



APRIL 2024



LAEDC



# INDUSTRY CLUSTERS

*in Los Angeles County*



Los Angeles  
County  
Economic  
Development  
Corporation

Institute for  
Applied  
Economics

# LOS ANGELES COUNTY INDUSTRY CLUSTERS

## Overview & Key Findings

### Introduction

Los Angeles County is large and diverse—geographically, socially, and economically. It encompasses over 4,000 square miles and was home to over 9.7 million people in 2023. If Los Angeles County were a country, its economy would be the 21st largest in the world, with a GDP of \$712 billion in 2023. L.A. County's private and public sectors supplied over 4.7 million jobs in 2023, and the county has over 1.3 million small businesses, with the highest proportion of woman- and BIPOC-owned small businesses of any U.S. county (1).

This report presents a description of L.A. County's economy through the lens of industry cluster employment. Industry clusters are concentrations of related industries in a particular region; the more concentrated an industry cluster is, the more competitive that industry cluster is relative to other regions in the country. (More information can be found in the Methodology section on page 35.)

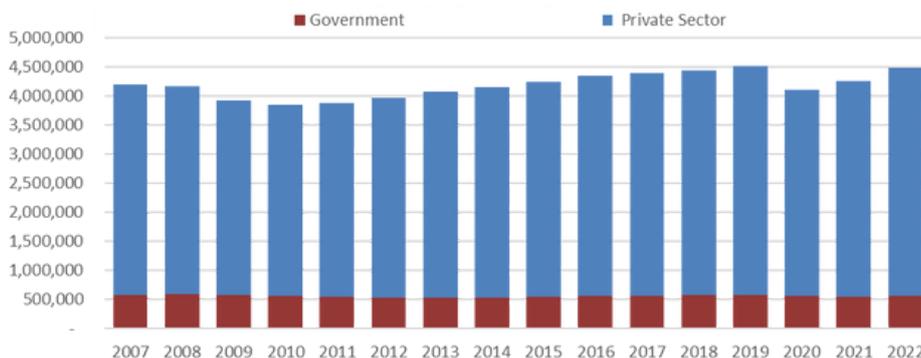
We last updated our industry clusters analysis in early 2020 with data through 2019. That analysis provided a useful pre-COVID-19-pandemic baseline for future analyses (2). This comprehensive update to the 2020 report includes data through 2022, the latest year for which official U.S. Bureau of Labor Statistics information is available.

*Note:* To enable like-for-like comparisons across clusters and organizations, LAEDC industry cluster analyses focus on **private sector (non-governmental) employment only**; governmental employment is excluded for cluster-level analyses.

### Key Findings

#### County-wide employment overview: 2007 - 2022

From the years 2010 to 2019, employment across all sectors in L.A. County grew an average of 2% annually. Private sector industry clusters employed roughly 90% of workers over this time period; the remaining percentage was employed by governments.



1. LA County By the Numbers, County of Los Angeles. <https://lacounty.gov/by-the-numbers/>

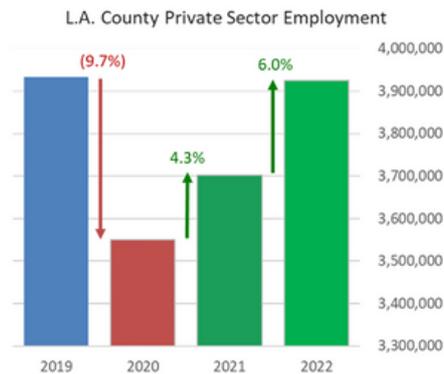
2. "Industry Clusters in Los Angeles County, 2020". <https://laedc.org/research/reports/industry-clusters-of-los-angeles-county-2020/>

# LOS ANGELES COUNTY INDUSTRY CLUSTERS

## Key Findings: COVID-19 Impacts

### COVID-19 pandemic economic impacts

In 2019, the private sector in L.A. County employed 3,932,547, a record high. With the onset of the COVID-19 pandemic, almost 382,000 jobs were lost—a decline of 9.7%. Fortunately, employment in L.A. County rebounded significantly in 2021 & 2022. The county experienced 4.3% growth in 2021, adding almost 151,900 jobs. In 2022, employment grew 6% (nearly 222,000 jobs), reaching 3,924,220.



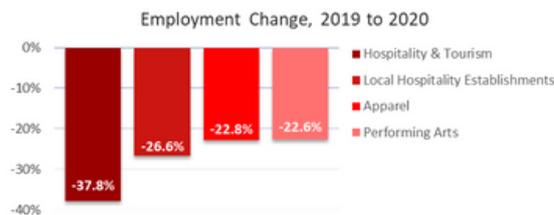
### Cluster-level impacts from the COVID-19 pandemic in 2020

Before turning attention to detailed information on each cluster, we'd like to present an overview of the effects of the COVID-19 pandemic on clusters. Of the 23 clusters covered in this report, 19 lost jobs; only 4 did not experience job losses in 2020.

#### Job losses between 20% and 40%

Four clusters **lost 20% of their jobs**. Not surprisingly, Hospitality & Tourism (Traded) and Local Hospitality (Local) fared the worst, followed by Apparel and Performing Arts:

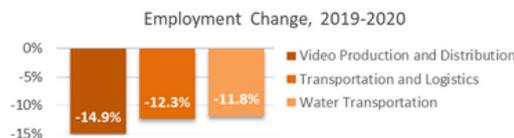
- Hospitality & Tourism (Traded), down 38%
- Local Hospitality (Local), down 27%
- Apparel, down 23%
- Performing Arts, down 22.5%



#### Job losses between 10% and 20%

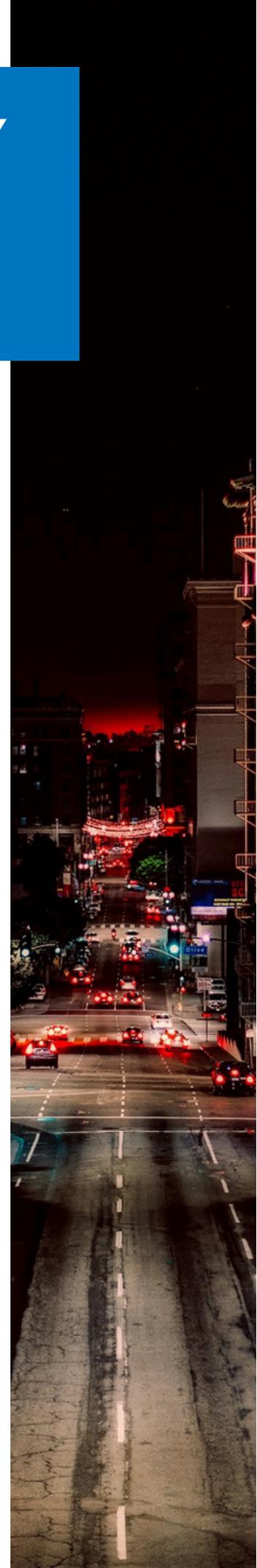
Three clusters **lost between 10% and 20%** of their jobs in 2020:

- Video Production & Distribution\*, down 15%
- Transportation & Logistics, down 12.3%
- Water Transportation, down 11.8%



#### Job losses between 0.1% and 10%

Twelve clusters experienced **job losses between 0.1% and 10%**:



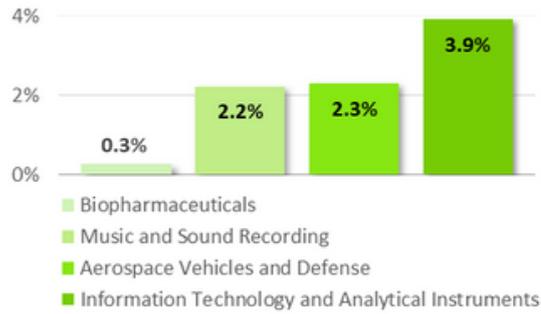
# LOS ANGELES COUNTY INDUSTRY CLUSTERS

## Key Findings: Cluster-Level Impacts

### Clusters with job gains in 2020:

- Biopharmaceuticals—up 0.3% (grew 4.1% in 2019)
- Music & Sound Recording—up 2.2% (grew >10% in 2019)
- Aerospace & Defense—up 2.3% (grew 8.6% in 2019)
- IT & Analytical Instruments—up 4% (down 3.3% in 2019)

Employment Change, 2019 to 2020

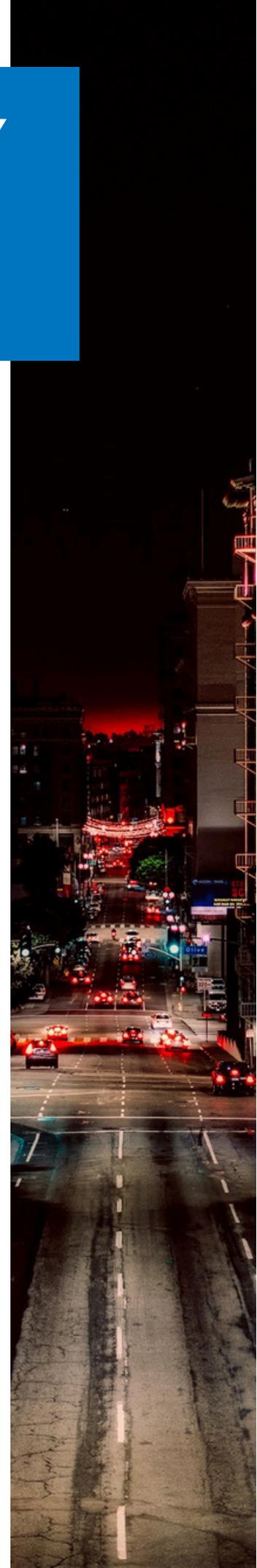


### Cluster-level performance post-pandemic: 2021-2022

As noted on Page 1, total private-sector employment in L.A. County is nearly back to 2019 levels. However, recovery within and across industry clusters was uneven during 2021 and 2022. Some clusters reached or exceeded 2019 employment levels in 2022, while others are still below 2019 levels. The table below summarizes the employment trajectory of each cluster in this report, from 2019 to 2022, sorted by impacts on employment in 2020:

EMPLOYMENT PERCENTAGE CHANGE BY CLUSTER			
CLUSTER	From 2019 through 2020 (COVID year)	From 2021 through 2022 (recovery)	From 2019 through 2022 (COVID drop + recovery)
Hospitality and Tourism	-37.8%	29.6%	-19.4%
Local Hospitality Establishments	-26.6%	28.7%	-5.6%
Apparel	-22.8%	12.2%	-13.3%
Performing Arts	-22.6%	34.3%	4.0%
Video Production and Distribution	-14.9%	57.8%	34.2%
Transportation and Logistics	-12.3%	8.3%	-5.0%
Water Transportation	-11.8%	9.0%	-3.9%
Distribution and Electronic Commerce	-9.7%	-3.3%	-12.7%
Local Commercial Services	-8.9%	11.1%	1.3%
Business Services	-8.1%	9.3%	0.4%
Textile Manufacturing	-7.4%	6.3%	-1.5%
Education and Knowledge Creation	-6.3%	12.3%	5.2%
Communications Equipment and Services	-4.6%	-3.5%	-7.9%
Marketing, Design, and Publishing	-4.2%	8.3%	3.7%
Food Processing and Manufacturing	-3.7%	4.0%	0.1%
Local Health Services	-2.9%	5.1%	2.0%
Financial Services	-2.3%	-1.5%	-3.7%
Local Community and Civic Organizations	-1.9%	9.6%	7.6%
Medical Devices	-0.7%	2.0%	1.3%
Biopharmaceuticals	0.3%	6.5%	6.8%
Music and Sound Recording	2.2%	18.0%	20.6%
Aerospace Vehicles and Defense	2.3%	-1.9%	0.3%
Information Technology and Analytical Instruments	3.9%	6.3%	10.4%

Additional details and commentary on the impacts of the COVID-19 pandemic can be found on the individual cluster pages.



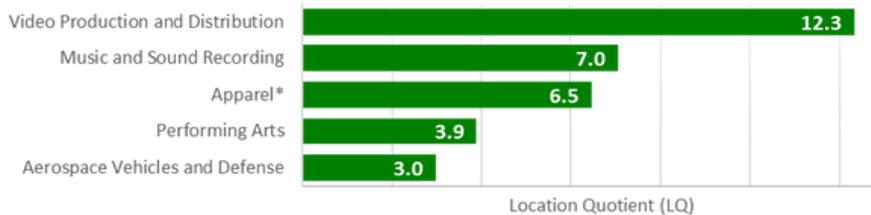
# LOS ANGELES COUNTY INDUSTRY CLUSTERS:

## *Key Findings: Regional Competitiveness*

### L.A. County's regional competitiveness

The geographic concentration of a group of industries in a sector provides important competitive advantages to the region for that industry cluster. Employment LQ measures the concentration of jobs in an industry for a particular region by determining the proportion of jobs in an industry in a region and comparing this to the same proportion for the same industry in the U.S. as a whole. Industries with LQs greater than 1.0 are *more concentrated* than in the U.S. as a whole, while those with LQs less than 1.0 are *less concentrated*.

By the measure of employment LQ, L.A. County's *most competitive* Traded industry clusters are:



The next most competitive group of Traded industry clusters (those with LQs greater than 1.0 but less than 3.0) are:



The remaining Traded clusters have LQs less than 1.0 but at least 0.7. It's important to note that these clusters are still competitive economically; however, there is room to increase competitiveness of these clusters in L.A. County relative to the rest of the U.S.

- Distribution and Electronic Commerce, LQ=0.9
- Medical Devices, LQ=0.9
- Hospitality and Tourism, LQ=0.8
- Food Processing and Manufacturing, LQ=0.8
- Biopharmaceuticals, LQ=0.8
- Business Services, LQ=0.8
- Information Technology and Analytical Instruments, LQ=0.7
- Financial Services, LQ=0.7

**\* Note:** While Apparel is still more concentrated in L.A. County than it is in the nation as a whole, the industry's concentration has fallen dramatically since the mid-aughts as this category of industries was increasingly offshored.

# CLUSTERS OVERVIEW

This report includes selected industry clusters in L.A. County representing key sectors in the economy, employing significant numbers of people and/or exhibiting greater concentration in L.A. County than in the U.S. as a whole.

The report is divided into two parts: **Traded** clusters and **Local** clusters. *Traded clusters* are groups of industries that are wealth-generating, selling goods and services in markets beyond the region and are often concentrated in locations that provide them with the most advantages. *Local clusters* consist of industries that serve the local population and exist regardless of a market's specific competitive advantages.

This report also includes four *aggregations* of Traded clusters; these aggregations are described on page 6.

L.A. COUNTY CLUSTERS	EMPLOYMENT	AVERAGE WAGE	LQ
<b>TRADED</b>			
Business Services	236,550	\$129,210	0.8
Distribution and Electronic Commerce	179,352	\$80,994	0.9
Video Production and Distribution	150,098	\$127,596	12.3
Education and Knowledge Creation	94,003	\$93,232	1.1
Transportation and Logistics	79,852	\$89,466	1.4
Hospitality and Tourism	73,213	\$71,415	0.8
Marketing, Design, and Publishing	70,376	\$141,934	1.6
Aerospace Vehicles and Defense	57,076	\$136,473	3.0
Financial Services	43,927	\$247,803	0.7
Performing Arts	42,092	\$228,538	3.9
I.T. and Analytical Instruments	34,748	\$151,896	0.7
Food Processing and Manufacturing	31,346	\$66,605	0.8
Apparel	22,635	\$56,659	6.5
Water Transportation	17,573	\$139,266	1.9
Communications Equipment and Services	11,520	\$158,305	1.3
Biopharmaceuticals	8,476	\$88,738	0.8
Medical Devices	7,467	\$92,576	0.8
Textile Manufacturing	6,601	\$57,797	1.2
<b>LOCAL</b>			
Local Health Services	473,581	\$72,505	0.9
Local Hospitality Establishments	409,066	\$31,627	1.0
Local Community and Civic Organizations	321,264	\$29,493	2.5
Local Commercial Services	317,765	\$74,564	1.1
<b>AGGREGATIONS</b>			
Trade	276,777	\$87,138	1.1
Entertainment	196,594	\$149,539	8.3
Fashion	33,356	\$56,854	3.0
Biomedical	15,943	\$90,536	0.8

# AGGREGATIONS

**Aggregations** are groupings of related clusters that have economic linkages and synergies. We examine these aggregations as larger sources of regional economic strength, as they are major drivers of local business and trade. These important aggregated industry groups for Los Angeles County are also covered in this report.

## TRADE

DISTRIBUTION  
AND ECOMMERCE  
TRANSPORTATION  
AND LOGISTICS  
WATER  
TRANSPORTATION

## BIOMEDICAL

BIOPHARMACEUTICALS  
MEDICAL DEVICES

## ENTERTAINMENT

VIDEO PRODUCTION  
AND DISTRIBUTION  
MUSIC AND  
SOUND RECORDING  
PERFORMING  
ARTS

## FASHION

APPAREL  
FOOTWEAR\*  
LEATHER\*  
JEWELRY\*  
TEXTILE  
MANUFACTURING

*\* Will not be covered in depth due to employment numbers below 4,000 in 2022.*



# CLUSTERS PRESENTATION

- *Traded* clusters and aggregations are highlighted first, then *Local* clusters
- Aggregations and clusters are introduced from *greatest employment to least*
- Component clusters of an aggregation are presented *immediately after* their aggregation page, from *greatest employment to least*

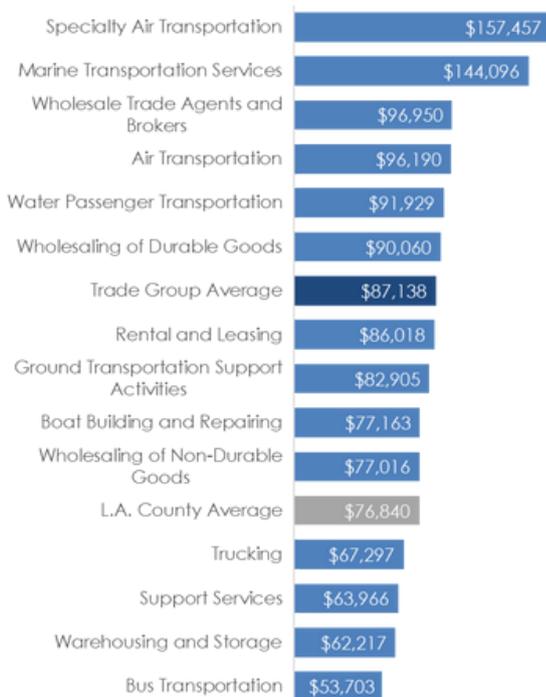
NUMBER OF  
EMPLOYEES  
**276,777**

AVERAGE  
WAGE  
**\$87,138**

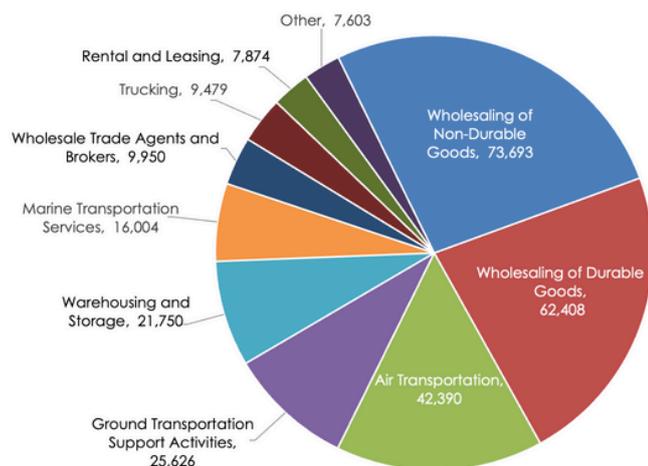
LOCATION  
QUOTIENT (LQ)  
**1.08**

*The Trade Group encompasses three industry clusters: Distribution & ECommerce, Transportation & Logistics, and Water Transportation.*

AVERAGE ANNUAL EARNINGS, 2022

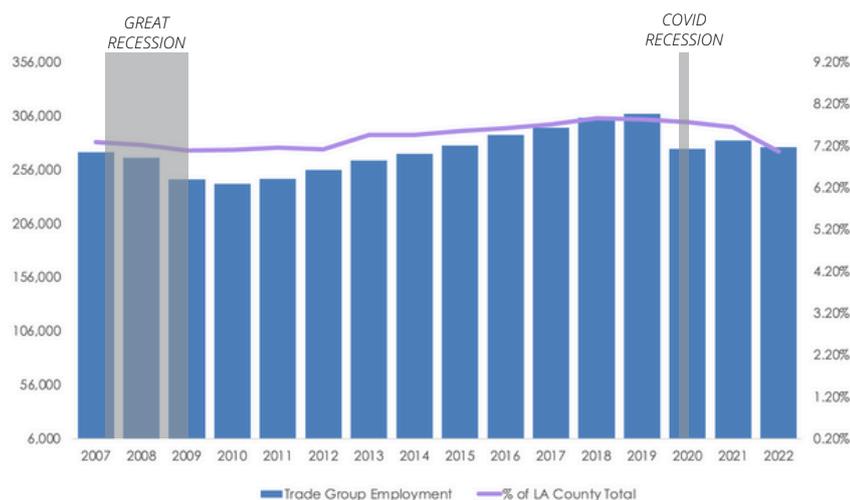


Average annual earnings in the Trade Group are almost **15% higher than the county average**, but earnings range widely within clusters and industries, from just over \$39,000 a year (Coastal Passenger Transportation) to over \$257,000 per year (Other Nonscheduled Air Transportation).



The Trade Group includes **90 industries**—the largest number of industries and jobs represented in this report. Wholesaling of durable and non-durable goods accounts for about **half of employment** in the Trade Group.

After reaching a multi-year high of almost 308,000 employees in 2019, the Trade Group lost 32,500 jobs in 2020. Almost 7,500 jobs were gained in 2021, but almost 6,000 lost in 2022, when employment stood at 276,777—about **7% of county employment**.



*In 2020, Trade Group employment dropped by 32,500 (about 10.5%) from 2019 levels. While this group experienced a modest recovery in 2021, employment levels decreased in 2022, due to declines in the Distribution & ECommerce cluster. In 2022, the Trade Group employed 1,500 more workers relative to the number in 2020. Easing inflation in 2023 should help slow these declines.*

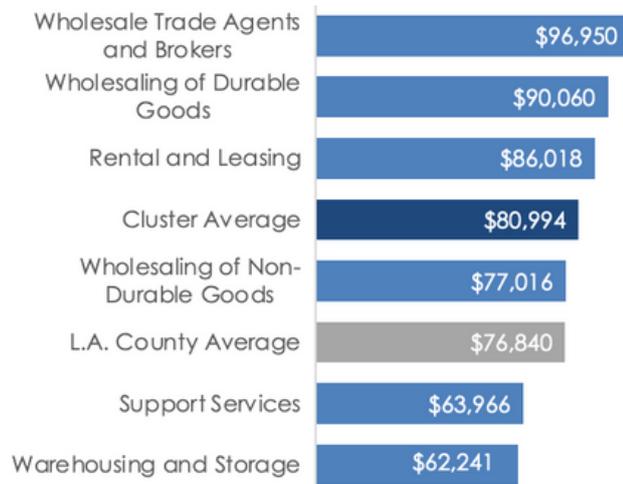
NUMBER OF  
EMPLOYEES  
**179,352**

AVERAGE  
WAGE  
**\$80,994**

LOCATION  
QUOTIENT (LQ)  
**0.93**

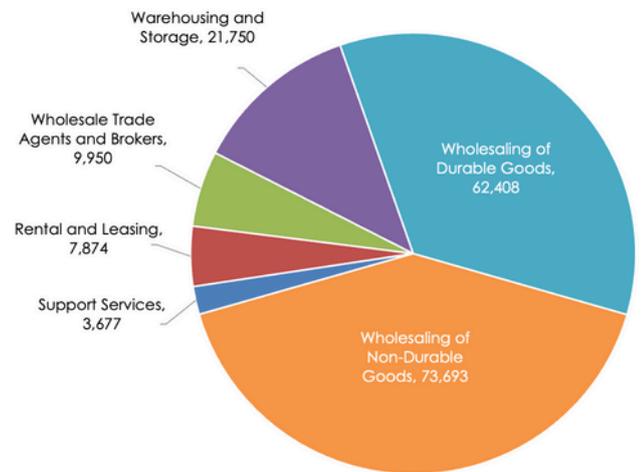
*This cluster combines wholesaling, electronic shopping, warehousing, and more to create L.A. County's second largest single traded cluster.*

AVERAGE ANNUAL EARNINGS, 2022

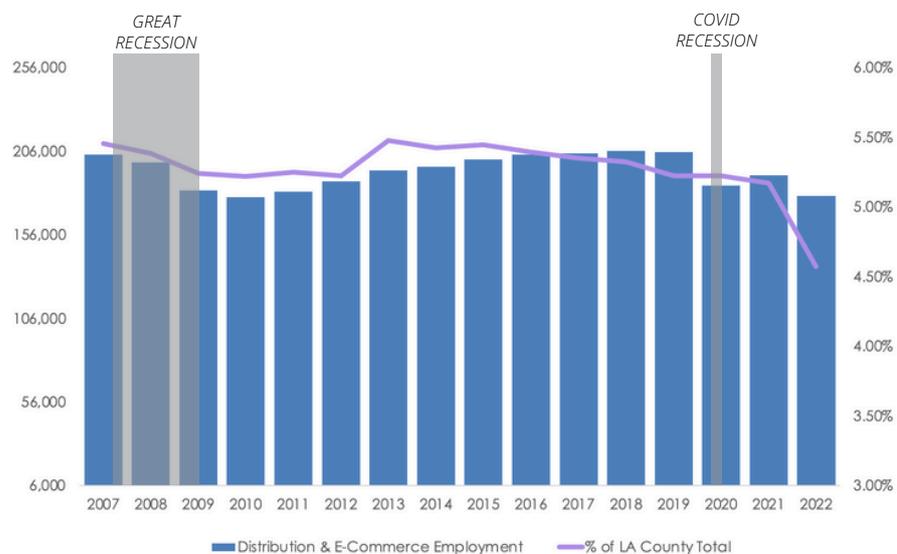


While average annual earnings are **slightly higher** in this cluster than the county average, **significant variations exist** across industries. Annual average earnings range from a low of around \$47,000 (Poultry and Poultry Product Merchant Wholesalers) to \$123,000 (Printing and Writing Paper Merchant Wholesalers).

Distribution & ECommerce employs nearly 180,000 people across 60 industries in 26 subclusters. **Wholesaling of durable and non-durable goods** accounted for over 136,000 jobs, or almost **76% of employment**, in 2022.



This cluster experienced a modest recovery in 2021, followed by jobs lost in 2022. This cluster is the largest in the Trade Group in terms of number of jobs, providing **4.6%** of private sector jobs in L.A. County in 2022.



*After rising year-over-year from 2010 to 2019, the Distribution & ECommerce cluster lost about 20,000 jobs, or 9.7%, in 2020. While all three Trade Group clusters added jobs back in 2021, only Distribution & ECommerce lost jobs (over 12,000) in 2022, with rising inflation putting pressure on manufacturers and wholesalers. Jobs in this cluster were down just over 26,000 jobs in 2022 vs. 2019—a loss of about 12.7%.*

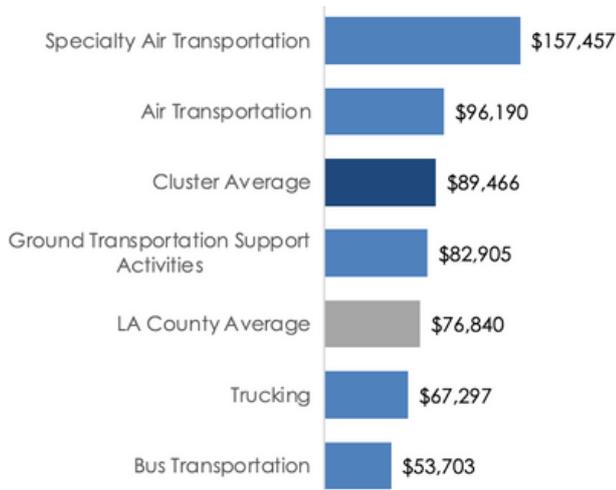
NUMBER OF  
EMPLOYEES  
**79,852**

AVERAGE  
WAGE  
**\$89,466**

LOCATION  
QUOTIENT (LQ)  
**1.43**

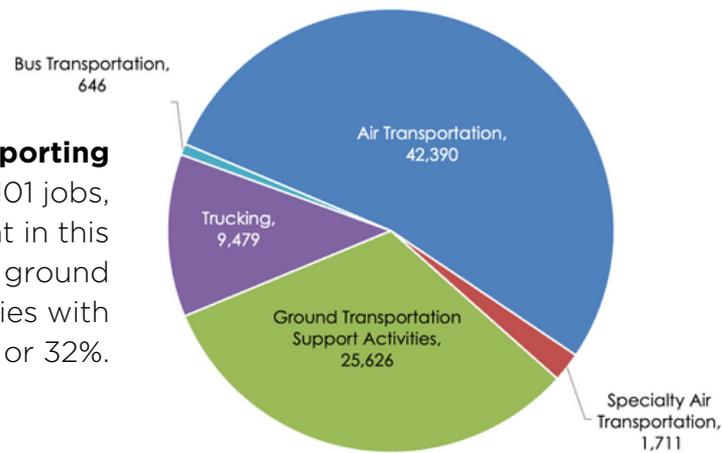
*Transportation & Logistics includes activities supporting air and ground (e.g., truck, bus, and rail) transportation for both passengers and freight.*

AVERAGE ANNUAL EARNINGS, 2022



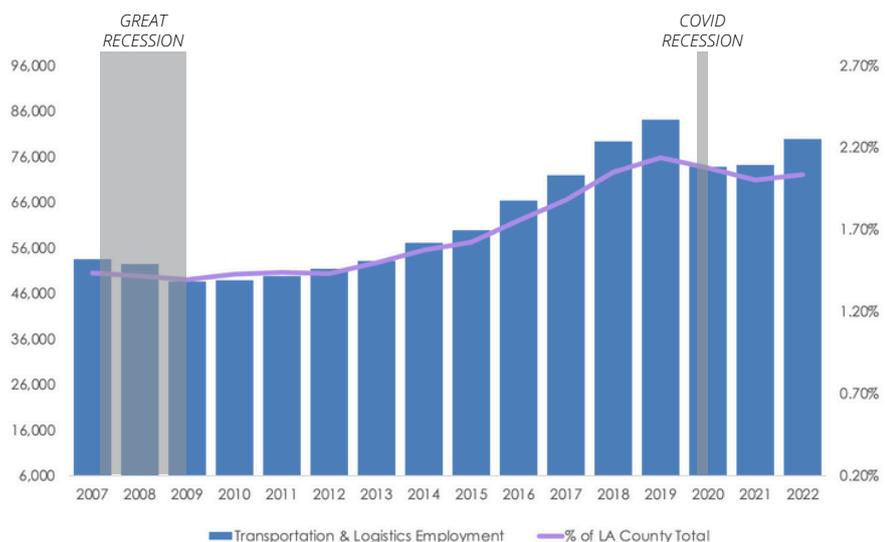
Average annual cluster earnings for are substantially higher than the county average, driven by **air transport**, whether public and private. The highest paying industry is Other Non-Scheduled Air Transport at \$257,277. Most of the freight, trucking, and urban transportation jobs fall **below the cluster and county average**.

**Air transportation and supporting activities** account for 44,101 jobs, or 55%, of employment in this cluster, followed by ground transport support activities with 25,656 jobs, or 32%.



This cluster is more concentrated in L.A. County than in the nation as a whole. High LQs include non-chartered freight air transport (4.3) and freight transport arrangement (2.8).

This cluster lost 10,340 jobs from 2019 to 2020 (a 12.3% drop) but has rebounded strongly, **gaining 5,682 jobs**, or 7.7%, in 2022. It accounts for just over 2% of all private sectors employment in L.A. County.



*After losing 10,340 jobs (12.3%) in 2020, the Transportation and Logistics cluster gained back 441 jobs in 2021 and almost 5,700 jobs in 2022. Contrast this big increase from 2021 to 2022 with the Distribution & Ecommerce cluster, which lost over 12,000 in 2022. Although job numbers in the Transportation & Logistics cluster are still 5% lower than in 2019, this cluster's recovery since 2020 appears robust.*

NUMBER OF  
EMPLOYEES  
**17,573**

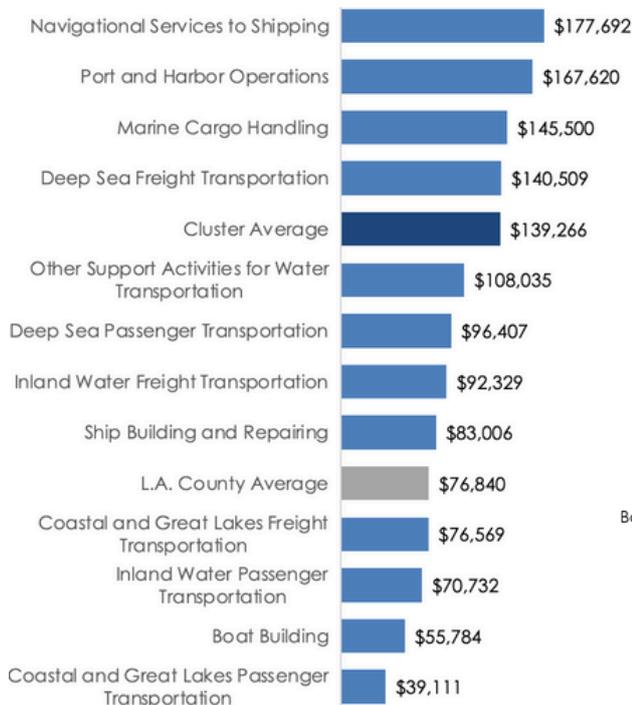
AVERAGE  
WAGE  
**\$139,266**

LOCATION  
QUOTIENT (LQ)  
**1.85**

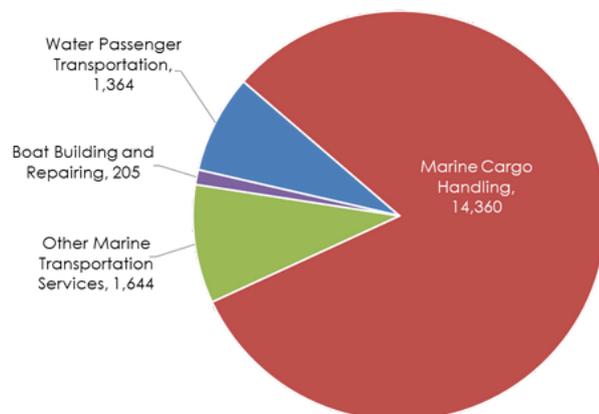
Water Transport is more concentrated in L.A. County than in the nation as a whole. The industry with the highest LQ here is Marine Cargo Handling (LQ=7.13).

*This cluster includes deep sea passenger and freight transportation, ship & boat building, port operations, cargo handling, and more.*

AVERAGE ANNUAL EARNINGS, 2022

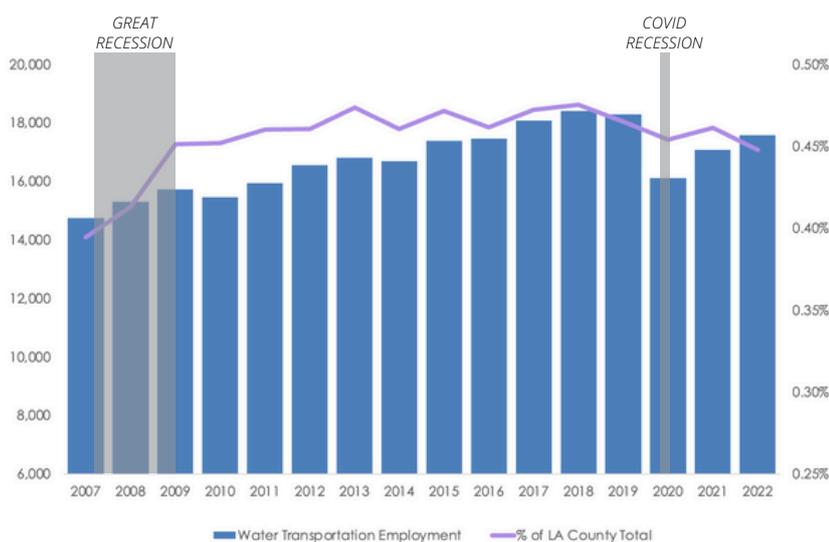


Average annual earnings across all industries in this cluster are **80% higher than the county average**. Port and Harbor Operations and Marine Cargo Handling are among the highest-paying industries. Passenger transport pays at or below average wages.



Marine transportation services for cargo dominate the cluster's workforce; marine cargo handling accounts for **14,360** of these workers—almost 82%.

Though one of the smaller clusters in this report (accounting for about 0.45% of private sector employment in the county), Water Transportation has **grown by 3,500 jobs**—nearly 25%—from 2007 to 2019, and has thousands of high-paying jobs in steadily growing industries.



*The Water Transportation cluster is of obvious economic and competitive importance to the region, providing high-paying jobs and on-going competitiveness relative to the rest of the U.S. (as demonstrated by LQs between 1.8 and 2.0 since 2014).*

*This cluster lost over 2,100 jobs (almost 12%); however, it added back 1,500 jobs by the end of 2022, bringing **cluster employment to 17,573**.*

NUMBER OF  
EMPLOYEES  
**236,550**

AVERAGE  
WAGE  
**\$129,210**

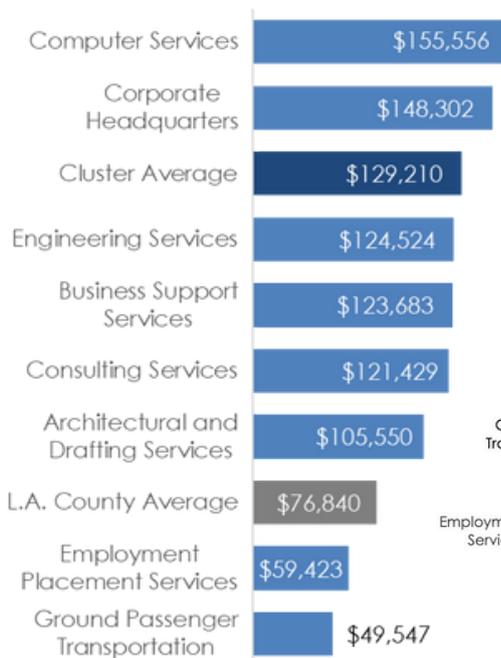
LOCATION  
QUOTIENT (LQ)  
**0.76**

This cluster is less concentrated in L.A. County than nationally. Industries with the highest LQs are Employment Placement Agencies (2.08) and Payroll Services (2.06).

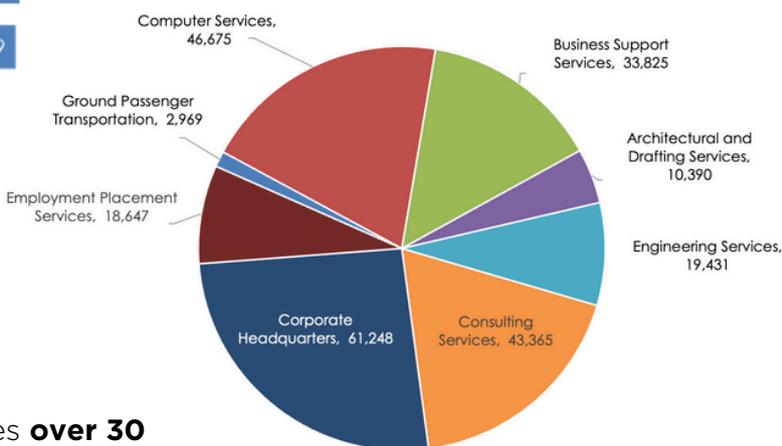


*Business Services is the largest Traded industry cluster in L.A. County, employing 236,550 people in L.A. County in 2022.*

AVERAGE ANNUAL EARNINGS, 2022



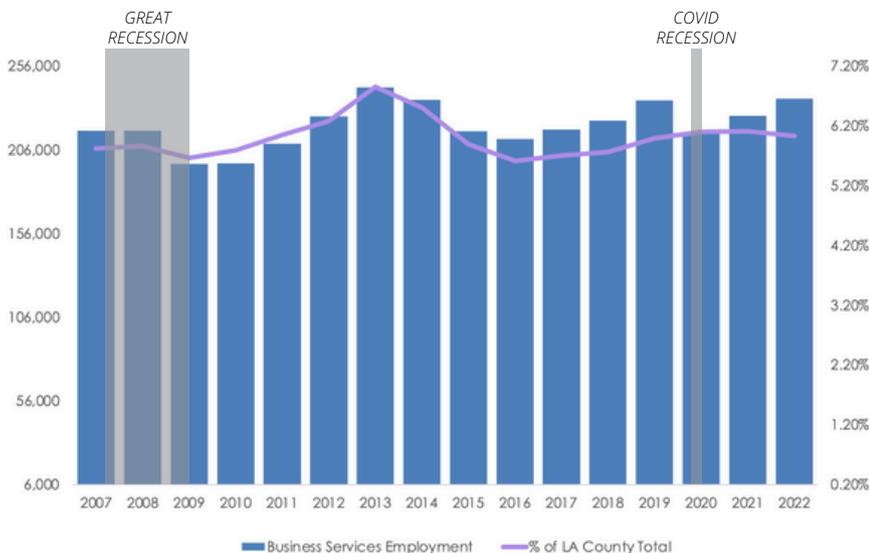
Most industries in this cluster pay **well above the county average**. Bank holding companies have by far the highest average wage (\$589K), but other industries with substantially greater employment (e.g., Computer Services) also pay well.



This cluster encompasses **over 30 industries** with a wide range of functions.

The bulk of employment is provided by jobs at corporate headquarters and in business support, consulting, and computer services.

The Business Services cluster accounts for **6%** of L.A. County private sector jobs in 2022. Jobs gained during the most recent upswing were erased in 2020 (over 19,000 jobs), but in 2021 and 2022, the cluster added **21,000 jobs**.



*The Business Services cluster has shown greater swings in employment over the years than it has in many other clusters. While a substantial number of jobs were lost from 2008-10, from 2014-2016, and in 2020, the cluster experienced significant growth after each downturn. Job growth since 2020 has been robust, with 21,000 jobs through the end of 2022 (a 9.8% increase). Despite these numbers, cluster LQ has been slowly declining here in recent years, suggesting that other regions of the U.S. are increasing their competitiveness in this industry cluster.*

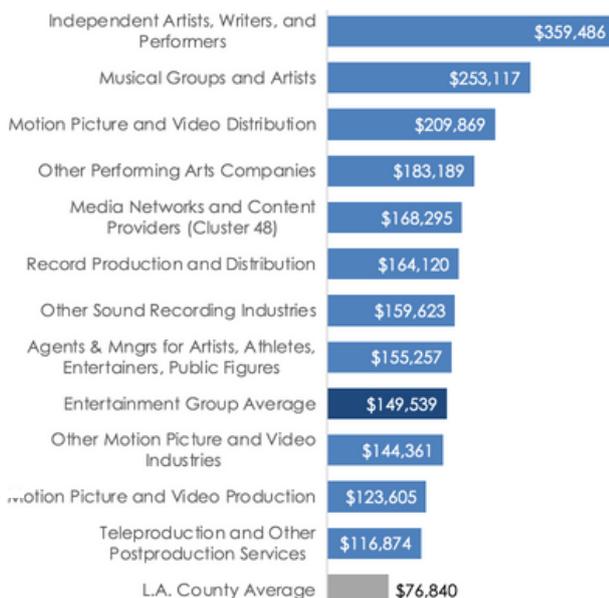
NUMBER OF  
EMPLOYEES  
**196,594**

AVERAGE  
WAGE  
**\$149,539**

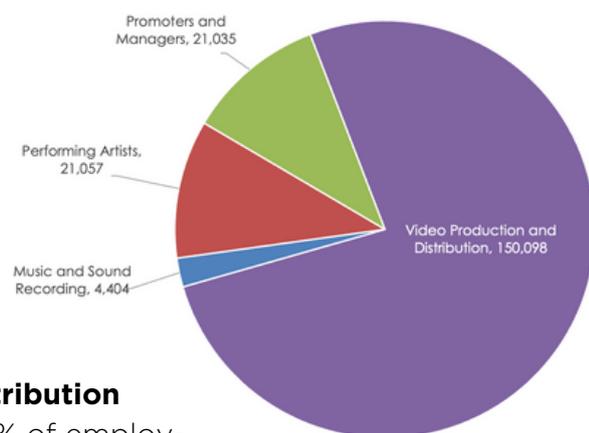
LOCATION  
QUOTIENT (LQ)  
**8.33**

*The Entertainment Group contains the Music & Sound Recording, Performing Arts, and Video Production & Distribution clusters.*

AVERAGE ANNUAL EARNINGS, 2022



Earnings in this cluster are **well above the county average**, driven by high-earning performing artists, writers, and musical groups, as well as the those employed in the film industry and in media streaming and distribution services.

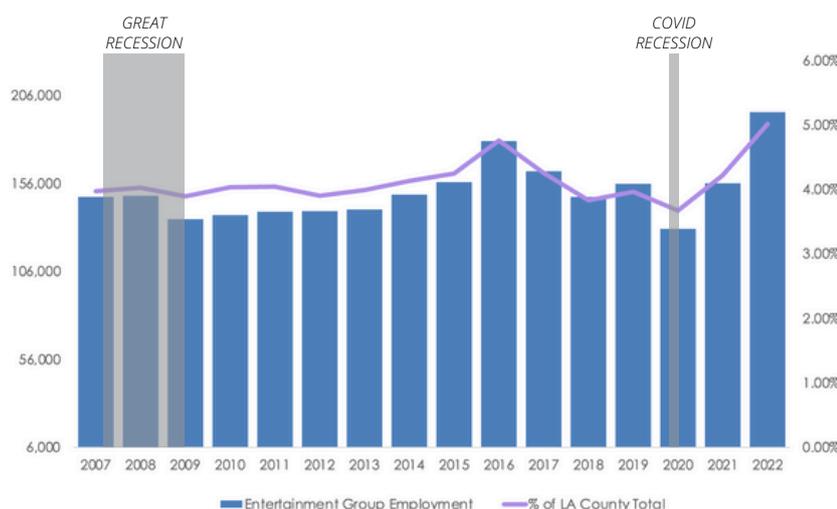


**Video production and distribution**

accounts for more than 75% of employment in this group, with almost 129,000 in motion picture and video production alone.

Predictably, the Entertainment Group is extremely strong in L.A. County, with an LQ of 8.33. Motion picture and video production & post-production are especially strong, with LQs over 15.

After modest gains in 2019, the Entertainment Group lost 25,000 jobs (16.5%) in 2020. It came back strongly in 2021-22, however, **adding over 66,300 jobs** since 2020—a **51% increase**. Its share of county private sector employment grew from 4% in 2019 to **5%** by the end of 2022.



*This group saw some of the biggest declines in 2020, followed by some of the biggest gains in 2021 and 2022, of any group or cluster. Losses in 2020 were concentrated in Performing Arts (over 9,000 jobs—a 22.3% loss) and Video Production & Distribution (over 16,700—a 15% loss). Music & Sound Recording did not experience job losses in 2020. All three clusters experienced modest job growth in 2021 and then rapid job growth in 2022: Performing Arts added 10,700 jobs (a 34% increase), Video Production & Distribution added over 54,000 jobs (a 57.8% increase), and Music & Sound Recording added 752 jobs (a 21% increase) from 2020 levels.*

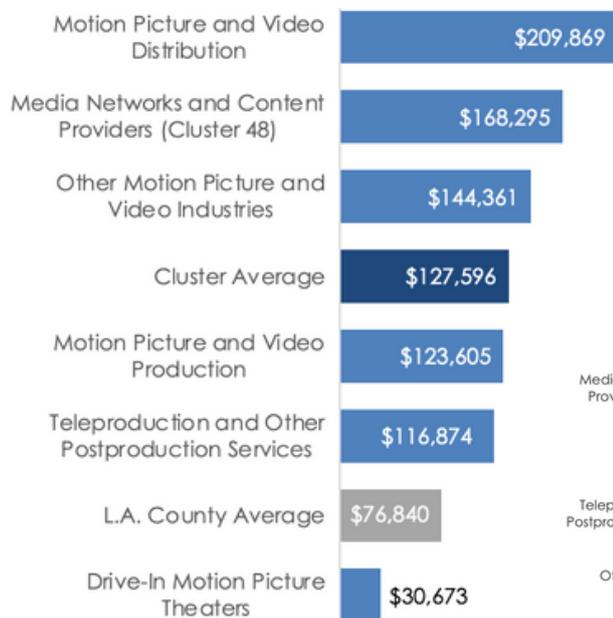
NUMBER OF  
EMPLOYEES  
**150,098**

AVERAGE  
WAGE  
**\$127,596**

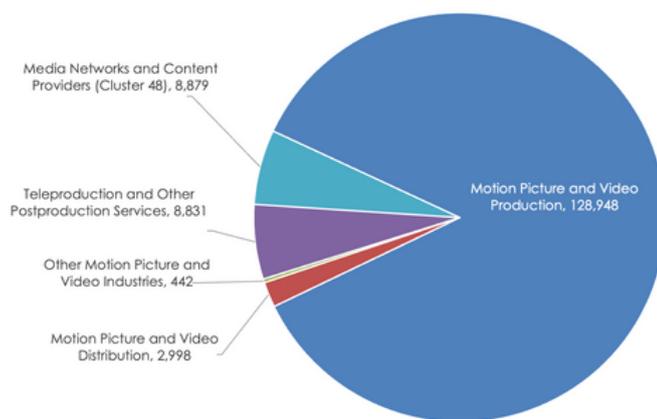
LOCATION  
QUOTIENT (LQ)  
**12.34**

*The Video Production & Distribution cluster leads the Entertainment Group in terms of both employment and LQ, employing over 150,000 in 2022.*

AVERAGE ANNUAL EARNINGS, 2022



Average annual earnings in this cluster are **almost twice** the county average, due to well-paying jobs in distribution and production of motion pictures. At the other end are low-wage jobs in the theaters themselves, creating a **wide disparity** in pay for the cluster.

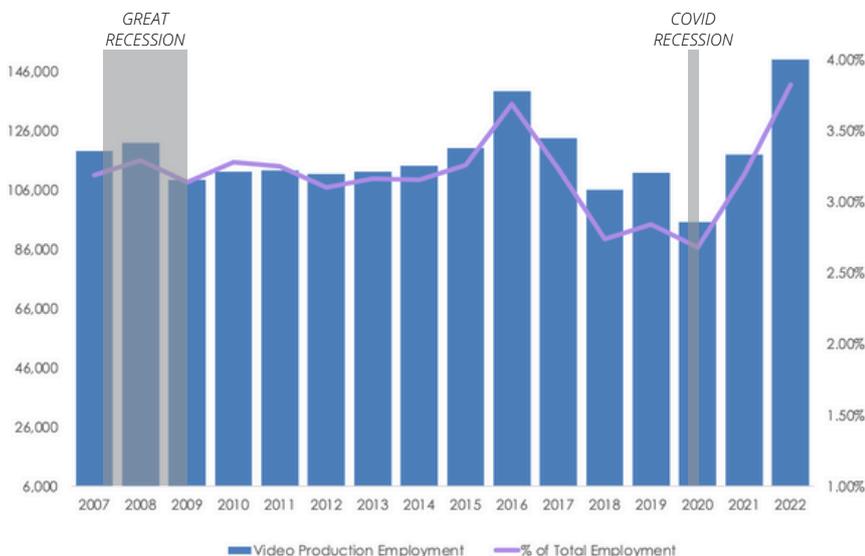


The Motion Picture and Video Production industry accounted for **86%** of jobs in this cluster (almost **129,000**) in 2022, with postproduction and media streaming/content production services employing 18,000 in 2022.

With 38% of jobs nationally, this cluster is highly concentrated in L.A. County versus the U.S. as a whole. Motion picture and video production and post-production have LQs over 15.



After suffering big job losses in 2017-18, this cluster experienced modest growth in 2019. Employment dropped precipitously in 2020, but post-2020 growth has been dramatic: Almost 55,000 jobs have been added since 2020—an **increase of 58%**.



*Video Production & Distribution has experienced volatility since 2015, with 25% job growth (28,000 jobs) from 2013 to 2016, followed by a loss of over 33,000 jobs (24%) by the end of 2018. The modest recovery underway at the end of 2019 was upended by the onset of the COVID-19 pandemic, with a 15% decrease in employment that year. Since 2020, however, this cluster has seen extraordinary job growth, adding almost 55,000 jobs in 2021 and 2022 (a 58% increase over 2020 levels). Despite this growth, Video Production & Distribution's LQ (regional competitiveness in the U.S.) has been declining, from 16.76 in 2007 to 12.34 in 2022.*

NUMBER OF  
EMPLOYEES

**42,092**

AVERAGE  
WAGE

**\$228,538**

LOCATION  
QUOTIENT (LQ)

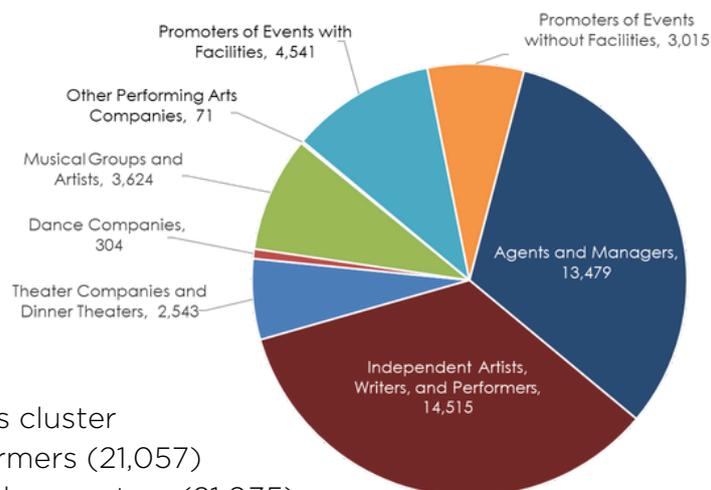
**3.89**

*The Performing Arts cluster includes performing arts companies, musical groups, agents, promoters, and independent writers, artists, and performers.*

AVERAGE ANNUAL EARNINGS, 2022



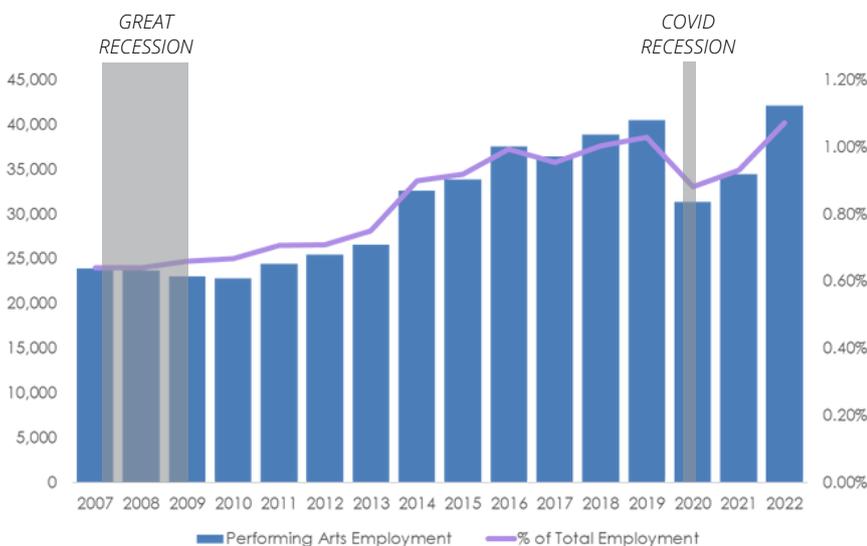
The cluster average is about **3 times higher** than that of the county. Independent artists, writers and performers enjoy the highest annual earnings. However, large income disparities exist in the cluster, as evidenced by much lower average annual earnings for those employed in theater and dance companies.



Jobs are **split 50:50** in this cluster between artists and performers (21,057) and agents, managers, and promoters (21,035).

A home of artists and creators, L.A. County's strength in performing arts is demonstrated by its 3.9 LQ. Agents and managers are very concentrated here, with an LQ of 15.2.

Performing Arts experienced a dramatic decline in 2020, as venues were shuttered with the onset of the pandemic. The cluster has rebounded strongly, however; it now employs **over 42,000**—1,600 more than in 2019.



*Over 9,100 jobs (about 22%) were lost in 2020. The cluster gained back 3,142 jobs in 2021, followed by substantial growth in 2022 as venues reopened. Since 2020, Performing Arts added 10,700 jobs (a 34% increase), and the cluster's employment now exceeds that of 2019 by over 1,600 jobs. Another point of strength in this cluster is that its LQ (a measure of concentration relative to the rest of the nation) has steadily increased since 2007, when it was 2.78: by 2019, it stood at 3.55; in 2022, it had rising to 3.89, a multi-year high.*



NUMBER OF  
EMPLOYEES  
**4,404**

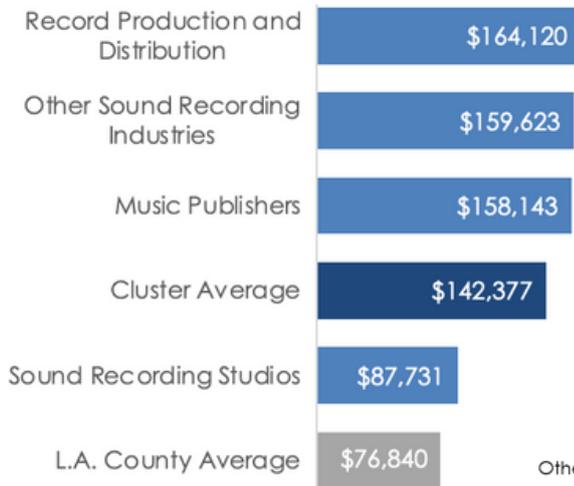
AVERAGE  
WAGE  
**\$142,377**

LOCATION  
QUOTIENT (LQ)  
**7.04**

This cluster is very concentrated in LA County, and continues to strengthen here relative to the nation. With an LQ of 8.24, Music Publishers is the strongest industry.

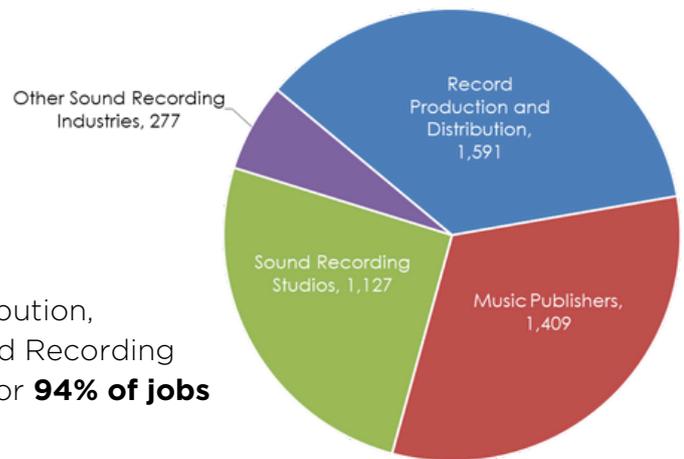
*An essential component of LA County entertainment, this cluster has a high concentration in the county relative to the rest of the U.S.*

AVERAGE ANNUAL EARNINGS, 2022

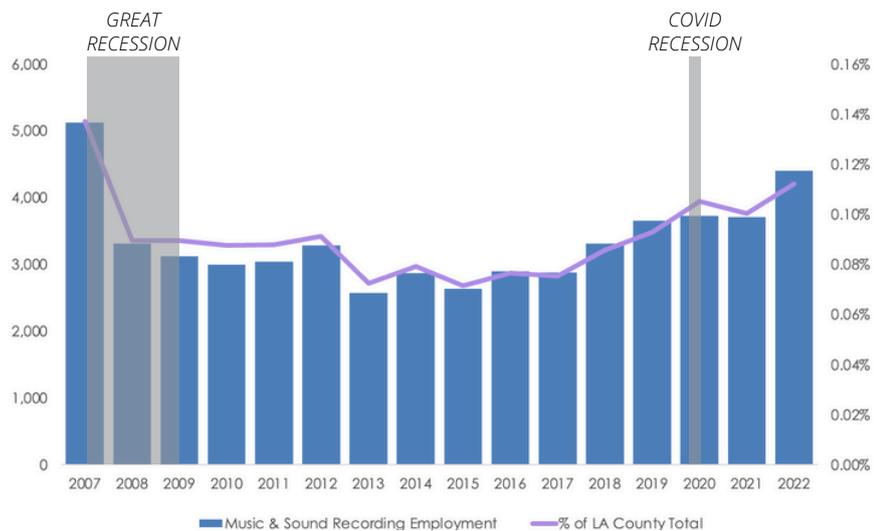


Cluster average annual earnings are **nearly twice** the county average, Record Production & Distribution has the highest average annual earnings; Sound Recording Studios employees earn less than the cluster average, but still more than the county average.

Record Production & Distribution, Music Publishers, and Sound Recording Studios together account for **94% of jobs** in this cluster.



After several years of employment in the 2,600 - 3,300 range, this cluster started experiencing more growth in 2018. The biggest increase in many years occurred in 2022; employment grew by **26%** in that year alone, and is now at a **multiyear high**.



*Music & Sound Recording was one of the few clusters that did not experience job losses in 2020, though the industry stayed fairly steady in 2020 and 2021. Since 2020, Music & Sound Recording has added 752 jobs (a 21% increase), and in 2022 stood at 4,404, a multiyear high. Additionally, the cluster's LQ (a measure of concentration relative to the rest of the nation), while having declined from 2007 to 2019, has recently improved: in 2007, its LQ was 7.45; in 2019, it was 6.18; and in 2022, it was 7.04.*

NUMBER OF  
EMPLOYEES

**94,003**

AVERAGE  
WAGE

**\$93,232**

LOCATION  
QUOTIENT (LQ)

**1.14**

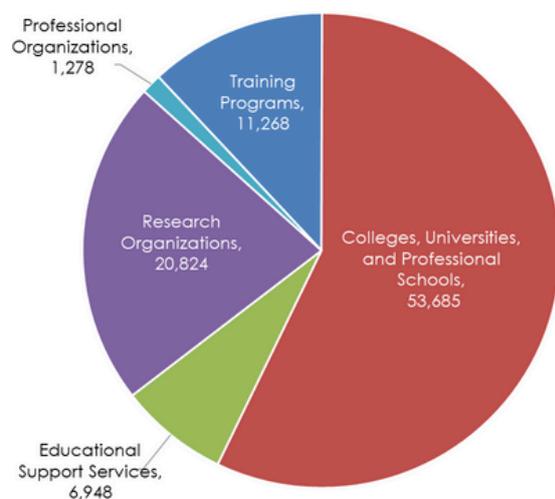
*This cluster includes privately-owned businesses and educational programs, from apprenticeship programs to universities and research institutions.*

AVERAGE ANNUAL EARNINGS, 2022



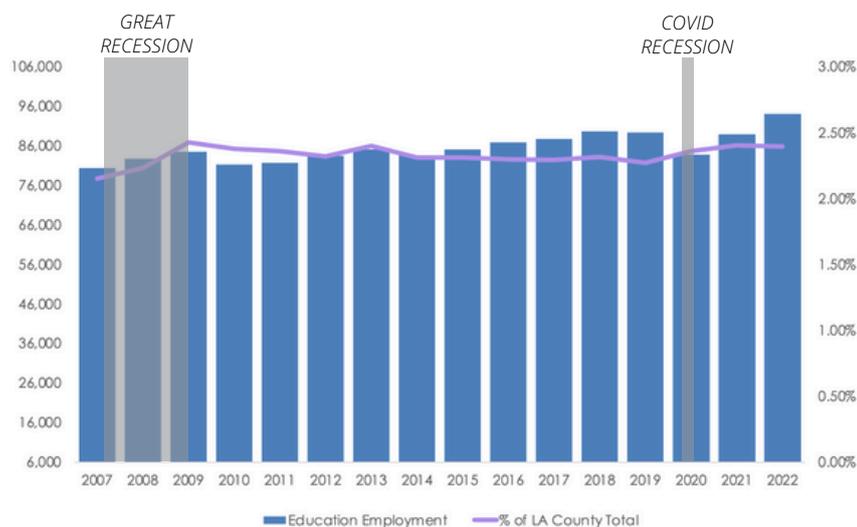
Average annual earnings in this cluster are more than **20% above** the county average. Research Organizations have the highest average earnings (almost \$150,000 annually), while those employed in industries related to vocational training and apprenticeships have annual earnings below the cluster and county average.

**Colleges, Universities, and Professional Schools** provide **57%** of the employment in the cluster. Research Organizations account for 22% of employment, and Training Programs employ another 12% of workers in this cluster.



While this cluster's LQ has declined since 2019 (LQ 1.46), certain industry concentrations have increased—including Colleges & Universities, Apprenticeship Training, and Nanotech R&D.

This cluster has experienced mostly slow and steady growth since 2007. After relatively modest job losses in 2020, it added more jobs through 2022, reaching **94,000 jobs**—the highest level of any year going back to 2007.



*The COVID-19 pandemic drove job losses of 5,600 (2.4%) in this cluster, mostly in the following subclusters: Colleges, Universities, & Professional Schools; Exam Preparation & Tutoring; and Other Miscellaneous Schools and Instruction. Since 2020, most industries have recovered well: the cluster as a whole employed **almost 4,700 more people in 2022 than in 2019**. Interestingly, R&D in Nanotechnology and Biotechnology added 600 jobs in 2020; both continued to grow in 2021 and 2022, for a total increase of 1,992 jobs from 2019 levels.*

NUMBER OF  
EMPLOYEES  
**73,213**

AVERAGE  
WAGE  
**\$71,415**

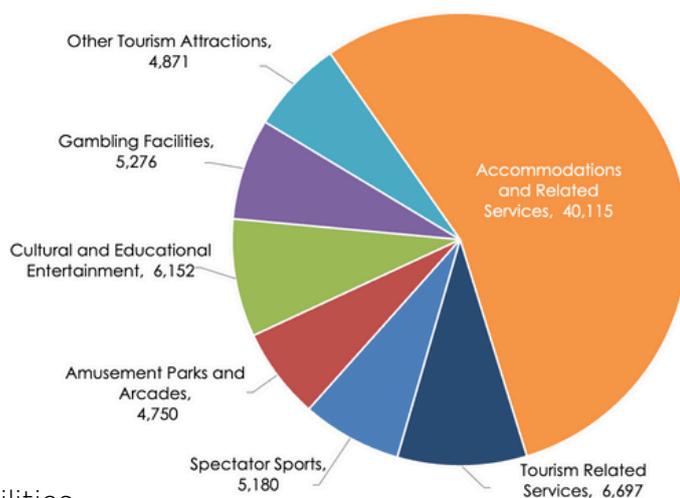
LOCATION  
QUOTIENT (LQ)  
**0.82**

*Comprising a variety of industries, this cluster attracts tourists from around the globe, but is still suffering the impacts of the COVID-19 pandemic.*

AVERAGE ANNUAL EARNINGS, 2022



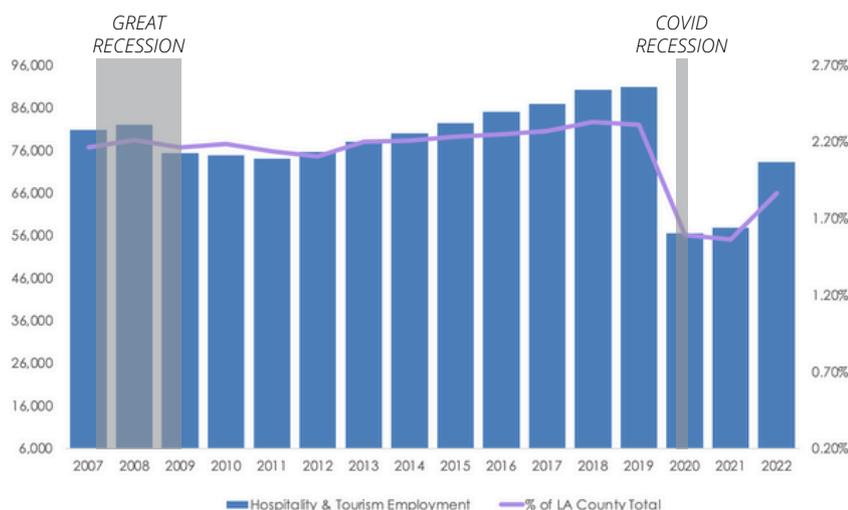
Average annual earnings related to professional sports are very high, but most of the industries in this cluster have wages below the L.A. County average. Average annual earnings in this cluster are about **\$5,400 less than** the county average.



**Accommodations & Related Services** provide more than 55% of jobs in the cluster. Tourist attractions & services and entertainment facilities account for 38% of employment. Sports teams represent 4.4% of jobs in the cluster.

This cluster is slightly less concentrated in L.A. County than in the U.S. as a whole, although the Casinos, Art Dealers, and Other Spectator Sports industries are at 2.0 or above.

The COVID-19 pandemic had the biggest impact on this cluster of any in this report, with over 34,000 jobs lost—almost 38%—from 2019. From 2021 through the end of 2022, the cluster **added 16,709 jobs**, but employment in this cluster is still down 19% from 2019 levels.



*This cluster experienced the greatest impacts from the COVID-19 pandemic of any cluster in this report. The majority of job losses were from hotels & motels, amusement parks, museums, and travel agencies. Some smaller industries saw even greater declines in terms of percentage of employment, including scenic & sightseeing transportation, tour operators, sports teams & clubs, amusement arcades, and gambling establishments. The cluster did grow in 2021 (1,328 jobs) and 2022 (15,381 jobs, or 26.6%), but employment is still down by 17,600 (19%) from 2019.*

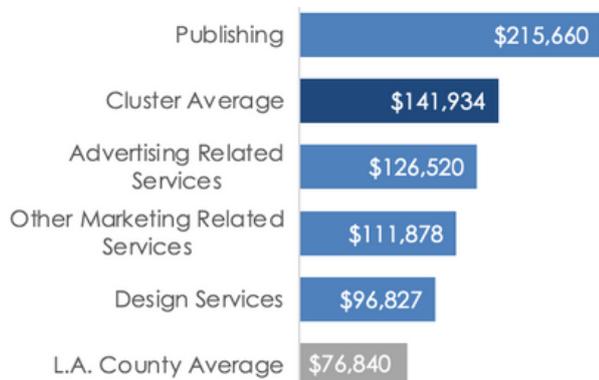
NUMBER OF  
EMPLOYEES  
**70,376**

AVERAGE  
WAGE  
**\$141,934**

LOCATION  
QUOTIENT (LQ)  
**1.59**

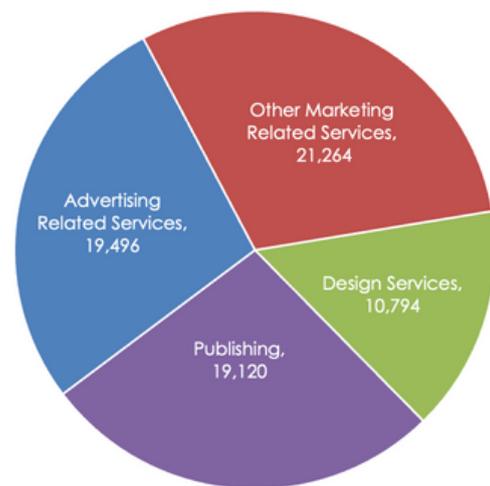
*This cluster encompasses a wide range of industries, including traditional and online publishing, creative design services, marketing, and advertising.*

AVERAGE ANNUAL EARNINGS, 2022



This cluster's average annual earnings are **85% higher** than the county's, with industries in the Publishing subclusters (including web search portals, media streaming, other media networks, and content providers) driving averaging annual earnings up further still.

Within the four major subclusters (publishing, advertising, design, and marketing services), the industries employing the largest numbers of people are internet publishing services\* (**14,003**), marketing consulting services (**11,617**), and advertising agencies (**16,177**).

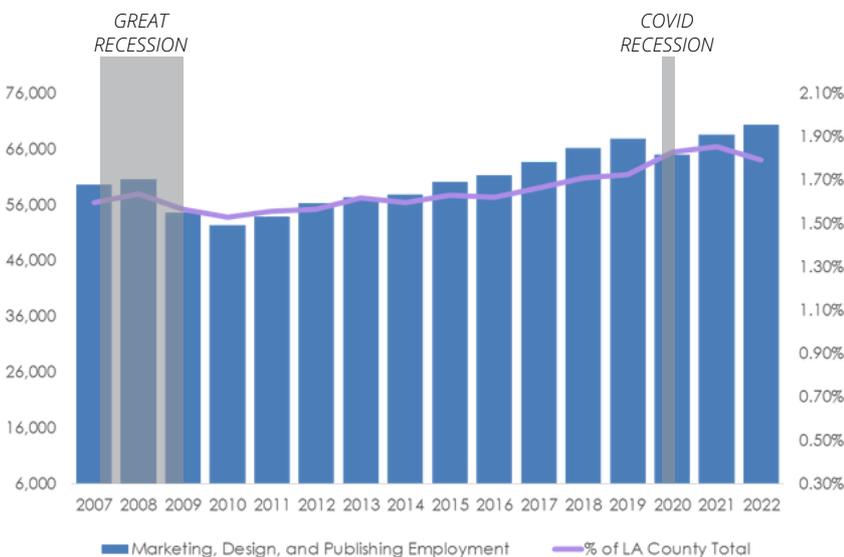


*\*This industry encompasses companies like Google, Meta, and more.*

This cluster is another strength for L.A. County with an LQ of 1.59. The most concentrated industries in this cluster are Other Specialized Design Services (LQ=4.1) and Media Buying Agencies (LQ=3.5).



This cluster has experienced steady growth since 2011. While some jobs were lost in 2020, the cluster recovered jobs lost since 2020 and added more. At the end of 2022, cluster employment was at a **multi-year high of 70,376**—3.7% higher than in 2019.



*This cluster has seen steady and impressive growth since 2011; while the cluster did lose jobs in 2020, the declines were relatively modest (about 4.2%). Moreover, the cluster recovered these losses and added a few thousand more in 2021 and 2022, bringing cluster employment to 2,530 more than in 2019. This resilience is perhaps not surprising, given the continued growth of online publishing and content production, and increasing demand for marketing and advertising services as the economy strengthened in 2021 and 2022.*

NUMBER OF  
EMPLOYEES  
**57,076**

AVERAGE  
WAGE  
**\$136,473**

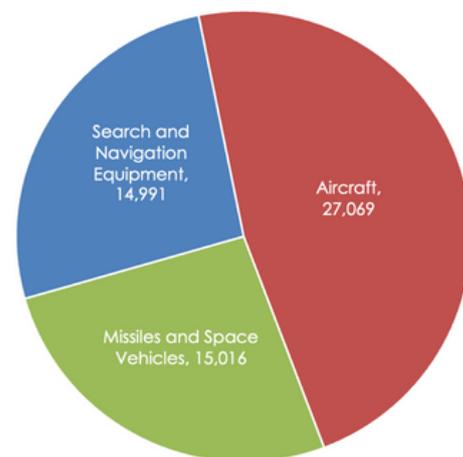
LOCATION  
QUOTIENT (LQ)  
**2.98**

*Home to the Jet Propulsion Laboratory and several defense contractor facilities, LA County's aerospace and defense cluster employs over 57,000.*

AVERAGE ANNUAL EARNINGS, 2022



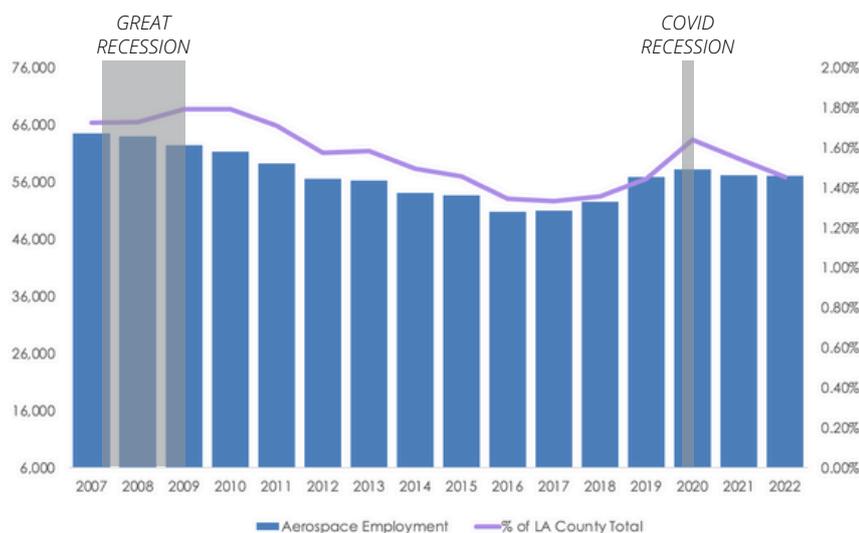
The aerospace cluster has **high average annual earnings** in its space, missile, aircraft and propulsion segments, attracting engineers from across the country. Cluster average annual earnings are almost \$60,000—almost **80%**—higher than county average annual earnings.



Though employment has slightly declined in the **aircraft segment**, it still represents **almost half** of this cluster's employment. Missiles and Space Vehicles Manufacturing has shown strong growth, adding over 3,600 jobs since 2019.

This cluster has a strong LQ of 2.98. The Guided Missile and Space Vehicle Manufacturing industry is especially concentrated, with an LQ of 5.71.

Although the Aerospace cluster has not gotten back to the employment levels of 2007 (64,493 jobs), it is well off of its lows of just under 51,000 in 2016-17, **adding around 7,100 jobs** between 2018 and 2022 and bringing employment levels above 57,000.



*Prior to 2017, employment in this cluster had been declining. The cluster slowly grew in 2017 and 2018, before seeing significant growth in 2019. Even as the COVID-19 pandemic drove job losses in other clusters in 2020, the Aerospace cluster added over 1,300 jobs. Although the cluster subsequently lost about 1,100 jobs in 2021 and 2022, employment in this cluster is still slightly above 2019 levels.*

NUMBER OF  
EMPLOYEES

**43,927**

AVERAGE  
WAGE

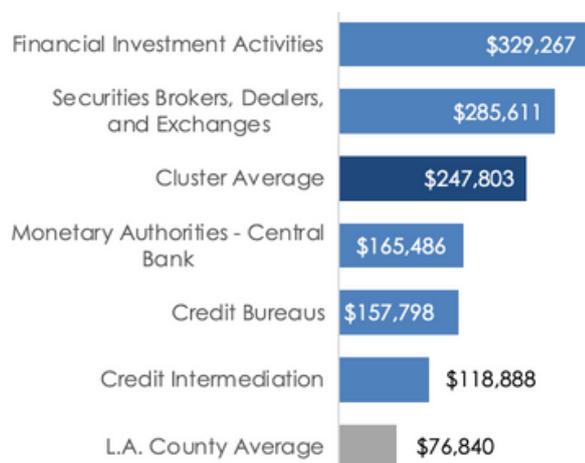
**\$247,803**

LOCATION  
QUOTIENT (LQ)

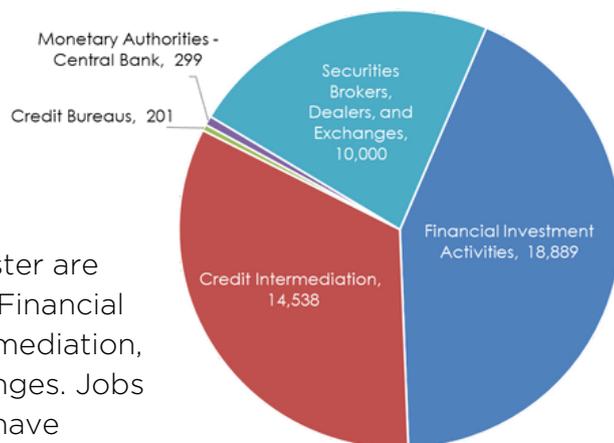
**0.69**

*This cluster includes over 30 industries, from financial investments to credit intermediation (e.g., sales financing, consumer lending).*

AVERAGE ANNUAL EARNINGS, 2022



One of the highest-paying clusters in L.A. County, the cluster's average annual earnings are **more than 3 times** the county average. Investment banking, securities brokering, and portfolio management have the highest annual wages.



Almost 98% of the jobs in this cluster are divided among three subclusters: Financial Investment Activities, Credit Intermediation, and Securities Brokers and Exchanges. Jobs in Financial Investment Activities have **increased since 2019**, whereas jobs in Credit Intermediation have been declining.

The Financial Services cluster is less concentrated here than the U.S. as a whole. The most concentrated industry, Open-End Investment Funds, has an LQ of 2.37 (down from 3.14 in 2019).

Employment in this cluster has been declining since 2013 in L.A. County. Notably, more jobs were lost in 2019 (4,245) than in 2020 (1,027). Job losses slowed further in 2021 and 2022. The cluster employs **1.1%** of the county's private sector workers.



*Job losses in 2020 were less significant than in some other clusters (about 2.3%, or just over 1,000 jobs). Job losses were actually larger in this cluster in 2019, with an 8.5% drop from 2018. Job declines in 2021 and 2022 were 1.24% and 0.24%, respectively, suggesting employment in this cluster may be stabilizing. While the consumer lending, investment banking, and securities dealing industry lost jobs in 2020, the real estate credit and securities brokerages industries gained jobs. On the whole, however, this cluster has experienced steady employment declines in L.A. County most years since 2007.*

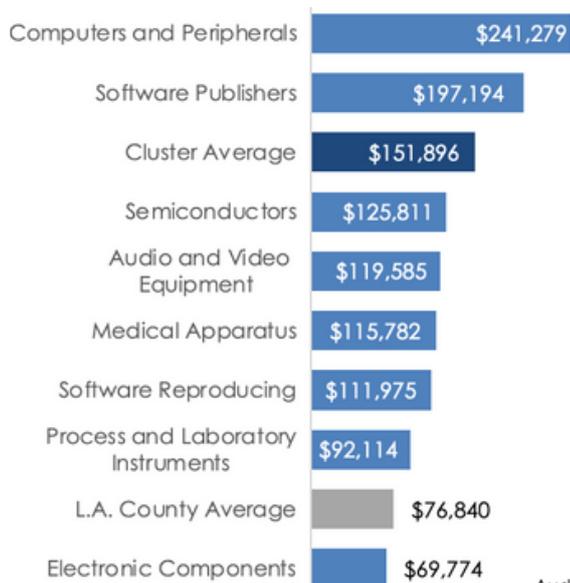
NUMBER OF  
EMPLOYEES  
**34,748**

AVERAGE  
WAGE  
**\$151,896**

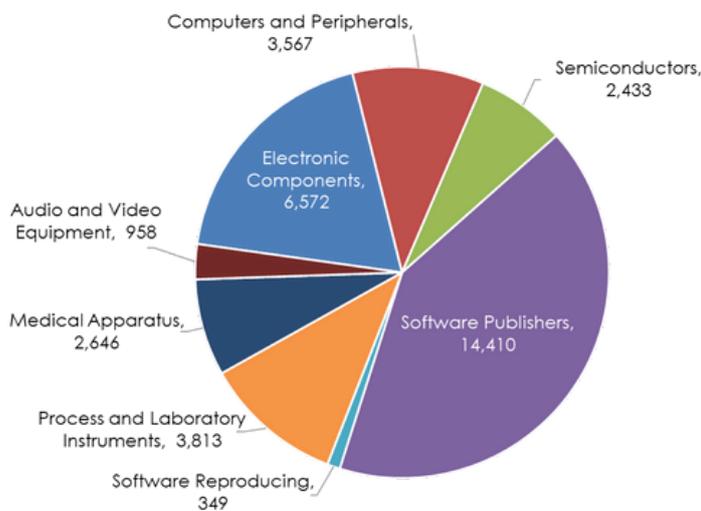
LOCATION  
QUOTIENT (LQ)  
**0.74**

*IT & Analytical Instruments represents many industries—everything from high-tech hardware and component manufacturing to software publishing.*

AVERAGE ANNUAL EARNINGS, 2022



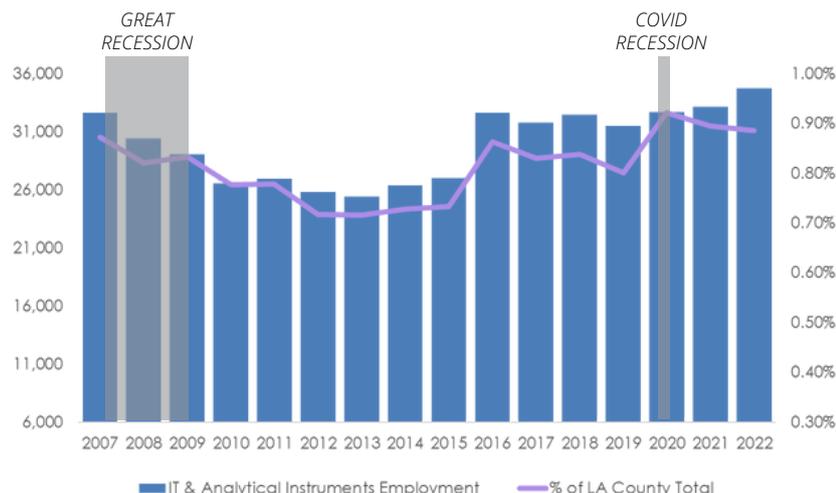
Average annual cluster earnings are **over twice** the county average. The Computers & Peripherals subcluster tops the list of average earnings at over \$241,000 annually. At the other end of the cluster are electronic component & device manufacturing industries, with average earnings of around \$70,000 a year.



**Software publishers** employ the greatest number of workers in the cluster, providing **42%** of all jobs. The Software Publishing, Semiconductors, and Computers & Peripherals subclusters have all grown since 2019.

Even as it adds jobs, this cluster is still less concentrated in LA county than the nation as a whole. Electric Connector Manufacturing is most concentrated at 2.93, an increase from 2.71 in 2019.

After the Great Recession, this cluster stabilized in 2010, experiencing little growth until a 20% jump in employment in 2016. This was again followed by several years of relatively flat employment until 2022, when the cluster grew by **4.8%**.



*One of the few clusters that experienced job growth in 2020, Information Technology & Analytical Instruments has continued growing in 2021 and 2022. Even as the cluster has added jobs, however, its LQ has been declining (albeit slowly). This suggests that other regions in the U.S. are adding jobs in these industries more quickly than is L.A. County.*

*A combination of apparel, leather, textile manufacturing, jewelry, and footwear, the Fashion Group is a staple of LA County.*

NUMBER OF  
EMPLOYEES  
**33,356**

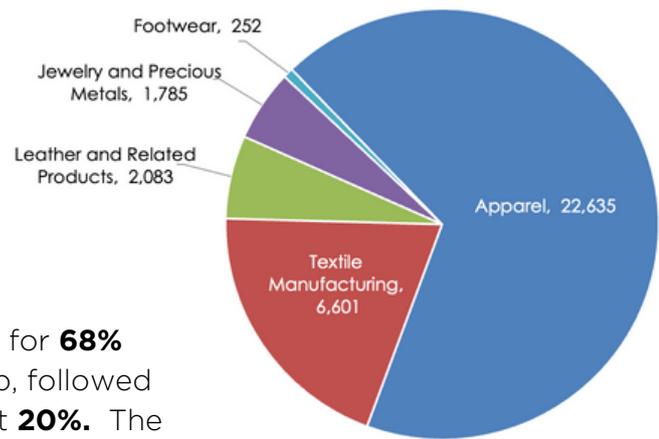
AVERAGE  
WAGE  
**\$56,854**

LOCATION  
QUOTIENT (LQ)  
**2.97**

AVERAGE ANNUAL EARNINGS, 2022



Average annual earnings across the Fashion Group as a whole are **well below** the county average, coming in at just \$56,854. Average annual earnings in each cluster hover between \$55,000 and \$62,000.

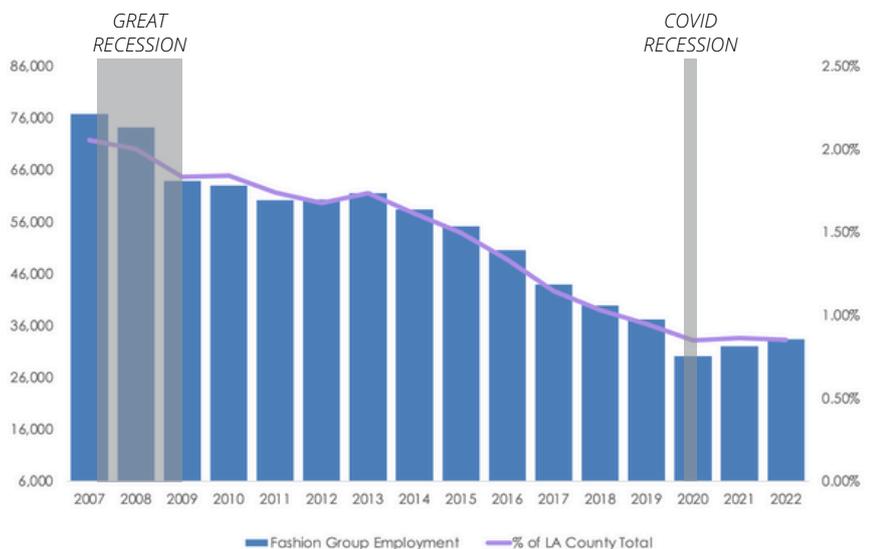


**Apparel industries** account for **68%** of employment in this group, followed by **Textile Manufacturing** at **20%**. The Leather and Related Products and Jewelry & Precious Metals clusters have similar numbers of jobs and comprise 11.6% of Fashion Group employment.

Fashion has historically had a large presence in L.A. County, but while it remains strong compared to the rest of the nation, its concentration is decreasing.



From 2007 through 2019, employment in the Fashion Group dropped by nearly 40,000 jobs (over 50%). The rate of job loss slowed in 2018-19, but 2020 saw the loss of an additional 7,000 jobs. One bright spot: the group recovered some **3,200 jobs** in 2021-2022.



*The COVID-19 pandemic took a heavy toll on the Fashion Group, which had already experienced year-over-year jobs losses since 2013. The greatest employment declines in 2020 were in the Apparel, Jewelry & Precious Metals, and Leather & Related Goods clusters. While job gains in Textiles Manufacturing and Jewelry Manufacturing through 2022 brought employment in these clusters back to 2019 levels, the Apparel, Footwear, and Leather & Related Goods clusters have struggled to match 2019 employment levels.*

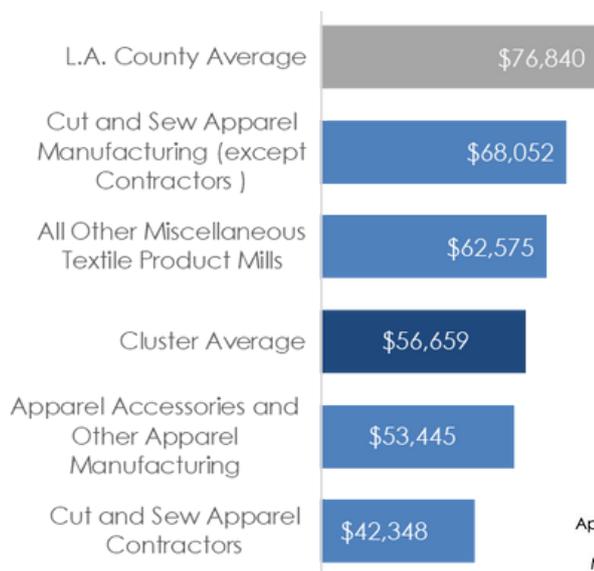
NUMBER OF  
EMPLOYEES  
**22,635**

AVERAGE  
WAGE  
**\$56,659**

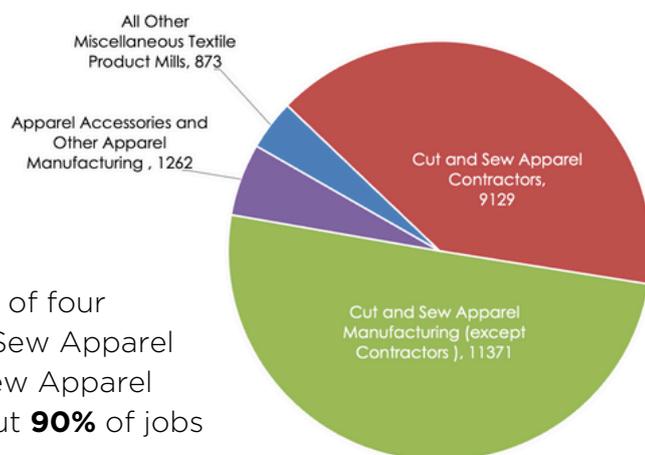
LOCATION  
QUOTIENT (LQ)  
**6.46**

*An important LA County cluster in the early 2000s, Apparel has witnessed significant employment declines since 2007.*

AVERAGE ANNUAL EARNINGS, 2022



Average annual earnings in the Apparel cluster are about **\$20,000 below** the county average. Cut and Sew Apparel Contractors earned just over **\$42,000** per year in 2022, whereas employees within the Cut and Sew Apparel Manufacturing (except Contractors) subcluster earn over **\$68,000** annually.

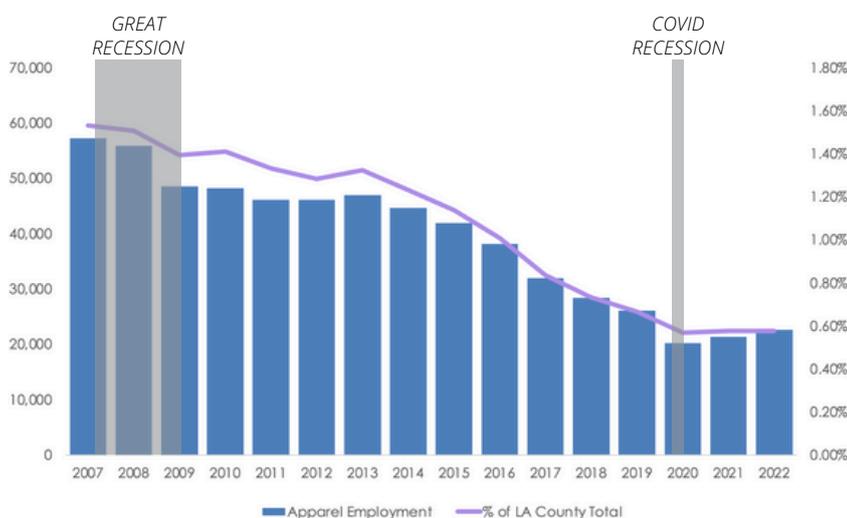


The Apparel cluster consists of four industries, with two—Cut & Sew Apparel Manufacturing, and Cut & Sew Apparel Contractors—providing about **90%** of jobs in this cluster.

While Apparel’s LQ is still high relative to the rest of the U.S. at 6.46, it is lower than it was in 2007 (8.17) and substantially lower than its multi-year peak of 9.22 in 2013.



From 2007 to 2020, the Apparel cluster went from 57,272 workers to 20,167—a 65% decline. Since 2020, however, the cluster has **added back 2,400 jobs**, bringing employment to 22,635 in 2022.



*The Apparel cluster was particularly hard-hit in 2020. Having lost over 20,000 jobs (44%) since 2013, the cluster saw employment drop by another 6,000 jobs in 2020. (Fortunately, jobs were added across all four industries in 2021 and 2022.)*

*While the U.S. as a whole lost over 100,000 jobs in this cluster since 2007—a 48% decline—L.A. County’s declining LQ reflects the fact that the county has lost more jobs as a percentage of total employment (65%) than has the U.S. (48%) in this cluster.*

NUMBER OF  
EMPLOYEES  
**6,601**

AVERAGE  
WAGE  
**\$57,797**

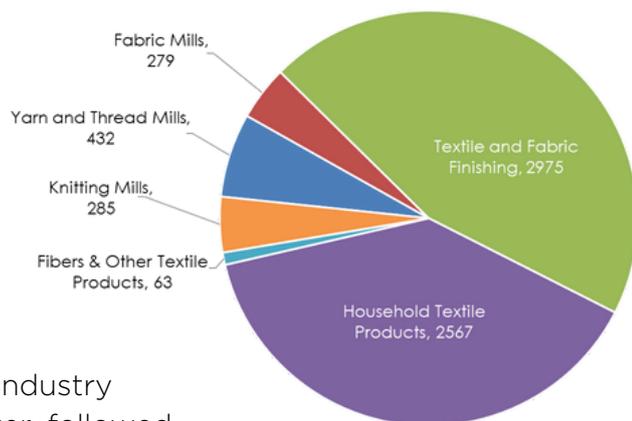
LOCATION  
QUOTIENT (LQ)  
**1.21**

*Textile Manufacturing consists of over 30 industries, including yarn, thread, fabric, and knitting mills; textile & fabric finishing; fibers; and more.*

AVERAGE ANNUAL EARNINGS, 2022



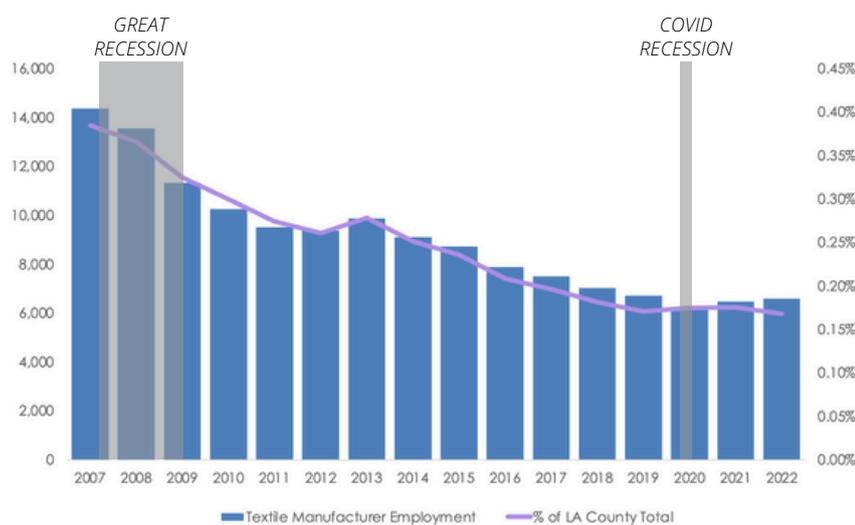
Average annual earnings in this cluster are **significantly lower** than the county average. At the low end is Fabric Mills at **\$41,118**; at the other end are workers in Fibers and Other Textile Products, who do slightly better than the county average, earning almost **\$79,000** annually.



The Textile and Fabric Finishing industry provided **45%** of jobs in the cluster, followed by Household Textile Products at **39%**. Bucking the job loss trend in the cluster, the Carpet and Rug Mills industry doubled employment from 2016 to 2022, adding 605 jobs.

Textile Manufacturing has a concentration in L.A. County just above the national average. It has dropped from a high of 1.47 in 2013 to 1.21 in 2022.

With the exception of an employment bump in 2013, jobs in the Textile Manufacturing cluster have declined steadily since 2007. However, the cluster has added a **modest number of jobs** in L.A. County since declining in 2020.



*Although this cluster lost 494 jobs in 2020 (a 7.4% decline), these losses were less severe on a percentage basis than those experienced in other Fashion Group clusters. In 2021 and 2022, the cluster gained back 394 jobs and increased its LQ from 1.09 in 2019 to 1.21 in 2022.*

*Notably, the Carpet and Rug Mills industry has seen robust employment growth since 2018, adding 541 jobs since 2017—an 80% increase. Further, this industry increased its LQ from 0.7 in 2017 to 1.42 in 2022, indicating increasing concentration in L.A. County.*

NUMBER OF  
EMPLOYEES  
**31,346**

AVERAGE  
WAGE  
**\$66,605**

LOCATION  
QUOTIENT (LQ)  
**0.82**

This cluster is less concentrated in LA County than it used to be. Employment in this cluster is similar to 2007 levels, whereas employment nationally has grown.

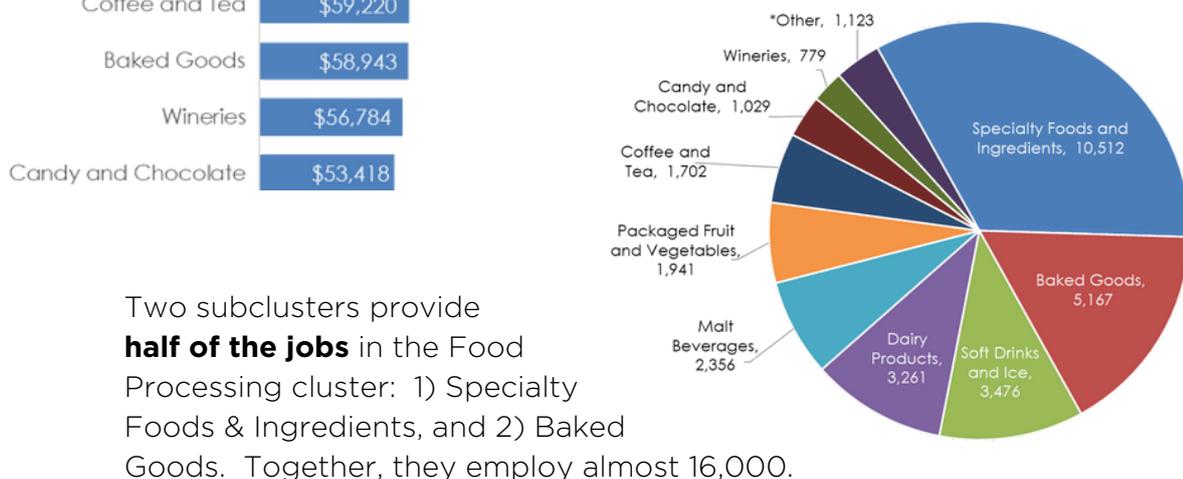
*This traded industry cluster consists of 52 industries involved in the production of foods & beverages for humans and foods for animals.*

AVERAGE ANNUAL EARNINGS, 2022



Average annual cluster earnings are only **87%** of the county average. Only the Dairy Products industry (\$79,750) and a handful of smaller industries (see "Other" note) have higher average annual earnings. Distilleries, with average annual earnings of \$106,434, top the list.

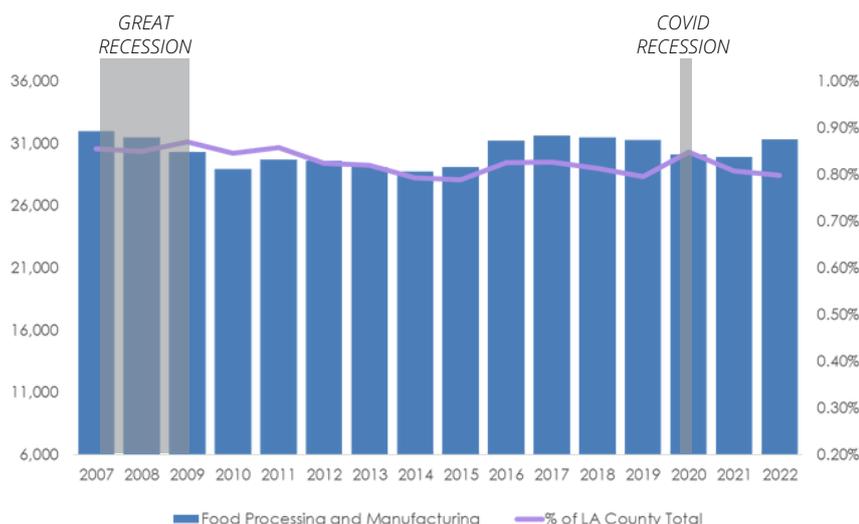
*\*\*"Other" includes subclusters Animal Foods; Glass Containers; Milling & Refining of Sugar, Cereals, and Oilseeds; Distilleries; and Farm Wholesalers*



Two subclusters provide **half of the jobs** in the Food Processing cluster: 1) Specialty Foods & Ingredients, and 2) Baked Goods. Together, they employ almost 16,000.



Employment in this cluster has fluctuated since 2007 but were almost exactly the same in 2022 as in 2007. **Specialty Foods and Ingredients** gained jobs since 2019, while Dairy Products, Soft Drinks & Ice, and Baked Goods lost jobs.



*The Food Processing cluster lost over 1,100 jobs in 2020 and lost an additional 226 jobs in 2021. In 2022, the cluster made up these losses and then some, with 1,423 jobs (a 4.7% increase), and 2022 employment levels are similar to those from 2016 to 2019. However, the LQ for this cluster in L.A. has been slowly declining, suggesting that other US regions are gaining concentration in this cluster.*

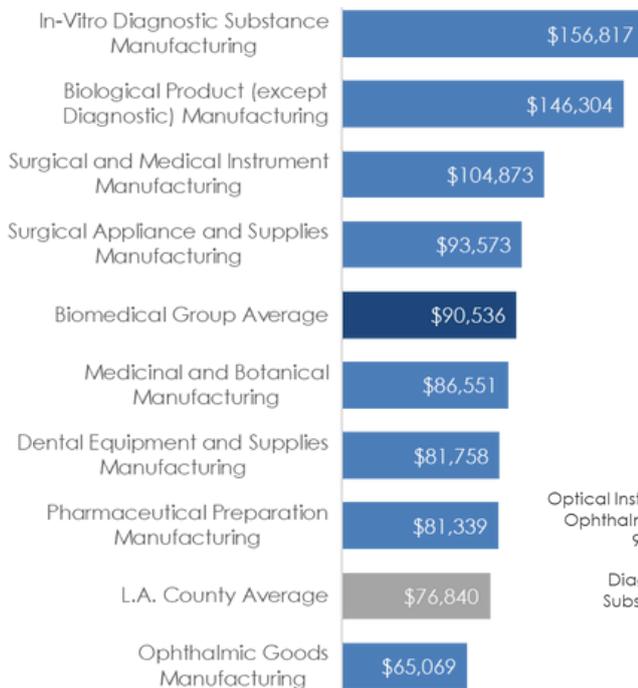
NUMBER OF  
EMPLOYEES  
**15,943**

AVERAGE  
WAGE  
**\$90,536**

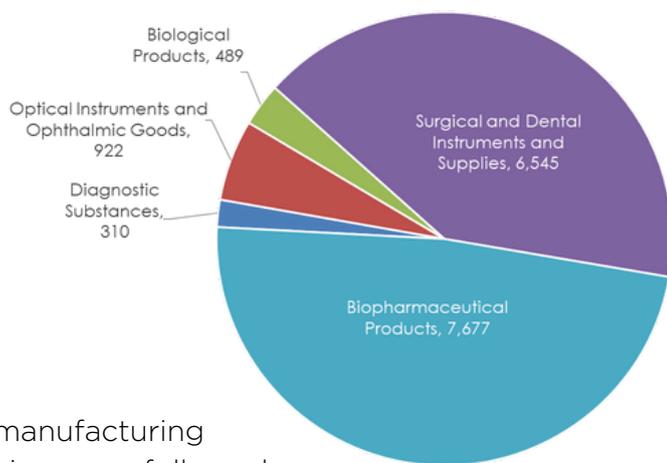
LOCATION  
QUOTIENT (LQ)  
**0.83**

*Consisting of industries in the biopharmaceuticals and medical devices clusters, this group employed almost 16,000 in LA County in 2022.*

AVERAGE ANNUAL EARNINGS, 2022



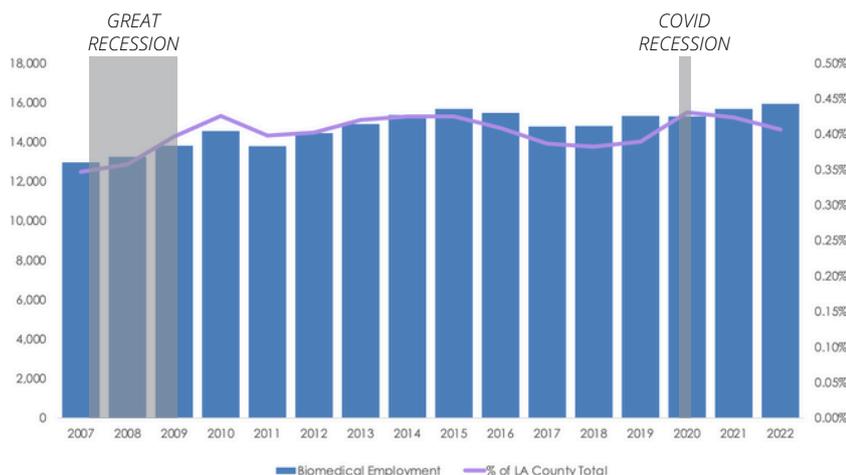
Average annual earnings for the Biomedical Group are almost **20% higher** than the county average. Average earnings have grown substantially since 2019, when the top industry paid \$108,000; now three industries exceed that mark, with one industry surpassing **\$156,000** annually.



Biopharmaceutical products manufacturing accounts for **48%** of jobs in this group, followed by Surgical and Dental Instruments at **41%**.

The Biomedical Group's concentration in LA County is just under the U.S. as a whole. Ophthalmic Goods Manufacturing has the highest employment LQ of 1.26.

This group experiences multi-year cycles. Employment grew from 2007-10, dropped in 2011, grew from 2012-15, dropped in 2016-17, and was on a growth trajectory until 2020. Employment declined slightly that year but then grew from 2021-22, reaching **15,943** workers.



*After growing by over 500 jobs in 2019, this group lost a handful of jobs in 2020, then added 660 jobs from 2021 through 2022—an increase of 4.1% over 2019. However, this growth was driven primarily by two industries: Pharmaceutical Preparation Manufacturing (which added 1,663 jobs from 2019-22, a 36% increase) and Surgical Appliance and Supplies Manufacturing (which added 583 jobs, an 18% increase). Except for In-Vitro Diagnostic Substance Manufacturing (which added 63 jobs), the remaining industries lost jobs from 2020 to 2022.*

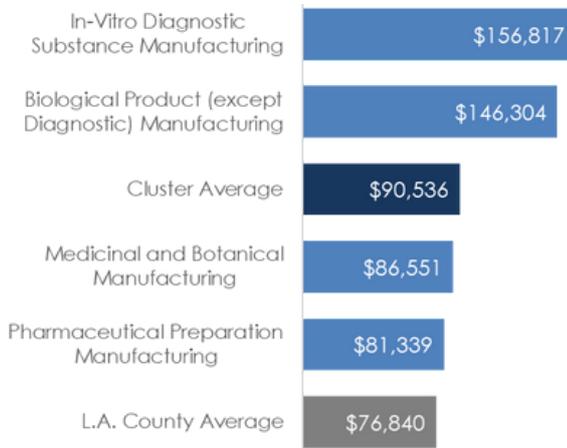
NUMBER OF  
EMPLOYEES  
**8,476**

AVERAGE  
WAGE  
**\$88,738**

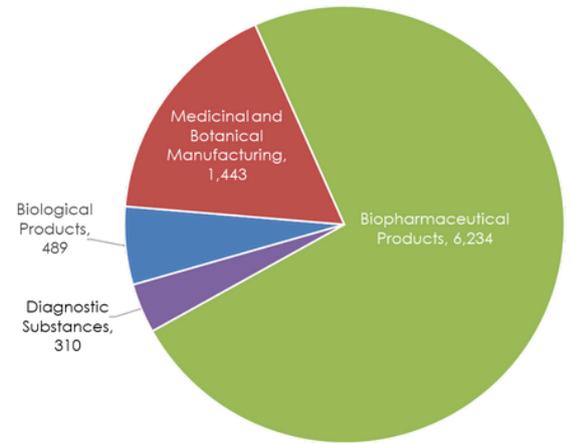
LOCATION  
QUOTIENT (LQ)  
**0.81**

*The Biopharmaceutical cluster is the larger of the two clusters in the Biomedical Group, employing almost 8,500 workers in 2022.*

AVERAGE ANNUAL EARNINGS, 2022



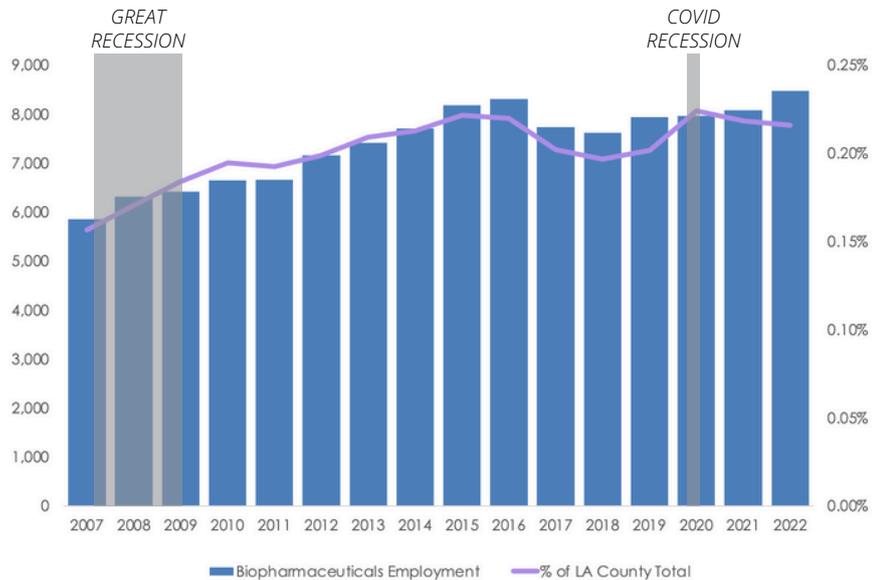
Average annual earnings in this cluster have increased substantially since 2019, with a cluster average **18% higher** than the county in 2022. The highest average annual earnings are in biological product manufacturing and in-vitro diagnostic substance manufacturing.



Biopharmaceutical product manufacturing provides **almost 75%** of jobs in this cluster. Medicinal and Botanical Manufacturing employs an additional **17%**.

Although there are stronger regions for biopharmaceuticals elsewhere in the country, L.A. County has improved its position from 0.6 in 2007 to 0.8 in 2022.

Except for a decline in 2017 and 2018, employment in this cluster has been increasing over time. Job numbers held steady during 2020, then grew by 1.6% in 2021 and 4.9% in 2022. This cluster has added a net of 1,055 jobs since 2012, a **15% increase**.



*After some job losses in 2017 and 2018, this cluster saw a bump in jobs in 2019. As opposed to clusters that lost jobs in 2020, this cluster grew slightly, followed by further modest growth in 2021 and a significant employment bump in 2022. The Pharmaceutical Preparation Manufacturing industry has been a particular standout, adding almost 400 jobs since 2019.*

NUMBER OF  
EMPLOYEES  
**7,467**

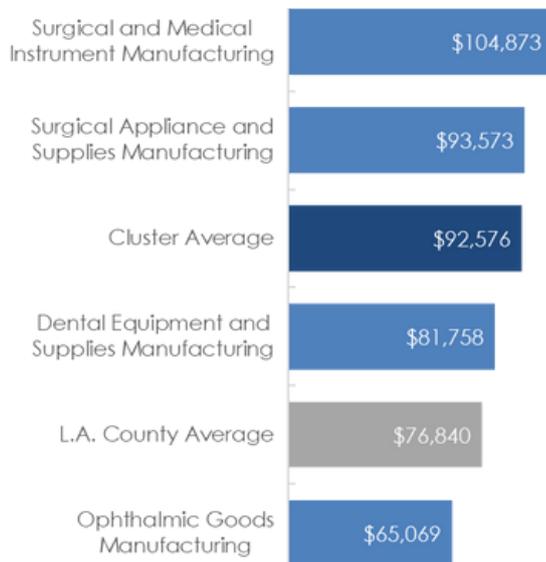
AVERAGE  
WAGE  
**\$92,576**

LOCATION  
QUOTIENT (LQ)  
**0.85**

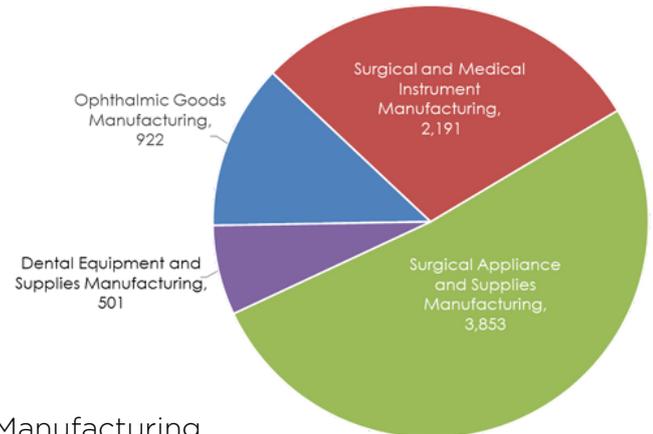
Employment concentration in L.A. County for this cluster has improved over the past 5 years, from 0.79 in 2018 to 0.85 in 2022.

*The smaller of the two clusters of the Biomedical Group, Medical Devices encompasses a range of products and employs almost 7,500 in L.A. County.*

AVERAGE ANNUAL EARNINGS, 2022



Cluster average annual earnings are over **20% higher** than the county average. Moreover, average annual earnings at the bottom of the cluster have increased, from \$56,000 in 2019 to \$65,000 in 2022.



The Surgical Appliance & Supplies Manufacturing industry provides just over **50%** of employment in this cluster, followed by Surgical & Medical Instrument Manufacturing at **30%**. Ophthalmic Goods Manufacturing and Dental Equipment & Supplies Manufacturing account for the rest.

Medical Devices cluster employment has been fairly consistent over the past several years and was just under **7,500** in 2022. Similarly, its contribution to total private sector employment in L.A. County has hovered around 0.2%.



*Employment in this cluster seems to follow a pattern of 3-4 years of steady growth, followed by 3-4 years of modest decline. The cluster appeared to be in a growth phase when the COVID-19 pandemic hit in 2020, during which time the cluster experienced minor job losses. Growth resumed in 2021 and the cluster added 270 jobs (a 3.7% increase). However, 270 jobs (1.7%) were lost in 2022.*

NUMBER OF  
EMPLOYEES  
**11,520**

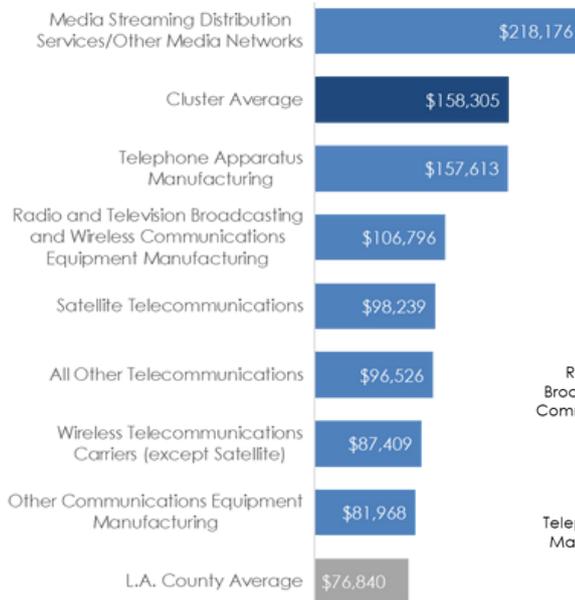
AVERAGE  
WAGE  
**\$158,305**

LOCATION  
QUOTIENT (LQ)  
**1.29**

Despite declining employment since 2007, this cluster is still more concentrated in L.A. County than in the U.S. as a whole, remaining at 1.3 or above since 2016.

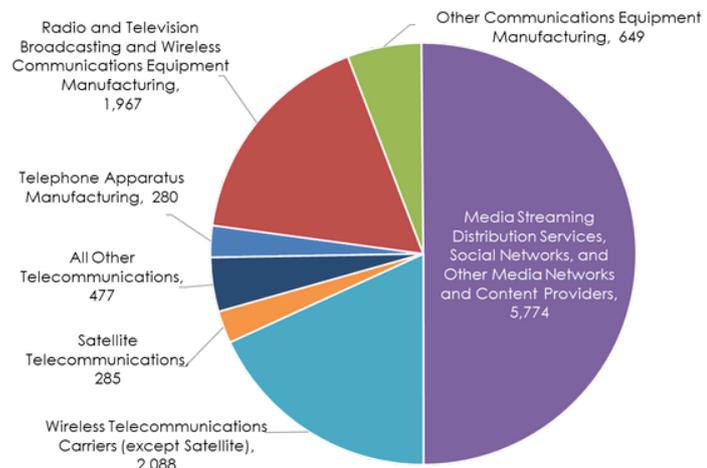
*This cluster includes industries ranging from radio, television, and satellite equipment to cable programming, wireless carriers, and media streaming.*

AVERAGE ANNUAL EARNINGS, 2022

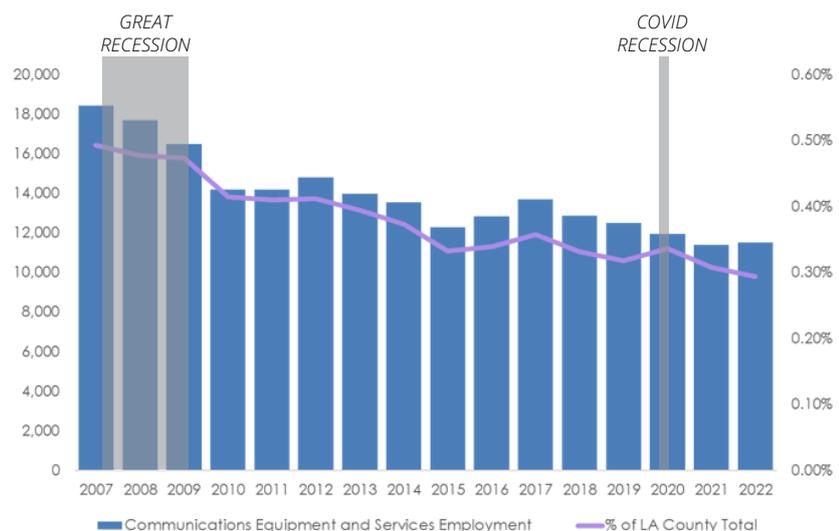


This clusters average annual earnings are **over twice** those of the county as a whole, and all industry annual average earnings exceed the county average. The top-earning industry is Media Streaming Distribution Services at over **\$218,000** annually.

The industry that includes Media Streaming Distribution Services, Social & Media Networks, and Content Providers accounts for **50%** of cluster employment. Telecommunications equipment manufacturing and wireless carriers providing the remaining 50%.



Employment in this cluster has been decreasing for years, mirroring US employment trends in this cluster. Interestingly, both L.A. County and the U.S. more broadly saw an **uptick** in employment in 2022.



*Employment in this cluster is somewhat cyclical, but the trend for both the US and LA County has been mostly downward since 2007. Employment fell 4.5% in 2020 and 4.7% in 2021 before increasing slightly in 2022. Technological change and geopolitical events are likely to have substantial effects on this cluster in the years to come.*

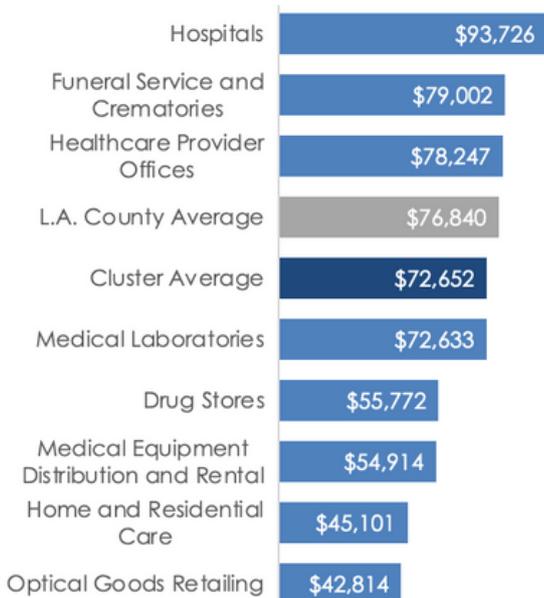
NUMBER OF  
EMPLOYEES  
**473,581**

AVERAGE  
WAGE  
**\$72,652**

LOCATION  
QUOTIENT (LQ)  
**0.91**

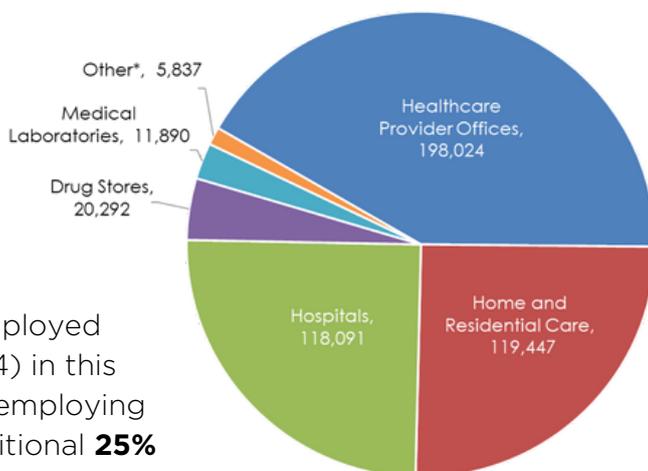
*The largest local cluster in LA County, Health Services includes hospitals, labs, imaging centers, healthcare providers, and residential care facilities.*

AVERAGE ANNUAL EARNINGS, 2022



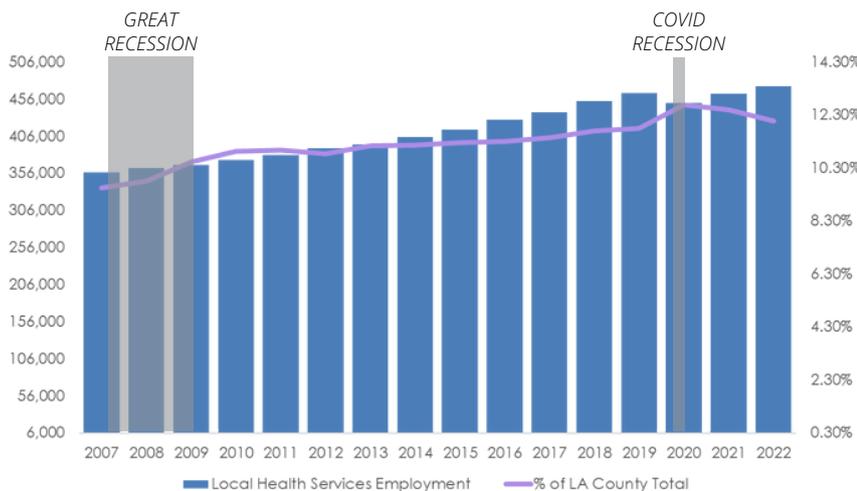
Average annual earnings for this cluster are about **\$4,000 below** the county's average. Of the 35 industries in this cluster, only six have average earnings exceeding the county's; at the top of the list is HMO medical centers at **\$120,778**.

*\*\*"Other" includes subclusters Optical Goods Retailing, Funeral Service and Crematories, and Medical Equipment Distribution and Rental*



Healthcare provider offices employed about **42%** of workers (198,024) in this cluster in 2022, with hospitals employing another **25%** (118,091). An additional **25%** (119,447) are employed in home and residential care, which includes residential care homes, psychiatric hospitals, and home health services.

With the sole exception of 2020, Local Health Services private sector employment has increased every year since 2007, **adding 115,000 jobs** from 2007-22. It employed over **12%** of private sector workers in L.A. County in 2022.



*Most industries in the Local Health Services cluster lost jobs in 2020 as a result of the COVID-19 pandemic; only Outpatient and Residential Mental Health / Substance Abuse Centers, Freestanding Ambulatory Surgical and Emergency Centers, and Other Outpatient Care Centers gained employment that year. Reflecting the changing landscape of reproductive health policy in the U.S., Family Planning Centers saw a big increase from 2021 (LQ=1.46) to 2022 (LQ=3.19).*

NUMBER OF  
EMPLOYEES  
**409,066**

AVERAGE  
WAGE  
**\$31,627**

LOCATION  
QUOTIENT  
**1.04**

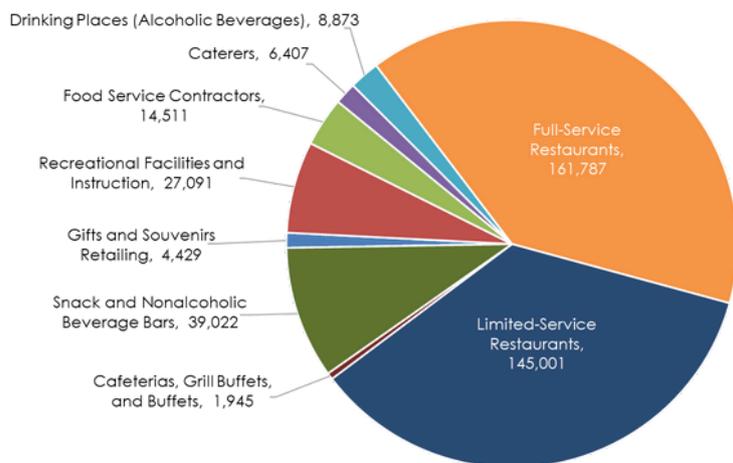
The employment concentration in Hospitality Establishments is about the same as the national average. The industry with the highest LQ is Snack & Non-alcoholic Beverage Bars (1.40).

*Hospitality Establishments includes restaurants, bars, sports & recreation facilities, food service & catering, and gift, novelty, and souvenir stores.*

AVERAGE ANNUAL EARNINGS, 2022



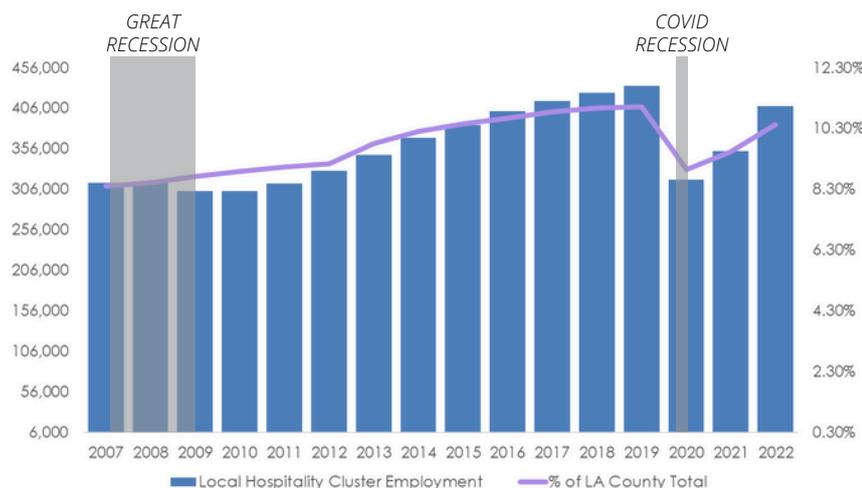
Average annual earnings for this cluster are **less than half** of the L.A. County average. Cluster average annual earnings have been increasing, however: in 2021, cluster earnings **increased by 11%**; in 2022, earnings **increased by 6.4%**.



Over 409,000 people worked in Local Hospitality in 2022, with **Full-Service Restaurants** employing almost **40%** and **Limited-Service Restaurants** employing over **35%**.



This cluster grew steadily from 2010 through 2019, until the COVID-19 pandemic hit in 2020. The cluster lost over 115,000 jobs (27%), but **added back 91,000 jobs** in 2021 and 2022. It employed **over 10%** of L.A. County's private sector workforce in 2022.



*As is well-known, the COVID-19 pandemic had a devastating effect on employment in travel, hospitality, and tourism around the world. While the Traded Hospitality cluster had the greater employment percentage drop (38% vs. 27% for the Local Hospitality cluster), the Local Hospitality Establishments cluster **lost the most jobs (over 115,000)**. The Local Hospitality Establishments cluster **added back over 91,000 jobs in 2021 and 2022**, so while the cluster is still down by over 24,000 jobs from 2019, strong growth in 2021-22 is encouraging.*

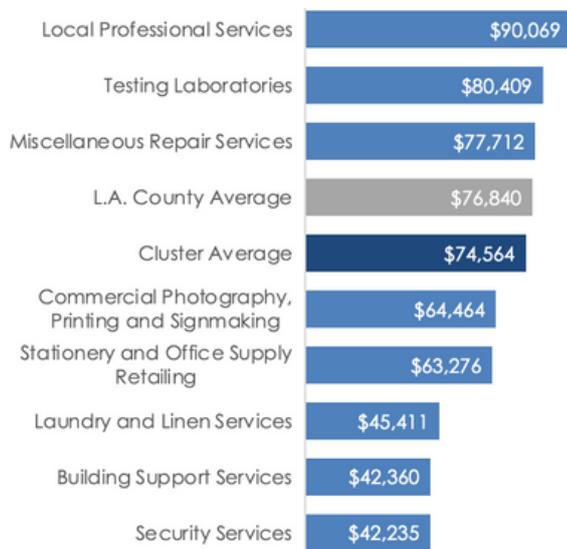
NUMBER OF  
EMPLOYEES  
**317,765**

AVERAGE  
WAGE  
**\$74,564**

LOCATION  
QUOTIENT  
**1.15**

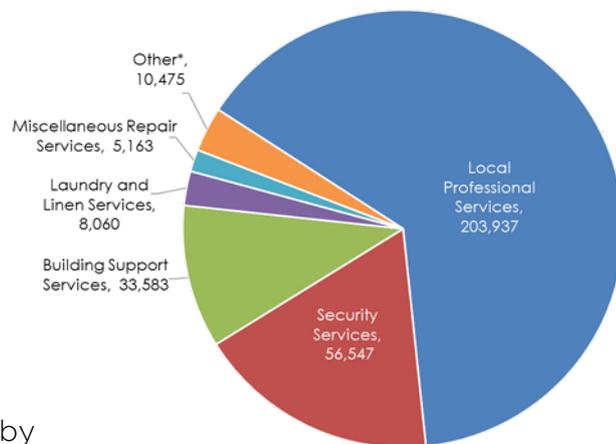
*Commercial Services includes commercial & industrial equipment repair & maintenance, lawyers and accountants, and security services.*

AVERAGE ANNUAL EARNINGS, 2022



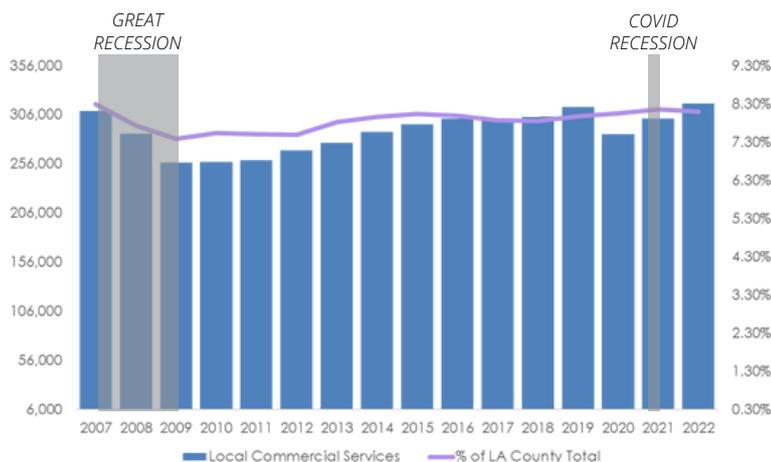
Though this cluster's **average annual earnings are very close to the county's**, average earnings by industry range widely. Lawyers and accountants are well-compensated, but jobs in security, inspection and repair are significantly lower than the county average.

*\*"Other" includes subclusters Testing Laboratories; Stationery and Office Supply Retailing; and Commercial Photography, Printing and Signmaking*



The largest subcluster, **Local Professional Services**, provides **64%** of employment in this cluster. Within this group, Temporary Help Services employs 85,414, followed by Offices of Lawyers at 53,264. The largest industry in **Building Support Services** is **Janitorial Services**, with **28,250** employees.

Employment in local commercial services saw modest growth from 258,000 in 2011 to 313,000 in 2019. The cluster lost 27,843 jobs in 2020 but gained 31,800 in 2021-22, bringing employment to **317,765**. This cluster accounted for **8%** of private sector jobs.



*This cluster lost almost 28,000 jobs (almost 9%) across most of its 31 industries in 2020; the few industries gaining jobs included Testing Laboratories & Services, Environmental Consulting Services, and Private Mail Centers. Robust growth in 2021-22 (31,800 jobs) brought employment levels above those of 2019. Most industries have grown since 2020—particularly lawyers, accountants, building inspectors, environmental consulting services and testing laboratories, and security guards & patrol services.*

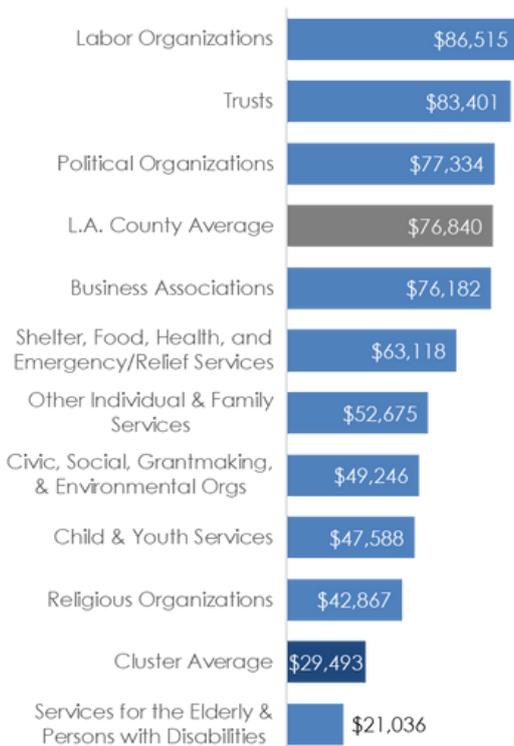
NUMBER OF  
EMPLOYEES  
**321,264**

AVERAGE  
WAGE  
**\$29,493**

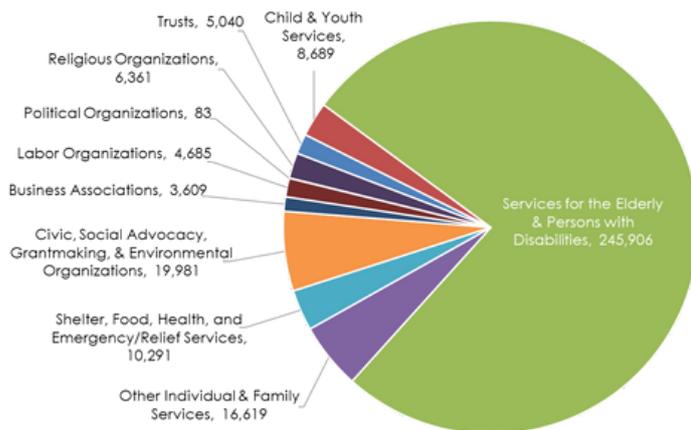
LOCATION  
QUOTIENT  
**2.47**

*The third largest local cluster, Local Community and Civic Organizations added 22,560 employees in LA County in 2019.*

AVERAGE ANNUAL EARNINGS, 2022



While some industries in this cluster pay fairly well, average annual cluster earnings are **extremely low** at **\$29,493**, a result of the large number of low-paying jobs performing services for the elderly and disabled.

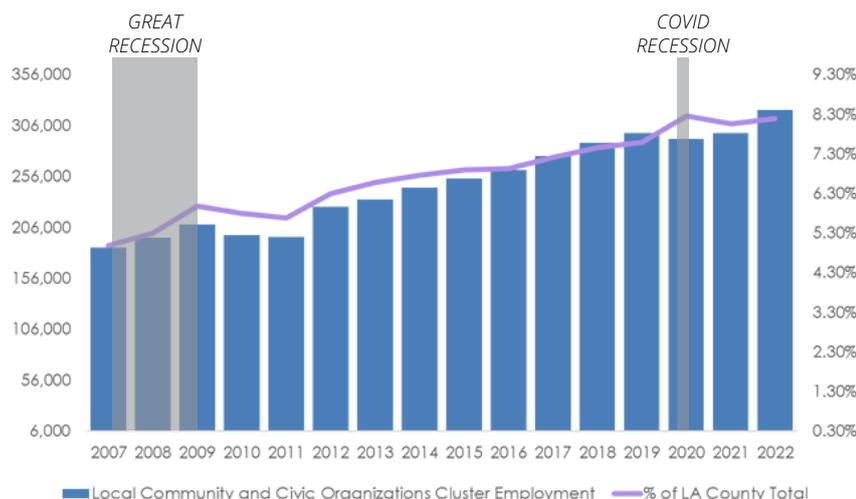


This cluster has seen increasing concentration since 2016, when the LQ was 2.27. This concentration is driven by Services for the Elderly and Disabled (LQ=3.78).

Over **75%** of those employed in this cluster provide **services to the elderly and disabled**. Another 8% provide health & behavioral services to families and individuals, and an additional 16% are employed in other social service organizations. The remaining 20,000 jobs in the cluster are divided among business associations, trusts, and labor, political, and religious organizations.



Employment rose consistently from 2012 until 2020 with the COVID-19 pandemic. However, the cluster has **added over 22,500 jobs since 2020**, and accounted for **8.2%** of Los Angeles County non-governmental workers in 2022.



*Years of steady growth in this cluster were interrupted by the COVID-19 pandemic, with religious, grantmaking, environmental, civic and social, and labor organizations experiencing most of the losses. Employment gains since 2020 have been primarily in services for the elderly and disabled—though jobs in community housing, social advocacy, voluntary health organizations, and business associations have also increased. A few categories have not recovered to 2019 levels; these include grantmaking foundations, environmental organizations, civic & social organizations, and labor unions.*



# METHODOLOGY AND REFERENCES



# Industry Clusters Background

As defined by the U.S. Cluster Mapping Project, industry clusters are concentrations of related industries in a particular region. Geographic proximity facilitates specialization of infrastructure and labor, increasing competitiveness and innovation in the region. The more concentrated an industry cluster is, the more competitive that industry cluster is in that region relative to other regions in the country.

## *A Brief History of Industry Cluster Research*

Work developing industry cluster definitions began in the early 2000's, when a team of researchers from Harvard Business School, MIT Sloan, and Temple Fox School of Business, led by Professor Michael Porter, gathered Census and industry data to develop an algorithm that defined cluster categories extending across the entire U.S. economy. This methodology standardized clusters and enabled comparative analyses between regions in the U.S.

In 2014, the U.S. Cluster Mapping Project was launched, led by Harvard Business School's Institute for Strategy and Competitiveness, in partnership with the U.S. Department of Commerce and the U.S. Economic Development Administration. The project provided over 50 million open data records on industry clusters and regional business environments.

More information about the project and its history can be found at the group's "About the Project" website at [www.clustermapping.us/about/about-project](http://www.clustermapping.us/about/about-project).

## Our Methodology

LAEDC examines clusters in Los Angeles County to better understand the county's regional strengths and weaknesses, compare the county's performance against that of other regions in the U.S., and build more informed economic development strategies based on these insights. To prepare this report, we engaged in the following activities:

- Using the Cluster Mapping Project's "US Cluster Definitions" spreadsheet, we mapped all private-sector (this includes not-for-profit organizations) 6-digit NAICS codes to their respective clusters ([www.clustermapping.us/content/cluster-mapping-methodology](http://www.clustermapping.us/content/cluster-mapping-methodology)).
- NAICS codes are updated every 5 years, requiring an update of the industry cluster definitions. The Cluster Mapping Project has not yet updated NAICS codes for 2022, so we mapped pre-2022 NAICS industries onto the latest 2022 NAICS codes using information from the US Census Bureau (<https://www.census.gov/naics>).
- We gathered employment and wage data from the U.S. Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)), the State of California Economic Development Department (<https://edd.ca.gov/>), and IMPLAN (a provider of economic impact data and analytical applications, <https://implan.com/>). To enable like-for-like comparisons across clusters and organizations, we include only private sector employment and wage data.
- We focused our analyses on the largest traded clusters and local clusters by employment.
- We broke those clusters down into their component industries by employment and showed employment patterns from 2007 to 2022 to gauge how the cluster has developed and how it responds to the business cycle.
- We determined the average wages paid in each cluster and compared them to the average wage across all industries in L.A. County. We then examined the top performing industries in the cluster by average wages, to highlight the standouts of the county.
- Finally, we calculated the location quotient for each cluster to show regional concentration. We identify a location quotient higher than 1.1 as being concentrated in Los Angeles County relative to the US as a whole, and a source of regional competitive advantage.

APRIL 2024

LAEDC

# INDUSTRY CLUSTERS

*in Los Angeles County*

*Funding provided through the Build Back Better program, U.S. Economic Development Agency.*

*The following LAEDC staff contributed to this report:*

- *Shannon Sedgwick, Senior Director*
- *Justin Adams, Senior Economist*
- *Dan Wei, Economist*
- *Gina Durante, Research Analyst*
- *Diego Saavedra, Analyst*

Los Angeles  
County  
Economic  
Development  
Corporation

Institute for  
Applied  
Economics