

INDUSTRY CLUSTERS OF SOUTHERN CALIFORNIA IN 2011

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ECONOMIC AND POLICY ANALYSIS GROUP
Los Angeles County Economic Development Corporation

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The LAEDC Economic and Policy Analysis Group offers objective economic and policy research for public agencies and private firms. The group focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in water, transportation, infrastructure and environmental policy.

Every reasonable effort has been made to ensure that the data contained herein reflect the most accurate and timely information possible and they are believed to be reliable.

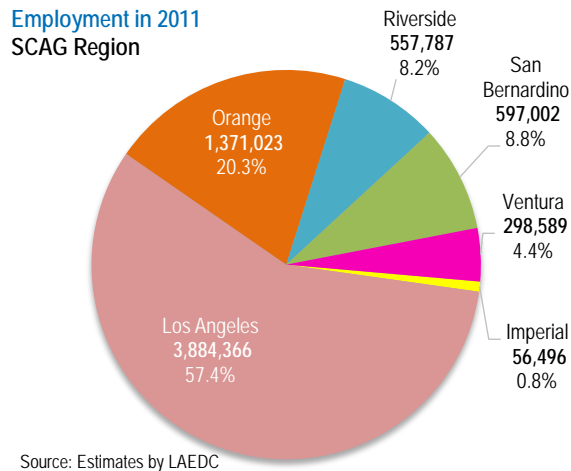
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Executive Summary

The six counties of Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial encompass 191 cities and more than 18 million residents in an area of more than 38,000 square miles. This large geographic area is home to a wide breadth of industry and economic activity.

County Employment

Total payroll employment in the region numbered 6.77 million in 2011. Los Angeles County employment exceeded 3.88 million, or 57.4 percent of the total, and Orange County was 1.37 million, or 20.3 percent of the SCAG region total, as shown below.



Cluster Theory

In this report, we examine the employment in the region and at each county level in terms of industry clusters.

Clusters are geographic concentrations of firms, suppliers, support services, infrastructure, and so on, which form in specific locations. This geographic clustering enables firms to compete and collaborate more efficiently, increasing demand for their supplier industries, encouraging the growth of specialized local infrastructure, developing a pool of specialized labor, and, through rivalry and proximity, spurring innovation and new advancements.

Industries are classified according to their patterns of spatial competition and geographic locational drivers into three main types:

Local industry clusters provide goods and services to the local population, such as eating establishments and local medical services.

Traded industry clusters are comprised of industries that are more highly-concentrated in a few regions, and provide the potential for wealth creation through exports. For example, motion picture production is more highly-concentrated in Los Angeles County than in the nation as a whole, and biomedical manufacturing is more highly-concentrated in Orange County.

The third type of cluster is the *natural resource dependent cluster*, comprised of industries that are located where the natural resources that support them are found, such as logging and mining. In the SCAG region, these industries account for a very small proportion of employment.

Regional Cluster Employment

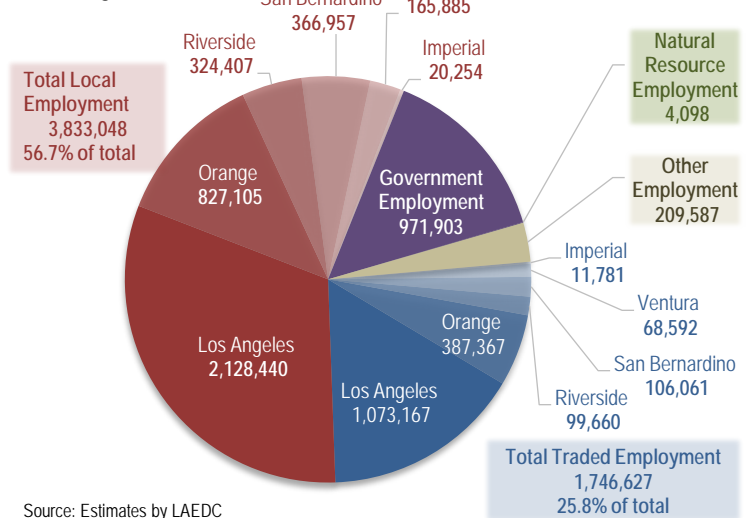
The industry cluster composition of the region is shown at right, with each county’s traded and local industry cluster employment.

In 2011, 56.7 percent of employment in the SCAG region was in local industry clusters, 25.8 percent in traded industry clusters, and more than 14 percent in government employment.

The category “Other” includes employment that has not been classified, employment of household help, and crop and animal production.

The largest traded and local industry clusters in the region by employment are shown below.

Cluster Employment in 2011
SCAG Region



Source: Estimates by LAEDC

Largest Traded and Local Industry Clusters in SCAG (By employment, 2011)

Traded Clusters	Employment	LQ
Trade ¹	269,609	1.3
Business Services	267,661	0.9
Entertainment	180,503	3.2
Hospitality and Tourism	131,897	1.1
Education and Knowledge Creation	124,863	1.0
Financial Services	89,840	0.8
Fashion ³	77,528	2.8
Processed Food	56,916	0.8
Biomedical ²	56,265	1.6
Aerospace	52,278	2.0
Analytical Instruments	50,336	1.9
All Other Traded Clusters	388,931	
Total Traded Cluster Employment	1,746,627	1.1
Local Clusters		
Health Services	668,661	0.9
Local Commercial Services	613,128	1.1
Local Hospitality Establishments	573,926	1.0
Real Estate, Construction, and Development	426,497	1.0
Local Retail Clothing and Accessories	240,388	1.0
All Other Local Clusters	1,310,447	
Total Local Cluster Employment	3,833,048	1.0
Natural Resource Clusters	4,098	0.1
Government	971,873	0.9
Other	209,587	2.3

Total Regional Employment

6,765,263

1 Includes Transportation and Logistics and Distribution
 2 Includes Biopharmaceuticals and Medical Devices
 3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles
 Sources: CA EDD; BLS; Estimates by LAEDC

Regional Cluster Strength

The location quotient (LQ) quantifies the employment concentration of an industry cluster within a region compared to a reference region (here, the United States). The strongest industry clusters by location quotient are shown below. This list provides an indication of the industry clusters in which the region has a specialized concentration and a competitive advantage. ❖

Strongest Traded Industry Clusters in SCAG Region (By LQ, 2011)

	Employment	LQ
Entertainment	180,503	3.2
Fashion ³	77,528	2.8
Aerospace	52,278	2.0
Analytical Instruments	50,336	1.9
Sporting, Recreational and Children's Goods	5,273	1.6
Biomedical ²	56,265	1.6
Trade ¹	269,609	1.3
Building Fixtures, Equipment, Services	26,971	1.2
Communications Equipment	10,954	1.1
Hospitality and Tourism	131,897	1.1

1 Includes Transportation and Logistics and Distribution
 2 Includes Biopharmaceuticals and Medical Devices
 3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles
 Sources: CA EDD; BLS; Estimates by LAEDC

1 Introduction

The six counties of Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial encompass 191 cities and more than 18 million residents in an area of more than 38,000 square miles. The region has a diverse and dynamic workforce of almost 9 million with a gross regional product of \$886 billion, larger than that of Turkey, Switzerland or Indonesia.

In the current economic climate, the region faces challenges in preparing an educated and skilled workforce that is able to compete in the global marketplace, in allocating sufficient resources to maintain or deliver critically-needed infrastructure under strained budgets, in fostering a climate of technological innovation and product development and in pursuing sustainable growth in the face of economic realities.

To better focus and tailor policy and economic development efforts, we need to examine how industries and regions compete, succeed and prosper, and deploy methods that will allow comparison of our regional performance against that of other regions.

Cluster Theory

Dr. Michael E. Porter's seminal work on the competitiveness of businesses and regions brings focus to how economic prosperity can be driven. Through ground-breaking work done at the Institute for Strategy and Competiveness at Harvard Business School, and supported by the Economic Development Administration of the U.S. Department of Commerce, Professor Porter's Cluster Mapping Project has defined industry clusters based on their locational correlation of employment.

According to Professor Porter's definition, clusters are geographic concentrations of firms, suppliers, support services, specialized infrastructure, producers of related products, and specialized institutions such as training programs or associations, that develop in specific locations. Geographic clustering of industries enables firms to compete and collaborate more efficiently, increasing demand for their supplier industries, encouraging the growth of specialized local infrastructure, developing a pool of specialized labor, and, through rivalry and proximity, spurring innovation and new advancements.

The investments made by these firms in technology, innovation and the upgrading of their goods and services results in improved productivity. Improved productivity increases competitiveness, which in turn, increases the market share of these firms and industries, enabling them to grow, creating high-wage jobs and attracting regional prosperity. The sale of goods and services to a wider marketplace brings new revenues into the region, which circulate and support local businesses and residents.

The first step of this virtuous cycle is to foster an environment where industry clusters can grow organically. Of course, the needs of industries may well vary, so an understanding of the nature and relative strength of resident industries is critical.

While there are a variety of methodologies to identify clusters, the Cluster Mapping Project's definitions allow the clear differentiation between traded industry clusters, in which competitive pressures spur innovation and expansion, and local-serving industry clusters, where the possibilities of expanding by selling outside of the region are limited.

Cluster Taxonomy

Industries are classified according to their patterns of spatial competition and geographic locational drivers into three main types:

Local industry clusters provide goods and services to the population of the local region, such as eating establishments and local medical services, and have limited exposure to other markets. Employment in local industries is widely dispersed and is generally proportional to overall economic activity within the region. Exhibit 1-1 lists the local industry clusters.

Exhibit 1-1

Local Clusters

- Local Food and Beverage Processing and Distribution
- Local Personal Services (Non-Medical)
- Local Health Services
- Local Utilities
- Local Logistical Services
- Local Household Goods and Services
- Local Financial Services
- Local Motor Vehicle Products and Services
- Local Retail Clothing and Accessories
- Local Entertainment and Media
- Local Hospitality Establishments
- Local Commercial Services
- Local Education and Training
- Local Community and Civic Organizations
- Local Real Estate, Construction and Development
- Local Industrial Products and Services

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

Traded industry clusters are comprised of industries that are more highly-concentrated in a few regions, and that provide the potential for wealth creation through exports. For example, motion picture production is more highly-concentrated in Los Angeles County than in the nation as a whole, and biomedical manufacturing is more highly-concentrated in Orange County. These are classified as traded industries.

The complete list of traded industry clusters is presented in Exhibit 1-2.

Exhibit 1-2

Traded Clusters

- Aerospace Engines
- Aerospace Vehicles and Defense
- Analytical Instruments
- Apparel
- Automotive
- Building Fixtures, Equipment and Services
- Business Services
- Chemical Products
- Communications Equipment
- Processed Food
- Agricultural Products
- Distribution Services
- Education and Knowledge Creation
- Entertainment
- Heavy Machinery
- Financial Services
- Fishing and Fishing Products
- Footwear
- Forest Products
- Furniture
- Heavy Construction Services
- Hospitality and Tourism
- Information Technology
- Jewelry and Precious Metals
- Leather and Related Products
- Lighting and Electrical Equipment
- Construction Materials
- Medical Devices
- Metal Manufacturing
- Motor Driven Products
- Oil and Gas Products and Services
- Biopharmaceuticals
- Plastics
- Power Generation and Transmission
- Prefabricated Enclosures
- Production Technology
- Publishing and Printing
- Sporting, Recreational and Children's Goods
- Textiles
- Tobacco
- Transportation and Logistics

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

The third type of industry cluster is the *natural resource dependent cluster*. These are comprised of industries that are located where the natural resources that support them are found, such as logging and mining. The list of natural resource industry clusters is shown in Exhibit 1-3.

Exhibit 1-3

Natural Resource Clusters

- Agricultural Products
- Coal Mining
- Combination Energy Services
- Fertilizers
- Forestry and Primary Wood Processing
- Livestock Processing
- Metal Mining
- Nonmetal Mining
- Water Transport
- Casino Hotels

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

In the pages that follow, the economic activity of the six counties of the Southern California Association of Governments (SCAG) is classified according to these definitions. The source of the data is the Census of Employment and Wages (CEW) produced by the Bureau of Labor Statistics (BLS) and the California Employment Development Department (CA EDD) for 2011.

Employment in industry clusters includes private sector employment only.

The analysis differs somewhat from the data provided by the Cluster Mapping Project itself since it uses the most recent annual payroll employment data using industries defined under the 2012 NAICS classifications.

Industry Clusters in the U.S.

The industry cluster strength of each of the counties is compared to that of the nation using a metric called the location quotient (LQ).

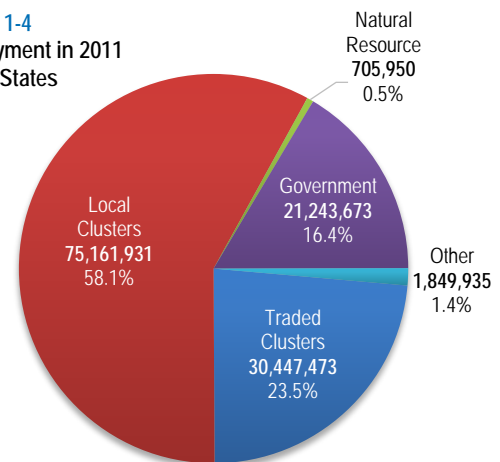
A location quotient quantifies the employment concentration of an industry or cluster within a region compared to a reference region (here, the United States).

If a region’s industry has a location quotient of greater than 1, the employment concentration in the region is higher than that in the nation as a whole, indicating a regional specialization and an evident competitive advantage.

Industries that are characterized by high location quotients are usually export-oriented and can generate regional prosperity.

The industry cluster composition of the United States is shown in Exhibit 1-4.

Exhibit 1-4
Employment in 2011
United States



Source: Estimates by LAEDC

Payroll employment across the nation numbered almost 130 million in 2011, with more than 16 percent in government employment, 58 percent in local industry clusters and almost 24 percent in traded industries.

The category “Other” includes employment that has not been classified, employment of household help, and crop and animal production, which are not included in any industry cluster definition. ❖

2 SCAG Region

The SCAG region encompasses six counties in Southern California: Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

This large geographic area is home to a wide breadth of industry and economic activity.

Payroll employment in the SCAG region numbered 6.77 million in 2011, with more than 14 percent in government employment, 56.7 percent in local industry clusters and 25.8 percent in traded industries. The industry cluster composition of the region is shown in Exhibit 2-1.

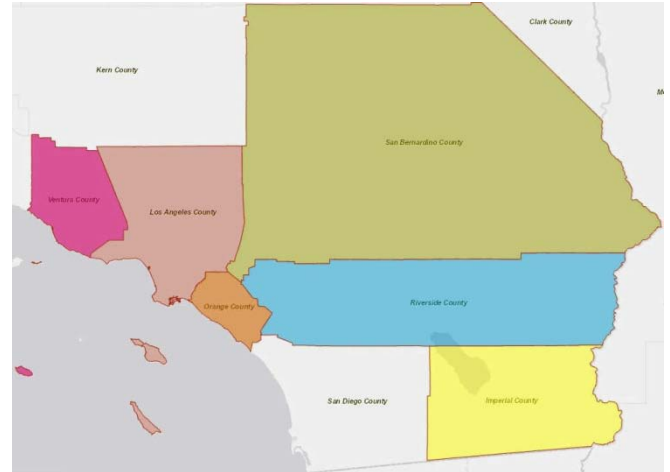
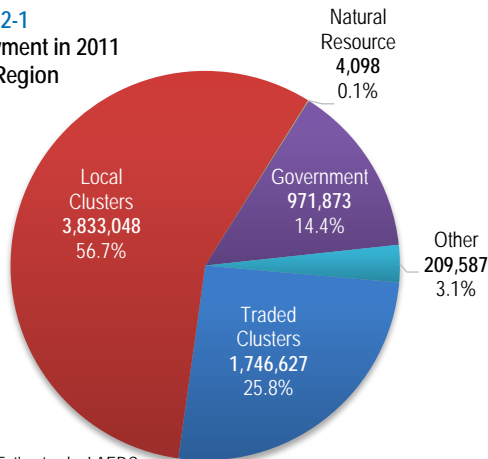


Exhibit 2-1
Employment in 2011
SCAG Region



Source: Estimates by LAEDC

Exhibit 2-2 displays the largest traded industry clusters in the SCAG region, measured by employment, along with their corresponding location quotients.

Of the fifteen largest traded industry clusters in the SCAG region, nine have location quotients greater than one, indicating a higher regional concentration of employment than the nation as a whole, suggesting a regional specialization and competitive advantage.

Exhibit 2-2
Largest Traded Industry Clusters in SCAG Region
(By employment, 2011)

	Employment	LQ
Trade ¹	269,609	1.3
Business Services	267,661	0.9
Entertainment	180,503	3.2
Hospitality and Tourism	131,897	1.1
Education and Knowledge Creation	124,863	1.0
Financial Services	89,840	0.8
Fashion ³	77,528	2.8
Processed Food	56,916	0.8
Biomedical ²	56,265	1.6
Aerospace	52,278	2.0
Analytical Instruments	50,336	1.9
Metal Manufacturing	48,939	1.1
Publishing and Printing	45,635	1.1
Information Technology	43,960	1.0
Heavy Construction Services	33,537	0.5
<i>All Other Traded Clusters</i>	<i>216,860</i>	
Total Traded Cluster Employment	1,746,627	1.1

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

The traded employment location quotient for the entire SCAG region in 2011 was 1.1. Compared to the nation as a whole, the six-county SCAG region has a larger share of its employment in traded industry clusters, suggesting the increased potential for wealth creation through exports.

The strongest industry clusters as measured by location quotient are shown in Exhibit 2-3. This list provides an indication of those industry clusters in which the region has a specialized concentration and a competitive advantage.

Exhibit 2-3**Strongest Traded Industry Clusters in SCAG Region
(By LQ, 2011)**

	Employment	LQ
Entertainment	180,503	3.2
Fashion ³	77,528	2.8
Aerospace	52,278	2.0
Analytical Instruments	50,336	1.9
Sporting, Recreational and Children's Goods	5,273	1.6
Biomedical ²	56,265	1.6
Trade ¹	269,609	1.3
Building Fixtures, Equipment, Services	26,971	1.2
Communications Equipment	10,954	1.1
Hospitality and Tourism	131,897	1.1

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 2-4 displays the largest local industry clusters (measured by employment) along with their corresponding location quotients.

Exhibit 2-4**Largest Local Industry Clusters in SCAG Region
(By employment, 2011)**

	Employment	LQ
Health Services	668,661	0.9
Local Commercial Services	613,128	1.1
Local Hospitality Establishments	573,926	1.0
Real Estate, Construction, and Development	426,497	1.0
Local Retail Clothing and Accessories	240,388	1.0
<i>All Other Local Clusters</i>	<i>1,310,447</i>	
Total Local Cluster Employment	3,833,048	1.0

Sources: CA EDD; BLS; Estimates by LAEDC

Of the five largest local industry clusters in the SCAG region, only one has a location quotient greater than one. As the exportability of the products and services provided by establishments in local industry clusters is limited by geographic reach, their location quotients will typically hover around one.

Many industries have a wide wage disparity; the largest industry clusters ranked according to employment do not necessarily correspond with the largest clusters by payroll. Exhibit 2-5 shows the largest traded and local industry clusters in the SCAG region measured by total payroll.

Exhibit 2-5**Largest Industry Clusters in SCAG Region
(By payroll, 2011)**

Traded Clusters	Payroll (\$ millions)
Business Services	\$ 19,969
Entertainment	19,022
Trade ¹	16,232
Financial Services	11,734
Education and Knowledge Creation	7,669
Aerospace	4,812
Analytical Instruments	4,786
Biomedical ²	4,280
Hospitality and Tourism	4,242
Information Technology	4,197
Publishing and Printing	3,200
Fashion ³	2,853
Processed Food	2,807
Metal Manufacturing	2,560
Heavy Construction Services	2,263
<i>All Other Traded Clusters</i>	<i>11,857</i>
Total Traded Cluster Payroll	\$ 122,482
Local Clusters	
Health Services	\$ 35,828
Local Commercial Services	32,600
Real Estate, Construction, and Development	22,416
Local Financial Services	10,799
Local Hospitality Establishments	10,346
<i>All Other Local Clusters</i>	<i>52,336</i>
Total Local Cluster Payroll	\$ 164,327
Natural Resource Clusters	278
Government	56,538
Total Regional Payroll	\$ 348,026

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; Estimates by LAEDC

Each of the six counties within the SCAG region has a unique composition of industry, with differing strengths, challenges and opportunities. Synopses of each county are presented on the following pages in alphabetical order. ❖

3 Imperial County

Imperial County is located in the southeast corner of the state of California along the international border with Mexico. With a total land area of 4,482 square miles and a population of 177,057 residents, the county exhibits a very low population density. Despite the region’s desert climate, the county’s economy has become highly dependent on agriculture made possible with irrigation supplied by the Colorado River.

The county has thousands of acres of some of the most productive farming land in California, producing more than \$1 billion in annual crop production and providing employment for thousands of workers.

Payroll employment in Imperial County numbered 56,496 in 2011, with almost 31 percent in government employment, 35.8 percent in local industry clusters and 20.9 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 3-1.



Of the fifteen largest traded industry clusters in the county, five have location quotients greater than one, indicating a higher regional concentration of employment than the nation as a whole, suggesting a regional specialization and competitive advantage. Clearly, the county is specialized in agricultural products and food processing.

Exhibit 3-1
Employment in 2011
Imperial County

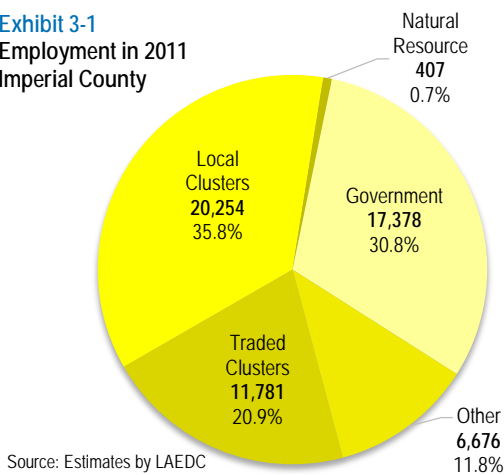


Exhibit 3-2 displays the largest traded industry clusters in Imperial County, measured by employment, along with their corresponding location quotients.

Exhibit 3-2
Largest Traded Industry Clusters in Imperial County
(By employment, 2011)

	Employment	LQ
Agricultural Products	6,199	26.1
Processed Food	1,723	3.0
Trade ¹	1,340	0.8
Business Services	486	0.2
Power Generation and Transmission	359	3.1
Hospitality and Tourism	346	0.4
Heavy Machinery	266	1.9
Building Fixtures, Equipment, Services	235	1.2
Financial Services	208	0.2
Heavy Construction Services	177	0.3
Aerospace	175	0.8
Entertainment	54	0.1
Publishing and Printing	47	0.1
Education and Knowledge Creation	46	0.0
Metal Manufacturing	37	0.1
All Other Traded Clusters	82	
Total Traded Cluster Employment	11,781	0.9

¹ Includes Transportation and Logistics and Distribution
Sources: CA EDD; BLS; Estimates by LAEDC

The strongest industry clusters as measured by location quotient are shown in Exhibit 3-3.

Exhibit 3-3
Strongest Traded Industry Clusters in Imperial County
(By LQ, 2011)

	Employment	LQ
Agricultural Products	6,199	26.1
Power Generation and Transmission	359	3.1
Processed Food	1,723	3.0
Heavy Machinery	266	1.9
Building Fixtures, Equipment, Services	235	1.2

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 3-4 displays the largest local industry clusters in Imperial County (measured by employment) along with their corresponding location quotients.

Exhibit 3-4
Largest Local Industry Clusters in Imperial County
(By employment, 2011)

	Employment	LQ
Local Retail Clothing and Accessories	3,434	1.7
Local Hospitality Establishments	3,146	0.7
Health Services	2,597	0.4
Local Commercial Services	1,933	0.4
Real Estate, Construction and Development	1,804	0.5
<i>All Other Local Clusters</i>	7,339	
Total Local Cluster Employment	20,254	0.6

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 3-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 3-5
Largest Industry Clusters in Imperial County
(By payroll, 2011)

Traded Clusters	Payroll (\$ millions)
Agricultural Products	\$ 120.0
Processed Food	59.4
Trade ¹	55.9
Power Generation and Transmission	30.1
Business Services	23.9
Heavy Machinery	12.8
Building Fixtures, Equipment, Services	11.9
Heavy Construction Services	10.7
Aerospace	8.2
Financial Services	8.1
Hospitality and Tourism	6.5
Metal Manufacturing	2.0
Publishing and Printing	1.5
Education and Knowledge Creation	1.2
Information Technology	0.9
<i>All Other Traded Clusters</i>	2.8
Total Traded Cluster Payroll	\$ 356
Local Clusters	
Health Services	\$ 83.7
Real Estate, Construction and Development	72.1
Local Retail Clothing and Accessories	69.3
Local Commercial Services	69.1
Local Hospitality Establishments	46.8
<i>All Other Local Clusters</i>	214.6
Total Local Cluster Payroll	\$ 556
Natural Resource Clusters	27
Government	920
Total Regional Payroll	\$ 2,003

¹ Includes Transportation and Logistics and Distribution
Sources: CA EDD; Estimates by LAEDC

Since the county economy is dominated by agricultural industries, the largest clusters in terms of payroll are also those related to the production, processing and movement of agricultural products.

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

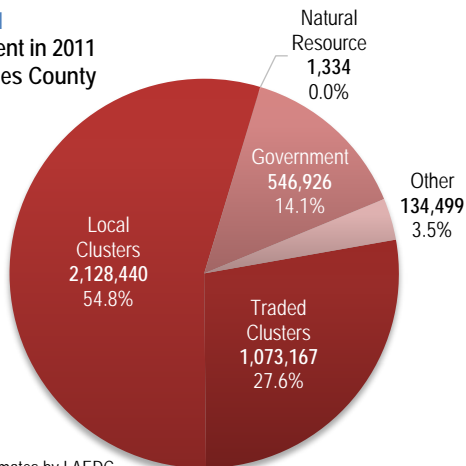
4 Los Angeles County

Los Angeles County is the most populous county in the nation, with 10 million residents in 4,700 square miles. The county is home to more than 220,000, with more minority- and women-owned businesses than any other county in the nation. It is one of the most diverse counties in the United States, with more than 140 cultures and 224 languages.

Los Angeles County is commonly associated with the entertainment industry; all six of the nation’s major film studios are located here. Other major industries include international trade supported by the Port of Los Angeles and the Port of Long Beach, aerospace, professional and business services, and fashion.

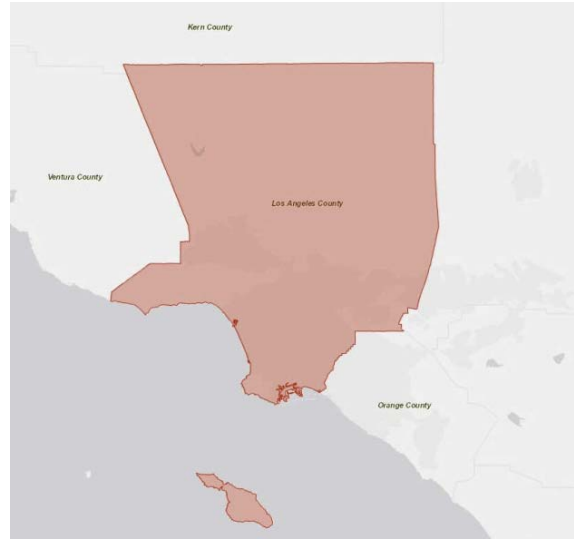
Payroll employment in Los Angeles County numbered 3.88 million in 2011, with 14 percent in government employment, 54.8 percent in local industry clusters and 27.6 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 4-1.

Exhibit 4-1
Employment in 2011
Los Angeles County



Source: Estimates by LAEDC

Exhibit 4-2 displays the largest traded industry clusters in Los Angeles County, measured by



employment, along with their corresponding location quotients.

Exhibit 4-2

Largest Traded Industry Clusters in Los Angeles County (By employment, 2011)

	Employment	LQ
Trade ¹	176,844	1.5
Entertainment	162,222	5.0
Business Services	152,068	0.9
Education and Knowledge Creation	90,313	1.2
Fashion ³	65,576	4.1
Hospitality and Tourism	62,033	0.9
Financial Services	53,503	0.9
Processed Food	39,729	1.0
Aerospace	39,456	2.6
Analytical Instruments	28,342	1.8
Publishing and Printing	27,800	1.2
Metal Manufacturing	26,769	1.1
Biomedical ²	22,152	1.1
Heavy Construction Services	14,174	0.4
Building Fixtures, Equipment, Services	13,501	1.0
All Other Traded Clusters	98,684	
Total Traded Cluster Employment	1,073,167	1.2

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

Of the fifteen largest traded industry clusters in the county, ten have location quotients greater than one, reflecting the county's strength in a wide variety of industries.

The strongest industry clusters as measured by location quotient are shown in Exhibit 4-3.

Exhibit 4-3

Strongest Traded Industry Clusters in Los Angeles County (By LQ, 2011)

	Employment	LQ
Entertainment	162,222	5.0
Fashion ³	65,576	4.1
Aerospace	39,456	2.6
Analytical Instruments	28,342	1.8
Trade ¹	176,844	1.5
Furniture	7,387	1.4
Sporting, Recreational and Children's Goods	2,473	1.3
Education and Knowledge Creation	90,313	1.2
Lighting and Electrical Equipment	7,037	1.2
Publishing and Printing	27,800	1.2
Biomedical ²	22,152	1.1
Metal Manufacturing	26,769	1.1

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 4-4 displays the largest local industry clusters in Los Angeles County (measured by employment).

Exhibit 4-4

Largest Local Industry Clusters in Los Angeles County (By employment, 2011)

	Employment	LQ
Health Services	385,410	0.9
Local Commercial Services	358,128	1.2
Local Hospitality Establishments	311,455	1.0
Real Estate, Construction, and Development	198,172	0.8
Local Food and Beverage	128,525	1.1
<i>All Other Local Clusters</i>	<i>746,750</i>	
Total Local Cluster Employment	2,128,440	0.9

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 4-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 4-5

Largest Industry Clusters in Los Angeles County (By payroll, 2011)

	Payroll (\$ millions)
Traded Clusters	
Entertainment	\$ 18,185
Business Services	11,993
Trade ¹	10,375
Financial Services	7,516
Education and Knowledge Creation	5,602
Aerospace	3,765
Analytical Instruments	2,860
Fashion ³	2,337
Publishing and Printing	2,233
Hospitality and Tourism	2,207
Processed Food	2,017
Biomedical ²	1,418
Metal Manufacturing	1,378
Information Technology	1,098
Oil and Gas Products and Services	1,091
<i>All Other Traded Clusters</i>	<i>5,940</i>
Total Traded Cluster Payroll	\$ 80,016
Local Clusters	
Local Commercial Services	\$ 20,911
Health Services	20,800
Real Estate, Construction, and Development	10,436
Local Financial Services	6,161
Local Hospitality Establishments	5,816
<i>All Other Local Clusters</i>	<i>30,968</i>
Total Local Cluster Payroll	\$ 95,092
Natural Resource Clusters	70
Government	33,246
Total Regional Payroll	\$ 211,249

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; Estimates by LAEDC

The Entertainment, Business Services and Trade clusters, the three largest traded clusters in terms of employment, are also the largest in terms of payroll.

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

5 Orange County

Orange County is located between the Pacific Ocean to its southwest, Los Angeles County to the north, San Bernardino County and Riverside County to the northeast and San Diego County to the southeast. The county has a total area of 948 square miles with more than 3 million residents.

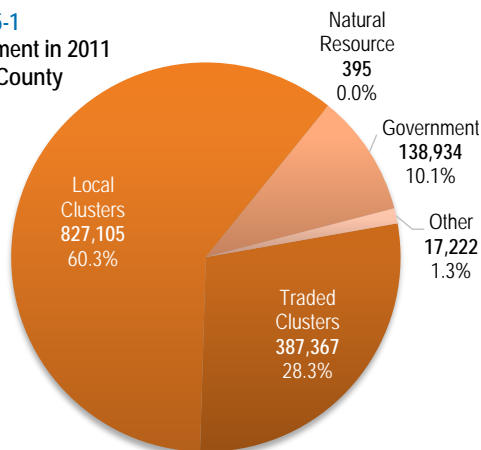
Orange County is home to a diverse economy focused on tourism and commerce. The county is home to Disneyland, Knott's Berry Farm, the Anaheim Convention Center, and numerous resorts along its 40 miles of beach coastline.

Payroll employment in Orange County numbered 1.37 million in 2011, with only 10 percent in government employment, 60.3 percent in local industry clusters and 28.3 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 5-1.



Of the fifteen largest traded industry clusters in the county, eleven have location quotients greater than one, reflecting the county's strength in a wide variety of industries.

Exhibit 5-1
Employment in 2011
Orange County



Source: Estimates by LAEDC

Exhibit 5-2 displays the largest traded industry clusters in Orange County, measured by employment, along with their corresponding location quotients.

Exhibit 5-2
Largest Traded Industry Clusters in Orange County
(By employment, 2011)

	Employment	LQ
Business Services	75,750	1.3
Hospitality and Tourism	47,481	2.0
Trade ¹	44,729	1.1
Financial Services	26,704	1.2
Information Technology	23,304	2.5
Education and Knowledge Creation	21,712	0.8
Biomedical ²	19,002	2.6
Analytical Instruments	16,810	3.1
Publishing and Printing	11,832	1.4
Metal Manufacturing	11,810	1.3
Aerospace	10,169	1.9
Entertainment	10,164	0.9
Fashion ³	9,174	1.6
Processed Food	7,513	0.5
Heavy Construction Services	6,881	0.5
<i>All Other Traded Clusters</i>	<i>44,333</i>	
Total Traded Cluster Employment	387,367	1.2

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

The strongest industry clusters as measured by location quotient are shown in Exhibit 5-3.

Exhibit 5-3

Strongest Traded Industry Clusters in Orange County (By LQ, 2011)

	Employment	LQ
Analytical Instruments	16,810	3.1
Sporting, Recreational and Children's Goods	1,942	2.9
Biomedical ²	19,002	2.6
Information Technology	23,304	2.5
Hospitality and Tourism	47,481	2.0
Aerospace	10,169	1.9
Fashion ³	9,174	1.6
Power Generation and Transmission	4,307	1.6
Communications Equipment	2,890	1.5
Publishing and Printing	11,832	1.4
Construction Materials	2,005	1.4
Metal Manufacturing	11,810	1.3
Financial Services	26,704	1.2

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 5-4 displays the largest local industry clusters in Orange County (measured by employment) along with their corresponding location quotients.

Exhibit 5-4

Largest Local Industry Clusters in Orange County (By employment, 2011)

	Employment	LQ
Local Commercial Services	146,503	1.3
Health Services	135,944	0.9
Local Hospitality Establishments	125,271	1.1
Real Estate, Construction and Development	119,232	1.4
Local Retail Clothing and Accessories	44,238	0.9
<i>All Other Local Clusters</i>	<i>255,917</i>	
Total Local Cluster Employment	827,105	1.0

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 5-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 5-5

Largest Industry Clusters in Orange County (By payroll, 2011)

	Payroll (\$ millions)
Traded Clusters	
Business Services	\$ 5,662
Financial Services	3,627
Trade ¹	3,501
Information Technology	2,337
Analytical Instruments	1,577
Education and Knowledge Creation	1,496
Hospitality and Tourism	1,427
Biomedical ²	1,350
Aerospace	900
Publishing and Printing	689
Metal Manufacturing	635
Entertainment	524
Heavy Construction Services	468
Fashion ³	415
Production Technology	413
<i>All Other Traded Clusters</i>	<i>2,645</i>
Total Traded Cluster Payroll	\$ 27,666
Local Clusters	
Local Commercial Services	\$ 7,858
Health Services	7,608
Real Estate, Construction and Development	6,970
Local Financial Services	2,992
Local Hospitality Establishments	2,261
<i>All Other Local Clusters</i>	<i>10,004</i>
Total Local Cluster Payroll	\$ 37,693
Natural Resource Clusters	21
Government	8,230
Total Regional Payroll	\$ 73,974

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

³ Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; Estimates by LAEDC

Note that although Hospitality and Tourism is the second largest traded cluster by employment, total payroll in the cluster ranks seventh, indicating lower per worker average wages than other industry clusters.

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

6 Riverside County

Riverside County lies inland of Los Angeles County and is bordered by Orange County to the west, San Bernardino County to the north, San Diego and Imperial Counties to the south, and Arizona to the east. The county consists of an area of 7,303 square miles with a population of approximately 2.2 million residents, making it the 4th most populous county in California.

Riverside County is home to the University of California, Riverside located in the northeastern part of the city of Riverside. Large numbers of Los Angeles area workers have moved to the county in recent years to take advantage of relatively affordable housing.

Payroll employment in Riverside County was 557,787 in 2011, with 20.8 percent in government employment, 58.2 percent in local industry clusters and 18 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 6-1.

Exhibit 6-1
Employment in 2011
Riverside County

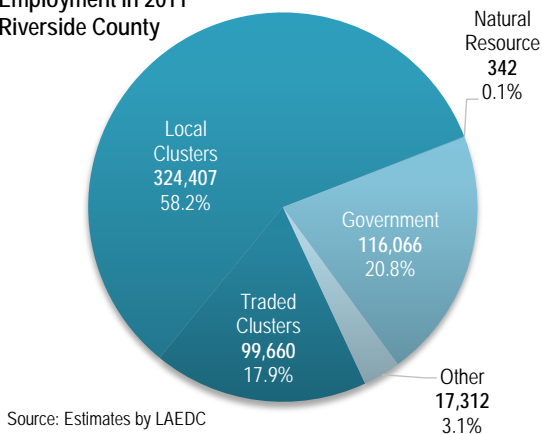


Exhibit 6-2 displays the largest traded industry clusters in Riverside County, measured by



employment, along with their corresponding location quotients.

Of the fifteen largest traded industry clusters in the county, six have location quotients greater than one, with Agricultural Products exhibiting the highest relative employment concentration.

Exhibit 6-2
Largest Traded Industry Clusters in Riverside County
(By employment, 2011)

	Employment	LQ
Trade ¹	15,989	1.0
Hospitality and Tourism	12,773	1.3
Business Services	11,820	0.5
Agricultural Products	7,632	3.3
Biomedical ²	5,513	1.9
Information Technology	5,277	1.4
Heavy Construction Services	5,118	1.0
Education and Knowledge Creation	3,464	0.3
Financial Services	3,356	0.4
Entertainment	3,099	0.7
Building Fixtures, Equipment, Services	3,007	1.6
Plastics	2,672	1.2
Automotive	2,594	0.7
Publishing and Printing	1,936	0.6
Production Technology	1,901	0.8
All Other Traded Clusters	13,510	
Total Traded Cluster Employment	99,660	0.8

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; BLS; Estimates by LAEDC

The strongest industry clusters as measured by location quotient are shown in Exhibit 6-3.

Exhibit 6-3

Strongest Traded Industry Clusters in Riverside County (By LQ, 2011)

	Employment	LQ
Agricultural Products	7,632	3.3
Biomedical ²	5,513	1.9
Building Fixtures, Equipment, Services	3,007	1.6
Sporting, Recreational and Children's Goods	404	1.5
Information Technology	5,277	1.4
Hospitality and Tourism	12,773	1.3
Lighting and Electrical Equipment	1,102	1.3
Prefabricated Enclosures	849	1.3
Plastics	2,672	1.2

² Includes Biopharmaceuticals and Medical Devices
Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 6-4 displays the largest local industry clusters in Riverside County (measured by employment) along with their corresponding location quotients.

Exhibit 6-4

Largest Local Industry Clusters in Riverside County (By employment, 2011)

	Employment	LQ
Local Hospitality Establishments	56,987	1.2
Health Services	55,363	0.9
Real Estate, Construction, and Development	47,477	1.3
Local Commercial Services	32,820	0.7
Local Retail Clothing and Accessories	27,195	1.4
<i>All Other Local Clusters</i>	<i>104,566</i>	
Total Local Cluster Employment	324,407	1.0

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 6-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 6-5

Largest Industry Clusters in Riverside County (By payroll, 2011)

	Payroll (\$ millions)
Traded Clusters	
Trade ¹	\$ 720
Business Services	595
Biomedical ²	387
Hospitality and Tourism	365
Information Technology	329
Heavy Construction Services	315
Financial Services	198
Agricultural Products	177
Automotive	136
Building Fixtures, Equipment and Services	128
Education and Knowledge Creation	121
Analytical Instruments	113
Plastics	112
Production Technology	100
Entertainment	98
<i>All Other Traded Clusters</i>	<i>627</i>
Total Traded Cluster Payroll	\$ 4,522
Local Clusters	
Health Services	\$ 2,659
Real Estate, Construction, and Development	2,099
Local Commercial Services	1,110
Local Hospitality Establishments	995
Local Food and Beverage	702
<i>All Other Local Clusters</i>	<i>3,429</i>
Total Local Cluster Payroll	\$ 10,994
Natural Resource Clusters	12
Government	5,878
Total Regional Payroll	\$ 21,791

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; Estimates by LAEDC

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

7 San Bernardino County

San Bernardino County is the largest county in the contiguous United States and is located in southeast California. With a land area of 20,105 square miles and a population of more than 2 million residents, it is characterized by very low population density. The bulk of the population lives in the 480 square miles south of the San Bernardino Mountains adjacent to Riverside and in the San Bernardino Valley.

The county's diverse geography and natural resources, as well as its proximity to major economic and population centers provide opportunities for a variety industry sectors, including commerce, education, tourism and recreation.

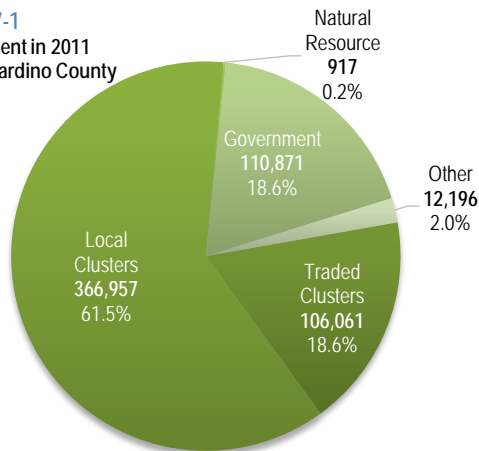
Payroll employment in San Bernardino County was 597,002 in 2011, with 18.6 percent in government employment, 61.5 percent in local industry clusters and 18.6 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 7-1.



employment, along with their corresponding location quotients.

Of the fifteen largest traded industry clusters in the county, five have location quotients greater than one, with Furniture exhibiting the highest relative employment concentration, followed by Building Fixtures, Equipment and Services.

Exhibit 7-1
Employment in 2011
San Bernardino County



Source: Estimates by LAEDC

Exhibit 7-2 displays the largest traded industry clusters in San Bernardino County, measured by

Exhibit 7-2
Largest Traded Industry Clusters in San Bernardino County
(By employment, 2011)

	Employment	LQ
Trade ¹	22,999	1.3
Business Services	17,237	0.7
Metal Manufacturing	6,079	1.6
Hospitality and Tourism	5,693	0.6
Heavy Construction Services	5,545	1.0
Education and Knowledge Creation	5,409	0.5
Processed Food	5,139	0.9
Financial Services	3,933	0.4
Building Fixtures, Equipment, Services	3,623	1.8
Entertainment	3,358	0.7
Plastics	2,817	1.2
Biomedical ²	2,469	0.8
Automotive	2,426	0.6
Publishing and Printing	1,883	0.5
Furniture	1,794	2.2
<i>All Other Traded Clusters</i>	<i>36,905</i>	
Total Traded Cluster Employment	106,061	0.8

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; BLS; Estimates by LAEDC

The strongest industry clusters as measured by location quotient are shown in Exhibit 7-3.

Exhibit 7-3
Strongest Traded Industry Clusters in San Bernardino County
 (By LQ, 2011)

	Employment	LQ
Furniture	1,794	2.2
Building Fixtures, Equipment, Services	3,623	1.8
Metal Manufacturing	6,079	1.6
Construction Materials	863	1.3
Trade ¹	22,999	1.3
Plastics	2,817	1.2

¹ Includes Transportation and Logistics and Distribution
 Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 7-4 displays the largest local industry clusters in San Bernardino County (measured by employment) along with their corresponding location quotients.

Exhibit 7-4
Largest Local Industry Clusters in San Bernardino County
 (By employment, 2011)

	Employment	LQ
Health Services	63,311	0.9
Local Commercial Services	55,292	1.2
Local Hospitality Establishments	48,817	1.0
Real Estate, Construction, and Development	39,209	1.0
Local Retail Clothing and Accessories	27,840	1.3
<i>All Other Local Clusters</i>	<i>168,078</i>	
Total Local Cluster Employment	366,957	1.1

Sources: CA EDD; BLS; Estimates by LAEDC

It should be noted that the Local Logistical Services industry cluster employed 27,721 in 2011 and had a location quotient of 2.4, indicating particular regional specialization. It is likely that although the national cluster definitions categorize this cluster as local serving, in San Bernardino many of the firms in the cluster cater to the large Trade cluster of the surrounding region and

therefore might more correctly be categorized as a traded cluster.

Exhibit 7-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 7-5
Largest Industry Clusters in San Bernardino County
 (By payroll, 2011)

	Payroll (\$ millions)
Traded Clusters	
Trade ¹	\$ 988
Business Services	892
Heavy Construction Services	346
Metal Manufacturing	331
Education and Knowledge Creation	247
Processed Food	227
Financial Services	208
Building Fixtures	160
Hospitality and Tourism	140
Biomedical ²	124
Automotive	115
Plastics	107
Entertainment	104
Chemical Products	102
Information Technology	93
<i>All Other Traded Clusters</i>	<i>748</i>
Total Traded Cluster Payroll	\$ 4,934
Local Clusters	
Health Services	\$ 3,355
Real Estate, Construction, and Development	1,788
Local Commercial Services	1,781
Local Logistical Services	1,209
Local Motor Vehicle Products and Services	905
<i>All Other Local Clusters</i>	<i>4,315</i>
Total Local Cluster Payroll	\$ 13,353
Natural Resource Clusters	
Government	52
	5,813
Total Regional Payroll	\$ 24,279

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; Estimates by LAEDC

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

8 Ventura County

Ventura County lies north of Los Angeles County on the Pacific coast. The county contains the Anacapa Island of Channel Islands National Park and San Nicolas Island.

Ventura County has a total area of 2,208 square miles and more than 800,000 residents. Major industries include agriculture, biotechnology, tourism and defense-related manufacturing. The large presence of technology corporations has led the county to be among the 100 highest-income counties in the country, as well as the sixth wealthiest county in California by per capita income.

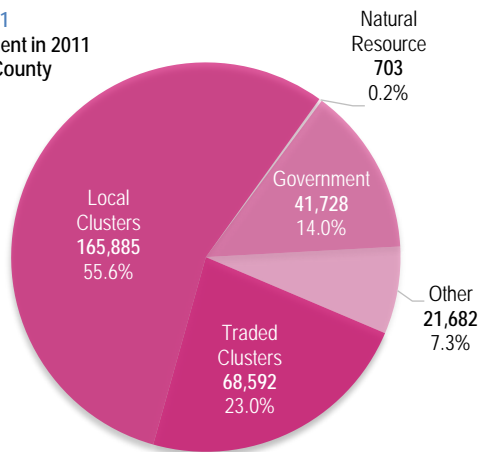
Payroll employment in Ventura County was 298,589 in 2011, with 14 percent in government employment, 55.6 percent in local industry clusters and 23 percent in traded industries. The industry cluster composition of the county is shown in Exhibit 8-1.



employment, along with their corresponding location quotients.

Of the fifteen largest traded industry clusters in the county, eight have location quotients greater than one, reflecting the county’s strength in a wide variety of industries.

Exhibit 8-1
Employment in 2011
Ventura County



Source: Estimates by LAEDC

Exhibit 8-2 displays the largest traded industry clusters in Ventura County, measured by

Exhibit 8-2
Largest Traded Industry Clusters in Ventura County
(By employment, 2011)

	Employment	LQ
Business Services	10,301	0.8
Agricultural Products	7,799	6.2
Trade ¹	7,709	0.9
Biomedical ²	7,123	4.5
Education and Knowledge Creation	3,919	0.7
Hospitality and Tourism	3,571	0.7
Information Technology	2,934	1.5
Analytical Instruments	2,560	2.2
Metal Manufacturing	2,368	1.2
Financial Services	2,136	0.5
Publishing and Printing	2,136	1.2
Production Technology	1,652	1.3
Heavy Construction Services	1,642	0.6
Entertainment	1,607	0.6
Building Fixtures, Equipment and Services	1,578	1.5
All Other Traded Clusters	6,760	
Total Traded Cluster Employment	68,592	1.0

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; BLS; Estimates by LAEDC

The strongest industry clusters as measured by location quotient are shown in Exhibit 8-3.

Exhibit 8-3
**Strongest Traded Industry Clusters in Ventura County
(By LQ, 2011)**

	Employment	LQ
Agricultural Products	7,799	6.2
Biomedical ²	7,123	4.5
Communications Equipment	1,284	3.0
Analytical Instruments	2,560	2.2
Sporting, Recreational and Children's Goods	295	2.0
Chemical Products	1,515	1.8
Building Fixtures, Equipment, Services	1,578	1.5
Information Technology	2,934	1.5
Production Technology	1,652	1.3
Metal Manufacturing	2,368	1.2
Publishing and Printing	2,136	1.2

² Includes Biopharmaceuticals and Medical Devices
Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 8-4 displays the largest local industry clusters in Ventura County (measured by employment) along with their corresponding location quotients.

Exhibit 8-4
**Largest Local Industry Clusters in Ventura County
(By employment, 2011)**

	Employment	LQ
Local Hospitality Establishments	28,250	1.2
Health Services	26,036	0.8
Real Estate, Construction, and Development	20,602	1.1
Local Commercial Services	18,452	0.8
Local Retail Clothing and Accessories	11,858	1.1
<i>All Other Local Clusters</i>	<i>60,686</i>	
Total Local Cluster Employment	165,885	1.0

Sources: CA EDD; BLS; Estimates by LAEDC

Exhibit 8-5 shows the largest traded and local industry clusters in the county measured by total payroll.

Exhibit 8-5
**Largest Industry Clusters in Ventura County
(By payroll, 2011)**

	Payroll (\$ millions)
Traded Clusters	
Biomedical ²	\$ 1,000
Business Services	802
Trade ¹	591
Information Technology	338
Agricultural Products	232
Education and Knowledge Creation	202
Financial Services	177
Analytical Instruments	169
Production Technology	133
Oil and Gas Products and Services	130
Metal Manufacturing	125
Publishing and Printing	122
Communications Equipment	111
Entertainment	110
<i>All Other Traded Clusters</i>	<i>573</i>
Total Traded Cluster Payroll	\$ 4,989
Local Clusters	
Health Services	\$ 1,323
Real Estate, Construction, and Development	1,051
Local Commercial Services	871
Local Financial Services	856
Local Hospitality Establishments	476
<i>All Other Local Clusters</i>	<i>2,061</i>
Total Local Cluster Payroll	\$ 6,638
Total Regional Payroll	\$ 14,731
Natural Resource Clusters	95
Government	2,450

¹ Includes Transportation and Logistics and Distribution

² Includes Biopharmaceuticals and Medical Devices

Sources: CA EDD; Estimates by LAEDC

A complete list of the county's traded and local industry clusters is provided in the Appendix. ❖

Appendix

Description of Industry Clusters

Listed below, in alphabetical order, are the forty-one traded industry clusters, with their subcluster components. Subclusters are defined as subgroups of industries within clusters that are more highly correlated with each other than with other industries within the same cluster. They provide a more detailed picture of the components of each traded cluster.

Aerospace Engines: Aircraft Engines; Small Arms

Aerospace Vehicles and Defense: Aircraft; Missiles and Space Vehicles; Defense Equipment

Agricultural Products: Farm Management and Related Services; Irrigation Systems; Packaging; Fertilizers; Agricultural Products; Wine and Brandy; Milling and Refining

Analytical Instruments: Laboratory Instruments; Optical Instruments; Process Instruments; Search and Navigation Equipment; Electronic Components

Apparel: Men's Clothing; Women's Clothing; Hosiery and Other Garments; Accessories; Knitting Mills

Automotive: Motor Vehicles; Automotive Parts; Automotive Components; Forgings and Stampings; Glass; Production Equipment; Small Vehicles and Trailers; Marine, Tank and Stationary Engines

Biopharmaceuticals: Biopharmaceutical Products; Health and Beauty Products; Containers

Building Fixtures, Equipment and Services: Plumbing Products; Drapery Hardware; Fabricated Materials; Heating and Lighting; Furniture and

Fittings; Clay and Vitreous Products; Floor Coverings; Steam and Air-Conditioning; Wood Cabinets, Fixtures and Other Products; Concrete, Gypsum and Other Building Products

Business Services: Management Consulting; Computer Services; Computer Programming; Printing Services; Marketing Related Services; Professional Organizations and Services; Engineering Services; Facilities Support Services

Chemical Products: Intermediate Chemicals and Gases; Packaged Chemical Products; Other Processed Chemicals; Refractories; Leather Tanning and Finishing; Special Packaging; Ammunition

Communications Equipment: Communications Equipment; Electrical and Electronic Components; Specialty Office Machines

Construction Materials: Tile, Brick and Glass; Plumbing Fixtures; Wood Products; Cut and Crushed Stone; Rubber Products

Distribution Services: Merchandise Wholesaling; Apparel and Accessories Wholesaling; Catalog and Mail-order; Food Products Wholesaling; Farm Material and Supplies Wholesaling; Transportation Vehicle and Equipment Distribution

Education and Knowledge Creation: Educational Institutions; Research Organizations; Educational Facilities; Lessors of Other Nonfinancial Intangible Assets; Supplies

Entertainment: Video Production and Distribution; Recorded Products; Entertainment Equipment; Entertainment Related Services; Entertainment Venues

Financial Services: Depository Institutions; Securities Brokers, Dealers and Exchanges; Insurance Products; Real Estate Investment Trusts; Passenger Car Leasing

Fishing and Fishing Products: Fish Products; Fishing and Hunting; Processed Seafood

Footwear: Footwear; Specialty Footwear

Forest Products: Paper Products; Paper Mills; Paper Industries Machinery; Prefabricated Wood Products; Brooms and Brushes

Furniture: Furniture; Wood Materials and Products; Furnishings

Heavy Construction Services: Final Construction; Subcontractors; Primary Construction Materials; Ceramic Tile; Equipment Distribution and Wholesaling; Fabricated Metal Structures and Piping; Explosives

Heavy Machinery: Construction Machinery; Farm Machinery; Railroad Equipment and Rental; Mining Machinery; Machinery Components; Valves and Pipe Fittings

Hospitality and Tourism: Tourism Attractions; Tourism Related Services; Water Passenger Transportation; Scenic and Sightseeing Transportation; Accommodations and Related Services; Boat Related Services; Ground Transportation

Information Technology: Computers; Electronic Components and Assemblies; Peripherals; Software; Communications Services; Fiber Optic Cable

Jewelry and Precious Metals: Jewelry and Precious Metals Products; Costume jewelry; Cutlery; Collectibles

Leather and Related Products: Leather products; Coated Fabrics; Related Products; Accessories

Lighting and Electrical Equipment: Lighting Fixtures; Electric Lamps; Batteries; Switchgear; Electrical Parts; Metal Parts

Medical Devices: Surgical Instruments and Supplies; Dental Instruments and Supplies; Ophthalmic Goods; Medical Equipment; Diagnostic Substances; Biological Products

Metal Manufacturing: Fabricated Metal Products; Metal Alloys; Precision Metal Products; Fasteners; Wire and Springs; Metal Processing; Iron and Steel Mills and Foundries; Nonferrous Mills and Foundries; Metal Furniture; Environmental Controls; Pumps; General Industrial Machinery; Saw Blades and Handsaws; Laundry and Cleaning Equipment

Motor Driven Products: Motors and Generators; Batteries; Motorized Equipment; Refrigeration and Heating Equipment; Appliances; Specialized Pumps; Specialized Machinery; Tires

Oil and Gas Products and Services: Oil and Gas Machinery; Hydrocarbons; Oil and Gas Exploration and Drilling; Pipeline Transportation; Petroleum Processing

Plastics: Plastic Materials and Resins; Plastic Products; Paint & Coating; Synthetic Rubber

Power Generation and Transmission: Electric Services; Turbines and Turbine Generators; Transformers; Porcelain, Carbon and Graphite Components; Electronic Capacitors

Prefabricated Enclosures: Recreational Vehicles and Parts; Mobile Homes; Trucks and Trailers; Caskets; Elevators and Moving Stairways; Office Furniture; Household Refrigerators and Freezers; Aluminum Processing

Processed Food: Milk and Frozen Desserts; Baked Packaged Foods; Coffee and Tea; Processed Dairy and Related Products; Meat and Related Products and Services; Flour; Specialty Foods and Ingredients; Milling; Candy and Chocolate; Malt Beverages; Paper Containers and Boxes; Metal and Glass Containers; Food Products Machinery

Production Technology: Machine Tools and Accessories; Process Equipment Sub-systems and Components; Process Machinery; Industrial Patterns; Fabricated Plate Work; Industrial Trucks and Tractors; Ball and Roller Bearings

Publishing and Printing: Publishing; News Syndicates; Signs and Advertising Specialties; Photographic Services; Photographic Equipment and Supplies; Media Representatives; Printing Services; Printing Inputs; Paper Products; Specialty Paper Products; Inked Paper and Ribbons; Office Equipment and Supplies

Sporting, Recreational and Children's Goods: Sporting and Athletic Goods; Games, Toys, and Children's Vehicles; Motorcycles and Bicycles

Textiles: Fabric Mills; Specialty Fabric Mills; Specialty Fabric Processing; Textile Machinery; Yarn and Thread Mills; Carpets and Rugs; Wool Mills; Fibers; Finishing Mills; Specialty Apparel Components; Tire Cord and Fabrics

Tobacco: Cigarettes; Other Tobacco Products; Tobacco Processing; Specialty Packaging

Transportation and Logistics: Air Transportation; Bus Transportation; Marine Transportation; Transportation Arrangement and Warehousing; Transportation Support and Operations; Airports.



County Level Data

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	52,278	2.0	\$ 4,811.9	454
Agricultural Products	29,338	1.0	903.3	908
Analytical Instruments	50,336	1.9	4,785.7	804
Automotive	20,444	0.4	1,032.2	856
Biomedical (biopharmaceuticals, medical devices)	56,265	1.6	4,279.6	815
Building Fixtures, Equipment and Services	26,971	1.2	1,185.0	1,097
Business Services	267,661	0.9	19,968.8	28,694
Chemical Products	12,207	0.6	871.2	436
Communications Equipment	10,954	1.1	754.1	255
Construction Materials	5,678	0.8	217.5	250
Education and Knowledge Creation	124,863	1.0	7,669.5	4,033
Entertainment	180,503	3.2	19,021.7	15,340
Fashion	77,528	2.8	2,852.7	4,702
Financial Services	89,840	0.8	11,734.1	8,441
Fishing and Fishing Products	479	0.2	18.1	48
Forest Products	5,089	0.4	244.9	192
Furniture	10,497	1.1	339.0	578
Heavy Construction Services	33,537	0.5	2,263.1	1,765
Heavy Machinery	4,408	0.3	306.4	255
Hospitality and Tourism	131,897	1.1	4,241.7	4,053
Information Technology	43,960	1.0	4,196.7	1,234
Lighting and Electrical Equipment	11,273	1.1	600.5	396
Metal Manufacturing	48,939	1.1	2,560.5	1,675
Motor Driven Products	4,874	0.4	258.9	165
Oil and Gas Products and Services	10,810	0.3	1,380.6	306
Plastics	22,724	0.8	1,034.6	732
Power Generation and Transmission	7,705	0.6	642.7	245
Prefabricated Enclosures	3,635	0.4	156.9	128
Processed Food	56,916	0.8	2,807.3	1,125
Production Technology	24,487	0.9	1,539.6	873
Publishing and Printing	45,635	1.1	3,200.1	3,164
Sporting, Recreational and Children's Goods	5,273	1.6	370.8	247
Tobacco	14	0.0	1.0	3
Trade	269,609	1.3	16,231.6	17,033
TOTAL TRADED CLUSTERS	1,746,627	1.1	\$ 122,481.9	101,303
LOCAL CLUSTERS				
Health Services	668,661	0.9	\$ 35,828.5	43,695
Local Commercial Services	613,128	1.1	32,599.8	37,404
Local Community and Civic Organizations	114,584	0.8	3,935.6	7,789
Local Education and Training	58,465	0.9	2,194.0	2,395
Local Entertainment and Media	98,049	1.2	5,430.8	5,962
Local Financial Services	154,749	0.8	10,799.5	11,765
Local Food and Beverage Processing /Distribution	216,754	1.1	7,138.7	10,749
Local Hospitality Establishments	573,926	1.0	10,346.3	31,254
Local Household Goods and Services	101,884	1.1	3,628.2	9,658
Local Industrial Products and Services	86,243	1.2	4,652.7	9,087
Local Logistical Services	120,007	0.9	5,012.4	6,147
Local Motor Vehicle Products and Services	191,519	1.0	7,522.4	17,963
Local Personal Services (Non-Medical)	113,346	0.9	3,063.8	14,881
Local Retail Clothing and Accessories	240,388	1.0	5,334.9	10,370
Local Utilities	54,848	0.8	4,422.8	1,802
Real Estate, Construction, and Development	426,497	1.0	22,416.2	48,989
TOTAL LOCAL CLUSTERS	3,833,048	1.0	\$ 164,326.6	269,911
TOTAL COVERED EMPLOYMENT	6,765,263	1.0	\$ 348,026.0	671,766
1 Includes Transportation and Logistics and Distribution		2 Includes Biopharmaceuticals and Medical Devices		
3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles				
Sources: CA EDD; BLS; Estimates by LAEDC				

INDUSTRY CLUSTERS IN IMPERIAL COUNTY

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	175	0.8	\$ 8.2	1
Agricultural Products	6,199	26.1	120.0	106
Analytical Instruments	3	0.0	0.1	2
Automotive	-	-	0.0	-
Biomedical (biopharmaceuticals, medical devices)	6	0.0	0.2	1
Building Fixtures, Equipment and Services	235	1.2	11.9	1
Business Services	486	0.2	23.9	88
Chemical Products	1	0.0	0.0	1
Communications Equipment	-	-	0.0	-
Construction Materials	1	0.0	0.0	1
Education and Knowledge Creation	46	0.0	1.2	10
Entertainment	54	0.1	0.6	10
Fashion	26	0.1	0.5	4
Financial Services	208	0.2	8.1	35
Fishing and Fishing Products	-	-	0.0	-
Forest Products	-	-	0.0	-
Furniture	-	-	0.0	-
Heavy Construction Services	177	0.3	10.7	17
Heavy Machinery	266	1.9	12.8	19
Hospitality and Tourism	346	0.4	6.5	40
Information Technology	14	0.0	0.9	1
Lighting and Electrical Equipment	-	-	0.0	-
Metal Manufacturing	37	0.1	2.0	2
Motor Driven Products	-	-	0.0	-
Oil and Gas Products and Services	13	0.0	0.7	2
Plastics	1	0.0	0.0	1
Power Generation and Transmission	359	3.1	30.1	2
Prefabricated Enclosures	2	0.0	0.1	2
Processed Food	1,723	3.0	59.4	15
Production Technology	10	0.0	0.2	3
Publishing and Printing	47	0.1	1.5	7
Sporting, Recreational and Children's Goods	6	0.2	0.2	1
Tobacco	-	-	0.0	-
Trade	1,340	0.8	55.9	115
TOTAL TRADED CLUSTERS	11,781	0.9	\$ 355.7	487
LOCAL CLUSTERS				
Health Services	2,597	0.4	\$ 83.7	199
Local Commercial Services	1,933	0.4	69.1	166
Local Community and Civic Organizations	619	0.5	11.3	62
Local Education and Training	425	0.8	7.9	9
Local Entertainment and Media	412	0.6	8.7	36
Local Financial Services	579	0.4	22.5	75
Local Food and Beverage Processing /Distribution	1,354	0.8	36.9	92
Local Hospitality Establishments	3,146	0.7	46.8	212
Local Household Goods and Services	255	0.3	6.1	40
Local Industrial Products and Services	272	0.5	9.8	45
Local Logistical Services	1,025	0.9	36.9	101
Local Motor Vehicle Products and Services	1,430	0.9	40.5	164
Local Personal Services (Non-Medical)	623	0.6	14.2	95
Local Retail Clothing and Accessories	3,434	1.7	69.3	128
Local Utilities	344	0.6	19.9	32
Real Estate, Construction, and Development	1,804	0.5	72.1	252
TOTAL LOCAL CLUSTERS	20,254	0.6	\$ 555.7	1,708
TOTAL COVERED EMPLOYMENT	56,496	1.0	\$ 2,003.2	7,333

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

INDUSTRY CLUSTERS IN LOS ANGELES COUNTY

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	39,456	2.6	\$ 3,764.7	268
Agricultural Products	4,392	0.3	229.7	261
Analytical Instruments	28,342	1.8	2,859.5	342
Automotive	10,108	0.4	465.0	438
Biomedical (biopharmaceuticals, medical devices)	22,152	1.1	1,418.4	384
Building Fixtures, Equipment and Services	13,501	1.0	545.2	590
Business Services	152,068	0.9	11,993.3	16,209
Chemical Products	6,524	0.6	445.9	256
Communications Equipment	5,566	1.0	380.9	115
Construction Materials	2,135	0.5	74.7	151
Education and Knowledge Creation	90,313	1.2	5,602.0	2,442
Entertainment	162,222	5.0	18,185.1	13,650
Fashion	65,576	4.1	2,336.7	3,932
Financial Services	53,503	0.9	7,515.6	4,760
Fishing and Fishing Products	374	0.3	14.6	32
Forest Products	2,038	0.2	80.4	97
Furniture	7,387	1.4	239.2	385
Heavy Construction Services	14,174	0.4	1,019.3	712
Heavy Machinery	1,983	0.2	159.2	103
Hospitality and Tourism	62,033	0.9	2,206.9	2,202
Information Technology	10,998	0.4	1,098.4	417
Lighting and Electrical Equipment	7,037	1.2	393.4	229
Metal Manufacturing	26,769	1.1	1,378.4	972
Motor Driven Products	2,591	0.3	131.5	89
Oil and Gas Products and Services	7,911	0.4	1,091.0	158
Plastics	10,752	0.7	491.3	363
Power Generation and Transmission	2,027	0.3	144.0	107
Prefabricated Enclosures	1,565	0.3	69.4	53
Processed Food	39,729	1.0	2,016.7	700
Production Technology	12,824	0.8	811.4	447
Publishing and Printing	27,800	1.2	2,233.4	2,045
Sporting, Recreational and Children's Goods	2,473	1.3	245.2	95
Tobacco	-	-	0.0	-
Trade	176,844	1.5	\$ 10,375.4	11,156
TOTAL TRADED CLUSTERS	1,073,167	1.2	\$ 80,015.8	64,159
LOCAL CLUSTERS				
Health Services	385,410	0.9	\$ 20,799.7	25,098
Local Commercial Services	358,128	1.2	20,910.8	21,843
Local Community and Civic Organizations	73,089	0.9	2,678.0	4,712
Local Education and Training	36,773	1.0	1,476.0	1,444
Local Entertainment and Media	58,996	1.2	3,707.6	3,393
Local Financial Services	85,283	0.8	6,161.3	6,165
Local Food and Beverage Processing /Distribution	128,525	1.1	4,213.0	6,556
Local Hospitality Establishments	311,455	1.0	5,815.8	17,741
Local Household Goods and Services	48,876	0.9	1,865.7	5,004
Local Industrial Products and Services	52,796	1.3	2,843.6	5,548
Local Logistical Services	63,796	0.8	2,680.5	3,431
Local Motor Vehicle Products and Services	102,075	0.9	3,855.8	10,067
Local Personal Services (Non-Medical)	64,929	0.9	1,847.0	8,657
Local Retail Clothing and Accessories	125,823	0.9	2,881.1	6,170
Local Utilities	34,314	0.8	2,920.1	989
Real Estate, Construction, and Development	198,172	0.8	10,436.4	24,983
TOTAL LOCAL CLUSTERS	2,128,440	0.9	\$ 95,092.4	151,801
TOTAL COVERED EMPLOYMENT	3,884,366	1.0	\$ 211,248.5	436,194

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

INDUSTRY CLUSTERS IN ORANGE COUNTY

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	10,169	1.9	\$ 900.4	97
Agricultural Products	1,733	0.3	57.4	91
Analytical Instruments	16,810	3.1	1,576.8	303
Automotive	4,678	0.5	279.5	207
Biomedical (biopharmaceuticals, medical devices)	19,002	2.6	1,350.0	256
Building Fixtures, Equipment and Services	5,027	1.1	264.7	224
Business Services	75,750	1.3	5,661.9	8,058
Chemical Products	1,713	0.4	113.7	88
Communications Equipment	2,890	1.5	191.6	84
Construction Materials	2,005	1.4	88.7	47
Education and Knowledge Creation	21,712	0.8	1,496.0	966
Entertainment	10,164	0.9	523.9	826
Fashion	9,174	1.6	415.3	499
Financial Services	26,704	1.2	3,627.1	2,264
Fishing and Fishing Products	2	0.0	0.1	4
Forest Products	1,092	0.4	67.0	49
Furniture	888	0.5	24.4	96
Heavy Construction Services	6,881	0.5	467.7	343
Heavy Machinery	1,043	0.3	77.3	39
Hospitality and Tourism	47,481	2.0	1,426.5	849
Information Technology	23,304	2.5	2,336.9	483
Lighting and Electrical Equipment	2,010	1.0	102.7	87
Metal Manufacturing	11,810	1.3	635.2	357
Motor Driven Products	884	0.3	57.9	35
Oil and Gas Products and Services	1,087	0.1	126.0	60
Plastics	5,976	1.1	298.1	182
Power Generation and Transmission	4,307	1.6	399.9	68
Prefabricated Enclosures	674	0.4	37.0	19
Processed Food	7,513	0.5	363.9	191
Production Technology	6,369	1.1	413.0	234
Publishing and Printing	11,832	1.4	689.2	698
Sporting, Recreational and Children's Goods	1,942	2.9	94.0	94
Tobacco	14	0.1	1.0	3
Trade	44,729	1.1	\$ 3,500.9	3,425
TOTAL TRADED CLUSTERS	387,367	1.2	\$ 27,665.5	21,326
LOCAL CLUSTERS				
Health Services	135,944	0.9	\$ 7,608.0	9,394
Local Commercial Services	146,503	1.3	7,857.8	8,637
Local Community and Civic Organizations	19,887	0.7	685.7	1,373
Local Education and Training	11,030	0.9	391.8	462
Local Entertainment and Media	19,721	1.2	1,052.3	1,282
Local Financial Services	40,796	1.1	2,991.7	2,897
Local Food and Beverage Processing /Distribution	36,346	0.9	1,259.2	1,736
Local Hospitality Establishments	125,271	1.1	2,261.1	6,281
Local Household Goods and Services	25,387	1.3	900.8	2,132
Local Industrial Products and Services	17,571	1.2	1,070.5	1,903
Local Logistical Services	16,156	0.6	641.3	738
Local Motor Vehicle Products and Services	36,234	0.9	1,680.6	3,146
Local Personal Services (Non-Medical)	24,197	0.9	644.2	2,962
Local Retail Clothing and Accessories	44,238	0.9	1,024.0	1,758
Local Utilities	8,591	0.6	654.0	377
Real Estate, Construction, and Development	119,232	1.4	6,969.8	11,449
TOTAL LOCAL CLUSTERS	827,105	1.0	\$ 37,692.7	56,527
TOTAL COVERED EMPLOYMENT	1,371,023	1.0	\$ 73,973.5	103,314

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

INDUSTRY CLUSTERS IN RIVERSIDE COUNTY

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	642	0.3	\$ 32.6	24
Agricultural Products	7,632	3.3	177.2	185
Analytical Instruments	1,499	0.7	113.4	37
Automotive	2,594	0.7	136.2	72
Biomedical (biopharmaceuticals, medical devices)	5,513	1.9	386.8	61
Building Fixtures, Equipment and Services	3,007	1.6	128.0	110
Business Services	11,820	0.5	595.4	1,675
Chemical Products	704	0.4	35.7	29
Communications Equipment	904	1.1	51.9	16
Construction Materials	564	0.9	20.0	11
Education and Knowledge Creation	3,464	0.3	121.1	225
Entertainment	3,099	0.7	98.0	293
Fashion	940	0.4	32.5	87
Financial Services	3,356	0.4	198.5	528
Fishing and Fishing Products	39	0.2	1.3	1
Forest Products	685	0.6	24.3	12
Furniture	365	0.5	12.9	36
Heavy Construction Services	5,118	1.0	314.6	290
Heavy Machinery	447	0.3	22.7	47
Hospitality and Tourism	12,773	1.3	364.5	431
Information Technology	5,277	1.4	328.9	110
Lighting and Electrical Equipment	1,102	1.3	50.5	35
Metal Manufacturing	1,876	0.5	88.9	106
Motor Driven Products	313	0.3	14.0	22
Oil and Gas Products and Services	177	0.1	10.3	23
Plastics	2,672	1.2	111.6	56
Power Generation and Transmission	324	0.3	26.8	20
Prefabricated Enclosures	849	1.3	29.8	28
Processed Food	1,675	0.3	86.2	73
Production Technology	1,901	0.8	100.1	72
Publishing and Printing	1,936	0.6	73.9	162
Sporting, Recreational and Children's Goods	404	1.5	13.1	25
Tobacco	-	-	0.0	-
Trade	15,989	1.0	720.1	759
TOTAL TRADED CLUSTERS	99,660	0.8	\$ 4,522.1	5,661
LOCAL CLUSTERS				
Health Services	55,363	0.9	\$ 2,658.5	3,568
Local Commercial Services	32,820	0.7	1,110.1	2,582
Local Community and Civic Organizations	7,317	0.6	191.5	655
Local Education and Training	3,015	0.6	92.6	165
Local Entertainment and Media	7,440	1.1	241.4	498
Local Financial Services	7,573	0.5	359.4	942
Local Food and Beverage Processing /Distribution	21,021	1.2	702.4	863
Local Hospitality Establishments	56,987	1.2	995.2	2,948
Local Household Goods and Services	11,156	1.4	326.6	1,079
Local Industrial Products and Services	5,162	0.9	218.8	484
Local Logistical Services	8,659	0.8	332.1	727
Local Motor Vehicle Products and Services	19,772	1.2	683.2	1,789
Local Personal Services (Non-Medical)	10,202	0.9	233.2	1,334
Local Retail Clothing and Accessories	27,195	1.4	544.6	952
Local Utilities	3,249	0.6	205.5	145
Real Estate, Construction, and Development	47,477	1.3	2,099.1	5,259
TOTAL LOCAL CLUSTERS	324,407	1.0	\$ 10,994.3	23,990
TOTAL COVERED EMPLOYMENT	557,787	1.0	\$ 21,791.2	49,727

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

INDUSTRY CLUSTERS IN SAN BERNARDINO COUNTY

	<u>Employment</u>		<u>Payroll</u>	<u>Establishments</u>
	Level	LQ	(\$millions)	Level
TRADED CLUSTERS				
Aerospace	956	0.4	\$ 50.5	34
Agricultural Products	1,584	0.6	86.9	86
Analytical Instruments	1,121	0.5	66.4	47
Automotive	2,426	0.6	115.1	102
Biomedical (biopharmaceuticals, medical devices)	2,469	0.8	123.9	50
Building Fixtures, Equipment and Services	3,623	1.8	160.0	130
Business Services	17,237	0.7	892.1	1,276
Chemical Products	1,751	1.0	102.4	51
Communications Equipment	309	0.4	18.8	15
Construction Materials	863	1.3	28.6	34
Education and Knowledge Creation	5,409	0.5	246.8	187
Entertainment	3,358	0.7	104.4	212
Fashion	1,264	0.5	45.2	118
Financial Services	3,933	0.4	207.8	456
Fishing and Fishing Products	29	0.1	1.1	1
Forest Products	773	0.6	40.0	27
Furniture	1,794	2.2	60.5	46
Heavy Construction Services	5,545	1.0	345.7	292
Heavy Machinery	558	0.4	28.6	31
Hospitality and Tourism	5,693	0.6	140.3	364
Information Technology	1,434	0.4	93.3	97
Lighting and Electrical Equipment	865	1.0	40.3	33
Metal Manufacturing	6,079	1.6	331.1	156
Motor Driven Products	923	0.8	45.1	14
Oil and Gas Products and Services	425	0.1	23.0	22
Plastics	2,817	1.2	107.3	99
Power Generation and Transmission	407	0.3	25.7	35
Prefabricated Enclosures	510	0.7	18.0	24
Processed Food	5,139	0.9	227.0	116
Production Technology	1,730	0.7	81.7	79
Publishing and Printing	1,883	0.5	80.3	138
Sporting, Recreational and Children's Goods	153	0.5	7.0	16
Tobacco	-	-	0.0	-
Trade	22,999	1.3	988.4	989
TOTAL TRADED CLUSTERS	106,061	0.8	\$ 4,933.6	5,377
LOCAL CLUSTERS				
Health Services	63,311	0.9	\$ 3,355.2	3,222
Local Commercial Services	55,292	1.2	1,781.4	2,455
Local Community and Civic Organizations	9,120	0.7	247.0	638
Local Education and Training	4,998	0.9	145.8	185
Local Entertainment and Media	6,652	0.9	231.0	455
Local Financial Services	8,698	0.5	408.4	905
Local Food and Beverage Processing /Distribution	20,470	1.1	648.6	958
Local Hospitality Establishments	48,817	1.0	751.0	2,645
Local Household Goods and Services	10,734	1.3	360.3	823
Local Industrial Products and Services	7,278	1.2	350.4	773
Local Logistical Services	27,721	2.4	1,208.7	896
Local Motor Vehicle Products and Services	23,440	1.3	905.2	2,001
Local Personal Services (Non-Medical)	7,719	0.7	170.1	1,100
Local Retail Clothing and Accessories	27,840	1.3	586.6	871
Local Utilities	5,658	0.9	415.8	161
Real Estate, Construction, and Development	39,209	1.0	1,788.1	4,250
TOTAL LOCAL CLUSTERS	366,957	1.1	\$ 13,353.4	22,338
TOTAL COVERED EMPLOYMENT	597,002	1.0	\$ 24,278.5	51,211

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

INDUSTRY CLUSTERS IN VENTURA COUNTY

	Employment		Payroll (\$millions)	Establishments
	Level	LQ		
TRADED CLUSTERS				
Aerospace	880	0.8	\$ 55.6	30
Agricultural Products	7,799	6.2	232.0	179
Analytical Instruments	2,560	2.2	169.5	72
Automotive	638	0.3	36.4	36
Biomedical (biopharmaceuticals, medical devices)	7,123	4.5	1,000.2	63
Building Fixtures, Equipment and Services	1,578	1.5	75.3	42
Business Services	10,301	0.8	802.1	1,388
Chemical Products	1,515	1.8	173.5	11
Communications Equipment	1,284	3.0	110.9	25
Construction Materials	112	0.3	5.4	6
Education and Knowledge Creation	3,919	0.7	202.3	204
Entertainment	1,607	0.6	109.7	350
Fashion	549	0.4	22.4	62
Financial Services	2,136	0.5	177.0	398
Fishing and Fishing Products	35	0.3	1.0	10
Forest Products	501	0.8	33.1	7
Furniture	64	0.2	2.0	15
Heavy Construction Services	1,642	0.6	105.1	112
Heavy Machinery	110	0.1	5.8	16
Hospitality and Tourism	3,571	0.7	97.0	167
Information Technology	2,934	1.5	338.2	126
Lighting and Electrical Equipment	259	0.6	13.6	13
Metal Manufacturing	2,368	1.2	124.9	81
Motor Driven Products	162	0.3	10.3	6
Oil and Gas Products and Services	1,196	0.7	129.6	41
Plastics	507	0.4	26.3	30
Power Generation and Transmission	281	0.5	16.1	14
Prefabricated Enclosures	35	0.1	2.7	2
Processed Food	1,137	0.4	54.2	30
Production Technology	1,652	1.3	133.1	39
Publishing and Printing	2,136	1.2	121.7	114
Sporting, Recreational and Children's Goods	295	2.0	11.3	16
Tobacco	-	-	0.0	-
Trade	7,709	0.9	590.9	588
TOTAL TRADED CLUSTERS	68,592	1.0	\$ 4,989.1	4,293
LOCAL CLUSTERS				
Health Services	26,036	0.8	\$ 1,323.4	2,214
Local Commercial Services	18,452	0.8	870.7	1,721
Local Community and Civic Organizations	4,552	0.7	122.0	349
Local Education and Training	2,224	0.8	79.9	130
Local Entertainment and Media	4,827	1.3	189.9	298
Local Financial Services	11,820	1.4	856.1	781
Local Food and Beverage Processing /Distribution	9,038	1.0	278.7	544
Local Hospitality Establishments	28,250	1.2	476.4	1,427
Local Household Goods and Services	5,477	1.3	168.7	580
Local Industrial Products and Services	3,164	1.0	159.7	334
Local Logistical Services	2,649	0.5	113.0	254
Local Motor Vehicle Products and Services	8,568	1.0	357.1	797
Local Personal Services (Non-Medical)	5,675	1.0	155.1	733
Local Retail Clothing and Accessories	11,858	1.1	229.3	491
Local Utilities	2,691	0.9	207.5	99
Real Estate, Construction, and Development	20,602	1.1	1,050.6	2,796
TOTAL LOCAL CLUSTERS	165,885	1.0	\$ 6,638.2	13,548
TOTAL COVERED EMPLOYMENT	298,589	1.0	\$ 14,730.9	23,986

1 Includes Transportation and Logistics and Distribution

2 Includes Biopharmaceuticals and Medical Devices

3 Includes Apparel, Footwear, Jewelry and Precious Metals, Leather and Related Products, and Textiles

Sources: CA EDD; BLS; Estimates by LAEDC

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