 107,170 employed earning median annual earnings of \$27,060.

For each identified target industry, we provide data sheets which report the employment in Los Angeles County and in the City WIB SDA in 2008, and the average annual earnings. We provide a breakdown of the occupational makeup of each industry by major group, and for each major group with a significant share of the industry's employment, we provide a list of the detailed occupations therein, including: the education and training required; the median annual earnings in Los Angeles County; and the total number of persons employed in Los Angeles County in that detailed occupational group in 2009.





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