CALIFORNIA JOBS FIRST

Regional Report

PART 1 MAY 2024

California COMMUNITY Foundation

LAEDC LOS ANGELES COUNTY ECONOMIC DEVELOPMENT CORPORATION
Collaboratively Advancing Growth and Prosperity for All

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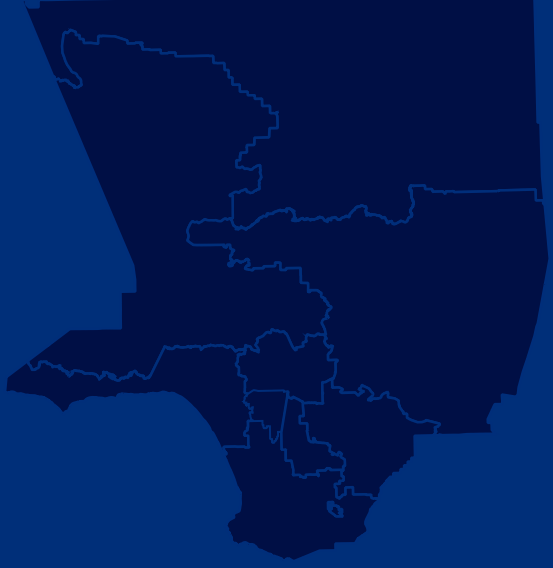


Executive Summary

The Los Angeles County California Jobs First Collaborative (LA County JFC) is pleased to introduce the Los Angeles Regional Plan report Part 1 for the California Jobs First Program, providing a detailed analysis of Los Angeles County's socioeconomic landscape. The California Jobs First program holds significant importance as a pioneering effort that places a strong emphasis on promoting equity and inclusion in economic planning. The LA County JFC has developed a robust planning process for the life of the CJF Program, which is detailed in a process map and timeline which can be found here. By actively engaging underrepresented groups and communities, the LA County JFC aims to ensure that their voices are heard, their perspectives are considered, and their interests are integrated into the decision-making process. This approach fosters a more comprehensive and holistic understanding of the challenges and opportunities faced by diverse populations, leading to more impactful and sustainable economic development and a more equitable and prosperous future for all.

Unlike traditional approaches, the LA County JFC goes beyond merely focusing on economic growth and development; it strives to create an inclusive framework that considers the needs and aspirations of all members of the community, especially those who have been historically marginalized or underserved. Through the California Jobs First initiative, LA County is positioned to draw significant investments into our region, fostering the development of high-quality, sustainable employment opportunities. These endeavors will not only enhance the quality of life for LA County residents but will also empower disadvantaged communities to flourish, ensuring they have the means to prosper.

Utilizing extensive economic research and a thorough community engagement process, the following report details various factors impacting employment in the region, including housing, childcare, job quality, and emerging green industries; describes the region's stakeholders and the stakeholder engagement process; assesses the factors affecting the region's economic, environmental, and health conditions; and presents a detailed economic and workforce analysis.

We recognize that there are distinct differences in the strengths, weaknesses, threats, and opportunities in the diverse subregions of the County. To that end, this report provides a regional view as well as breaking the County down into eight distinct Service Planning Areas, or SPAs, designated by Los Angeles County's Department of Public Health to conduct research and data analysis.

Los Angeles County Service Planning Areas

Source: Los Angeles County Department of Public Health.

NOTE: *The South SPA 6, which encompasses high-poverty neighborhoods from Crenshaw and Hyde Park to Compton and Paramount, is split along interstate 110, into a western half and eastern half. These are referred to as the South-West SPA, and the South-East SPA, accordingly, and each have different demographic profiles.*

SPA 1
Antelope Valley

Acton, Agua Dulce, Gorman, Lake Hughes, Lake Los Angeles, Lancaster, Littlerock, Palmdale, Quartz Hill, and others

SPA 2
San Fernando Valley

Burbank, Calabasas, Canoga Park, Canyon Country, Encino, Glendale, LA Cañada-Flintridge, San Fernando, Sherman Oaks, Sun Valley, Van Nuys, Woodland Hills, and others

SPA 3
San Gabriel Valley

Alhambra, Altadena, Arcadia, Azusa, Baldwin Park, Claremont, Covina, Diamond Bar, Duarte, El Monte, Glendora, Irwindale, Monrovia, Monterey Park, Pasadena, Pomona, San Dimas, San Gabriel, San Marino, Temple City, Walnut, West Covina, and others

SPA 4
Metro LA

Boyle Heights, Central City, Downtown LA, Echo Park, El Sereno, Hollywood, Mid-City Wilshire, Monterey Hills, Mount Washington, Silverlake, West Hollywood, and Westlake

SPA 5
West

Bel Air, Beverly Hills, Brentwood, Culver City, Ladera, Malibu, Mar Vista, Marina del Rey, Pacific Palisades, Palms, Playa del Rey, Santa Monica, Venice, West LA, Westchester, and Westwood

SPA 6
South: East

Athens, Compton, Lynwood, South Gate, Watts, and others

SPA 6
South: West

Baldwin Hills, Crenshaw, Exposition Park, Florence, Hyde Park, Paramount, West Adams, and others

SPA 7
East

Artesia, Bell, Bellflower, Bell Gardens, Cerritos, City of Commerce, City Terrace, Cudahy, Downey, East Los Angeles, Hawaiian Gardens, Huntington Park, La Habra Heights, Lakewood, La Mirada, Los Nietos, Maywood, Montebello, Norwalk, Pico Rivera, Santa Fe Springs, Signal Hill, South Gate, Vernon, Walnut Park, Whittier, and others

SPA 8
South Bay

Athens, Avalon, Carson, Catalina Island, El Segundo, Gardena, Harbor City, Hawthorne, Inglewood, Lawndale, Lennox, Long Beach, Hermosa Beach, Manhattan Beach, Palos Verdes Estates, Rancho Dominguez, Rancho Palos Verdes, Redondo Beach, Rolling Hills, Rolling Hills Estates, San Pedro, Torrance, Wilmington, and others

The components of this report are as follows:

Stakeholder Mapping details our inclusive planning process that brought together a diverse and comprehensive swath of stakeholders from across LA's industries, SPAs, communities, and lived experiences. As the most populous region in California, with more than 9.7 million residents in Los Angeles County, residing in 88 cities and over 100 unincorporated communities spread across more than 4,000 square miles of urban, suburban, and rural areas, it is important to recognize the distinct subregions of Los Angeles County and consider their unique challenges and opportunities related to our goals. We therefore engaged stakeholder organizations and residents from each of the eight SPAs in our inclusive community tables and collaborative governance structure to help guide and inform our collective planning to build a sustainable economy that fosters economic resilience in the overall transition to a carbon neutral economy throughout Los Angeles County.

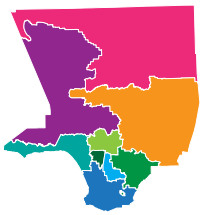
The Regional Summary draws together data analysis and stakeholder surveys conducted by CVL Economics and Beacon Economics to furnish a thorough picture of the socio-economic conditions of our incredibly complex and diverse region. The Los Angeles County Regional Index (Appendix B), created by CVL Economics, summarizes the region's economic development environment through the compilation and analysis of key economic, demographic, educational, health, and community-related indicators across eight Service Planning Areas (SPAs). Beacon Economics' report provides a broad overview of the economy and living conditions in Los Angeles County – its strengths, weaknesses, opportunities, and threats. Their findings, as well as those from other reputable research sources (see References in Appendix E), help to paint the picture of Los Angeles County.

The Labor Market Analysis provides an overview of the Los Angeles labor force, job training opportunities, and prominent industries and occupations. This section also details common barriers to employment that many Angelenos face, including high housing costs, affordable childcare, discrimination by age, gender, and/or race, lack of well-paying work, past criminal justice history, poor health and disability, mismatch between the potential worker's skills and education levels and those demanded in the labor market, lack of relevant training, and lower educational attainment.

The Industry Clusters Analysis provides insights on industry and labor conditions within the County. Formal work on the Industry Cluster Analysis began in January 2024 by Beacon Economics, and is supported by research conducted internally on potential growth clusters in Los Angeles County, environmental effects of existing and proposed clusters, potential job growth and industries at risk of displacement. Beacon's research on industry clusters describes the region's diverse industry clusters, ranging from Entertainment and Aerospace to Healthcare and Financial Services. Carefully exploring the strengths and weaknesses of various industry clusters across SPAs, the analysis identifies clusters with promising growth prospects and those requiring targeted interventions. For instance, Aerospace Vehicles and Defense, Local Health Services, and Performing Arts emerge as sustainable and lucrative clusters in certain regions, while others like Food Processing and Manufacturing require environmental mitigation efforts to align with California Jobs First mission goals. Moreover, the analysis sheds light on emerging industries such as Green Energy, Advanced Transportation and Clean Technology, Biosciences, Food Manufacturing, and Construction, emphasizing their pivotal role in transitioning to a greener economy. Despite facing challenges, these sectors offer opportunities for innovation, job creation, and environmental sustainability. Initiatives like the High Road Construction Careers program are instrumental in supporting workforce development in critical sectors like Construction and can be replicated for other sectors.

The SWOT Analysis provides a high-level understanding of the region's overall strengths, weaknesses, opportunities and threats, both at a regional level and broken down by SPA to give a clearer picture of the diversity of the region. Los Angeles County's economy has exhibited robust growth and notable improvements, such as its commendable reduction in poverty, lifting several hundred thousand residents above the federal poverty level. Despite these strengths, the region faces substantial weaknesses, evident by its declining population and sluggish growth in comparison to other comparable metropolitan areas. These weaknesses stem from labor supply shortages, caused by a work skills gap, stifling housing costs, and childcare accessibility issues. Strategic initiatives aimed at reducing these barriers and fostering effective employer-employee connections will not only benefit families but also bolster the resilience of businesses in Los Angeles. These improvements will also help prepare Los Angeles for a changing climate, and help it achieve a less-carbon intensive economy, as green jobs will require new employees, new training, and offer more environmentally friendly employment opportunities.

Regional SWOT Findings



Strengths

- Los Angeles County's massive size enables it to weather shocks, and it contains many of the economic inputs it needs to function.
- Los Angeles has more Colleges and Universities than any other metropolitan area in the country.
- The Motion Picture Industry continues to be a source of economic strength.
- The number of Angelenos who live below the poverty line has fallen over the last decade, and incomes have risen.

Weaknesses

- Los Angeles County's declining and aging population lowers the available labor supply, reduces the number of potential consumers, and makes future economic growth more difficult to achieve.
- High housing costs force longer commute times, prevent households from moving to neighborhoods that better meet their needs, consume a large proportion of income, and increase the prevalence of homelessness.
- Los Angeles County has a relatively low labor force participation rate, especially within disinvested communities.

Opportunities

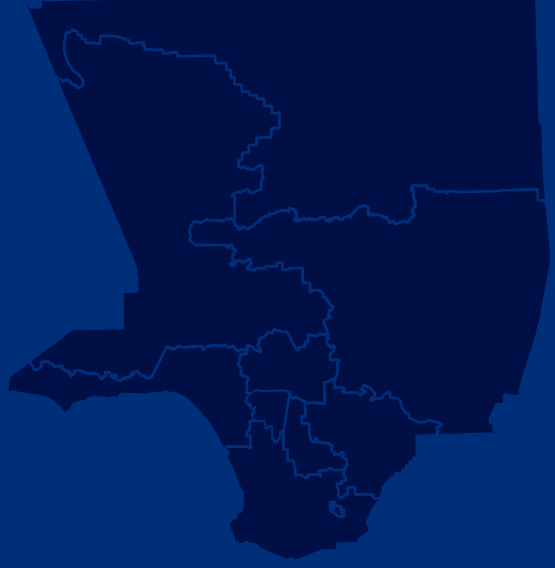
- The green economy and the number of green jobs is growing: Green jobs account for 27% of the total employment in the county, a rise from 21% in 2012.
- The Technology Industry has a strong foundation in the County and could provide high income employment opportunities. South Bay, San Fernando, and the West SPA account for 74% of the County's Tech employment.

Threats

- Climate change-related threats including wildfire risk and the adverse effects of urban heat islands will worsen in the future.
- There is a high degree of spatial inequality between each of the Service Planning Areas.
- While the average level of education among Angelenos has increased, the number of jobs requiring higher levels of education has increased faster.

Beginning in December 2023, the Los Angeles County Jobs First Collaborative (LA County JFC) has engaged in an extensive stakeholder mapping process that helped to inform the Regional Plan Part 1. We present those findings and analysis through a visual presentation of the data we collected. Additionally, the LACJFC contracted with two economic research firms, Beacon Economics and CVL Economics, to conduct the Regional Summary, Industry Cluster Analysis, and SWOT Analysis. Their findings are included in this report and identify barriers to recovery, and recommend strategies to support the most disinvested communities in our region to transition toward becoming more sustainable and resilient. We are energized by the work of the LA County Jobs First Collaborative governance to date and the collaborative nature of its governance structure to achieve our overarching goal of building an equitable and sustainable economy that fosters long-term economic resilience in the overall transition to a carbon neutral economy.

Glossary



Active Stakeholders: Organizations/individual residents that are currently engaged with the LA County Jobs First Collaborative.

California Jobs First (CJF): Formerly referred to as the California Economic Resiliency Fund (CERF), California Jobs First is program developed by the State of California's Office of Planning and Research (OPR), Office of Business and Economic Development (GO-Biz), and the Labor and Workforce Development Agency (LWDA) to promote a sustainable and equitable recovery from the economic distress of COVID-19 by supporting new plans and strategies to diversify local economies and develop sustainable industries that create high-quality, broadly accessible jobs for all Californians.

CJF impact clusters: We selected three characteristics that best capture whether an industry cluster aligns with CJF's goals, and refer to these clusters as CJF impact clusters since they are likely to impact the economy through sustainable and equitable growth. CJF impact clusters share the following characteristics:

- They have very low or low environmental impact intensity and greenhouse gas impact intensity.
- Their employment growth exceeded the overall SPA-level cluster employment growth average.
- Their average wage is above the overall SPA-level average wage.

Los Angeles County Jobs First Collaborative (LA County JFC): Formerly referred to as the High Road Transition Collaborative (HRTC), these are economic development organizations that represent California's 13 distinct regional economies and bring together diverse members of the labor, industry, and business sectors as well as community interests.

Community Based Organization (CBO): An entity, typically a nonprofit, whose purpose is aimed at supporting or improving a community generally or in a specific way/for a specific group of people within the community.

Disadvantaged Communities: The identified 'disadvantaged' census tracts, according to the California Environmental Protection Agency's CalEnviroScreen, encompass various criteria, such as median household incomes at or below 80 percent of the statewide median income or falling below the low-income threshold established by the Department of Housing and Community Development. CalEPA created the Disadvantaged Communities Map which can be accessed here https://oehha.ca.gov/calenviroscreen/sb535.

We use the Climate and Economic Justice Screening Tool from the Council on Environmental Quality (CEQ) to define disadvantaged. Communities are considered disadvantaged:

- If they are in census tracts that meet the thresholds for at least one of the tool's categories of burden, or
- If they are on land within the boundaries of Federally Recognized Tribes

The definitions employed by OEHHA's CalEnviroScreen and the Council on Environmental Quality use multiple criteria to identify census tracts

that are vulnerable to economic shocks subject to poor environmental conditions. The use of the OEHHA and CEQ definitions to identify disadvantaged communities helps make sure all census tracts are accounted for and ensures that estimates of residents living in these communities are not overinflated.

Disinvested Communities: California Jobs First uses four criteria to define disinvested communities. If a community qualifies under any one category, it is considered disinvested. These four criteria are:

- Census tracts identified as 'disadvantaged' by the California Environmental Protection Agency.
- Census tracts with median household incomes at or below 80% of the statewide median income or with median household incomes at or below the threshold designated as low-income by the Department of Housing and Community Development's list of state income limits adopted pursuant to Section 50093 of the California Health and Safety Code.
- 'High poverty area' and 'High unemployment area' as designated by the California Governor's Office of Business and Economic Development California Competes Tax Credit Program.
- California Native American Tribes as defined by the Native American Heritage Commission (NAHC) Tribal Consultation.

Educational Attainment: The level of formal education that an individual receives (e.g., graduating high school or college).

Environmental Impact Intensity: We measure environmental quality by analyzing the industry environmental impact data of five types of pollution:

- **Criteria and Hazardous Air Emissions** – emissions of air pollutants that are hazardous to human health. For instance, carbon monoxide, lead, ozone, sulfur dioxide, nitrogen oxide, etc.
- **Greenhouse gas emissions** – emissions of carbon dioxide, nitrous oxide, methane, sulfur hexafluoride, etc.
- **Point Source Industrial Releases to Ground** – pollution from an identifiable industrial source which is released to the ground. Examples include ammonia, lead, mercury, etc.
- **Point Source Releases to Water** - pollution from an identifiable source that is released to water. Examples include formaldehyde, nitrogen, zinc, etc.
- **Water Withdrawals** – water taken from fresh, or saline water sources. Includes groundwater.

These types of pollution are measured in kilograms, and a higher value reflects a more negative impact on the environment. To categorize industry cluster sustainability, Beacon Economics summed all these sources of pollution for each industry cluster and divided the sum by the cluster's Los Angeles County Gross Regional Product (GRP). This measure is known as environmental impact intensity (measured in kilogram per dollar).

Green Jobs: Represent jobs that contribute to the process of decarbonizing the economy, ranging from clean energy production to electric vehicle manufacturing to improving home energy efficiency.

Industry Clusters: Industry clusters are regional concentrations of related industries. The clusters are made up of firms, suppliers, workers, and other institutions that support the regional economy, including government entities. This type of colocation of industries fosters essential economic relationships that positively benefit the regional economy through job creation and economic growth. Industry clusters form due to underlying economic forces such as increased productivity that stem from labor market pooling, information spillovers that reduce production costs, the presence of specialized suppliers, and other factors. If an industry stands to benefit from these economic forces, then it's likely these clusters will form since it will reduce costs for all firms involved. Hollywood serves as an excellent example of this.

Labor Market Pooling: Labor market pooling refers to a situation in which workers with specialized skills concentrate in a particular region. This benefits both producers and workers since it reduces search and matching efforts between firms and workers, consequently reducing both labor shortages and unemployment. Producers benefit from having a pool of workers for when they need to expand, which leads to increased firm productivity.

Local clusters: Industries that serve their local population and exist regardless of a region's specific advantages.

Location quotient (LQ): The location quotient gauges how concentrated an industry is in a particular area compared to its concentration across the entire nation. Concentration refers to the share of employment for a particular industry cluster. Therefore, location quotients capture a region's industrial specialization. The location quotient of an industry cluster (or sub-cluster) is the ratio of the share of employment in that cluster at the SPA level to the share of employment in that cluster in the nation. This provides information about the level of concentration of that cluster in the region compared to the rest of the United States. Industry clusters with an LQ greater than 1 are more concentrated in the corresponding SPA than in the United States overall.

Prime-age workers: Individuals between the ages of 25-54, a widely-recognized timeframe for peak labor market participation.

Redlining: A government-sponsored practice that exacerbated inequality by prioritizing home loans in desirable areas for White homeowners, driving away low-income people and people of color, and leaving them with fewer pathways to home ownership, reduced economic security, and a decreased ability to adapt to shocks and stresses such as impacts from climate change.

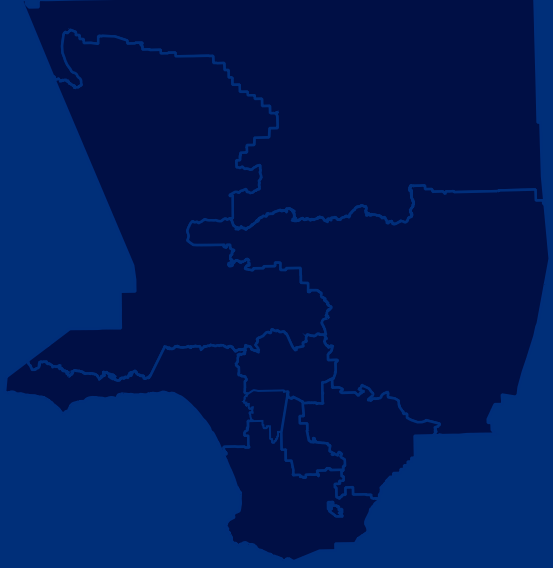
Stakeholders: State of California designated categories of communities, causes, or industries to include in this California Jobs First process. Stakeholder groups for CJF include Labor Organizations, Employers, Businesses and Business Associations, Grassroots and Community-Based Organizations, Government Agencies, Economic Development Agencies, Philanthropic Organizations, Education and Training Providers, Workforce Entities, Environmental Justice Organizations, Workers Centers, Disinvested Communities, and California Native American Tribes.

SWOT analysis:

- **Strengths** – Positive assets, resources, and characteristics that can be leveraged and built upon to grow a more inclusive and sustainable regional economy
- **Weaknesses** – Liabilities and barriers to economic development and quality of life that could limit economic growth potential.
- **Opportunities** – Competitive advantages and positive trends that hold potential for the attraction of new businesses, investments, skilled workers, and more quality jobs.
- **Threats** – Unfavorable factors and trends that are and could continue to negatively affect the regional economy.

Traded clusters: Traded clusters refer to industries that are wealth-generating, selling their products and services to markets beyond the region they reside in. For example, technology companies develop software and hardware products used around the country and the world. Similarly, the agriculture industry produces lettuces, strawberries, and other commodities sold in many markets. Because these industries "import" new money into the region by selling to external customers, they support broader local growth

Stakeholder Mapping



Summary

This section describes the governance structure of the LA County Jobs First Collaborative and how we are working across sectors and communities to bring together stakeholders to create a high-road economy in LA County. We also discuss regional collaborations that have the potential to help us achieve our strategic vision, our future plans and who will benefit from these initiatives, and a description of disinvested/disadvantaged communities in Los Angeles County. The Stakeholder Mapping process for Part 1 of the CJF initiative drew upon a diverse and comprehensive group of stakeholders from across LA's industries, SPAs, communities, and lived experiences. The LA County Jobs First Collaborative has committed extensive time and funding to conduct outreach and engagement activities to ensure that the organizations and individuals serving and residing in our most disinvested communities were directly engaged in this process.

Today, the LA County Jobs First Collaborative consists of more than 600 grassroots and community-based organizations, community organizers, community members, employers, businesses and business associations, education and training providers, economic development agencies, government agencies, workforce entities, environmental justice organizations, philanthropic organizations, labor organizations, worker centers, and California Native American Tribes. The LA County Jobs First Collaborative's extensive and diverse network of partners within the governance model across various sectors positions it with tremendous potential in the development and execution of the economic development plan. With active participation from entities like academia, economic development agencies, community-based organizations, and environmental justice advocates, the collaborative forms a robust foundation. Labor organizations and worker centers bring strategic expertise in worker and community organizing, while economic development agencies contribute multifaceted capabilities to support small businesses, advocate for communities, and foster connections. Organizations focused on community development, environmental justice, and sustainability, such as GRID Alternatives, Rising Communities, and Pacoima Beautiful, enrich the plan's objectives. The BizFed Institute and the American Indian Chamber of Commerce of California provide crucial business and industry perspectives. Finally, government collaboration, notably with the County of LA Department of Economic Opportunity, ensures seamless connectivity and effective implementation. This collective synergy enhances the LA County Jobs First Collaborative's capacity to create a comprehensive, inclusive, and impactful economic development plan for the region. **The full list of LA County Jobs First Collaborative Partners can be found in here**.

The LA County Jobs First Collaborative Governance Structure

The governance structure for the LA County Jobs First Collaborative is designed to promote shared decision making and to ensure that the voices of disinvested communities are prioritized. We are committed to utilizing lived-experience data from disinvested communities to lead our decision-making processes. We are working to engage community voices from all of our County's Service Planning Areas to ensure that no subregion is left out of the planning process. As seen in the breadth of the LA County Jobs First Collaborative's diversity, the governance model of the LA County Jobs First Collaborative also holds true to this practice of balanced representation and shared decision-making by geography and entity types.

The shared/inclusive structure includes four primary components: (A) Affinity Hub and Subregional Table Leads (B) Table Partner Leads (C) Steering Committee (D) Stewardship Committee. The structure is designed to be non-hierarchical, as indicated in the horizontal relationships between the different components of the model.

Affinity Hub and Subregional Table Leads are made up of all of the required entity types: Labor; Employers, businesses, and business associations; Grassroots and community-based organizations, community organizers, and community members; Government agencies; Economic development agencies; Philanthropic organizations; Education and training providers; Workforce entities; Environmental justice organizations; Worker centers; Disinvested communities; California Native American Tribes. The LA County Jobs First Collaborative has also identified other demographic groups for representation in the process by partnering with organizations that serve themes/persons, such as: Immigrants; Transition Age Youth; Public Health; Personal Health; Income & Wealth; Prone to Personal Violence; Community Violence; and LGBTQ+. The membership and focus of these Tables cut across regions, sectors, affinity areas, and shared challenges. The roles of the Affinity Hub and Subregional Table Leads include but are not limited to: gathering relevant data and community voice, responding to data analysis and research, advising on key needs, co-creating economic development strategies, and summarizing ideas and concepts to provide essential knowledge to inform the CJF planning process.

The 12 Affinity Hub Leads serve constituents in the following thematic areas: Youth; Families; Homeless, Veterans and Seniors; Employers and Business; Economic Development; Underemployed Adults; Labor and Workers; Immigrants; Sustainability; Academia; Institutional and Government; and Civic Engagement and Place Based Coalitions. Roles of the Affinity Hub Leads include convening and facilitating a minimum of 5 conversations in their affinity areas presenting and responding to research, identifying community needs, sharing input from other levels of the governance structure such as other Table Partner Leads, providing capacity building resources for community participation and gathering feedback for strategic proposals. A primary focus will be to facilitate the flow of information regarding CJF priorities between stakeholders and the Steering Committee. The Regional Convenor created a shared repository for the Affinity Hub Leads that is available to the general LA County JFC that can be found here. Using the shared repository allows for Affinity Hub Leads to provide meeting details for greater engagement, summaries of their convenings and other research/data for the LA County JFC to consider as they move towards the Catalyst and Implementation phases.

A capacity building vendor was budgeted to help the Affinity Hub Leads with understanding the California Jobs First initiative, presenting and gathering research data and engaging directly with the Subregional Table Leads. The capacity building vendor has also provided digital tools to the Affinity Hub Leads through the shared repository to ensure that each meeting with the Subregional Table Leads are recorded, transcribed, summarized, and shared with all other Affinity Hubs to ultimately help them make informed decisions collaboratively. After the Affinity Hub Leads receive guidance from the capacity building vendor, they can request a funded facilitator to help lead their convening. This was approved to help the Affinity Leads stay on schedule if disruptions from participants were anticipated in the convenings.

Working closely with the 12 Affinity Hub Leads are the 90 Subregional Table Leads that are outreaching to and engaging their respective constituents and other organizations that serve and reside in the same Serving Planning Area (SPA) to ensure their constituents have a voice in the planning process. In Phase 1, we provided microgrants of $10,000 per organization to provide outreach and engagement in planning around the 10 thematic areas in each of the eight SPAs. The Academia and Institutional and Government thematic areas do not have Subregional Table Leads, only Affinity Hub Leads.

The 8 Table Partner Leads are designed to support the work of small businesses and economic development strategies in underserved/under voiced communities that warrant additional data collection and in-depth planning. The LA County Jobs First Collaborative identified seven industries from the industry cluster research that show promise in providing climate forward, high road careers. The Table Partner Leads will be represented by non-profit organizations/associations in the following industries:

1. **Clean/Renewable Energy**
2. **Aerospace Manufacturing**
3. **Transportation and Logistics**
4. **Bioscience**
5. **Video Production and Distribution**
6. **Construction**
7. **Healthcare**
8. **Financial Strategy***

The Steering Committee approved these sectors to become funded tables, led by respective subject matter experts. Each table lead will receive a $50,000 grant to guide the Steering Committee towards projects that align with the goals and objectives of the California Jobs First program while benefitting the Los Angeles region. The elected table leads will be community serving organizations that are specialists within one of the seven sectors, and will leverage their contacts to help connect jobs, resources, and pertinent information to the proposed projects from the Catalyst and Implementation phases. (*) It's important to note that the eighth Table called "Financial Strategy" is being considered to "connect the opportunity dots." This table lead will also be a local non-profit with experience in securing funding by pairing multiple initiatives into one potential project.

The Steering Committee is made up of 38 members that meet bi-weekly to discuss program updates. They include the 12 Affinity Hub Leads, a number of Subregional Table Leads, as well as additional representatives and community members to ensure the voice of all the required CJF-related stakeholder groups. A supermajority (members of the Governance Committee have advocated for 80% or more) of the seats on the Steering Committee are dedicated to community-based leaders of disinvested communities, rooted in grass roots and community-based organizations. The Steering Committee serves as the primary decision-making body for the LA County Jobs First Collaborative (JFC), with voting authority on major decisions related to the design and implementation of LA County JFC strategies for the region. Key decision points include; Budget Allocation, Goals/Outcomes and Types of Data Collection, Outreach and Engagement Strategy, Regional Strategy (Phase 1), and Economic Development and Transition Roadmap Project Strategies to prioritize for implementation projects (Phase 2). These decisions will be informed by data and needs analysis, in addition to substantial input from the Affinity and Subregional Tables, Hub Leads, and the Stewardship Committee.

The Stewardship Committee consists of the Regional Convenor (Los Angeles County Economic Development Cooperation, or LAEDC) and the Fiscal Agent (California Community Foundation, or CCF). The Stewardship Committee reviews data analysis, summarizes concepts shared by data consultants with the Steering

CJF GOVERNANCE MODEL

12 AFFINITY HUB LEADS

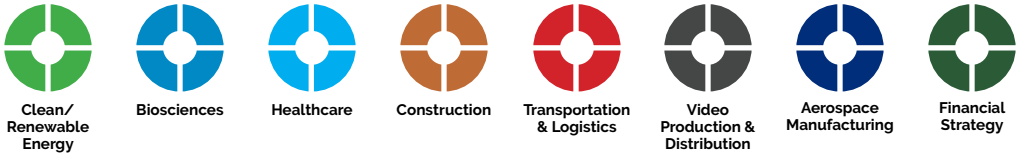
representing the thematic areas countywide (for logos and orgs assigned to these positions see Affinity Hub Leads (lacerf.org)

SUBREGIONAL TABLE LEADS

90 Subregional Table Leads representing thematic areas with their SPA

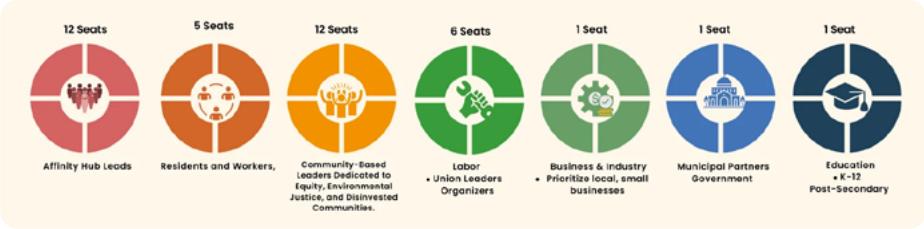
TABLE PARTNER LEADS

8 Table Partner Leads representing industries within the county



STEERING COMMITTEE

The Steering Committee consists of 38 elected representatives who encompass influential voices from government, labor, business, industry, and community stakeholders.



STEWARDSHIP COMMITTEE

LAEDC LOS ANGELES COUNTY ECONOMIC DEVELOPMENT CORPORATION
Collaboratively Advancing Growth and Prosperity for All

Convenor

California COMMUNITY Foundation

Fiscal Agent

Committee, and plays a primary role in the implementation of decisions made by the Steering Committee. The Fiscal Agent and Regional Convener have non-voting seats on the Steering Committee. The Stewardship Committee also provides resources for training and capacity building, communications, ongoing engagement, contracting, and subcontracting.

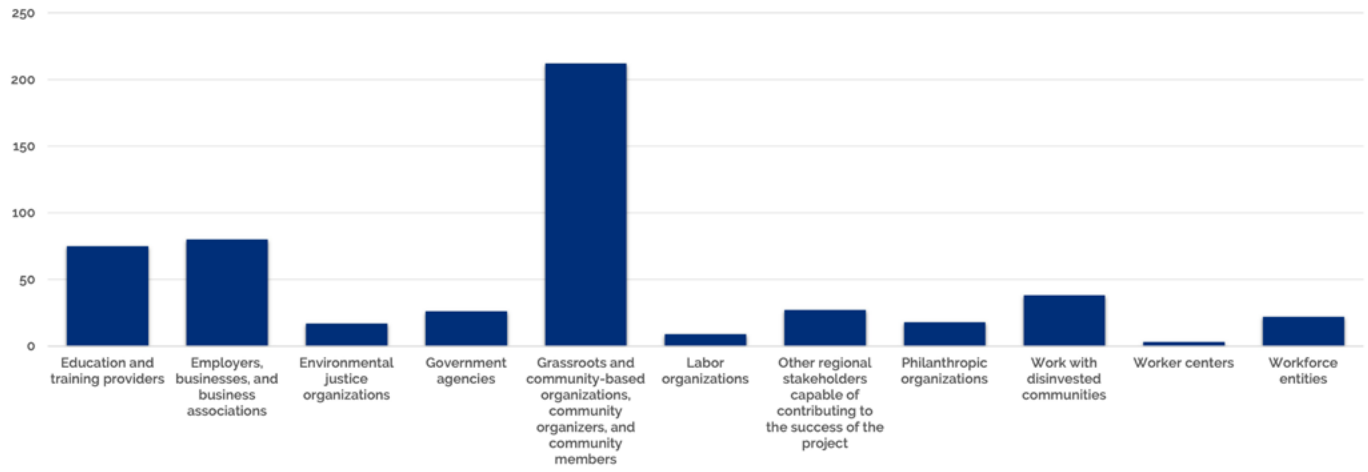
This collaborative includes each of the mandated entity types (see *Figure 1*) and representation from all service planning areas (see *Figure 2*). The LA County JFC has been intentional in analyzing geographic representation across the county by constituency served to ensure that stakeholders are representative of all constituents in the region..

Table 1. LA County Jobs First Collaborative Constituency Served by SPA (Primary Service Area)

Main Constituency Served	Other - All of LA County	SPA 1 - Antelope Valley	SPA 2 - San Fernando	SPA 3- San Gabriel	SPA 4 - Metro	SPA 5 - West	SPA 6a - South - East	SPA 6b - South - West	SPA 7 - East	SPA 8 - South Bay/ Harbor	Grand Total
Academia	7	4	3	1	2	1	1		1	1	21
Civic Engagement / Place-Based Coalitions	7	3	2	1	5		3	5	1	2	29
Economic Development	23	3	2	3	4	1	4	11		5	56
Employers and Business	26	3	5	7	6	8	2	8	2	7	74
Families	13	12	8	5	8	1	13	18	1	23	102
Homeless, Veterans, Seniors	4	3	2	3	11	3	19	19	2	8	74
Immigrant	3		1	2	4		3	2	2	3	20
Institutional & Government	11	1	1	1	1			1	1		17
Labor and Workers	13	1	2		4	1	2	1		1	25
Sustainability	18	1		4	5	2		3		2	35
Underemployed Adults	11	2	2	5	6		9	3	2	10	50
Youth	12	9	8	11	13	6	15	23	7	23	127
Grand Total	148	42	36	43	69	23	71	94	19	85	630

In addition to analyzing for gaps within the entity types, SPAs, and constituencies each respective entity type serves, each organization's primary service area is analyzed to ensure that the LA County JFC includes organizations that exclusively focus on serving each of the SPAs (see Table 1).

Figure 1: Number of Each Entity Type Within the LA County Jobs First Collaborative



LA County Jobs First Collaborative Partners may fit within more than one Entity Type but were asked to select one for the purposes of mapping.

Figure 2: Geographic Breakdown of LA County Jobs First Collaborative (by Headquarter Location)

This figure conveys the breakdown of LA County Jobs First Collaborative Partners based on their headquarters.

Challenges and Best Practices

The immense geographic span and diversity of the Los Angeles Region creates a unique set of challenges for the LA County Jobs First Collaborative's planning process and stakeholder engagement. Due to the vast geography and rich diversity of our residents and communities, LA County JFC faced several challenges in planning outreach and engagement and participation in decision-making across all of the disinvested communities within the Los Angeles region. Although much progress has been made, there are still a few categories of stakeholders that we are still working to engage, such as stakeholders from California Native American Tribes, Worker Centers, and Philanthropic Organizations.

Despite our efforts, engaging stakeholders from California Native American Tribes has proven to be particularly difficult. The Regional Convener's Outreach and Engagement Manager developed numerous tactics to connect with many indigenous tribes throughout Los Angeles County, including leveraging the partnerships of LA County Jobs First Collaborative stakeholders who are affiliated with indigenous tribes both inside and outside

Los Angeles, but the program still struggled to engage significant numbers of stakeholders from the county's Native American population. After consulting with another LA County Jobs First Collaborative partner, we learned that race and gender play a vital role in being able to connect with tribes throughout the region. We were advised that a person of color, specifically Native American or African-American, should be appointed to engage with the community. The Regional Convenor's Program Director, who is African-American, worked with Beacon Economics and CVL Economics to draft appropriate interview questions for gathering critical data about the Native American community. These efforts resulted in findings and best practices, which will be included in the Regional Plan Part 2.

Reaching philanthropists also presented a challenge. The Regional Convenor has taken steps to engage philanthropic organizations in hopes to help attract other philanthropists. For example, we are leveraging the LA County JFC member CIV:Lab, which is a grantmaking network that channels global funds and resources directly to community climate initiatives. CIV:Lab has offered the LA County Jobs First Collaborative opportunities to apply for grants through their organization. The Jobs First team anticipates being able to engage with other philanthropists through the practice of onboarding grantmaking organizations. Most recently, the Regional Convenor's Program Director has connected with REDF, a venture philanthropic organization that invests in employment social enterprises, and Plug and Play Tech Center, an accelerator that mentors tech-related startups before connecting them with businesses, venture capitalists, governmental, and academic institutions. Plug and Play Tech Center has launched an initiative with VC's and businesses to integrate DEI into their existing business models.

While we are still working to better engage worker centers, we anticipate that as the LA County Jobs First Collaborative begins developing strategic pilot projects that serve the region better, the stakeholders should be able to engage worker centers to tap into talent pools. This approach should begin to increase the participating number of worker centers throughout the region. Additionally, this strategy may also be an opportunity to work with Organized Labor to ensure quality labor standards.

Roles in Plan Development and Implementation

Considering the extensive diversity among the partners of the LA County Jobs First Collaborative across various sectors and stakeholder groups, the collaborative governance model demonstrates a robust foundation and excellent potential in developing the plan and engaging in Implementation. With the active participation of the Los Angeles Regional Consortium (LARC) and UCLA Labor Center in the Steering Committee, these organizations will collectively play a vital role in contributing to the economic development plan via their valuable insights into incorporation of collaborative educational initiatives aimed at bridging the skills gap, which will be supplemented by success models with demonstrated outcomes in this area. Leveraging the extensive network of 19 community colleges in Los Angeles County, LARC will support our efforts to implement the plan's focus on the identified industry clusters within academia. Simultaneously, the UCLA Labor Center and the Milken Institute will contribute their expertise in research, education, and policy work to further enhance the impact of California Jobs First on academia. This collaborative effort ensures a well-rounded approach that aligns with the overarching goals of the economic development plan. As an illustrative example, the Pacific Asian Consortium in Employment (PACE) was awarded $5 million through 2023's Pilot Project Program. They won the award through proposing to develop a green loan fund to "promote the creation and expansion of green businesses in the Los Angeles region with the objectives of solving the climate crisis and economic inequality. Being that PACE is a community development financial institution (CDFI), they will be able to launch a revolving loan fund that will help nearly 20 green-related companies in the Los Angeles region with flexible financing and working working capital that could lead to providing high road jobs to women, minorities, and other marginalized entrepreneurs. The underlying concept behind PACE's revolving loan fund is to align with

the goals and objectives of the California Job First initiatives of reaching a carbon-neutral and climate-resilient economy.

Economic development agencies partners include The Center by Lendistry, San Gabriel Valley Economic Partnership (SGVEP), Antelope Valley Economic Development and Growth (AV-EDGE), Coalition for Responsible Community Development (CRCD), Inclusive Action for the City, Business Resource Group CDC, and Vermont Slauson Economic Development Corporation (VSEDC). These all contribute a wealth of expertise to effectively develop the plan for California Jobs First. Their multifaceted capabilities encompass supporting the growth of small businesses through enhanced access to capital, participating in political and community-driven advocacy, facilitating and implementing impactful workforce development initiatives, cultivating a business-friendly climate, and ensuring the success of businesses. Furthermore, these agencies play a pivotal role in fostering connections between cities, companies, and organizations, with a dedicated focus on ensuring that disinvested and underserved populations receive the necessary resources to thrive, thereby fostering equity and leveling the playing field.

Integral to California Jobs First's community-driven approach are organizations like Rising Communities, Centro CHA, Community Development Technologies Center, Faith And Community Empowerment, South Los Angeles Transit Empowerment Zone (SLATE-Z), Community Build Inc., and Fathers and Mothers Who Care are deeply attuned to the pulse of the community. Their commitment ensures that the needs of disinvested communities are not only heard but actively advocated for, aligning them with various economic opportunities. These organizations are deeply embedded in their communities, actively working towards transformative change in areas such as health equity, community and economic resiliency, environmental justice, racial equity, youth and immigrant workforce development, apprenticeships and training, business support, capacity building, housing, climate resiliency, and economic mobility.

At the core of California Jobs First, which strives for a transition to a carbon-neutral economy, the LA County Jobs First Collaborative governance model is enriched by the presence of organizations such as GRID Alternatives of Greater Los Angeles, Dylette Family Foundation, and Pacoima Beautiful. These entities are uniquely positioned with a primary focus on environmental justice and sustainability policy advocacy, community organizing, and planning. They actively collaborate with local municipalities, corporations, and foundations to implement clean energy systems in disinvested communities. Furthermore, they play a pivotal role in working with businesses, community and technical colleges for job training initiatives. By reaching communities through community-based organizations, these entities are instrumental in guiding the LA County Jobs First Collaborative towards the focused objective of transitioning to a carbon-neutral economy.

Crafting the plan and navigating through the intricacies of the Implementation Phase demands a nuanced understanding and collaboration among workers, employers, and high road jobs. Labor organizations and worker centers, including the Koreatown Immigrant Worker Alliance (KIWA), Los Angeles County Federation of Labor, AFL-CIO, LA Hospitality Training Academy (Unite HERE 11), Worker Education & Resource Center (SEIU 721), International Association of Machinists and Aerospace Workers, LA/OC Building Trades Council, and SEIU-UHW, bring forth their expertise in strategic worker and community organizing. Their contributions extend to driving policy changes, safeguarding the rights of working people, elevating living standards and working conditions, supporting workers facing barriers to employment, and establishing a robust network of labor organizations. This collective mastery positions them as pivotal contributors to this concerted effort.

Employers, businesses, and business associations, exemplified by the BizFed Institute, possess the expertise and extensive networks required to establish a seamless connection between workers and employers willing to hire from disinvested communities. In particular, the BizFed Institute distinguishes itself with its highly effective NextUp Forum series, spanning over four years and comprising 25+ forums. This series provides an invaluable foundation for constructing a robust and actionable strategic program, capable of operationalizing every facet of California Jobs First. The NextUp Forum series, with its diverse array of participants, including elected officials

and top leaders from businesses, nonprofits, community-based organizations, academia, and various industries, serves as an excellent platform. These forums have the potential to play an instrumental role in formulating a shovel-ready program that aligns with the goals of California Jobs First. Notably, the BizFed Institute has the capacity to host events tailored to single vertical markets or industries, strategically convening in multiple Service Planning Areas (SPAs) to ensure comprehensive coverage across various markets.

Also serving as a business association, the American Indian Chamber of Commerce of California is critically significant in the development of the plan and engagement of the Implementation Phase prioritizing the inclusion of California Native American Tribes. The American Indian Chamber of Commerce of California will support the development and implementation of the Regional Plan by facilitating efforts to share information with and solicit information from California Native American Tribes and organizations that serve American Indians/Alaska Natives in the LA Region. In addition to ground testing research and data intended to reflect American Indians/Alaska Natives' existence and experiences in Los Angeles County today, they will help identify and define projects that benefit and address mutually agreed needs and priorities. Once selected, they will help to explore how American Indian/Alaska Native (AI/AN) community members can strengthen and participate in Los Angeles County's enhanced economy, including how to prepare for and access good-paying jobs in LA Jobs First prioritized sustainable industries. Their culturally responsive approach to engagement will include one-on-one discussions and iterative development of strategies, priorities, and recommendations to empower, uplift, and create community ownership in the LA County Jobs First Collaborative decision-making process.

Collaboration with government entities is paramount for the successful development and implementation of any plan, and the County of Los Angeles Department of Economic Opportunity (DEO) assumes a pivotal role in seamlessly connecting the various elements across the region. Renowned for its extensive experience, the DEO is proficient in crafting and executing countywide programs, specifically designed to support small businesses, elevate workforce skills, and channel disinvested communities towards flourishing careers in high-growth industries. Furthermore, the DEO actively engages in strategic partnerships with community-based organizations to drive impactful workforce and business development initiatives within Los Angeles County, leveraging its expansive network of 17 America's Job Centers of California (AJCC). This robust network positions the department as a potential avenue for the implementation of training programs geared towards high road jobs, as outlined in the overarching plan.

Disinvested Communities

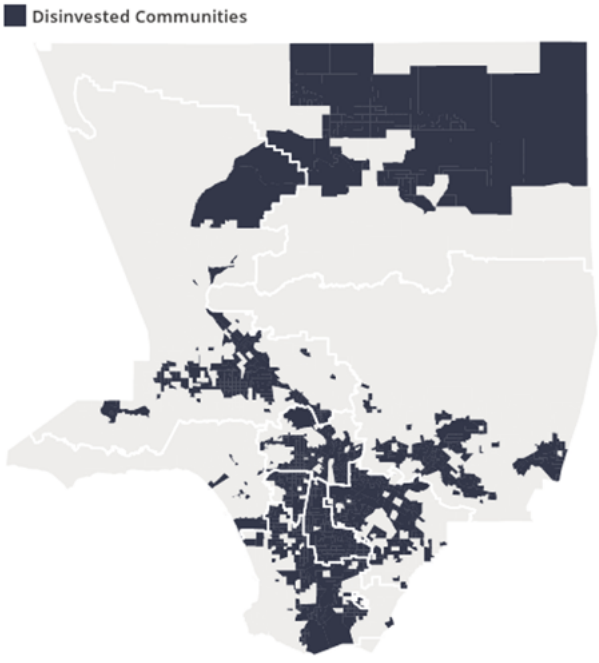
In this report, we refer to both disinvested and disadvantaged communities. It is important to recognize which areas are disinvested because of economic reasons, environmental reasons, historical injustices, or a combination of these. Understanding this enables policy makers to focus on the relevant policy solutions. In total, the four criteria for disinvested communities identified by the original SFP, which can be found in the glossary, offer a broad definition and 52% of the County is considered disinvested for one reason or another according to the criteria. As the table below shows, the percent of disinvestment in each SPA ranges dramatically. Only 8% of the population in the West SPA is disinvested, whereas 99% of the South-East SPA is considered disinvested.

Table 2: Equity and Sustainability SPA-level Metrics

	Total Population	% of Population that is Disinvested*	Median Household Income	Poverty Rate	Unemployment Rate	Pollution Burden Index (higher scores = more pollution)	Jobs Influenced by the Green Economy	New and Emerging Jobs in Green Tech
L.A. County Average	9,722,000	52%	$82,500	16.6%	5.8%	6.3	27.0%	6.3%
SPA 1 – Antelope Valley	4,63,000	76%	$85,000	11.5%	7.8%	4.0	29.9%	5.8%
SPA 2 – San Fernando	1,930,000	42%	$81,650	13.2%	5.9%	6.2	25%%	5.7%
SPA 3 – San Gabriel	1,679,000	34%	$85,000	11.4%	4.3%	6.4	28.7%	6.3%
SPA 4 – Metro	1,10,6000	70%	$69,800	16.6%	6.6%	6.8	23.1%	6.6%
SPA 5 – West	757,000	8%	$113,000	9.5%	5.6%	6.0	26.0%	10.7%
SPA 6 – South-East	700,000	99%	$58,000	22.1%	7.9%	7.2	30.3%	4.1%
SPA 6 – South-West	451,000	91%	$53,000	22.4%	7.9%	6.2	24.1%	4.8%
SPA 7 – East	1,138,000	62%	$77,300	12.5%	4.9%	6.8	29.7%	5.2%
SPA 8 – South Bay	1,498,000	52%	$83,000	11.5%	4.9%	6.3	28.0%	6.7%

The following map depicts each disinvested census tract, illustrating that most of the disinvested areas are in the South-East, South-West, Metro, and Antelope Valley SPAs. However, most disinvested areas do not meet all four criteria. In fact, Lancaster City is the only city that meets all of them.

Figure 3: Disinvested Communities in Los Angeles County



Source: California Energy Commission. California and Justice40 Disadvantaged or Low-Income Communities. Governor's Office of Business and Economic Development in California or the California Competes Tax Credit program. Analysis by Beacon Economics.

As described in the Glossary, California Jobs First utilizes the definition of disinvested, while our researchers recommend using the definition of disadvantaged. Based on the definition, as described in the glossary, the majority of disinvested communities are captured by the definition of a disadvantaged community. How the terms "disadvantaged" or "disinvested" are defined matters. Some definitions may focus on or weight one specific socioeconomic variable over another while not considering the overall macroeconomic conditions of a community (leading to cases, for example, where an area with higher-than-average unemployment rates is deemed disadvantaged or disinvested even if it is home to a significantly high share of high-income households). Doing so could considerably overestimate the shares of residents living in disadvantaged and disinvested communities. Furthermore, the risk of being too expansive and inclusive with "disadvantaged" or "disinvested"

classifications is that these terms themselves lose analytical value, and their impact on the research is diluted. **We therefore will use the term "disadvantaged" going forward in our report to describe communities that are suffering from significant hardship due to economic and environmental factors.**

Disadvantaged census tracts were identified using two different definitions, OEHHA's CalEnviroScreen and the Council on Environmental Quality, who use multiple criteria to identify census tracts that are vulnerable to economic shocks subject to poor environmental and economic conditions. The use of the OEHHA and CEQ definitions to identify disadvantaged communities helps make sure all census tracts are accounted for and ensures that estimates of residents living in these communities are not overinflated

As seen in the figure below, SPAs were disaggregated by level of disadvantaged census tracts per region. SPAs with high levels of disadvantaged census tracts were in the "High" zones, shaded in red, while those in medium tier fall under "Medium", or orange shade. SPA 5 is the sole region that is in the low tier for disadvantaged regions. The ranks of disadvantaged census tracts by SPA fall in line similarly between the two datasets – with both datasets aligning in terms of SPA geography and level of disadvantaged census tracts. The top four for both datasets are SPA 6 South-East, SPA 6 South-West, SPA 4 and SPA 7, while SPA 5 ranks the best for both datasets as well. A combined usage of the two datasets is utilized for the overall total in the index (to account for certain variations by SPA). In total, just under 5.1 million residents live in disadvantaged census tracts in Los Angeles County – approximately 50% of the population.

Figure 4: Distribution of Disadvantaged Census Tracts and Population by SPA and Data Source

Level of Disadvantaged Census Tracts	SPA	Share of Disadvantaged Census Tracts by Data Source			Population of SPA Living in Disadvantaged Areas (Thousands)
		OEHHA (CalEnviroScreen)	Council on Environmental Quality	Combined Datasets	
High	SPA 6 East	99.2%	94.6%	94.6%	581.1
	SPA 6 West	93.9%	77.6%	82.7%	372.6
	SPA 4	58.1%	65.0%	67.5%	721.5
	SPA 7	69.1%	53.8%	56.6%	627.4
Medium	SPA 1	18.8%	49.4%	49.4%	185.1
	SPA 3	33.7%	48.2%	50.0%	964.5
	SPA 8	53.6%	39.4%	42.2%	687.7
	SPA 2	42.8%	40.3%	41.5%	912.6
Low	SPA 5	6.2%	5.0%	7.5%	41.8

Source: California Office of Environmental Health Hazard Assessment, Council on Environmental Quality. Analysis by CVL Economics.

The geography of Los Angeles County is defined very much by the concentration of affluence as well as disadvantage. Moreover, race is anchored to place in the County which offers suppressed opportunities to thrive for young people of color. The index of concentrated disadvantage, an analytical tool used for mapping spatial disadvantage among families with children, shows clusters of concentrated disadvantage across the

County notably in southern Los Angeles County, the Antelope Valley and the San Fernando Valley.[1] The long and shameful legacy of disinvestment in certain communities in south and east Los Angeles has received well-deserved local, state, and national attention, but far less attention has been paid to similarly disadvantaged communities in the San Fernando Valley, San Gabriel Valley, Antelope Valley, and other communities across Los Angeles County.

The disparate geographic landscape of opportunity yields very different life outcomes for those raised in neighborhoods of affluence compared to those raised in neighborhoods of disadvantage. Historically disadvantaged communities continue to struggle with low levels of economic development, high housing costs, and limited opportunities for advancement. Moreover, they tend to suffer from poorer health outcomes, a lack of green spaces, and aging infrastructure.

Disinvestment also tends to be higher in communities with larger non-White populations, as illustrated by the comparison between SPA 5 where only 40.6% of the population is non-White to SPA 6 South-East which is nearly 98.7% non-White. Areas where non-Hispanic White residents comprise a larger share of the population tend to on average benefit from higher household incomes, healthier environmental conditions, and stronger social cohesion. For example, 6% of SPA 5 West's population live in disadvantaged communities compared to SPA 6 South-East and South-West, the two most diverse SPAs, where 94% and 82% of their populations, respectively, live in disadvantaged communities. Nearly 67% of the population in SPA 4 Metro are disadvantaged, ranking it third behind SPA 6 in terms of percentage of population that is disadvantaged in a SPA. Nearly 40% of the disadvantaged population in the county reside in SPA 2 San Fernando Valley and SPA 3 San Gabriel Valley. SPA 1 Antelope Valley and SPA 6 tend to have the lowest incomes across the entire distribution. The West SPA is in a league of its own with an average household income of $149,000. These discrepancies between SPAs highlight some of the underlying inequities that can have negative ramifications for future economic outcomes. .

Figure 5: Share of Residents Living in Disadvantaged Communities by SPA – 2021

Source: California Office of Environmental Health Hazard Assessment, Council on Environmental Quality. Analysis by CVL Economics.

SPA 6 South-East and SPA 6 South-West are historically disadvantaged and today continue to struggle with high poverty rates, lower educational attainment, and fewer job prospects than the other SPAs. SPA 6 South-East, which has 581,000 people living in disadvantaged areas, accounts for 11.4% of the disadvantaged population in the region. SPA 6 South-East and SPA 6 South-West have average household incomes of $63,200 and $66,000,

1 https://file.lacounty.gov/SDSInter/lac/1137148_ARDIStratPlan2.8.23_fullreport.pdf

respectively. The average income for a disadvantaged household in the South-East SPA is $33,656; and even lower in SPA South-West at $31,396. Interestingly, disadvantaged households in the South-East SPA have an average household size of 3.03, which is the highest among all disadvantaged households. This suggests disadvantaged households in the South-East SPA are more likely to include children. The only SPA with a higher rate is the South-West SPA which has the largest share of people under the age of 18 who are part of a disadvantaged household (58.4%). Nearly 60% of households living in SPA 6 South-West are considered disadvantaged. This is in stark contrast to SPAs such as Antelope Valley (38.6%), San Fernando (36.8%), San Gabriel (35.1%), and South Bay (35.1%). The West SPA has only 15.1% of people under 18 living in a disadvantaged household. This discrepancy between SPA 6 and all the other SPAs highlights some of the underlying inequities during residents' youth that can have negative ramifications for future economic outcomes.

Table 3: Disadvantaged Communities Household Statistics, 2022

	Disadvantaged			Non-Disadvantaged		Disadvantaged	
SPA	Households	Share SPA	Share County	Avg. Income	Avg. HH Size	Avg. Income	Avg. HH Size
Antelope Valley	58,034	41 .83	3 .78	$152,334	3 .55	$34,113	2 .61
East	154,131	45 .63	10 .04	$148,193	3 .68	$36,377	2 .68
Metro	249,201	51 .49	16 .23	$186,810	2 .41	$32,172	1 .90
San Fernando	296,220	43 .69	19 .29	$176,182	3 .08	$34,361	2 .24
San Gabriel	233,250	42 .22	15 .19	$179,394	3 .30	$35,516	2 .34
South Bay	234,961	42 .97	15 .30	$183,754	2 .96	$35,953	2 .15
South -West	88,781	59 .96	5 .78	$154,681	3 .49	$31,396	2 .37
South-East	111,191	59 .10	7 .24	$126,515	4 .40	$33,656	3 .03
West	109,704	32 .10	7 .14	$254,249	2 .27	$34,469	1 .61

Source: U.S. Census Bureau Analysis by Beacon Economics

Note: This table uses solely the CalEnviroScreen definition for disadvantaged households

Our Regional Summary also speaks to the disparities in educational differences across communities. SPAs with lower levels of educational attainment tend to have larger minority populations who have not had the same opportunities for educational attainment as their non-minority counterparts. In the SPA 6 South-East, 56% of people 25 and older who did not graduate high school are in disadvantaged households. This drops to 25.9% for those with a bachelor's degree, once again underscoring the importance of education for improving incomes. That said, this rate for bachelor's degree holders is higher than in other SPAs such as San Fernando and East, which both had a rate of 22.6%. SPAs where minority groups account for 85% or more of the population (specifically SPA 6 South-East, SPA 6 South-West, and SPA 7 East) also have the lowest shares of individuals who have obtained a graduate or professional degree.

Residents living in disadvantaged communities face a whole host of issues that their counterparts in wealthier neighborhoods do not. From exposure to environmental hazards such as waste, diesel particulate matter and contaminated drinking water, to a lack of green spaces, supermarkets, social organizations, advanced institutions and broadband access, those in disadvantaged communities are subject to many difficulties. When

surveyed, SPA 6 residents have noted that administrative hurdles and licensing costs have been a big obstacle for entrepreneurship and incentives to start businesses. Social infrastructure (such as K-12 education, health services, and emergency services) in the region remains poorer compared to other SPAs.

Each community is unique and has its own sets of strengths and weaknesses that can seem contradictory. For example, SPA 8 South Bay has a lower percentage of disadvantaged communities compared to the county average, but still faces a myriad of environmental challenges as seen in its below average levels of parks and open spaces or in residents' hazardous waste exposure, which is nearly double the county average. SPA 4 Metro has an above average share of their population living in disadvantaged communities at 67%, yet has above average opportunities for job training.

Native Americans

California Jobs First also defines individuals of American Indian and Alaska Native descent as belonging to disadvantaged communities. American Indians and Alaska Natives comprise a small portion of the total Los Angeles population, and many live under strained economic conditions. Due to historical displacement and discrimination, many individuals affiliated with a Native tribe have been marginalized. For this reason, California Jobs First classifies California Native American Tribes as disadvantaged communities. Using data on American Indians and Alaska Natives (AI/AN) from the U.S. Census Bureau Public Use Micro Sample (PUMS), we are including people who have origins in any of the original peoples of North, South, and Central America, who maintain tribal affiliation or community attachment.

Los Angeles County has the largest population of American Indian and Alaska Natives in the entire nation, but does not have any federally recognized tribal nations or reservations. In 2022 nearly 138,299 people identified as American Indian and Alaska Native alone, which accounts for 1.4% of all people in Los Angeles County. An additional 157,544 people identified as AI/AN and another race. Together, the AI/AN alone and in-combination population stood at 295,773 (3% of the total Los Angeles County population) in 2022.

American Indian and Alaska Natives often face high disconnection rates, which translates to this group having the highest share of jobless working-age population at 19%, compared to 13% countywide. Per capita income for American Indians and Alaska Natives was $35,406 in 2022 compared to the overall County average of $43,171. Understanding why there is such a stark difference in the incomes of American Indians and Alaska Natives is of paramount importance. Incomes are strongly correlated with educational attainment. Below we see that only 23.3% of AI/AN people above the age of 25 have a bachelor's degree or higher. This is much lower than the overall County share of bachelor's degree holders, which was 35.6% in 2022. American Indians and Alaska Natives also have a higher share of people who did not graduate high school (24.3%) relative to the County overall (19.4%). The significant disparity in the educational attainment of American Indians and Alaska Natives in Los Angeles County hurts their earning potential. The median Native American with a bachelor's degree had annual earnings of $55,000 in 2022, which is significantly less than the countywide median of $69,000. The median AI/AN person with a graduate degree earned $12,000 less annually than the median graduate degree holder in the County as a whole.

Table 4: Unemployment and Labor Force by Educational Attainment for American Indian and Alaska Natives Age 25 and Older in Los Angeles County, 2022

Education Attainment	Share	Unemployment Rate (%)	5-year Change in Unemployment Rate (p.p)	Labor Force Participation Rate (%)	5-year Change in Labor Force Participation Rate (p.p)
Less than High School Graduate	24 .3	5.2	-5.3	57.0	6.4

Education Attainment	Share	Unemployment Rate (%)	5-year Change in Unemployment Rate (p.p)	Labor Force Participation Rate (%)	5-year Change in Labor Force Participation Rate (p.p)
High School Graduate IIncludes Equivalency)	21.4	5.9	-4.3	66.0	1.0
Some College or Associate's Degree	30.9	6.2	0.7	72.1	5.1
Bachelor's Degree or Higher	23.3	6.6	-1.8	82.2	1.9

Source: U.S. Census Bureau. Analysis by Beacon Economics

Stakeholder Outreach

Our collaborative is committed to conducting extensive research, data analysis, and community outreach and engagement to provide a truly data-driven and community-informed process to defining, identifying, and meaningfully engaging all of the disadvantaged communities in the LA region. The LA County Jobs First Collaborative is currently in the midst of convenings among the Affinity Hub and Subregional Table Leads, along with Community Planning forums. These convenings provide a platform for community feedback, ensuring a robust validation and contextualization of research findings.

The LA County Jobs First Collaborative adopted the following core values that have informed our outreach process:

(1) ***Transparency -*** CJF data, processes, and information are publicly available and easy to access. It is clear on what timeline will be used and how decisions will be made.

(2) ***Inclusion -*** CJF governance seeks to engage all peoples, parties, businesses, and entities in Los Angeles County by varying and adapting the modality (virtual, in-person, etc.), languages, and formats that are used to ensure full participation of all.

(3) ***Accountability -*** The CJF governance structure is accountable to the wider community and allows for community input, feedback, and modification when needed.

(4) ***Confidence in Structure -*** CJF governance structure should continually strive to instill confidence in transparency, inclusion, and accountability.

(5) ***Unheard voices in decision-making -*** CJF governance will actively create seats at the decision-making table(s) for leaders from disadvantaged communities. The governance process will center, lower barriers, and proactively seek to tip the scales toward community-led decision-making.

To engage constituents from disadvantaged communities for participation in the LA County Jobs First Collaborative , we are conducting grassroots outreach via the Affinity Hub Lead structure. Particularly, the Affinity Leads will reach out to their network of contacts who are subject matter experts within their respective verticals to participate in preliminary meetings that cover the CJF overview and empirical data from the contracted research firms. Additionally, the Subregional Table Leads will participate in subsequent meetings

under their respective Affinity Hub group. Each community participant will have the opportunity to validate, challenge, or question the research presented to them as it may relate to their community. When appropriate, the researchers integrate this "lived data experience" back into the research to give a more accurate reflection of each SPA. Subregional Table Leads will leverage their networks within their specialized area of focus to increase engagement efforts and participation at convenings. The Affinity Hub and Subregional Table Leads provide adequate resources for representatives of community-based organizations and residents to participate, such as language interpretation services and participant stipends.

We have begun to host monthly meetings with the LA County JFC members via "Issues Tables." The LA County JFC is committed to engage a minimum of 150 members on an ongoing basis. Our website includes regular updates of public meetings and planning activities, including a calendar of subgroups meetings, events, and LA County JFC contacts. Community members from across every region are encouraged to participate in community planning meetings and events. To encourage robust participation in the planning process, members and community members that participate in public meetings receive stipends and/or gift cards. Additionally, community organizations participating in meetings, workshops, interviews, focus groups, and/or other engagement activities receive a stipend for their involvement. The LA County Jobs First Collaborative staff publishes the schedules of subgroup activities and distributes these through our network of community partners.

Additionally, Beacon Economics has provided a partnership database that includes over 4000 LA County nonprofits with their location by SPA, area of focus, type of organization, and numerous data regarding their employees, job prospects, wages, and educational attainment levels. This will serve as a vital resource for Subregional Table Leads to succeed in their outreach efforts. We continue to leverage data findings, geographic mapping, stakeholder mapping, and supplemental data sets, as well as the collected lived-experience data from the 90 Subregional Table Leads via surveys and other methods to identify any sub-regions or groups of people where data gaps may persist and additional outreach and engagement may be needed.

We anticipate that these activities may attract new LA County JFC members, additional subject matter experts, businesses who see financial and workforce placement opportunities, and philanthropists who have initiatives towards social justice. New LA County Jobs First Collaborative Partners onboarded by Subregional Table Leads will be tracked and also used as a success metric to ensure the reach of the LA County Jobs First Collaborative continues to expand.

Building on the engagement of LA County JFC committees, Affinity Hubs, and Subregional Tables as well as the quantitative analysis completed earlier in the Planning Phase, the research team at CVL Economics conducted stakeholder outreach to gain a more comprehensive picture of the region's current landscape and inform the Regional Summary. The Los Angeles County Regional Index (Appendix B), which analyzed 27 indicators across five dimensions (Equity, Sustainability, Job Quality and Access, Economic Competitiveness, and Resilience) for each of the eight Service Planning Areas (SPAs), informed discussions with both community members and regional employers. By focusing on localized indicators, stakeholders were able to provide more targeted insights and input than would otherwise be possible from a county-level analysis; in turn, this input will guide the development strategies that are tailored to the specific economic realities and challenges they face.

The stakeholder outreach to residents and employers in the region was undertaken from November 2023 through January 2024. In the stakeholder engagement process, it was recognized that committees, partners, and strategic leadership entities often originate from positions of influence within the community. The LA County JFC research team therefore prioritized the development of a statistically significant representative sample (n=800) of community members that mirrored the race and ethnicity population demographics for each

of the eight SPAs, focusing on residents living in disadvantaged communities.[2] The results of their study are summarized in Appendix A.

Prioritizing equity to uplift our most disadvantaged communities requires identifying how the benefits and burdens of economic development, regional planning, and other relevant processes are distributed in and across communities; identifying and institutionalizing remedies to systemic barriers facing specific groups; and identifying present-day disparities of sub-populations and high unemployment areas, while confronting the planning, development, and decision making processes that are driving existing barriers and creating new levels of inequity. Addressing equity in the LA region requires moving beyond "leveling the playing field" which prioritizes equality over equity. We are approaching equity with the understanding that groups are not starting at the same place due to historical disinvestment, unprecedented adverse impacts of the pandemic, and the worsening effects of climate change. This understanding is dictating and guiding how we conduct stakeholder outreach.

Looking Ahead

The LA County Jobs First Collaborative is continually conducting extensive research, data analysis, and community outreach and engagement to provide a truly community-driven and stakeholder-inclusive process to ensure that constituents living in each SPA have a voice in the CJF planning process. This includes defining, identifying, and meaningfully engaging marginalized populations and disadvantaged communities in all corners of Los Angeles County. The Affinity Hub, Subregional meetings, and Community based forums taking place over the next several months will give the community at large an opportunity to respond to the research conducted by our vendors in order to validate, challenge, and/or further contextualize the research findings. The information gathered from formal research vendors and community-derived lived experience data will be synthesized to spur potential solutions through strategic pilot projects. Ultimately, these initiatives will lead to sustainable and equitable economic growth in Los Angeles County. This comprehensive approach sets the foundation for informed decision-making and collaborative initiatives to propel Los Angeles County towards a more resilient and equitable future.

During the Catalyst phase, we will expand recruitment and onboard new partners from disadvantaged communities; incorporate their lived-experience data to make informed decisions about which strategic pilot projects the LA County JFC should invest in; and, expand the shared decision-making process to ensure that there is sufficient and balanced representation across the County's eight SPAs. Data collected through our outreach and engagement efforts will assist us in selecting projects that will strengthen the competitiveness, resiliency, and equity of targeted industry sectors, and begin the pre-development activities needed to bring them to fruition. We plan to host approximately 30 convenings across the County during the Catalyst project period. Convenings will bring together current and future partners, and the various stakeholder groups and organizations already engaged in the LA County JFC from across Los Angeles County's eight SPAs. The purpose of the convenings will be to share information about the selected projects and describe how they will improve our region. The convenings will serve to build community interest in the selected projects, and ensure that current and new members of disadvantaged communities are represented in the selected projects. They will also provide an opportunity for community members to collaborate and integrate projects in specific SPAs that may complement projects in other SPAs. We will continue to allocate resources and time to research and data gathering to make decisions that are beneficial to and reflective of the priorities of disadvantaged communities in the region.

2 Details on CA Jobs First survey respondent demographics can be found in Appendix K.

Potential Synergies & Collaboration

The LA County Jobs First Collaborative includes a wide range of community-based organizations, educational institutions, and private sector partners ready to push this initiative forward. The Steering Committee is identifying potential synergies and collaborations through eight industry-based Table Partners, one of which is Financial Strategy. The purpose of this is to connect the region's myriad funding sources, executive orders, and climate initiatives with proposed pilot projects as a series of investments.

In the case of California Jobs First, a projected award to the Los Angeles region from the remaining California Jobs First budget could be paired with other federal and state funding opportunities such as, Governor Newsom's Executive Orders N-16-22, N-82-20 Land and Water Protection climate initiative, N-19-19 Climate Agenda, and the Career Pathway and Training proposed funds from Executive Order N-11-23; the California Air Resources Board Scoping Plan, and the Sustainable Groundwater Management Act, as well as tax credits, philanthropic sources, and other suggested funding opportunities. The awarded table lead will have the ability to understand the resources needed in each proposed pilot project, and be able to pair funding solutions to them.

Additional examples of opportunities for synergy and collaboration with regional and subregional plans include:

- The Los Angeles Regional Consortium (LARC), which consists of the 19 community colleges in Los Angeles County, holds a Steering Committee seat and will play a pivotal role in operationalizing a joint effort between academia, the workforce, and high-road employers.

- LA County Jobs First Collaborative partner UNITE LA is leading the Los Angeles Regional K-16 Collaborative application, which aims to improve enrollment, persistence, and degree completion of BIPOC students in fields that lead to employment in middle and high-skill occupations and increased economic and social mobility, starting with a focus on streamlined pathways to health care, engineering, and computer science careers. The Collaborative will advance three primary objectives to achieve this goal: 1) Expand and enhance dual enrollment offerings, course registrations, and completions to improve pathway awareness and early college credit; 2) Enhance transfer pathways through the creation of stackable credentials, strengthened articulation between community colleges and CSUs, and better advising to improve transfer success and 3) Expand paid work-based learning opportunities to improve students' economic security, career exposure, and employer-aligned skill development.

- LA County Jobs First Collaborative partner UCLA is the lead applicant for a Good Jobs Challenge Grant from the US EDA focused on addressing the growing workforce needs within the healthcare sector. UCLA convened a group of several stakeholders within Los Angeles County to form a new regional partnership in healthcare. The Equitable Workforce Pathways for Los Angeles County Healthcare project will identify educational and employment pathways for individuals from underserved areas in the region. The desired outcome is for individuals to obtain quality jobs through employer-informed training. This aligns with regional and statewide strategies for economic development, including linking programs to industry demand, providing career pathways for underrepresented populations, and investing in growth industry clusters.

- Some LA County Jobs First Collaborative partners are involved in the cross-sectoral initiative known as the Committee for Greater LA which has established bold plans to close the digital divide, reduce the number of people experiencing homelessness, and improve the Black experience in Los Angeles County as strategies to prioritize the recovery of Los Angeles County's most marginalized communities. Others are involved in Bold Vision, an ambitious multi-sector regional initiative to create a better, more equitable Los Angeles County for our youth of color by transforming the systems that govern our lives. Community engagement efforts have focused on Education, Housing, Youth Power, and Youth impacted by the Child Welfare and Juvenile Justice Systems.

The Los Angeles region is a national leader in the planning and implementation of sustainability initiatives, and we propose to coordinate our CJF efforts with many of the existing and emerging sustainability initiatives across our region, with a specific focus on reducing the inequitable environmental impacts which disproportionately affect our disadvantaged communities.

The Los Angeles County Economic Development Corporation (LAEDC) spearheaded a coalition in the Build Back Better Regional Challenge, hoping to secure part of the $1 billion funding under the American Rescue Plan for blue and green growth innovations in Southern California's Goods Movement Ecosystem (GME). Despite not advancing to Phase 2 of the funding, the coalition, comprising nine key partners and 36 additional members, remains committed to regional economic development and environmental sustainability. The coalition's efforts are now synergized with the California Jobs First initiative.

Partners include the City of Los Angeles, led by the Mayor's Office and City Council, with support from vital departments such as the Economic and Workforce Development Department (EWDD), LA Department of Water and Power (LADWP), Public Works, and the LA Department of Transportation. The Port of Los Angeles (Port of LA) and AltaSea at the Port of LA focus on enhancing GME efficiency and leading the 'Blue Economy Goods Movement' project, respectively. The Los Angeles Cleantech Incubator (LACI) is advancing training for battery electric vehicle (BEV) maintenance and electric vehicle (EV) charging station repairs. Urban Movement Labs (UML) is developing a micro-distribution network, while Santa Monica College aims to upskill/reskill the workforce, bolstered by a recent grant focused on the blue economy. The Los Angeles Regional Strong Workforce Consortium (LARC), Entrepreneur Education Center, Inc. (EECI), and the Long Beach Economic Partnership are each contributing through various initiatives aimed at economic development, entrepreneurship promotion among BIPOC and at-risk youth, and workforce development.

In addition to these collaborative efforts, the LAEDC Institute of Applied Economics has created a foundation of industry cluster mapping and data collection on the ocean, blue, and green economies, culminating in a final report to assist the LA California Jobs First collaborative. This comprehensive approach embodies a collective determination to enhance the region's economic and environmental landscape.

- The LAEDC is the lead applicant for the collaborative of partners in LA's Goods Movement Ecosystem and our region's Green and Blue (Ocean) Economies that recently won a phase one planning grant from the US EDA and is now a finalist for a $60+ million-dollar implementation grant under the EDA's Build Back Better Regional Challenge. This EDA program shares many of the same objectives as CJF.

- The LAEDC and other LA County JFC partners are engaged in California's pursuit of a Clean Hydrogen Hub from the US Department of Energy (DOE) with a particular focus on our region's ports, energy, manufacturing, and transportation sectors, and a potential DOE investment of more than $1 billion. California needs hydrogen to play a major role in decarbonizing our economy, and the Governor's Office intends for this effort to be focused on communities with the largest pollution burden.

- Los Angeles CleanTech Incubator (LACI) is leading the Transportation Electrification Partnership (TEP), an unprecedented regional public private collaboration to accelerate deep reductions in climate and air pollution by the time of the 2028 Olympic and Paralympic Games in Los Angeles. All of the related projects are equity driven, create quality jobs, grow the economy, and help the region reach the bold targets in the TEP's Zero Emissions 2028 Roadmap 2.0.

The Los Angeles County OurCounty Sustainability Plan, which was developed and approved by the Los Angeles County Board of Supervisors in 2019, outlines a bold, inclusive and regional vision for sustainability for the present and future generations of Los Angeles. This plan is a prime example of alignment between the California Jobs First initiative's goals and objectives and the strategies set forth by the County of Los Angeles. Specifically, our work is aligned with the Plan's Goal 4, "a prosperous Los Angeles County that provides

opportunities for all residents and businesses and supports the transition to a green economy." We intend to work with the County to help achieve these common goals of promoting inclusive growth across the changing economy; examine the impact of the transition to a cleaner economy on disadvantaged workers; identify strategies for supporting displaced workers; develop recommendations for ensuring inclusive employment practices within growth sectors of the economy; and, partner with community-based organizations, educational institutions, and the private sector to connect and place graduates and workers with meaningful on-the-job training and employment opportunities within growth sectors of the economy. Notably, the Los Angeles County Chief Sustainability Office holds a seat on the Steering Committee, furthering alignment between the County of Los Angeles and the efforts of the LA County JFC.

Given the alignment between the Los Angeles County OurCounty Sustainability Plan and the LA County JFC, a collaborative effort could be forged between the BizFed Institute and the County of Los Angeles Department of Opportunity's America's Job Centers of California (AJCC). This collaboration has the potential to propel the objectives outlined in both CJF and the OurCounty Plan. Leveraging its expertise, the BizFed Institute might facilitate a forum, akin to their successful NextUp Forum series, bringing together employers vested in sustainability and the transition to a carbon-neutral economy. By strategically partnering with geographically relevant AJCC's, job seekers from disadvantaged populations can be effectively reached. This collaboration not only expands employer connections for both entities but also targets specific populations in identified disadvantaged areas, fostering learning opportunities for businesses to transition to carbon-neutral practices, address labor shortages, and offer high-road career paths to job seekers from marginalized communities.

The LA100 Equity Strategies report also coincides with California Jobs First and highlights key findings and tips for the city of Los Angeles to succeed in transitioning to 100% reliable, renewable energy use by 2035. The report focuses on utilizing research to strategize the transition through an equity lens, paying close attention to opportunities of economic development and clean energy for communities that have been identified as lacking access to clean energy. Several of the LA100 effort's advisory and steering committee members are LA County Jobs First Collaborative Partners including: LA City Council District 3, LA Cleantech Incubator (LACI), City of LA Mayor's Office, Port of Los Angeles (POLA), Sierra Club, Climate Resolve, Community Build, Inc., Esperanza Community Housing Corporation, Los Angeles Alliance for a New Economy (LAANE), Move LA, Pacific Asian Consortium in Employment (PACE), Pacoima Beautiful, The South Los Angeles Transit Empowerment Zone (SLATE-Z), and Strategic Concepts in Organizing and Policy Education (SCOPE). Having these entities at the table will guarantee congruence across the City of LA's objectives and the LA County Jobs First Collaborative's planning and implementation process.

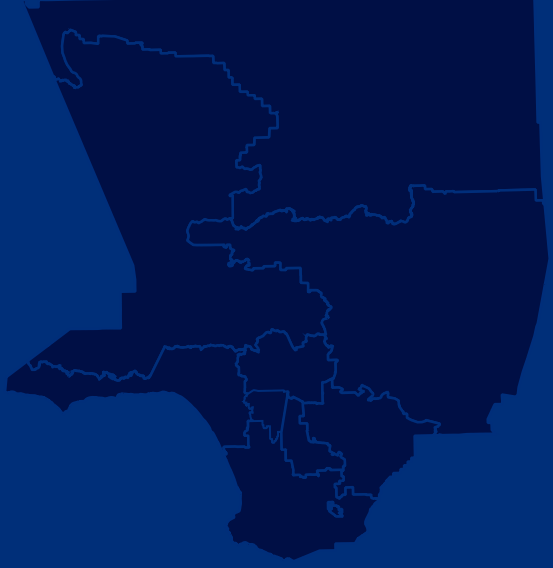
The Los Angeles County OurCounty Sustainability Plan and the LA100 Equity Strategies report eloquently underscore the synergy and alignment shared with the overarching goals of the California Jobs First initiative. The Sustainability Plan's focus on inclusive growth and clean energy transition mirrors the goals of California Jobs First, emphasizing collaboration with community-based organizations and educational institutions. Similarly, the LA100 report, with its equity-driven approach to clean energy, complements California Jobs First's commitment to equitable economic development. The active participation of LA County Jobs First Collaborative Partners in these efforts ensures a consistent and concerted push toward shared objectives, creating a unified strategy for sustainable and equitable economic development in the region.

As the network of LA County JFC Partners are already intertwined in these LA County and City strategies, it is certain that the strategies implemented in Phase 2 of CJF will be embedded and work harmoniously with Los Angeles County, City of LA, and other subregional plans of the region. The potential collaboration with the BizFed Institute and the County of Los Angeles Department of Economic Opportunity's AJCCs serves as merely one noteworthy illustration of the many impactful partnerships that have emerged from these collective efforts.

Not only do the following County plans and projects provide opportunities for collaborations and partnerships, but research being conducted to inform these plans has been referenced in our report to better understand the full picture of how Los Angeles County is working towards achieving equity:

- Los Angeles County's Comprehensive Economic Development Strategy (CEDS) for 2020-2025, whose five strategic goal areas are: improving government responsiveness; starting, growing, and supporting small business and entrepreneurship; targeting industries and high growth clusters; developing talent; and advancing sustainability and economic resiliency.
- The Los Angeles County Metropolitan Transportation Authority (Metro) 2020 Long Range Transportation Plan, a $400 billion, 30-year transportation blueprint for a more mobile, sustainable, and vibrant future for Los Angeles County with four goals: Better Transit, Less Congestion, Complete Streets, and Access to Opportunity. Metro's Vision 2028 plan is a nearer term framework for enhancing communities and lives through improved mobility, rider experiences, and access to opportunity leading up to the Olympics. The projects identified in these plans will support thousands of well-paying jobs during the CJF time horizon and connect more of our disadvantaged communities to job centers.
- Los Angeles Regional Collaborative for Climate Action and Sustainability (LARC)**:** Facilitated by the UCLA Institute of the Environment and Sustainability (IoES), LARC is a network of local and regional decision makers planning for a sustainable Los Angeles County. Its climate mitigation and adaptation work is driven by cutting edge research on local climate impacts and includes climate practitioners from city and county government, regional agencies, nonprofits, businesses, and academia. It is a convening body which coordinates climate resiliency efforts with land-use, transportation, infrastructure, energy, water, public health, emergency response, and resource management partners.
- Los Angeles County Anti-Racism, Diversity, and Inclusion (ARDI) Initiative, launched in 2020, whose mission is to end structural racism and its consequences in Los Angeles County. Their strategic plan, published in 2023, articulates an anti-racist agenda that will guide, govern, and increase the County's ongoing commitment to fighting systemic and institutional racism in all its forms and dimensions by directing, building capacity for, and sustaining equitable policy, workforce culture, data analysis, and resource distribution..

Regional Summary



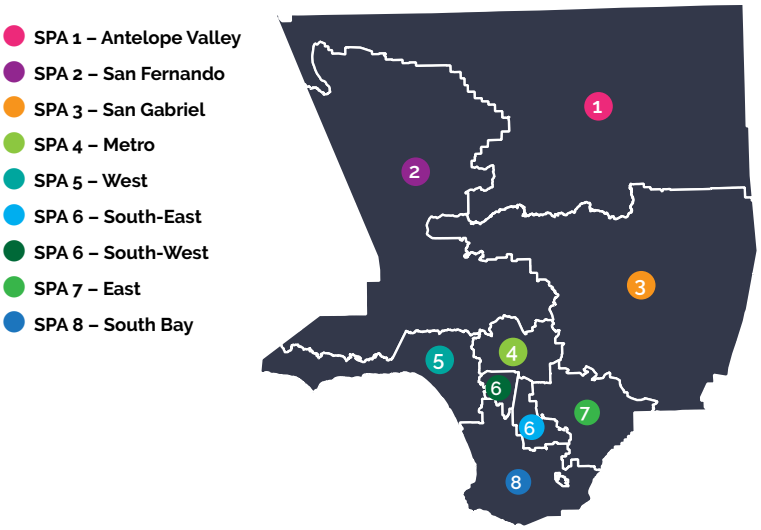
Introduction

The Regional Summary draws together data analysis and stakeholder surveys conducted by CVL Economics and Beacon Economics to furnish a thorough picture of the socio-economic conditions of our incredibly complex and diverse region (see Appendix D **Regional Summary Appendix**). The Regional Summary will help to paint the picture of Los Angeles County's economic, health, environmental, and equity challenges so that we can better understand how to achieve our goals.

Overview of the Region

More than one-quarter of California's entire population resides in the 4,088 square miles that comprise Los Angeles County. There are 9,7 million people living in 88 cities and vast unincorporated areas, including 14 cities with populations exceeding 100,000 residents. Los Angeles County is so vast and diverse that socioeconomic data at the county level can often mask diverging trends on the ground. Understanding where challenges and opportunities lie requires an in-depth look at the industry, demographic, socioeconomic, and environmental landscape at a subregional level. Thus, our analysis disaggregates the county into eight Service Planning Areas (SPAs), as seen in the map belo with SPA 6 divided into western and eastern halves to account for demographic differences as requested by the LA County JFC.

Figure 6: Los Angeles Service Planning Areas



Los Angeles is a region marked by diversity and innovation, yet also defined by deep-rooted disparities. Los Angeles County's inequitable geography, in terms of both race and class, is rooted in the region's history, beginning with Spanish settlers who forcibly took land through violence from existing indigenous populations.[1] Policies and tactics such as racially restrictive covenants, "Redlining," violence organized by collective groups, "urban renewal," the siting of public housing, and the siting of toxic-emitting industrial plants created a spatial distribution

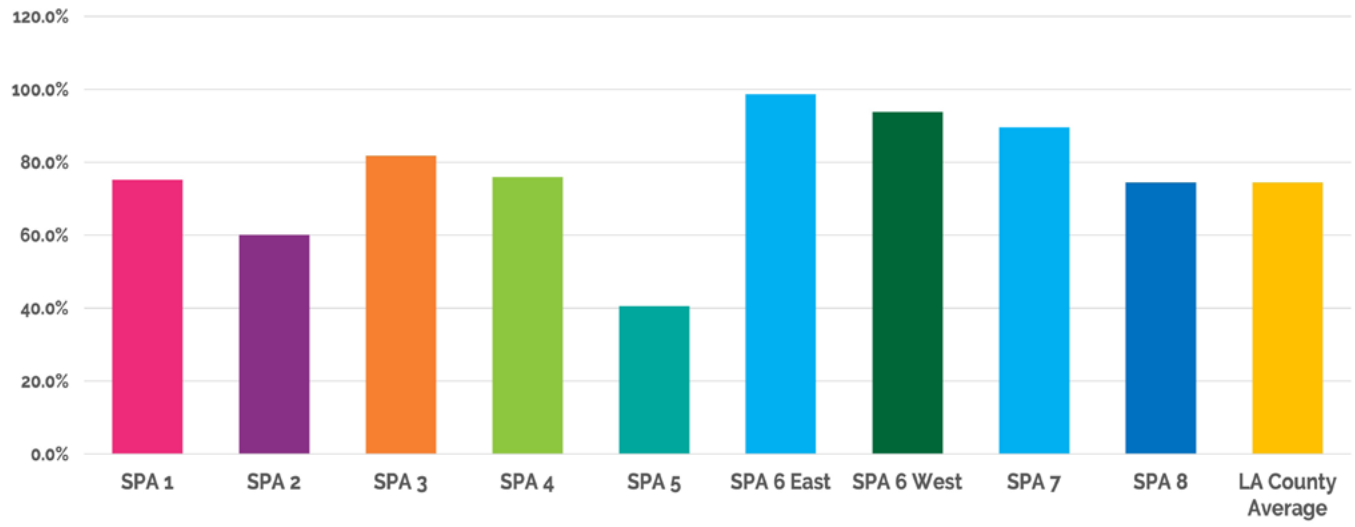
1 Redford, L. (2017). The intertwined history of class and race segregation in Los Angeles. Journal of Planning History, 16(4), 305-322.

of advantage and disadvantage in Los Angeles County that continues to shape the life outcomes of children born here today.

As America's modern immigration gateway, Los Angeles has experienced significant changes in its ethnic and racial composition over the last five decades, with many neighborhoods undergoing sweeping transformations. From 1990 through 2016, Los Angeles County grew by 1.38 million residents,[2] dramatically increasing the region's racial and ethnic diversity. Since 1960, the county's white population has fallen by about three-fourths (81% to 27%) while the black population has remained relatively stable (8%). The Asian population has rapidly grown from 2% to 14% and the rapidly growing Hispanic population has expanded, comprising nearly half of the county's total population (increasing from 11% to 48%) and even surpassing the percentage of the whites after 1990.[3] Demographic shifts remain an important aspect of the county's outlook. The foreign-born population is noticeably older than the native-born population, which is fairly unique to Los Angeles. In 2022, the median age of foreign-born residents in the county was 51.9, nearly 72% higher than the median age of native-born residents (30.2). One in three residents in the County are foreign-born. Today, roughly 75% of Los Angeles County's population is composed of non-White residents — which includes residents identifying as Hispanic/Latino (49%), Asian/Pacific Islander (15%), and Black/African American (8%) — making the county more diverse than the statewide average (64%) and U.S. overall (55%).[4]

The highest share of non-White residents is in SPA 6 South-East, where only about 1% of the population is White compared to large concentrations of Latino and Black residents, who make up 82% and 14% of the SPA, respectively. SPA 6 South-West is also majority non-White, with 94% of the population belonging to a minority group and is home to the highest share of Black residents (30%) of any SPA — almost four times higher than the countywide average. The lowest share of minority group populations is in SPA 5. Forty-one percent (41%) of the population in SPA 5 belongs to a minority group, which is almost 35 percentage points below the countywide average. SPA 5's population distribution includes 59% White, 15% Latino, and 13% Asian.

Figure 7: Share of Minority Group Population by SPA – 2021



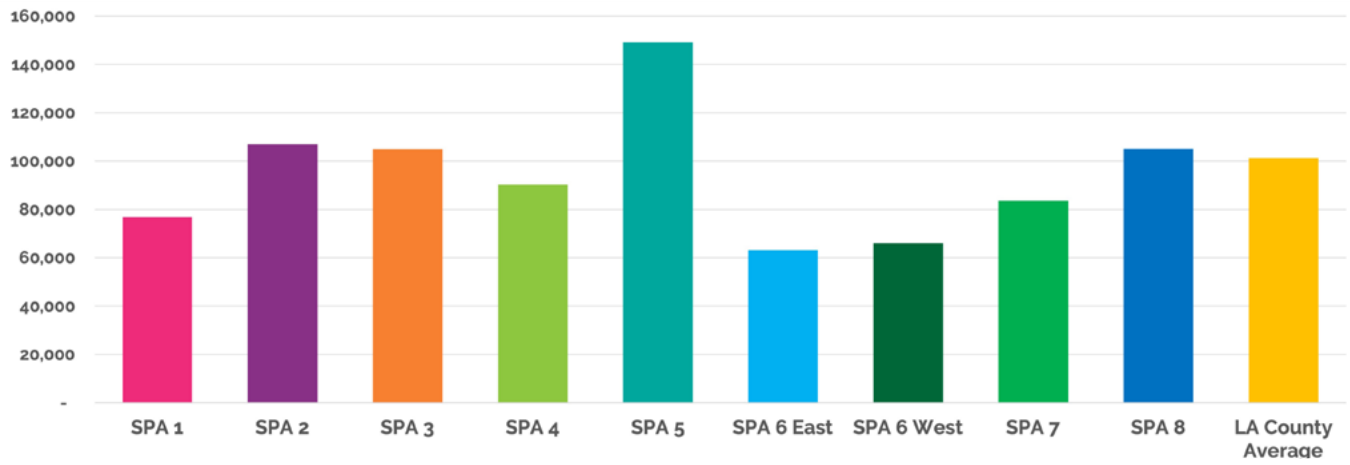
Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

2 https://laedc.org/wp-content/uploads/2017/06/People-Industry-and-Jobs_FINAL_2016-2021.pdf
3 https://knowledge.luskin.ucla.edu/wp-content/uploads/2018/01/Race-Ethnicity-and-Income-Segregation-Ziman_2016.pdf
4 For the purposes of this section, "White" population groups refer to White, non-Hispanic residents. The use of "non-White" and "minority" will be used interchangeably when referring to Hispanic or Latinx, Asian and Pacific Islander, Black or African American, and Native American population groups. https://www.census.gov/quickfacts/fact/table/losangelescitycalifornia,santamonicacitycalifornia,losangelescountycalifornia/BZA010221#qf-headnote-a

Nearly 50% of Los Angeles County residents live in disadvantaged areas. SPA 6 South-East and South-West, SPA 7 and SPA 4 are home to the highest shares of residents living in disadvantaged areas (94%, 82%, 54%, 67%, respectively). These communities continue to struggle with low levels of economic development, high housing costs, and limited opportunities for advancement. Moreover, they tend to suffer from poorer health outcomes, a lack of green spaces, and aging infrastructure. Areas with higher concentrations of non-White populations tend to also have higher shares of residents living in disadvantaged communities. These communities suffer from lower educational attainment, life expectancy, and access to healthcare, and are at a higher risk of exposure to poor air quality and water contaminants.

Blacks, Latino, and American Indian residents are much more likely to live in neighborhoods of concentrated disadvantage, even when they are families with high incomes. This is due to historical "institutional", "spatial", and "relational" racism that systemically produced gaps in life outcomes for people of color. According to Bayer, Charles & Park (2021), the average Black household in Los Angeles County has to earn $150,000 a year to live in a neighborhood with the same average median income as the average White household earning approximately $20,000 a year.[5]

Figure 8: Average Household Income by SPA



Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

At every level of educational attainment, there are racial and gender wage gaps. Blacks and Native Americans have historically had the lowest labor force participation rates and the highest unemployment rates in Los Angeles County. County residents also lag well behind the U.S. average for educational attainment. The highest level of educational achievement for 20% of residents is a high school diploma or GED alternative.

Los Angeles County is one of the most expensive places to live in the state: a family of four earning less than $100,900 a year in Los Angeles County is now classified as low-income.[6] And yet, the median household income for a family of four is $98,200 with 14% of the population living in poverty.[7] In 2023, there were an estimated 75,518 people experiencing homelessness within Los Angeles County, a 9% increase from the previous year.[8] The California Housing Partnership estimates that it would take an additional 568,000 affordable housing units to meet the rental needs of those with lower incomes. Moreover, high housing costs continue to be a significant burden

5 Bayer, P., Charles, K. K., & Park, J. (2021). Separate and Unequal: Race and the Geography of the American Housing Market. https://file.lacounty.gov/SDSInter/lac/1123282_DraftLosAngelesCountyRacialEquityStrategicPlan4.21.22.pdf
6 https://www.hcd.ca.gov/sites/default/files/docs/grants-and-funding/income-limits-2023.pdf
7 https://www.census.gov/quickfacts/fact/table/losangelescitycalifornia,santamonicacitycalifornia,losangelescountycalifornia/BZA010221
8 https://www.lahsa.org/news?article=927-lahsa-releases-results-of-2023-greater-los-angeles-homeless-count

on Los Angeles County families. The average Los Angeles County household that rents their unit pays 43% of their income for rent alone, while the average Los Angeles County household that owns their unit pays 30% of their income for their owner payment alone. Pulling children out from under poverty, meeting the educational demands of the workplace of today and tomorrow, and helping families cope with crushing health, housing and social service needs top the list of issues that require vigorous attention.

Table 5: Summary of Poverty (Census) in Los Angeles County, 2022

	Persons in Poverty	Poverty Rate (%)	Percent of County	Gini*
Antelope Valley	52,613	11.5	4.0	0.44
East	141,592	12.5	10.8	0.43
Metro	180,071	16.6	13.8	0.54
San Fernando	251,913	13.2	19.3	0.49
San Gabriel	188,791	11.4	14.5	0.48
South Bay	170,646	11.5	13.1	0.50
South-West	97,782	22.4	7.5	0.51
South-East	152,931	22.1	11.7	0.43
West	69,017	9.5	5.3	0.43

Source: U.S. Census Bureau. Analysis by Beacon Economics

*The Gini Index is a measure of income inequality. The higher the value, the higher inequality in a SPA.

Economy and Economic Development

Los Angeles County is an economic powerhouse that boasts some of the most dynamic industries nationwide and a complex economy with millions of workers engaged across a variety of sectors. With more than one-quarter of a million employers, including more manufacturers and more minority and women-owned businesses than any other county in the nation, the county has an exceptionally strong economic base on which to build a competitive future. However, Los Angeles County faces multiple challenges across employment and labor, educational attainment, health outcomes, housing, and environmental risk factors that the LA County Jobs First Collaborative is working to overcome. This section provides an in-depth look at the region's economic opportunities, labor force participation analysis, a summary of industry clusters, and a snapshot of Los Angeles County residents' overall economic wellbeing and the factors that impact it.

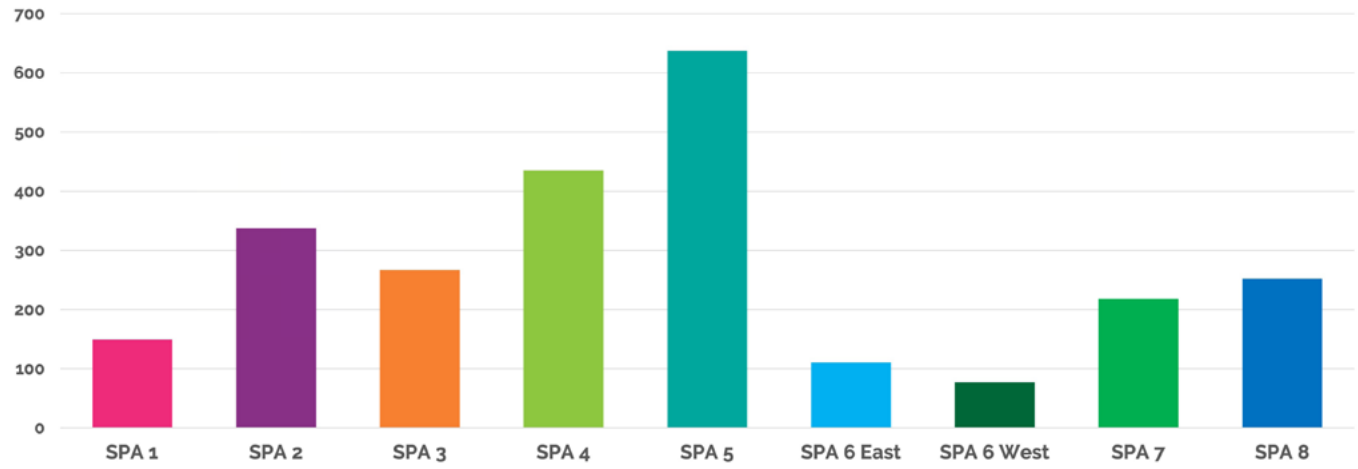
Business Density

Los Angeles County has a total of roughly 300,000 employer-based establishments (businesses with more than 1 employee), which is equivalent to approximately 296 businesses per 10,000 residents. The SPAs with the largest number of businesses are SPA 2 (73,250), SPA 3 (51,320), and SPA 5 (44,700). On a per capita basis, though, SPA 5 rises to the top of the list with 637 businesses per 10,000 residents — more than twice as much as the countywide average. Not only does SPA 5 have a significant amount of business activity for its population size, but a large share of its firms are in high-wage industries. Roughly 21% of SPA 5's businesses, for example,

are in the *Professional, Scientific, and Technical Services* sector; this is the largest share of any SPA in Los Angeles County and significantly higher than the countywide average of 14%.

The lowest concentration of businesses relative to population is in SPA 6 South-West at only 77 businesses per 10,000 residents. SPA 6 South-West has the lowest absolute number of businesses across Los Angeles County as well with just over 3,500 businesses. These firms are largely concentrated in the *Health Care* (which comprises 14.1% of all establishments in the region), *Retail Trade* (13.5%), and *Other Services* (11.4%) sectors. SPA 6 South-East similarly has a low level of establishments per capita (110). Most of SPA 6 South-East's business activity occurs in the *Wholesale Trade*, *Retail, Manufacturing*, and *Transportation and Warehousing* sectors; collectively, these sectors account for half of all establishments in the region.

Figure 9: Number of Business Establishments per 10,000 Residents – 2021



Source: 2021 County Business Patterns. Analysis by CVL Economics.

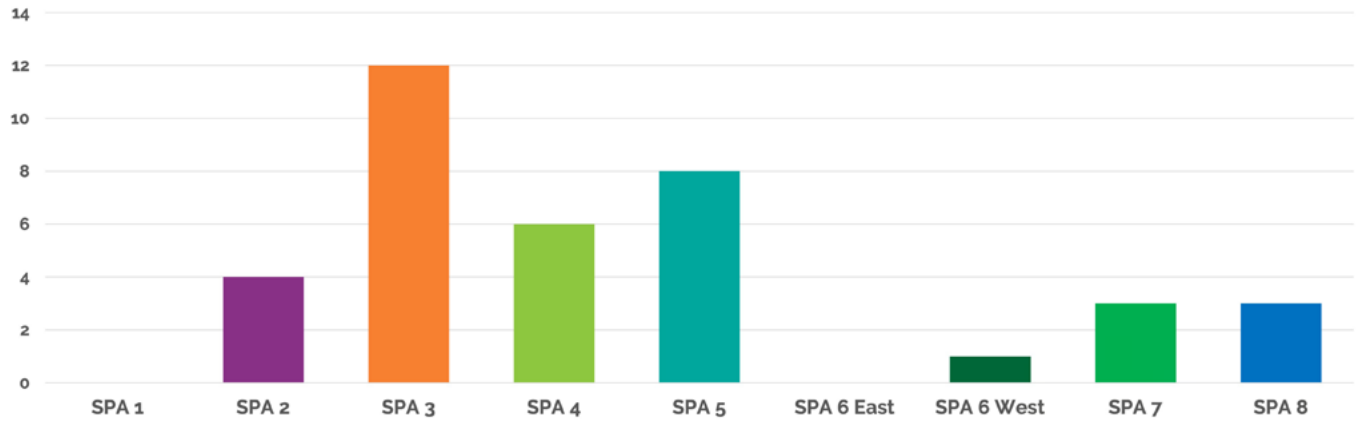
Research Institutions

Research universities, including Ph.D. and professional degree-granting institutions, play an important role driving innovation and educating the future workforce of a region. They provide pathways and create talent pipelines into high-skilled, high-wage industries and occupations. Often where there are large concentrations of higher education institutions, there are high levels of cross-sector pollination, business activity, and worker productivity. Indeed, there is strong evidence that research universities play a critical role in fostering long-term economic growth by creating new knowledge and promoting entrepreneurship.[9]

There are 37 research or professional degree institutions in Los Angeles County. The largest number of research and professional degree granting universities are in SPA 3, which is home to 12 institutions including the California Institute of Technology, Claremont Graduate University, and California Polytechnic University, Pomona. SPA 5 is also a regional hub for higher education that includes Pepperdine University, Loyola Marymount University, and the University of California, Los Angeles (UCLA). On average, each SPA has just over 5 research institutions per region. SPA 1 and SPA 6 South-East are the only two SPAs without a PhD. or professional degree-granting institution.

9 Joseph Parilla and Glencora Haskins, "How research universities are evolving to strengthen regional economies," The Brookings Institution, February 9, 2023, https://www.brookings.edu/articles/how-research-universities-are-evolving-to-strengthen-regional-economies/.

Figure 10: Number of Ph.D. and Professional Degree Institutions by SPA – 2022



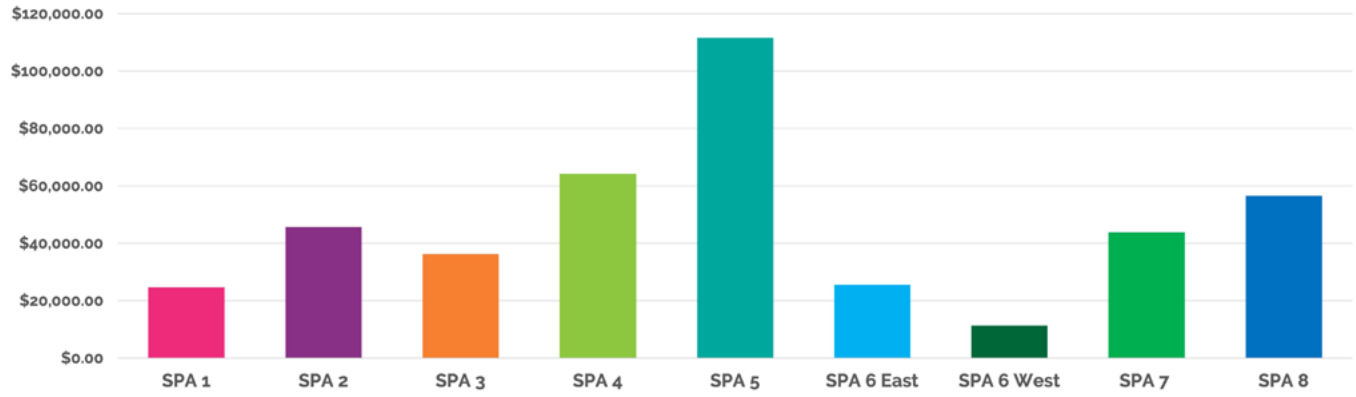
Source: Lightcast. Analysis by CVL Economics.

Exports

The global trade of goods takes place primarily through the Ports of Los Angeles and Long Beach, as well as through services via business firms, nonprofits, and academic institutions. These are massive contributors to Los Angeles's economy. In total, roughly half a trillion dollars' worth of goods and services were exported in 2021. On average, exports from Los Angeles County average $48,365 per capita. SPA 2 is the largest source of exports for Los Angeles County, with over $99 billion exported from the region in 2021, followed by SPA 8 at $87.8 billion. The regions with the lowest dollar-value exports are SPA 6 South-West (at $5.2 billion) and SPA 1 (at $8.8 billion).

Per capita, SPA 5 once again comes out on top with $111,500 in exports per resident, which is more than twice as much as the countywide average and $47,000 more than second-ranking SPA 4. Due to their relatively low business density and relative lack of research of institutions, SPA 6 South-West ($11,370), SPA 1 ($24,600) and SPA 6 South-East ($25,600) fall towards the lower end of the list with respect to export revenues.

Figure 11: Exports per Capita by SPA – 2022

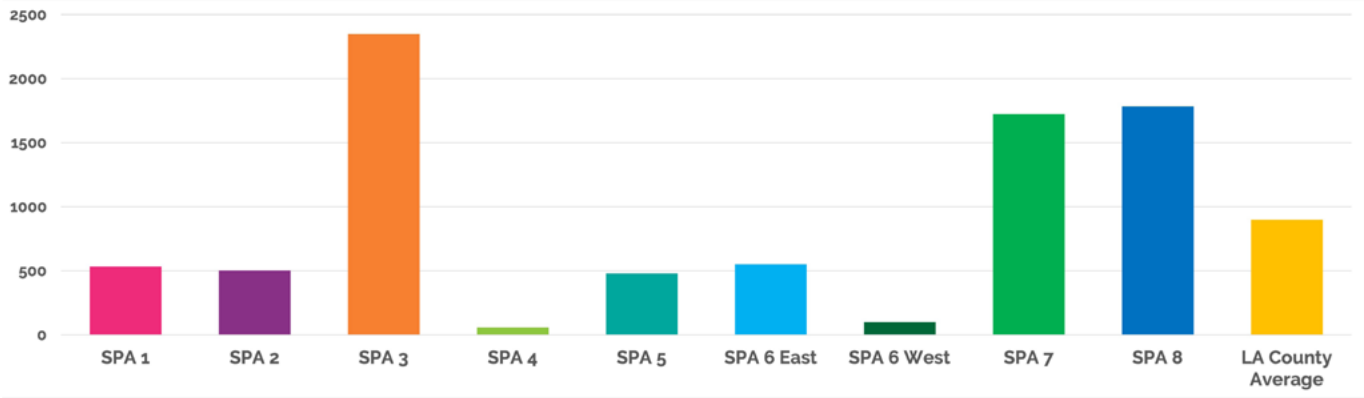


Source: IMPLAN. Analysis by CVL Economics.

Solar Energy Opportunities

The growing urgency around climate change has prompted substantial solar energy development in Los Angeles County, which makes sense for a region where the sun shines for over 260 days a year on average.[10] Development of solar energy infrastructure on institutional and publicly owned properties can help provide energy to schools, community-oriented properties, government facilities, hospitals, and more. Whether a region can successfully leverage solar energy development opportunities is heavily tied to access to space, zoning, and existing infrastructure. As such, regions such as SPA 4 (which includes Downtown Los Angeles and Hollywood) lack the infrastructure and space for conversions; consequently, SPA 4 has the lowest number of solar development opportunities for public and community facilities of the eight SPAs. The highest number of solar development opportunities are in SPA 3, SPA 7, and SPA 8, which collectively account for over 72% of all of Los Angeles County's solar development opportunities.

Figure 12: Number of Solar Energy Development Opportunities by SPA – 2017 to 2022



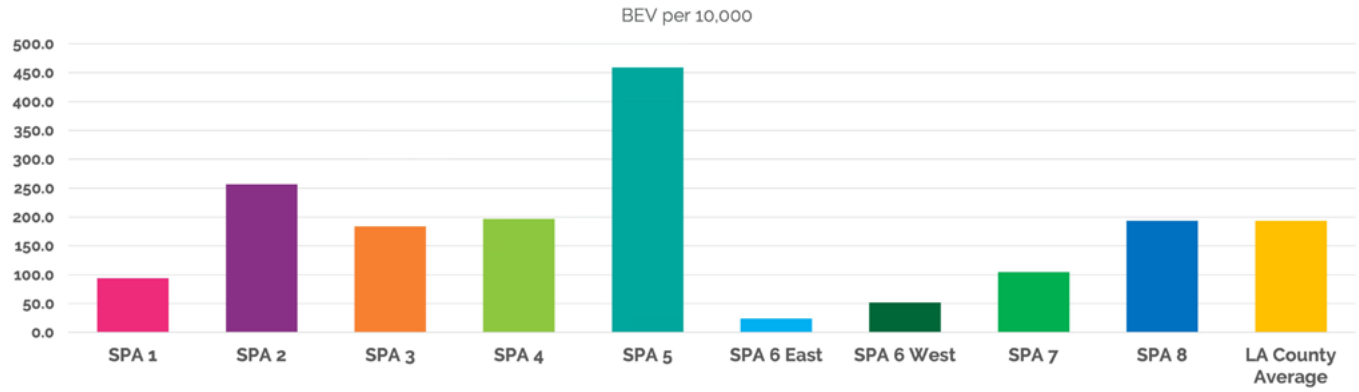
Source: California Center for Sustainable Communities, UCLA. Analysis by CVL Economics.

Battery Electric Vehicle Adoption

Battery electric vehicles (BEV) are essential to our transition towards an efficient, cleaner and low-carbon transport system. The prevalence of BEVs has surged over the past 15 years. In 2010, Los Angeles County had just over 200 registered BEVs; by 2022, this number had skyrocketed to 193,800.[11] SPA 2 has the largest number of registered BEVs, with over 55,700 vehicles, accounting for 28.7% of all BEVs in the county. When adjusted for population, SPA 5 has the most BEVs per capita of any region — roughly 459 BEVs per 10,000 residents — which is almost 2.5 times higher than the countywide average. Conversely, SPA 6 South-East (24.1 per 10,000 residents) and SPA 6 South-West (51.9 per 10,000 residents) have the fewest BEVs per capita. Given charging infrastructure requirements, areas like SPA 6 and SPA 1 have less access to charging stations both residential and commercial. Furthermore, BEVs are costly even when taking rebates into account. A lack of affordable options for purchase and higher costs of maintenance and repair makes BEV adoption a more challenging proposition for low-income households.

10 National Center for Environmental Information.
11 California Energy Commission

Figure 13: Number of Battery Electric Vehicles per 10,000 Residents by SPA – 2022



Source: California Energy Commission. Analysis by CVL Economics.

Industries and Occupations

Broadly speaking, the Los Angeles County's economy is based on industry clusters related to entertainment, such as Video Production and Distribution, Music and Sound Recording, and Performing Arts. Other major industry clusters include Aerospace and Defense, Education and Knowledge Creation, Transportation and Logistics, and Marketing, Design, and Publishing. Apparel and Textile Manufacturing are still highly concentrated in the county when compared to the rest of the nation, but the industry clusters are clearly in decline. Local-serving industries such as Health Care, Community and Civic Organizations, Construction, Commercial Services, Hospitality, and Retail also play an essential role in the county's economy. Many SPAs depend heavily on these local-serving industry clusters.

As Los Angeles continues to age, demand for health care increases. Currently, three of the top four occupations with the largest number of projected openings are in health care. However, many of these positions do not require high skill, such as home health aides and health care support occupations. These also tend to be filled by women.

The Los Angeles County economy is underpinned by industry clusters related to Entertainment, Aerospace and Defense, Financial Services, Education and Knowledge Creation, Transportation and Logistics, and Marketing, Design, and Publishing. Local-serving industries such as Healthcare, Community and Civic Organizations, Construction, Commercial Services, Hospitality, and Retail also play an essential role in the County's economy. Los Angeles County has various industry clusters in distinct regions. However, some SPAs have fewer economic opportunities within their boundaries. The Antelope Valley, South-West, and South-East stand out due to the dearth of employment opportunities in internal industry clusters. This suggests that a sub-regional approach that addresses this lack of opportunities is necessary for equitable and sustainable growth.

The largest share of employed Los Angeles County residents work in Management, Business, Science, and Arts occupations. The share of Los Angeles County residents in these occupations grew by 4.3 percentage points to 41.3% from 2017 to 2022.[12] Many of the occupations in this category require workers to perform cognitive non-routine tasks that cannot be easily automated, and reflects the integral role that high-skilled labor plays in the region's economy. The growth of these occupations is good for workforce resilience, but it is essential to ensure that enough training and development opportunities exist for more Los Angeles residents to be able to work in these types of occupations.

12 Lightcast

Table 6:Top-30 Regionally Concentrated Existing Industry Clusters in Los Angeles County (Sorted by LQ)

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Video Production and Distribution	141,164	26.9	26.6	15.6	124,794
Traded	Music and Sound Recording	4,411	51.7	34.4	7.2	142,514
Traded	Apparel	24,192	-28.3	-49.8	6.0	56,156
Traded	Performing Arts	42,329	15.3	65.9	4.0	229,422
Traded	Aerospace Vehicles and Defense	57,291	12.5	1.2	3.1	136,380
Traded	Jewelry and Precious Metals	1,788	3.3	9.0	2.7	55,268
Local	Local Community and Civic Organizations	315,800	14.3	312.8	2.5	29,996
Traded	Water Transportation	17,574	-2.4	6.3	1.9	139,267
Traded	Marketing, Design, and Publishing	86,425	9.8	24.2	1.8	149,254
Traded	Transportation and Logistics	80,199	11.0	55.3	1.5	89,293
Traded	Textile Manufacturing	6,318	-11.3	-29.5	1.2	58,084
Traded	Recreational and Small Electric Goods	6,634	-14.0	-5.3	1.2	100,406
Local	Local Commercial Services	315,632	6.7	20.5	1.2	74,600
Local	Local Entertainment and Media	12,580	-22.1	-14.7	1.2	108,777
Traded	Downstream Chemical Products	9,745	3.7	-4.0	1.2	76,979
Local	Local Government Services	195,051	-1.9	2.3	1.2	102,384
Traded	Education and Knowledge Creation	169,318	5.6	15.1	1.1	96,076
Local	Local Logistical Services	94,638	31.8	60.8	1.1	52,161
Traded	Environmental Services	4,410	9.6	-4.3	1.1	82,590
Local	Local Hospitality Establishments	404,728	-1.4	25.0	1.1	31,534
Local	Local Food and Beverage Processing and Distribution	131,536	0.6	5.2	1.0	44,416
Local	Local Industrial Products and Services	18,062	-15.1	-17.5	1.0	72,036
Traded	Metalworking Technology	13,514	-18.2	-21.2	1.0	66,808
Local	Local Personal Services (Non-Medical)	81,227	12.6	-59.6	1.0	43,392
Local	Local Retailing of Clothing and General Merchandise	208,478	-3.5	1.7	1.0	46,510
Local	Local Health Services	510,056	8.1	21.0	0.9	74,702
Local	Local Motor Vehicle Products and Services	97,124	-9.0	3.5	0.9	66,821
Traded	Electric Power Generation and Transmission	4,635	-2.5	11.1	0.9	159,709
Local	Local Education and Training	232,308	-2.5	3.2	0.9	64,033
Traded	Printing Services	10,203	-26.1	-32.9	0.9	58,037

Source: Lightcast. Analysis by Beacon Economics..

Economic Well-being

Economic well-being is defined as having present and future financial security, as well as overall quality of life. Despite the economic shocks caused by the COVID-19 pandemic, the Great Recession, and high inflation, the County's economy has seen marked improvements over the past decade. In general, wages grew considerably across all income groups over the last ten years, and outpaced inflation. However, disparities and inequities

persist. Workers with higher levels of education saw faster wage growth than those with lower levels of education. This suggests that upskilling could help workers obtain quality employment and earn a living wage. Unemployment across Los Angeles County has dropped to around 5.8%, but remains higher compared to other comparable metropolitan areas, which have unemployment rates at 4%.

Economic Competitiveness

An educated workforce and a high density of business activity are key determinants of a region's economic competitiveness. Skilled workers are vital for local economies in terms of establishing, attracting, and retaining businesses in innovative, export-oriented industries. Lower-income communities tend to have fewer residents who have attended a four-year institution. In SPAs 6 South-East and South-West, the shares of residents with at least a bachelor's degree are 6.0% and 15.1%, respectively — far below the countywide average of 27.8%. Conversely, this share is 54.2% in higher-income SPA 5. SPA 5 also has a high degree of business activity with 637 businesses per 10,000 residents (or more than two times higher than the countywide average); in absolute terms, its 44,700 establishments is only surpassed by SPA 2 (73,250) and SPA 3 (51,320). SPA 6 and SPA 7 are the regions with the lowest business density and are also the ones that took the longest to recover jobs lost during the Great Recession.

Labor Force Participation

Labor force participation is a fundamental factor in economic well-being for individuals, families, and the state. Yet despite a robust employment recovery from the pandemic, it lags compared to pre-pandemic levels. Although Los Angeles County has added a significant number of jobs since the depths of the COVID-19 pandemic, recovery remains incomplete, and employment is still significantly below January 2020 levels. As a result, county businesses continue to face challenges hiring workers for open positions.

Overall, labor force participation increased from 2017 to 2022, except for those who graduated high school. This group saw a decrease of 0.3 percentage points in labor force participation. The only other metro area that saw declines in labor force participation rates from 2017 to 2022 was Dallas, and it was for those who did not complete high school. Los Angeles County had a labor force participation of 65% in 2022, lower than labor force participation rates in the Houston (67%), Atlanta (68%), and Dallas (70%) metropolitan areas. The Phoenix MSA, home to a large retirement community, has a lower labor force participation rate of 64%.

The countywide average share of working-age individuals without a job is roughly 12.0%, which aligns closely to the statewide average of 11.7%. Of the nearly 72,000 Angelenos that are prime-aged and not participating in the labor force or attending college, roughly 39% have either never worked or last worked more than five years ago; their average age is 33 years old; 65% are females; and, almost half are Latino.

Gaps in labor force participation may reflect barriers to participation and/or poor opportunities. In turn, these affect household well-being and contribute to broader labor market inequities. There are substantial differences in participation by age, gender, family structure, race/ethnicity, region, and nativity. Understanding why labor force participation is relatively low in Los Angeles County is of paramount importance for improving workforce development in the county. A study by the Public Policy Institute of California (PPIC) reveals several key findings and policy considerations about California that are consistent with Los Angeles County:

Significant gaps still exist by race, gender, and nativity. Among prime-age workers, women are 13 percentage points less likely to work than men. By race/ethnicity and gender, Black men (83%) and Latina women (74%) have the lowest rates. Foreign-born noncitizen adults have slightly lower participation than native-born and naturalized citizens.

Educational differences largely drive racial gaps. For prime-age college graduates, participation is near 90 percent, with only small differences between Asian, Black, Latino, and white adults. However, for those lacking

a high school diploma, rates are much lower, ranging from 74% (Latino) to 48% (Black). Fully eliminating educational attainment gaps could close most racial gaps in participation.

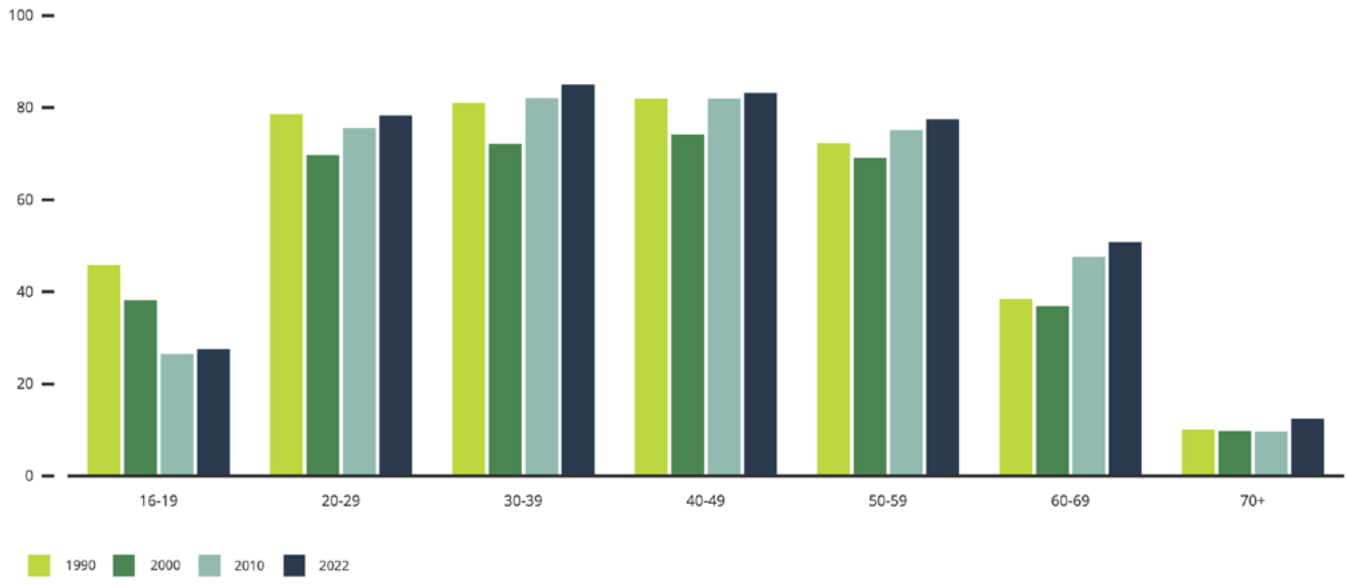
Gender gaps are largest for women with young children and a partner. For prime-age single adults with no children, participation gaps between men and women are small—especially among those with at least some college education. The large gender gaps in participation are driven mostly by motherhood.

People with disabilities experienced a 14% participation increase post-pandemic. Labor force participation is significantly lower among prime-age (6%) and 55 and older (25%) adults who have a disability, especially for those with less education. Prime-age participation has increased substantially post-pandemic, though the prevalence of disability has also increased.

Age as a Factor

Labor force participation of younger people (under 25) tends to be lower in Los Angeles County compared to other metropolitan areas. Phoenix-Mesa-Chandler MSA led the 2022 labor force participation rate at 63.2%. Dallas, Houston, and Atlanta had labor force participation rates more than four percentage points higher than Los Angeles County (52.8%). This suggests there might be some workforce development challenges in Los Angeles County that are specifically affecting younger workers. This is a threat for the Los Angeles County economy since many young people may be missing out on experience that is crucial for accumulating human capital which can translate to higher wages in the future. Young workers are more likely to be structurally underemployed for a myriad of reasons. Studies have suggested that several factors, including the rise of school enrollment among youth resulting in a more competitive labor market, an unwelcoming economic climate for new hires, and the relative plateau of adequate entry-level full-time jobs, have all contributed to high levels of underemployment for young workers.[13]

Figure 14: Los Angeles County Labor Force Participation Rate by Age (Need Data)



Source: U.S Census Bureau, IPUMS USA; Analysis by Beacon Economics

California's aging population portends a shrinking workforce over the coming decades, a continuation of trends that predate the pandemic. An aging population is the reason for California's long-term labor force declines.

13 https://www.labor.ucla.edu/wp-content/uploads/2023/11/DownloadedNov7_Young-Workers-in-California.pdf

Labor force participation has fallen from over 67% in 2000, to nearly 62% today. Among adults aged 25–54 ("prime" working years) it has hovered around 80% in recent decades. The decline is entirely due to an aging population, rather than fluctuations around periods of recession and recovery. [14]

Demographic changes tend to occur over the long term and the changing structure of Los Angeles's population are more apparent when looking at the age distribution over time. In 1990, the County had a relatively young population, with Angelenos over 50 comprising roughly one in five persons. As of 2022, one in three persons was 50 and older. According to the California Department of Finance, Los Angeles's share of the population ages 65 years and over will more than double in ten years, growing from 13.4 percent in 2016 to just under 31 percent in 2030, or 4.5 million people. By 2060, persons 50 and older will comprise 49% of Angelenos.

Although the labor force is affected by the aging population, the older segments have higher participation rates now compared to decades ago. There are several reasons for this. One is the increase in life expectancy. Because people are living longer, there is more need to accumulate wealth to finance more years in retirement because a large segment of the labor force does not have employer-provided pensions. Despite older segments of the population participating at higher rates, the baby boom generation's aging and retirement significantly impacted the overall labor force participation rate in the county.

If we hold the age structure of Los Angeles constant and calculate the age-adjusted labor force participation rate, applying weights to different age groups based on their share of the total population, this eliminates the effect of changes in the age distribution. If Los Angeles County had the same age structure as it did in 1990, there would be an additional 307,000 persons in the county's labor force. With large numbers of baby boomers entering retirement in 2011, and the youngest turning 65 in 2029, the aging population will create an increase in demand for health care and supportive services. Taking care of an aging population will require a shift in resources because of the costs associated with senior health care needs.

Over the longer term, California's economy—along with that of most other states—faces significant labor market headwinds. Labor force participation—which includes both employed workers and those who are unemployed but looking for work—remains below pre-pandemic levels both statewide and across many of California's diverse regions and populations. This trend predates the pandemic: since a high of 68% in 1990, labor force participation is now below 63%. While some fluctuations reflect the dynamics of recessions and macroeconomic forces, demographic changes and an aging population underlie much of the long-term decline, echoing the broader national trend (Abraham and Kearny 2020). The Congressional Budget Office projects a national decline of roughly 1 percentage point over the next decade (Congressional Budget Office 2023).

If these projections play out, an aging population and declining labor force participation will pose new economic challenges for Los Angeles. Workforce size and skills and population age structure are both critical to County-level spending policies—from education to infrastructure to safety net to health. Millions of federal and state dollars have been invested in Los Angeles County for workforce development through local community colleges, regional occupational centers, adult schools, workforce development boards, and training programs. In some cases, these efforts were effective in creating job opportunities for both higher- and lower-skilled workers. However, the data above suggests there is still much room for improving workforce resiliency and increasing labor force participation. We measure two primary factors impacting labor force participation: age and race/ethnicity.

In summary, policymakers have the opportunity not only to offset aggregate declines, but also to reduce labor market inequalities across demographic groups. Efforts to increase participation among the aging population

14 https://www.ppic.org/publication/labor-force-participation-in-california/

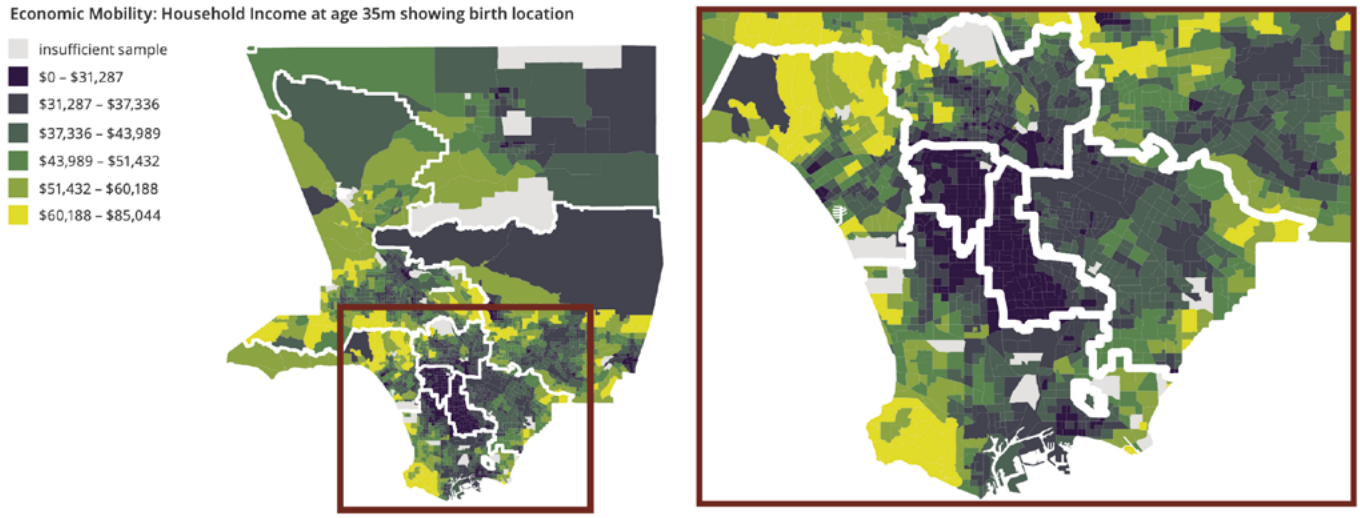
could have a sizable impact on aggregate. But policymakers can also make gains by addressing multifaceted barriers among the largest low-participation demographic groups—such as less-educated, married Latina women and less-educated, single Black men. The end result could not only be a solution to California's current and ongoing challenge in the aggregate, but more equitable workforce opportunities for those who need it most.

Economic Mobility

There is an obvious correlation with economic mobility and per capita income. Generally, children from wealthier neighborhoods grow up to earn higher incomes than those from low-income neighborhoods. This is as true in Los Angeles as it is in all major cities. However, there are differences worth noting. The maps following illustrate the comparison, with economic mobility on the left, and per capita income on the right, both divided by the same U.S. census tracts. The per capita income map shows the average income of the total population in each census tract. Both sets of data are split into eight equal sized buckets. Almost all the neighborhoods in the South SPA are in the lowest brackets of economic mobility. However, this is not the case for per capita income, as shown by the yellow census tracts in the SPA.

Figure 15: Economic Mobility in Los Angeles County

The average wage of people in their mid-thirties, showing the zip code they grew up in.



Economic Mobility: Household Income at age 35m showing birth location

The average median household income of a 35-year-old Angelino born to parents in the top 25% of the income distribution was $55k in 2015. Those born to parents in the bottom 25% of the income distribution have incomes 39% lower at $33k (Please note that inflation has increased these income figures over the last seven years in absolute terms. However, the relative difference has likely remained the same). There are clear differences by SPA: SPA 6 South-West and South-East have the lowest economic mobility by this measure, whereas SPA 5 West has the most. A 35-year-old born in SPA 6 South-West made around $28,300 per year in 2015, while those born in SPA 5 made closer to $48,000 per year.

In contrast, the fewer minority group residents a SPA has, the higher its average annual household income tends to be. Majority non-Hispanic White residents comprise a larger share of the population tend to on average benefit from higher household incomes, healthier environmental conditions, and stronger social cohesion. SPA 5 West's average annual household income of $149,000 is far above the $101,200 county average, with SPA 2 ($107,000) and SPA 8 ($105,100) coming in at a distant second and third. Likewise, while incomes are very high

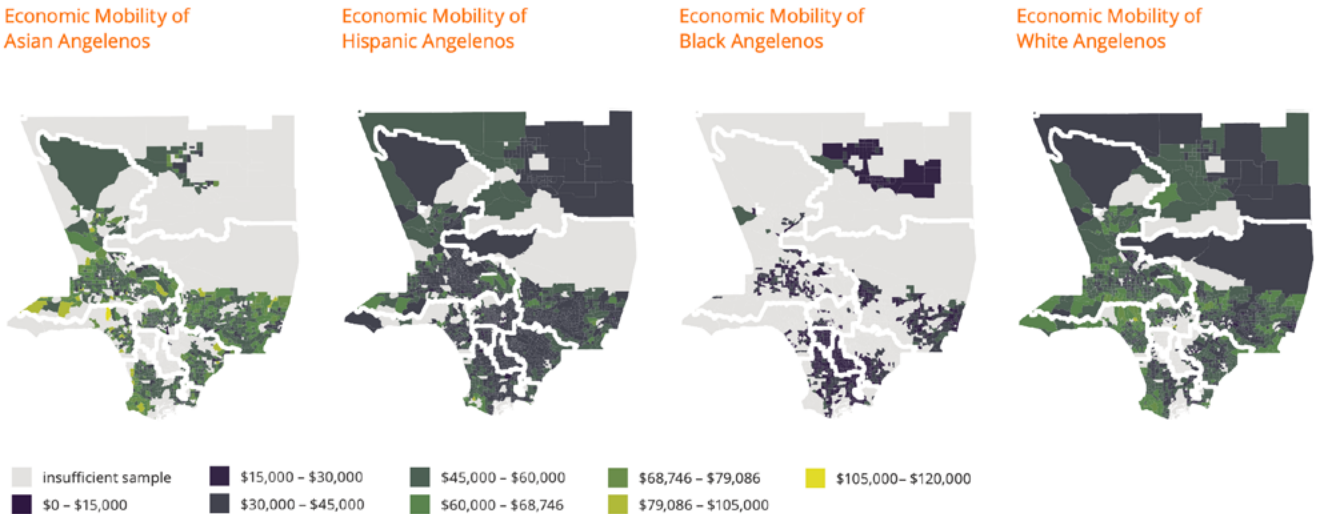
in Bel Air and the Hollywood Hills, both areas have lower than expected economic mobility, suggesting that not all children born in these neighborhoods grow up to be as financially successful as their parents.

Table 7: Economic Mobility by SPA

Where Individuals Grew Up	Median Income of Individuals in Their Mid-Thirties
SPA 1 – Antelope Valley	$ 38,785
SPA 2 – San Fernando	$ 44,593
SPA 3 – San Gabriel	$ 44,090
SPA 4 – Metro	$ 37,205
SPA 5 – West	$ 47,912
SPA 6 – South-East	$ 29,289
SPA 6 – South-West	$ 28,318
SPA 7 – East	$ 38,787
SPA 8 – South Bay	$ 40,607

Source: Opportunity Insights. Analysis by Beacon Economics

There is a clear empirical connection between race and economic mobility. As the maps below illustrate, economic mobility is highest for white families, followed by Hispanic families, and lowest for Black families. There are a number of interrelated and complex socioeconomic factors that determine an area's economic mobility – education, crime, employment opportunities, etc. In a simple attempt to isolate the racial effects from these other spatial effects, we can focus on the same neighborhoods, as the neighborhood location should hold many of these factors constant. For example, looking at low-income families in Culver City, white children from these families earn around $27,000 by their mid-thirties, Hispanic children earn approximately $26,000, and Black children earn only $21,000 on average.



For American Indian/Alaska Natives (AI/AN), the discrepancy is worse. In 2022, the poverty rate for an AI/AN person in Los Angeles County was 15.2%, which is about 1.5 percentage points higher than the rest of the

population. It is noteworthy that the poverty rate for AI/AN people is lower in Los Angeles County than in the United States overall, where nearly 22% of American Indians and Alaska Natives live in poverty.

Table 8: Annual Earnings by Educational Attainment for American Indian and Alaska Natives Age 25 and Older in Los Angeles County, 2022

Educational Attainment	Median Earnings ($)	5-Year Growth Rate (%)
Less than High School Graduate	26,000	36 .8
High School Graduate (Includes Equivalency)	34,500	27 .8
Some College or Associate's Degree	40,000	33.3
Bachelor's Degree or Higher	55,000	10.0
Graduate or Professional Degree	80,000	12.7

Source: U.S. Census Bureau. Analysis by Beacon Economics

Job Quality and Access

Los Angeles County saw tremendous economic growth following the Great Recession and has experienced strong recovery in the four years since the start of the COVID-19 pandemic. Total employment (which includes salaried, self-employed, and gig workers) is 4% higher than it was in 2019, currently around 6.6 million jobs. The county also has a high percentage of higher-paying jobs, with a strong presence in the *Professional, Scientific, and Technical Services*, *Information*, and *Finance and Insurance* sectors. The impact of COVID-19 on public health and consumer spending has also led to massive labor demand in the *Health Care and Social Assistance* and *Transportation and Warehousing* sectors.

Lower unemployment rates, access to higher-paying jobs, and workforce development training opportunities are key measurements that help determine the overall economic wellbeing of a region. These are the factors that demonstrate how an area can not only attract workers but also retain them. Moreover, such conditions provide opportunities for economic mobility and career flexibility, leading to new businesses and better outcomes for economic development overall.

Educational Attainment

An educated workforce is a cornerstone of economic development, opportunity and mobility. Historically, workers with a college education have benefitted from greater employment prospects and higher wages on average, and regions with larger shares of college graduates have fared better overall. In the wake of the COVID-19 pandemic, the unemployment rate for skilled workers was much lower compared to the unemployment rate for less-educated workers; this was largely due to the ability of higher-wage workers to be able to work remotely, on average, as opposed to lower-wage workers who were more likely than not required to work onsite.[15]

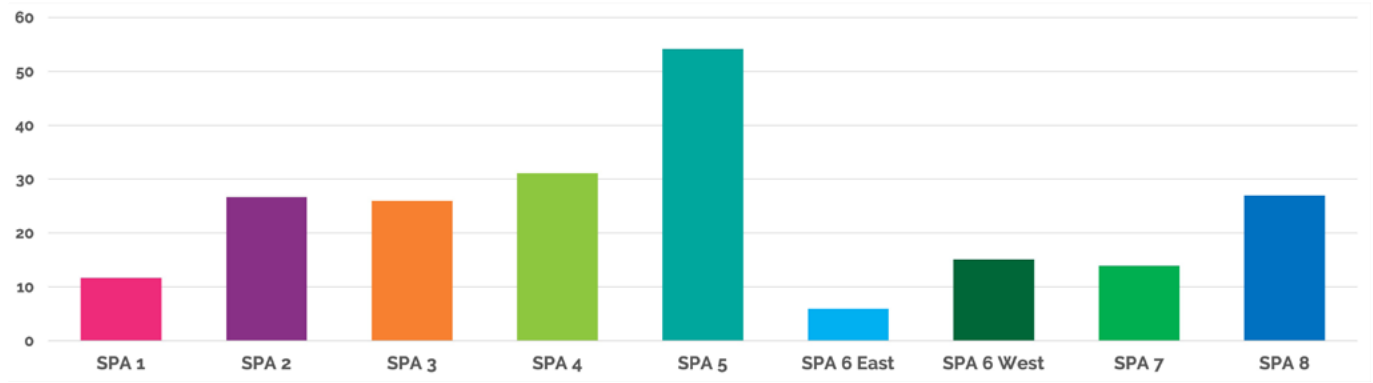
Roughly 67% of Los Angeles County residents have completed high school, and 27.8% have earned at least a bachelor's degree or more, which is slightly higher than the 25.9% statewide average. As the region with the highest household income on average, it is not surprising that SPA 5 has the most educated workforce; 54.2% of residents hold at least a bachelor's degree, and roughly 22% have earned either a graduate or professional degree (or twice the countywide average). SPA 4 has a similar education profile: 67% of the population has earned

15 Marisol Cuellar Meijia, Cesar Alesi Perez, Vicki Hsieh, and Hans Johnson, "Is College Worth It?" Public Policy Institute of California, March 2023, https://www.ppic.org/publication/is-college-worth-it/.

at least a high school diploma or equivalent, and 31% have graduated from a 4-year year institution. The lowest educational attainment levels are in SPA 6 South-East and SPA 1. Approximately 56% of SPA 6 South-East's population has not completed high school and only about 6% have earned a bachelor's degree. SPA 1 fares slightly better; approximately 11.7% of the population has completed a bachelor's degree.

In SPA 6 South-East, over 56% of people 25 and older who did not graduate high school are in disadvantaged households. This drops to 25.9% for those with a bachelor's degree, once again underscoring the importance of education for improving incomes. That said, this rate for bachelor's degree holders is higher than in other SPAs such as SPA 2 San Fernando and SPA 7 East, which both had a rate of 22.6%.

Figure 16: Share of Population with at least a Bachelor's Degree by SPA – 2021



Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics

Educational attainment is highly correlated with income levels, as the significant difference between college graduates and those who did not graduate college shows. In 2022, bachelor's degree holders had annual median earnings nearly twice as high as high school graduates. Annual median earnings of associate degree holders were nearly $24,500 less than the median earnings of those with a bachelor's degree. Those with a graduate or professional degree earned even more, with median earnings exceeding bachelor's degree holders by over $23,000.

Median earnings for college graduates in Los Angeles County in 2022 were higher than in other comparable metro areas. However, median earnings for non-college graduates were lower, despite the robust earnings growth. People who did not graduate high school had a median earnings growth rate of 35.6% from 2017 to 2022. Likewise, the share of the population aged 25 and older with a bachelor's or higher increased by 3.4 percentage points to 35.6%. High school graduate median earnings grew by an astounding 25.6% from 2017 to 2022. This impressive wage growth for non-college graduates is partly driven by minimum wage ordinances enacted in certain Los Angeles County cities.

The Los Angeles County labor market continues to demand employees with college degrees, creating a need for highly educated workers. College graduates have a significantly lower unemployment rate compared to other educational attainment groups. From 2017 to 2022, there was a slight uptick in unemployment rates for high school graduates and people with either some college or an associate degree. There are stark differences between educated and less educated Angelenos. For example, someone with at least a bachelor's degree has a predicted probability of labor force participation of 88%, compared to 70% for an otherwise similar individual with no high school diploma.

Table 9: Annual Earning Rates by Educational Attainment, 2022 ($)

Educational Attainment	Los Angeles County
Less than High School Graduate	29,708
High School Graduate (includes Equivalency)	36,283
Some College or Associate Degree	44,512
Bachelor's Degree	69,000
Graduate or Professional Degree	92,256

Source: American Community Survey. Analysis by Beacon Economics

Unemployment

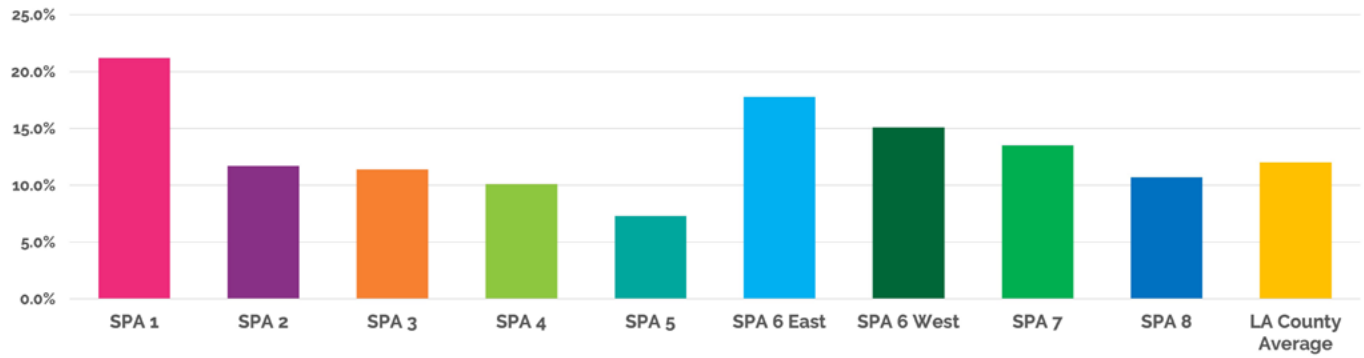
Although Los Angeles County labor markets have recovered from the past two recessions, recovery in terms of the unemployment rate has not been as robust as certain comparable markets, such as Dallas and Phoenix metropolitan areas (3.8%) and Atlanta MSA (4.0%). Recovery is also not occurring equally across the region. EDD High Unemployment Area (HUA) data reveals that there are 14 sub-areas in Los Angeles County where unemployment remains more than 1.5 times the state average. Furthermore, economic recovery has been uneven, with some industries experiencing stronger recovery than others. While we expect to see continued economic recovery over the next two years, a number of the County's hardest hit industries will likely lag behind.

Table 10: Los Angeles County Unemployment – 2022

Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
Overall Unemployment Rate								
7.8	4.9	6.5	5.9	4.3	4.9	7.9	7.9	5.5
Prime Age (ages 25-54) Unemployment Rate								
7	4.1	6.5	5.1	3.9	4.6	6.7	6.5	5

Source: US Census Bureau. Analysis by Beacon Economics

Figure 17: Jobless Working-Age Population Rate by SPA 2021



Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

Measuring unemployment can be difficult at a sub-regional level. Indeed, unemployment rate estimates often lag at even the county level. As a workaround, this indicator estimates the number of individuals who are not working by looking at the jobless working-age population rate (or the share of people between the ages of 25 and 54 who are not currently working). As the chart below illustrates, unemployment tends to be high for younger workers. The 11.8% unemployment rate for workers under 25 in Los Angeles County is higher than comparable metropolitan areas such as Dallas-Fort Worth-Arlington and Phoenix-Mesa-Chandler, which both come in at 7.7%. Prime-age workers (25 to 55) tend to have lower unemployment rates. Women of prime working age tend to have slightly higher unemployment rates compared to their male counterparts, as seen in the table below.

Table 11: Los Angeles County Unemployment by Age and Gender – (2022)

Age	Total Unemployment Rate (%)	Male Unemployment Rate (%)	Female Unemployment Rate (%)
Under 25	11 .8	12 .3	11 .3
25 to 34	6.0	6.3	5.7
35 to 44	4.7	3.9	5.7
45 to 54	4.6	4.3	5.0
55 to 64	4.8	4.7	4.9
Over 65	3.9	4.0	3.8

Source: American Community Survey. Analysis by Beacon Economics

Unemployment By Race

The jobless working-age population is vastly different when disaggregated by race and ethnicity. The share of non-Hispanic White individuals aged 25 to 54 who are not working is 9% across Los Angeles County. By comparison, the share of minority group populations who are unemployed is roughly 13%. Areas with larger shares of disadvantaged communities suffer from higher shares of working-age populations who do not have a job. In the SPA 6 South-West and South-East, over 60% of those not in the labor force are part of a disadvantaged household. In the Metro SPA, 63% of persons not in the labor force are from disadvantaged

households. About 50% of individuals who are not participating in the labor force are from disadvantaged households in the San Fernando and San Gabriel SPAs.

The highest share of persons without a job are in SPA 1 (21%), where just over 17% of the non-Hispanic White working age population does not have a job. This figure rises to 22.5% for jobless, working age individuals from minority group populations. SPA 6 South-East and South-West also have a significantly higher jobless rate (at 17.8% and 15.1%, respectively) compared to the county overall. The lowest share of jobless working-age individuals is in SPA 5, with only 7.3% of the population aged 25 to 54 are without a job. Notably, the discrepancy between rates of White (6.1%) and non-White (8.8%) populations without a job narrows in high-income SPA 5.

Median Household Income and Per Capita Income

One of the greatest strengths exhibited by Los Angeles County over the past 10 years is the growth of incomes at both the household and individual levels. Since 2012, the median household income has grown 55.7% in Los Angeles County, a rate that exceeds Houston (MSA), Dallas (MSA), and Atlanta (MSA). Only Phoenix (MSA) grew at a faster rate, reaching 61.4%. This robust growth in household incomes has been partly eroded by inflation in the past few years (27.5% since 2012), but the rate of growth of incomes was still high enough for real incomes to increase overall. Per capita income in Los Angeles County reached $43,171 in 2022. This corresponds to a 63.1% increase since 2012 and a 33.2% increase since 2017. Again, Phoenix (MSA) (63.3% from 2012 to 2022 and 36% from 2017 to 2022) was the only region from the comparison group that surpassed Los Angeles County over these time spans. This presents an opportunity for county residents as they stand to prosper from this trend.

Accounting for inflation, the growth in real income (in terms of 2022 prices) in Los Angeles County has been spread throughout the income distribution as a greater number of households have moved up the income brackets. Low-income households (those making less than $50,000) made up 38.6% of the total in 2012. That share dropped to 33.6% in 2017, and to 32.1% in 2022. The share of households making between $50,000 and $99,999 remained fairly constant during this period, suggesting that the decrease in the share of households making less than $50,000 was due to some households moving up the income distribution. This could be due to upward mobility of households, or because some lower-income households moved out of Los Angeles.

Table 12: Los Angeles County Median Household Income and Per Capita Income

Variable	2012	2017	2022
Household Median Income	$53,001	$65,006	$82,516
Per Capita Income	$26,467	$32,413	$43,171

Source: American Community Survey. Analysis by Beacon Economics

In 2022, nearly 41% of households earned $100,000 or more, a near seven-percentage point increase since 2012. The share of households making $200,000 or more grew by 5.3 percentage points from 2012 to 2022. The median (50th percentile) household income is lowest in SPA 6 South-West at $53,000. This is less than half the median household income in the West SPA, highlighting the vast difference in income across SPAs. Within SPAs, there is also substantial variability. In many SPAs (Antelope Valley, East, San Fernando, San Gabriel, South Bay, West), the 25th percentile makes slightly over $40,000 per year, the median household has an income in the $75,000 to $85,0000 bracket, and the 75th percentile jumps up to the $130,000 to $150,000 bracket.

Table 13: Los Angeles County Population by Real Household Income (Base Year = 2022)

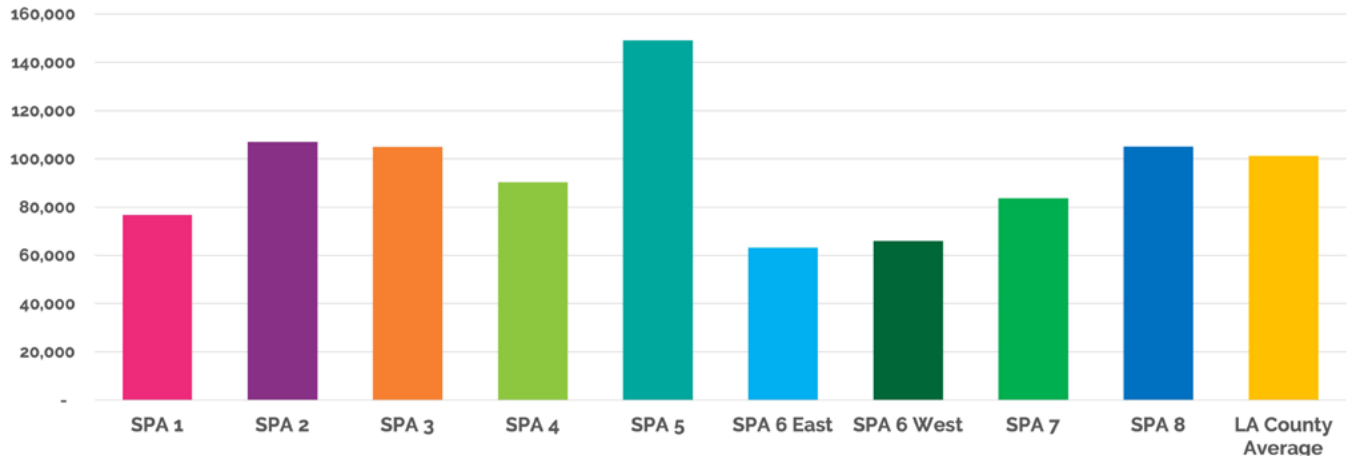
Income Bracket	Share 2012(%)	Share 2017(%)	Share 2022(%)
Less than $50,000	38.6	33.6	32.1
$50,000 to $99,999	27.6	27.6	27.3
$100,000 to $149,999	15.4	16.5	16.9
$150,000 to $199,999	8.1	7.4	9.4
$200,000 or More	10.3	13.3	14.3

Source: American Community Survey. Analysis by Beacon Economics

Worker Earnings

Although Los Angeles boasts one of the most dynamic and innovative economies in the world, not all residents get to benefit. Income inequality has been and continues to be a pressing issue in Los Angeles, with the gap between high- and low-income groups widening over the past few decades. Average annual household income (HHI) is roughly $101,200 across all races and ethnicities. Non-Hispanic White HHI averages around $130,700 per year. HHI is significantly lower for minority group populations overall, at $85,800. SPA 5's HHI ($149,000) is well above the countywide average, and almost a third of SPA 5's population has an HHI of $150,000 or more. The HHI for SPA 5 residents overall is considerably higher than in SPA 2, which comes in a distant second at $107,000. The lowest HHI is in SPA 6 South-East ($63,200) followed by SPA 6 South-West ($66,000). SPA 6 South-West has the highest share of households earning less than $25,000 (29%) of any SPA, which is significantly higher than the Los Angeles County average of 18%.

Figure 18: Average Household Income by SPA – 2021



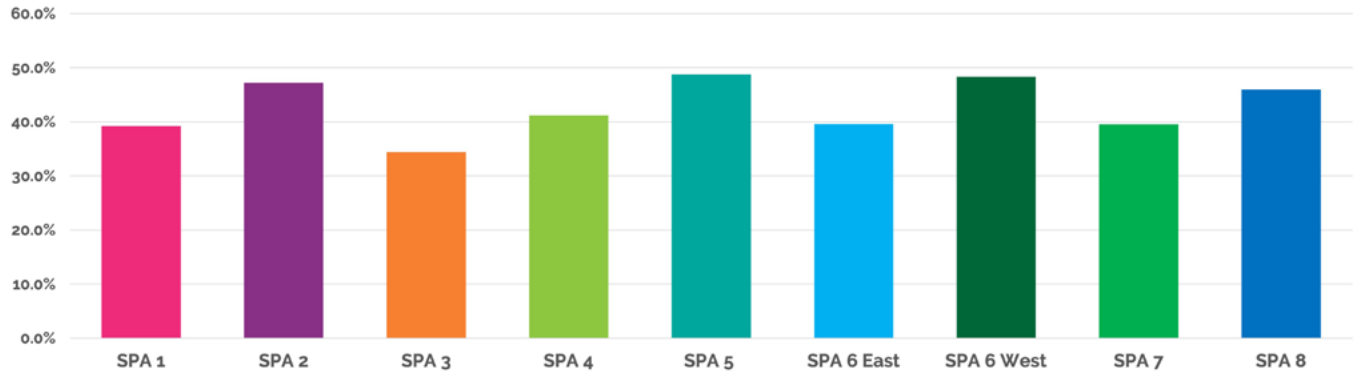
Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

Los Angeles County's average annual wage across salaried, self-employed, and gig workers is $66,200. The highest average annual wage is in SPA 5 at $75,700, in contrast to SPA 7 where the average annual wage is the lowest in the county, at $59,630. In general, higher-paying sectors across the county range from the majority blue-collar *Construction*, *Manufacturing*, and *Wholesale Trade* sectors to the majority white-collar *Information*, *Finance*, and *Professional, Scientific, and Technical Services* sectors. Residents with *Government* sector jobs also

have compensation levels higher than the countywide average. Less prosperous areas tend to have lower-paying jobs in the *Health Care and Social Assistance* and *Accommodations and Food Services* sectors.

Not only does SPA 5 have the highest average annual wages for all workers and across all sectors, but it also has the largest concentration of workers employed in higher-paying industries relative to the countywide average, at 49%. SPA 6 South-West has the second highest share, driven by a massive concentration of *Transportation and Warehousing* jobs that pay an average of over $91,000 a year — significantly higher than any other SPA for the industry. Although SPA 6 South-West is home to this high paying industry, this reflects the number of jobs in the region, not residents of SPA 6's average salaries. Additionally, in 2022 Logistics and Warehousing had huge surges in demand coming out of the pandemic and SPA 6 West was in a good position to supply those jobs. The average salary for the Transportation and Warehousing in SPA 6 West was higher than any other area in LA County – and notable higher than a lot of the most popular county industries (Leisure and Hospitality, services, etc.). The lowest share of workers employed in above-average paying industries is in SPA 3 (34.4%), followed by SPA 1 (39.2%).

Figure 19: Share of Workers Employed in Industries Paying Above-County Average Wages by SPA – 2022



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics, Quarterly Census of Employment and Wages, Nonemployer Statistics, Lightcast. Analysis by CVL Economics.

In Los Angeles County, American Indians and Alaska Natives (AI/AN) usually earn lower average wages than the rest of the population and tend to have a lower share within the highest-paying occupations. For instance, in management occupations non AI/AN workers earn an average wage of $118,834 while AI/AN earn an average wage of $84,671. . Of all AI/AN workers, only 8.3% work in management occupations; for the rest of the Los Angeles County population, the share in management occupations reaches 11.1%. In lower-paying occupations, such as office/administrative, AI/AN hold a higher share (12.4%) compared to the rest of the population (11.4%), and they get paid nearly $11,000 less, on average. Among AI/AN workers, 8.3% are employed in food preparation and serving occupations, which is higher than the 6.1% share for the rest of the population.

Table 14: Household Income Distribution by SPA, 2022

	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
25th percentile	$40,500	$40,000	$30,000	$40,000	$41,300	$42,000	$25,000	$28,800	$56,200
50th percentile	$85,000	$77,300	$69,800	$81,650	$85,000	$83,000	$53,000	$58,000	$56,200
75th percentile	$136,600	130,000	$127,000	$146,700	$150,000	$150,000	$105,000	$99,500	$224,300
Standard deviation	$93,323	$85,943	$137,269	$124,837	$134,081	$135,779	$93,457	$62,670	$217,189

Source: U.S. Census Bureau. Analysis by Beacon Economics

Broadly speaking, wages have been growing across many industries, occupations, and levels of educational attainment. However, wages have grown most for workers with some college or higher. Examining the growth of wages reveals that in the top 25 occupations, only four corresponded to a high school graduate education, and none corresponded to less than high school. For those with less than a high school diploma the highest wage growth occurred in health care office and administrative positions, which grew at a rate of 54% to around $38,000. This still leaves these residents at the lower end of the distribution, suggesting that upskilling remains an essential tool for raising incomes and improving quality of life. Upskilling through college is an opportunity that many residents can benefit from since Los Angeles has excellent community colleges and is home to many four-year colleges and universities. Upskilling through County and employer training programs also provides pathways to better incomes. Wage data reveals that several high-paying occupations for those with a high school diploma or less are in management, which tend to be skill-intensive.

Cost of Living

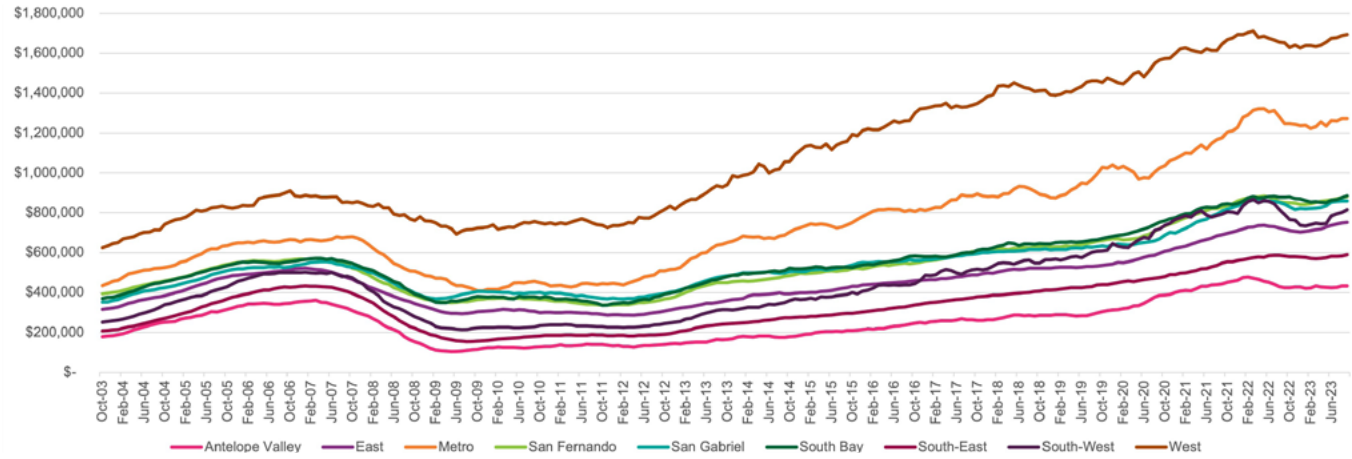
Housing Affordability

Like much of California, Los Angeles County has been experiencing a severe housing shortage and affordability crisis. As of November 2023, the County has the 4th worst home price-to-income ratio amongst over 100 qualifying U.S. metropolitan regions. Nearly every issue important to residents in Los Angeles, from homelessness to crime to education, at some level ties back to the underlying challenges associated with high housing costs. Low housing affordability and availability puts Los Angeles County at risk of misallocation of workers and reduced economic growth. It is a primary reason for the County's declining population, which further exacerbates the lack of labor supply as workers leave for more affordable locations.

The median home price continues to increase, as illustrated in the chart below. The lack of new units, especially for lower-income households, has created a tight housing market where prices have continued to rise at a rapid rate. In 2000, home values in Los Angeles County hovered around $213,000 on average. By the end of 2023, home values in Los Angeles County climbed to over an average of $890,000 (a nearly 320% increase).[16] The West SPA has the most expensive real estate in the county (and some of the most real estate in the United States), followed by the Metro SPA. High prices in these SPAs are driven by a lack of housing vacancies and new construction, which restrains the housing supply from expanding. It is also due to high housing demand in these SPAs, which boast central business districts and other amenities such as more retail options.

16 Zillow

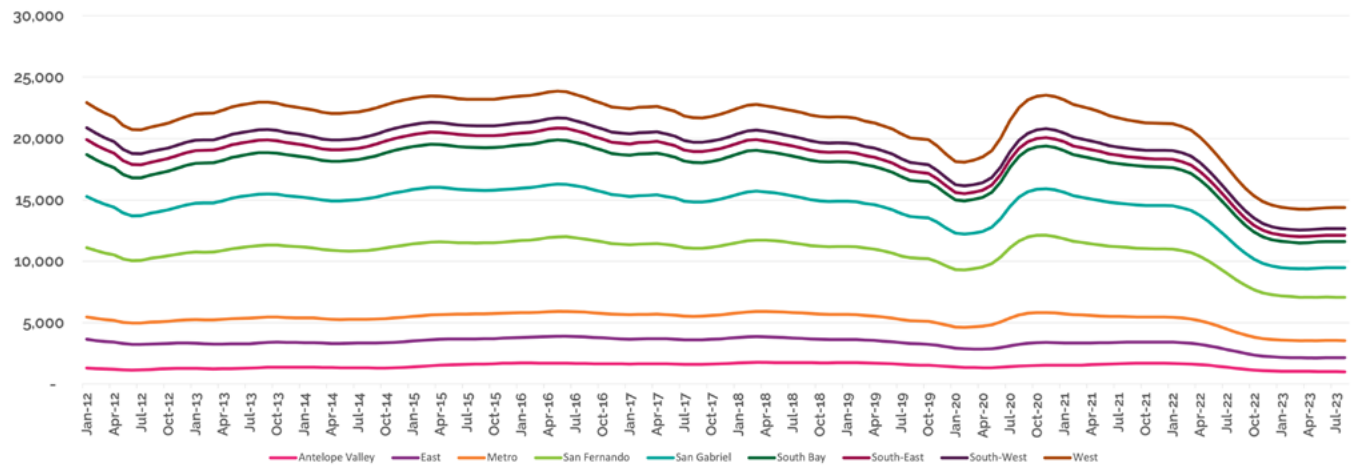
Figure 20: Median Sale Price of Homes by SPA, 2003-2023



Source: CoreLogic. Analysis by Beacon Economics

However, the entire region is experiencing excess demand for housing, which has driven home prices up across the board. Overall, the SPA 6 South-West saw the fastest increase in home prices over the last five years. This is partly because it is one of few remaining areas in the county with affordable homes and proximity to the central business district.

Figure 21: New Home Listings Across SPAs



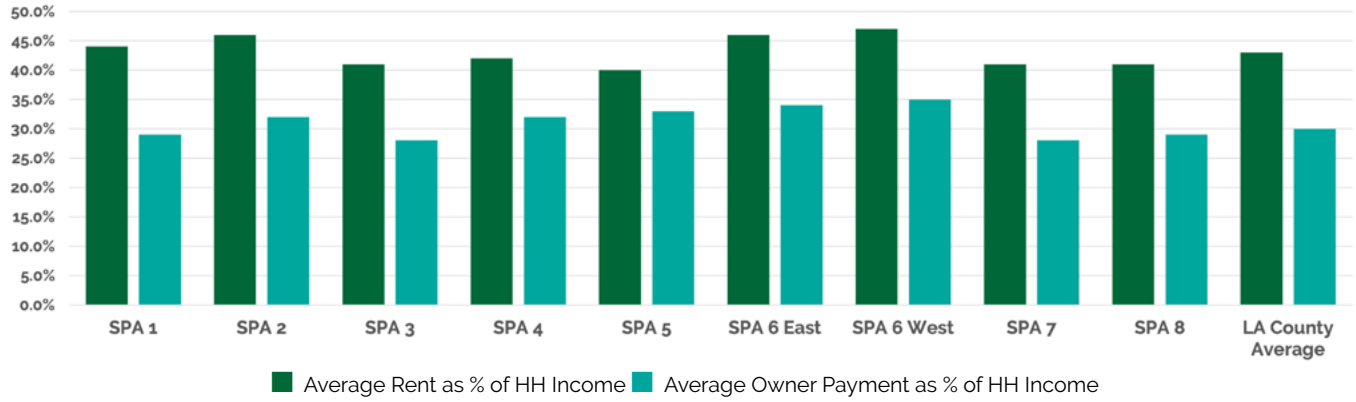
Source: CoreLogic. Analysis by Beacon Economics

The rental market has increased as well, but not to the same degree. Between 2000 and 2023, the average cost of rent for a two-bedroom apartment in Los Angeles County has increased by 82% from $1,375 to $2,500.[17] The average renter household in Los Angeles County pays nearly 43% of their household income on rent, with one quarter of households extremely rent burdened (defined as paying 50% or more of income on rent). This figure drops to 30% for homeowners with respect to mortgage payments. Households in SPA 6 South-West pay the largest share of household income for both rent and homeowner costs at 47.4% and 35%, respectively. Households in SPA 6 South-East also have higher-than-average housing costs; rent as a share of household income is 46.0% (which falls just behind SPA 2's share at 46.2%) and homeowner costs as a share of household

17 CoStar

income is 33.6%. SPA 5 has the lowest figure of rent as a share of household income, with households on average paying 40.1% towards housing costs. The lowest homeowner costs as a share of household income are in SPA 7, with households paying just under 28% for owner-related housing costs.

Figure 22: Rent and HomeOwner Costs as a Percent of Household Income by SPA – 2021



Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

Wages and earnings have not kept pace with rising housing costs, leaving many households cost-burdened. The share of households that are cost-burdened (i.e., with housing costs greater than 30% of household income) has declined since 2012. Still, some SPAs have a significantly high percentage of cost-burdened households. In Metro, for instance, 49% of households are cost burdened. The SPA 6 South-West and South-East both surpass 50%, although they have seen the greatest percentage decline since 2012. This is partly due to rising household incomes, but also due to housing turnover as some low-income households move out of the county and are replaced by higher-income households.

Compared to other metro areas, Los Angeles County has added the fewest units since 2010, both in absolute terms and as a percentage of total units. Los Angeles County most closely resembles the Chicago metro area, although it has added a higher concentration of multifamily units. The Sunbelt metros of Atlanta, Dallas, Houston, and Phoenix have all added high volumes of new housing since 2010, with more than 60% of them being single-family units, reflective of the available land for such construction and local preferences. As Los Angeles County lacks comparable undeveloped land, its construction opportunities are more limited. Los Angeles' lack of housing construction has also aggravated many of the local affordability and overcrowding issues. This makes it difficult for people to live near their workplace, meaning many people are forced to live farther away from their workplace and commute.

Commute Times

Los Angeles County is notorious for its traffic, especially during morning and evening rush hour. In recent years, drivers in Los Angeles spent more time in traffic than almost any other major city in the world. The average work commute time for Los Angeles County is 31.3 minutes. Almost 50% of workers in Los Angeles County have a commute time of less than 30 minutes, 25.9% of workers commute for 30 to 45 minutes, and 25% of workers commute for 45 minutes or longer. Long commute times have both monetary costs and physical and mental health costs to individuals. Not only can longer commute times have adverse effects on a worker's mental and physical health, but they can also potentially end up making a sizable dent in their transportation costs when factoring in public transit fares, gas, tolls, and parking fees. People with longer commutes tend to spend more money on gas and have less time for leisure or work activities. Traffic and long commutes also may cause stress and adverse health effects from remaining sedentary for a longer portion of the day.

Long commute times may also be a financial barrier to employment for people who cannot afford childcare or gas and vehicle expenses. On a neighborhood level, longer commute times could indicate a lack of access to local employment and suggest that residents are not being adequately served by or integrated with the local economy. As the metropolitan Los Angeles area has continued to grow in sprawl, some are forced to live farther away from economic centers in order to afford housing.[18]

The longest commute times for workers are for SPA 1 residents, who spend an average of 35.2 minutes traveling to work. This is likely due to the fact that a large number of residents likely work in job centers located in other SPAs. Approximately 29% of SPA 1 residents have commute time longer than one hour, which is the largest share by far of any SPA. SPA 5 residents face less travel time to the office, averaging 27.8 minutes per worker. Only 6% of SPA 5 residents require more than an hour to commute to work.

Figure 23: Average Commute Times by SPA – 2021

Source: 2021 5-Year Public Use Microdata Sample American Community Survey. Analysis by CVL Economics.

Economic Shock: The COVID-19 Pandemic

The Los Angeles region's consistent economic performance over the previous decade reversed quickly and significantly after the pandemic struck in March of 2020. As a result, the flow of economic activity was stanched seemingly overnight across many industries. COVID-19 only increased the severity of pre-existing challenges and inequities in Los Angeles County. Low-income workers experienced job loss at disproportionately high rates, small businesses were closing at higher levels due to drastically decreased revenues and low levels of liquidity; and non-essential service industries that rely on person-to-person interaction were faring worse than essential industries and knowledge-based industries which were able to transition to remote work. Women left the labor force at a higher rate and minorities were disproportionately impacted by the virus in terms of cases, deaths, job loss, and business insolvencies, as many small business owners in underinvested communities suffered what may be unrecoverable losses.

The structure of the Los Angeles County economy is characterized by a relatively high prevalence of the types of industries (and their accompanying workforce) that were most hard-hit by the pandemic. These industries require a high degree of in-person interaction, and include sectors focused on entertainment, particularly the film and television industry, and the types of businesses that cater to tourists such as restaurants and hotels. Additionally, 88% of employer firms in Los Angeles County are truly small, having fewer than 20 employees.[19] As a result, Los Angeles County was particularly hard-hit compared to California or the nation as a whole.

18 https://la.myneighborhooddata.org/2021/06/commute-time/
19 https://www.neilsberg.com/insights/number-of-small-businesses-in-los-angeles-county-ca/#1-19-employees

The hardest hit industries that suffered the most job losses in Los Angeles County during the pandemic include: hospitality (accommodation and food services and drinking places); arts, entertainment, and recreation; non-essential retail; personal care and laundry services; and motion picture and sound recording. Low wage workers are very prevalent in all of these hardest hit industries listed with the exception of the motion picture and sound recording industry; low wage workers account for a much smaller share of jobs in that industry, but many businesses in the motion picture and sound recording industry's supply chain are small and struggled while production levels remained low. These businesses include craft services, trailer rentals, stage and costume rentals, special effects makeup artists, and more. In addition to employing significant numbers of low wage workers, the hardest hit services industries listed employed large numbers of young workers, women, and people of color. Just prior to the pandemic, almost half of all hospitality workers were Latino/a; more than 40% of arts, entertainment, and recreation workers were under the age of 35; nearly 47% of workers in non-essential retail were Latino/a; almost a quarter of all workers in personal care and laundry services were Asian (compared to 16% across all industries); and, nearly 60% of the industry's workforce were female.

It has become clear that the pandemic has triggered long lasting changes within industries, and accelerated changes that have been taking place over time. Los Angeles County has a number of traded and local-serving industry clusters in which we have a demonstrated competitive advantage. The largest traded clusters by employment include business services, distribution and e-commerce, video production and distribution, hospitality and tourism, education and knowledge creation, and transportation and logistics; while the largest local serving industry clusters include health services and hospitality establishments. There are multiple economy-wide shifts that were taking place prior to COVID-19 that have been accelerated, including remote work effects and their associated economy-wide consequences, increased digitization of service provision, labor market supply shifts, and the shift towards e-commerce.

Housing demand during the pandemic increased for a variety of reasons, including increased cash balances for down payments, low mortgage interest rates, and remote work effects. That being said, this increase in home values also reflects a long term trend, and although home value increases are expected to slow in the near future, we expect the trend to continue unless there is a substantial housing supply increase or an economic shock that serves to significantly decrease demand for homes. Median home prices and median rents rose as housing demand increased, exacerbating the degree of rent burden that residents of the county face.

The COVID-19 pandemic also revealed disparities in the digital divide, which puts up barriers to schooling from home, working from home, attending telehealth appointments, and many other facets of life. In Los Angeles County, the digital divide disproportionately impacts residents in the historical underserved neighborhoods of South and East LA, where there are fewer internet service providers, lower broadband adoption rates, and less fiber infrastructure. Across California, the demographic groups that have been most affected are low-income households, Latino households, and those with a disability.

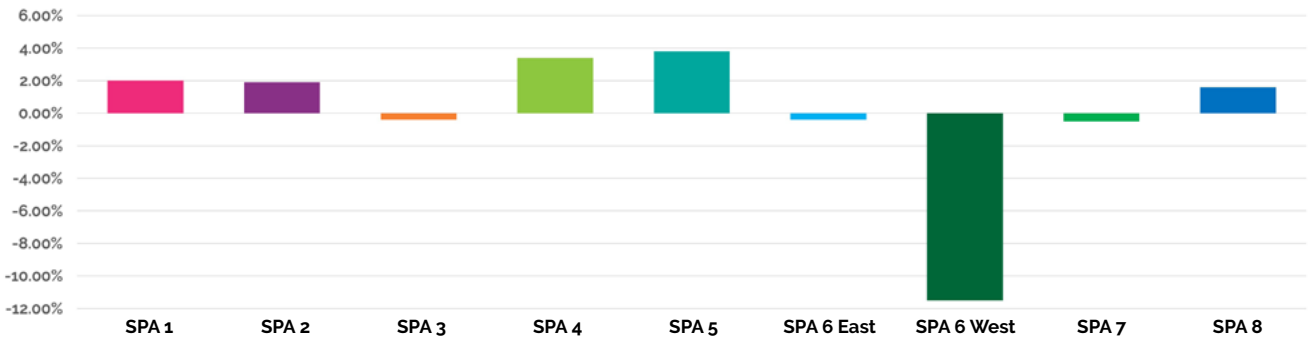
Economic Shock: The Great Recession

The ability for a regional economy to bounce back from an economic downturn is critical for household income, employment, and price stability. Over the last two decades, the recession prompted by the twin shocks of the 2006 collapse of the housing market and the 2007-08 global financial crisis as well as the pandemic-induced recession have provided two very different pictures of what economic resilience (or lack thereof) looks like. For Los Angeles County, the recovery following the Great Recession was particularly slow, with total employment not fully rebounding from the effects of the financial crisis until roughly four years later. By comparison, the V-shaped recovery from the 2020 recession, while even, surpassed most early projections.

Regions with strong foundations, including business density, and populations with higher educational attainment, were able to recover more quickly. SPA 5 experienced a rapid recovery following the Great

Recession with total employment growth between 2008 and 2012 at 3.7%, vastly outpacing the countywide average of 1.3%; employment growth in the region was largely driven by the *Education*, *Health Care*, *Information* and *Finance and Insurance* sectors. SPA 4 also had considerably strong recovery and saw total employment increase by 3.3% between 2008 and 2012. Industries that propelled SPA 4's growth included the *Education*, *Administrative Support*, and *Arts, Entertainment and Recreation* sectors. The Great Recession cast a longer shadow over SPA 6 South-West. By 2012, total employment in the region was still down by over 11%. Large job losses in the *Education*, *Government*, and *Information* sector were a significant constraint on growth. In fact, employment among salaried workers in SPA 6 South-West never fully recovered. In 2008, SPA 6 South-West had a total of 91,900 salaried workers; in 2019, the peak of a 10-year expansion nationwide, only 80,600 jobs had come back online.

Figure 24: Employment Growth Rate by SPA – 2008 to 2012



Source: U.S. Bureau of Labor Statistics, Current Employment Statistics, Quarterly Census of Employment and Wages, Nonemployer Statistics, Lightcast. Analysis by CVL Economics.

Economic Shock: Inflation

In 2022, inflation reached levels not seen in decades. Demand-stimulating federal fiscal and monetary policy and behavioral changes in consumption combined with global production shortfalls have led to supply chain issues and rising price levels. Higher rates of inflation redistribute wealth in a disruptive way: they reduce wages in real terms for all earners, but disproportionately impact lower-income households who have less disposable income. With a higher percentage of their income spent on basic necessities, these households cannot offset rising prices by shifting discretionary spending as higher-income households are able to do. Fortunately, the high inflation rates we saw in 2022 have come down in 2024 to 3.2%.[20] However, the cost of living continues to increase in Los Angeles. Nationally, the Consumer Price Index (CPI), a measure of economy-wide inflation, increased 0.6% from January 2024 to February 2024 and was up 3.2% from February 2023.

Food, in particular, is seeing continued increases in cost, which is increasing food insecurity in Los Angeles County. A University of Southern California study revealed that food insecurity increased in 2023, with 30% of households experiencing food insecurity. This is an increase of 6% from 2022, when rates were 24%.[21] According to the USDA, in 2024, food-at-home prices are predicted to increase 1.6%, and food-away-from-home prices are predicted to increase 4.1%.[22]

20 https://www.usinflationcalculator.com/inflation/current-inflation-rates/
21 https://publicexchange.usc.edu/wp-content/uploads/2023/09/FoodInsecurityinLACounty_ResearchBrief_July2023_Final.pdf
22 https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/

Climate and Environmental Impact

Climate Impact on the Economy

Climate change has potential to do significant economic harm, and poses worrying tail risks. Climate change will have both direct and indirect effects on many industries and industry clusters in the region. For example, direct climate change effects on the transportation system in Southern California may include infrastructure damage, changes to vehicles, and system use. Indirect effects of climate impacts may change trade flows, land use patterns, transportation energy supply and demand, and the institutions, laws, and policies which shape the transportation system. All of this will have a significant impact on the availability of new jobs in the green economy.

Additionally, climate will impact non-White businesses and business owners at a higher rate than White-owned businesses. A recent study conducted by the UCLA Center for Neighborhood Knowledge (CNK) and the UCLA Latino Policy and Politics Institute (LPPI) found that climate has a profound impact on small ethnic-owned businesses (EOBs), which are a vital part of Los Angeles' business sector and form the backbone of our economy.[23] These findings include:

- Almost a third of small EOBs are energy burdened and struggle to pay their utility bills.
- Over half of EOBs reported having already been hurt by climate change, and nearly half expect negative impacts in their future.
- Less than a quarter of EOBs in the Los Angeles region have a sustainability plan in place.
- The priority needs for small EOBs to transition to 100% renewable energy are payment programs to fund upgrades to existing equipment, multilingual educational materials to understand how their business can transition, and new energy efficiency equipment.
- African American/Black and home - based businesses face more challenges in paying their utility bills than other racial/ethnic groups and storefront businesses.
- Businesses in low wage industries felt that climate change will have a negative impact on their businesses, and storefront businesses were more likely to anticipate both positive and negative impacts due to climate change.

CalEnviroScreen 4.0 is the latest version of the California Communities Environmental Health Screening Tool, developed by the Office of Environmental Health Hazard Assessment (OEHHA). The CalEnviroScreen calculates a component score by combining pollution burden and population characteristics.[24] A higher component score indicates an elevated bad level of environmental and/or socioeconomic factors within a census tract. The areas with the highest component scores, SPA 6 South-East, SPA 6 South-West, SPA 7 East, and SPA 4 Metro, have remained unchanged from 2012 to 2021. It is worth noting SPA 6 South-East and South-West are at the 96th and 86th percentile respectively, when compared to the rest of the State, meaning these regions have some of the worst CalEnviroScreen scores of anywhere in California.

23 https://escholarship.org/uc/item/1jt7r0d0

24 Environmental Effects components signify the existence of pollutants within a community rather than the actual exposure to them. The CalEnviroScreen 4.0 scoring system assigns Exposures component (e.g. Ozone Concentrations, PM2.5 Concentrations, Diesel PM Emissions, Drinking Water Contaminants, Children's Lead Risk from Housing, Traffic Impacts) twice the weight as Environmental effects(e.g. Ground Water Threats, Hazardous Waste, Solid Waste Sites and Facilities, Impaired Water Bodies, Clean-up Sites), specifically, Environmental Effects components signify the existence of pollutants within a community rather than the actual exposure to them)

Table 15: CalEnviroScreen 4.0 Component Score by SPA, 2021

SPA	CalEnviroScreen 4.0 Component Score	Average Component Score Percentile (Within California)
South-East	62.5	95.5
South-West	50.1	86.3
East	43.9	76.1
Metro	41.8	73.7
San Gabriel	34.7	59.0
San Fernando	34.1	60.7
South Bay	33.2	59.5
Antelope Valley	27.8	51.9
West	20.4	38.1

Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

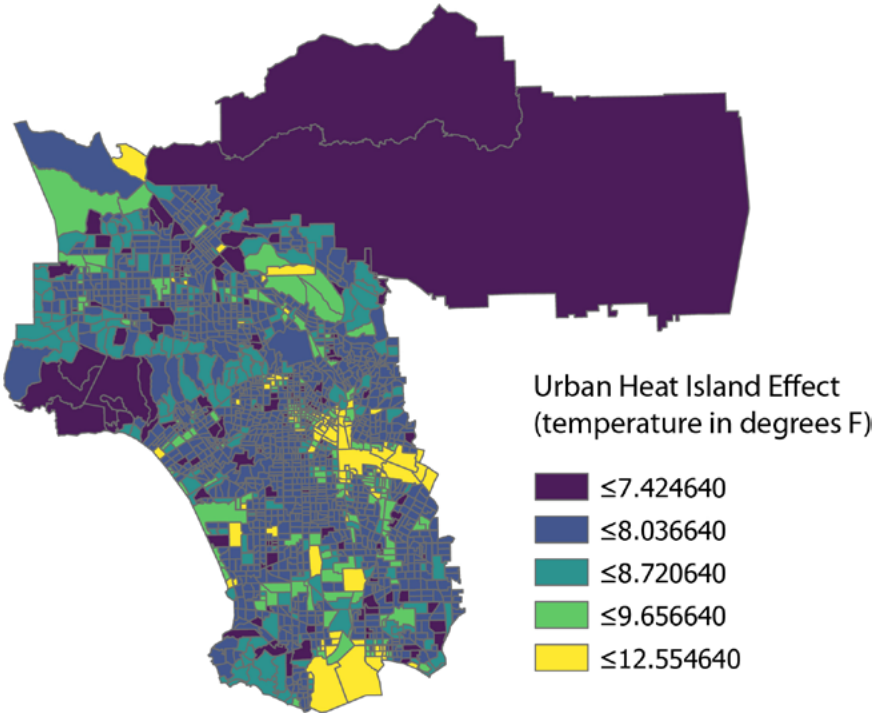
Heat

Warming is expected to increase across the LA region in the coming decades (Cayan et al. 2008; Horton et al. 2015; Swain et al. 2016; Maurer 2007; Hayhoe et al. 2004; Sun, Walton, and Hall 2015). The number of extreme heat days in southern California is expected to increase considerably by the middle of the 21st century as a result of climate change. Elements of the built environment contribute to heat-related health impacts. Specifically, high concentrations of impervious surfaces such as pavements and roofs and minimal tree canopy and green space create "urban heat islands" (UHI) in heavily urbanized areas. There are approximately three million people in Los Angeles living in a census tract with more than 8˚F Fahrenheit UHI effect —meaning that people in those census tracts feel at least 8˚F more heat because of the urban environment. UHI in non-tropical regions experience temperatures up to 5.4˚F hotter than surrounding rural areas (Taha 2015a), an effect that increases in magnitude during heat waves (Zhao et al. 2018).

Vulnerable populations, such as those with limited access to air conditioning, outdoor workers, and individuals of lower socioeconomic status are disproportionately affected by the UHI effect. The average UHI effect in Los Angeles County is 8.04˚F, 10% higher than the national average UHI effect of 7.3˚F. Among the SPAs, the East, Metro, and South Bay exhibit lower tree canopy occupancy rates, consistently averaging 10% below the county-wide average. Consequently, these SPAs experience higher temperatures due to their lower tree canopy occupancy rates.

SPAs with high urban heat island effect (East, Metro, South Bay, and West) have relatively higher median incomes, averaging $77,871. SPAs with low urban heat island effect show lower median incomes, with an average of $64,972. In a study across 20 southwestern U.S. metro areas, UC Davis researchers found that, in extremely hot weather, California's poorest neighborhoods were almost five degrees hotter than its wealthiest

ones. The temperature difference was more pronounced in heavily Latino neighborhoods, reaching 6.7 degrees higher than areas with fewer Latino residents.[25]



Vulnerable communities are exposed more often to harmful environmental conditions, such as polluted air, water sources, landscapes, and heat stress. These include low-income communities and communities of color, which often experience a greater urban heat island effect due to a lack of trees and other vegetation, and which have lower access to air conditioning (Reid et al. 2009a); older adults, young children, people with chronic medical conditions, and people taking certain medications, who are physiologically vulnerable to the effects of heat (Kenny et al. 2010; Reid et al. 2009a; Tsuzuki-Hayakawa, Tochihara, and Ohnaka 1995); outdoor workers (Bethel and Harger 2014); and people experiencing homelessness (Harlan et al. 2013).

Unfortunately, the housing stock in LA is not designed for extreme heat. Approximately 51% of households in Los Angeles County have central air conditioning (American Housing Survey 2015). While California code requires that landlords provide adequate heating facilities in homes, air conditioning is not a requirement. Moreover, the LA region's affordable housing crisis may prevent many renters from being able to move to air-conditioned homes where they would be less impacted by heat. Access to air-conditioned spaces may be additionally limited by factors such as mobility, vehicle ownership, perceptions of neighborhood safety, and distance to transit. These factors can prevent vulnerable populations from implementing adaptive and health protective strategies, such as getting to cooling centers or other air-conditioned locations.

Air Quality

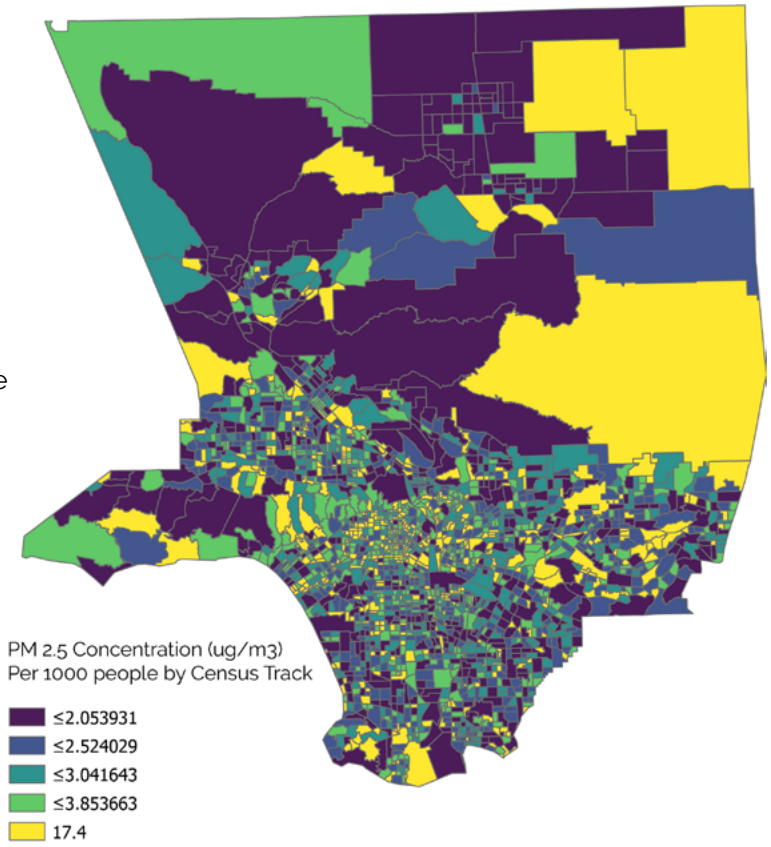
Los Angeles County already has some of the worst air quality in the country, ranking as the most polluted region in the United States for ozone and among the top 10 most polluted regions for year-round and short-term particle pollution (American Lung Association 2017). Los Angeles County suffers from a disproportionate amount of air pollution and smog — exacerbated by the millions of gas-powered vehicles on the road each day and the prevalence of wildfires — relative to the rest of the country. While air quality in the region has improved in recent decades, climate change threatens to reverse this trend. Recent data illustrates this point. According to the Los Angeles County OurCounty report:

25 Dialesandro, J., Brazil, N., Wheeler, S., & Abunnasr, Y. (2021). Dimensions of Thermal Inequity: Neighborhood Social Demographics and Urban Heat in the South-Western U.S. International Journal of Environmental Research and Public Health, 18(3), 941.139 https://doi.org/10.3390/ijerph18030941

- The prevalence of childhood asthma was 7.5% in 2015.
- There were an estimated 1,031 tons of diesel PM10 emissions and 682 tons of diesel PM2.5 emissions in 2017.
- Disadvantaged communities in LA County had an average toxicity-weighted concentration of emissions of 6,364 µg/m3 in 2011-2013.
- On average, monitored sites in LA County exceeded the Federal and State 8-hour ozone standard (0.70 ppm) on 25 days in 2017.[26]

Using a historical multi-year average, Los Angeles County has been recorded to have pollutant levels, measured by fine particulate matter (PM2.5), of approximately 11.7 micrograms per cubic meter of air (µg/m3), just under the recommended levels of 12 µg/m3 that denote little risk of exposure. Five of the eight SPAs have PM2.5 readings between 11.8 and 12.1 µg/m3. SPA 1 has the cleanest air, with pollutant levels at 7.5 µg/m3. By contrast, SPA 6 East and SPA 3 have the poorest air quality, each with pollutant levels at 12.1 µg/m3 (or just above the recommended threshold). [27]

Transportation accounted for 37% of California's greenhouse gas (GHG) emissions in 2020, making it the state's largest energy-consuming and GHG-emitting sector. Vehicle exhaust contains toxic chemicals such as nitrogen oxides, carbon monoxide, and benzene, which are harmful to health. SPA 6 South-West has the highest traffic impact score of 1,755.5 vehicle km/h per km of road, compared to 670.3 in Antelope Valley. San Fernando and Metro exhibit consistent positive changes from 2004 to 2017, suggesting an increase in traffic density, while SPA 6 shows a continuous improvement from 2013 to 2017.[28]



26 https://ourcountyla.lacounty.gov/wp-content/uploads/2019/07/OurCounty-Final-Plan.pdf
27 Office on Environmental Health Hazard Assessment
28 CalEnviroScreen 4.0

Table 16: Changes in Traffic Impact Across SPAs, 2004-2017

SPA	2017 Annual Traffic Impact (vehicle-km/h per km of road)	2004-17 Change (%)	2013-17 Change (%)
Antelope Valley	670.3	23.3	35.5
East	1393.5	-3.1	22.6
South Bay	1233.1	-0.9	18.6
San Fernando	1566.2	1.2	12.7
San Gabriel	1245.7	-18.1	11.1
Metro	1649.1	5	5.7
West	1518.3	-2.7	0.5
South-East	1518.5	-9.3	-4.6
South-West	1755.5	-15.4	-5.8

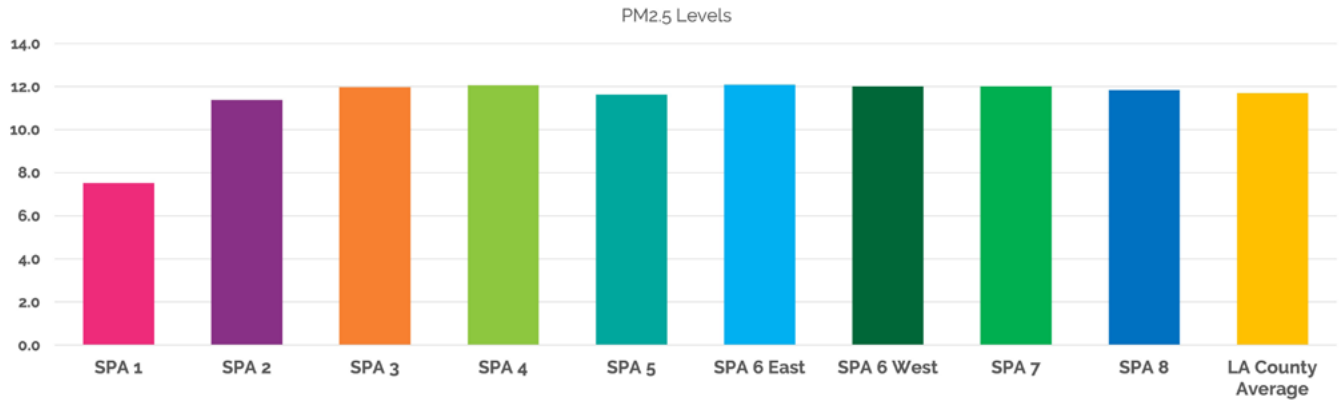
Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

Metro SPA has the highest diesel PM emissions with a value of 0.40 (tons/year). Metro also has the region's highest population density, ranging from 30,000 to 150,000 persons per square kilometer. SPAs with high diesel emissions (East, Metro, South Bay, and West) have relatively low median incomes, averaging $64,298. In contrast, communities with low diesel emissions show higher median incomes, with an average of $84,252. Census tracts along highways experience higher concentrations and greater growth in diesel PM emissions compared to other areas. These census tracts are in South-West, South-East, South Bay, and Metro SPAs.[29]

Despite a persistent growth in population, implemented reductions in emissions have significantly improved air quality in Los Angeles in the past few years, with average levels of PM2.5 (inhalable particle matters with diameters less than 2.5 micrometers) dropping below the threshold of risk. The best levels of air quality in Los Angeles are in the northern parts of the county, with SPA 1 and SPA 2 having the lowest levels of PM2.5. Neighborhoods in South Los Angeles suffer from the highest level of air pollution: SPA 6 South-East has a PM2.5 of 12.1µg/m3, which is just over the 12.0µg/m3 recommended levels. Additionally, elevated levels of ozone concentration are particularly notable in northern Los Angeles County, especially in the San Fernando and Antelope Valley SPAs.

29 Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics

Figure 25: Pm2.5 levels by SPA – 2015 to 2017 average



Source: California Office of Environmental Health Hazard Assessment. Analysis by CVL Economics.

Table 17: Changes in Traffic Impact Across Services Planning Areas, 2004-2017

SPA	2017 Annual Traffic Impact (vehicle-km/h per km of road)	2004-17 Percent Change (%)	2013-17 Percent Change (%)
SPA 1 – Anteloipe Valley	670 .3	23 .3	35.5
SPA 7 – East	1,393 .5	-3.1	22.6
SPA 8 – South Bay	1,233 .1	-0 .9	18.6
SPA 2 – San Fernando	1,566 .2	1.2	12.7
SPA 3 – San Gabriel	1,245 .7	-18.1	11.1
SPA 4 – Metro	1,649 .1	5.0	5.7
SPA 5 – West	1,518 .3	-2.7	0,5
SPA 6 – South-East	1,518 .5	-9.3	-4.6
SPA 6 – South-West	1,755 .5	-15.4	-5.8

Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

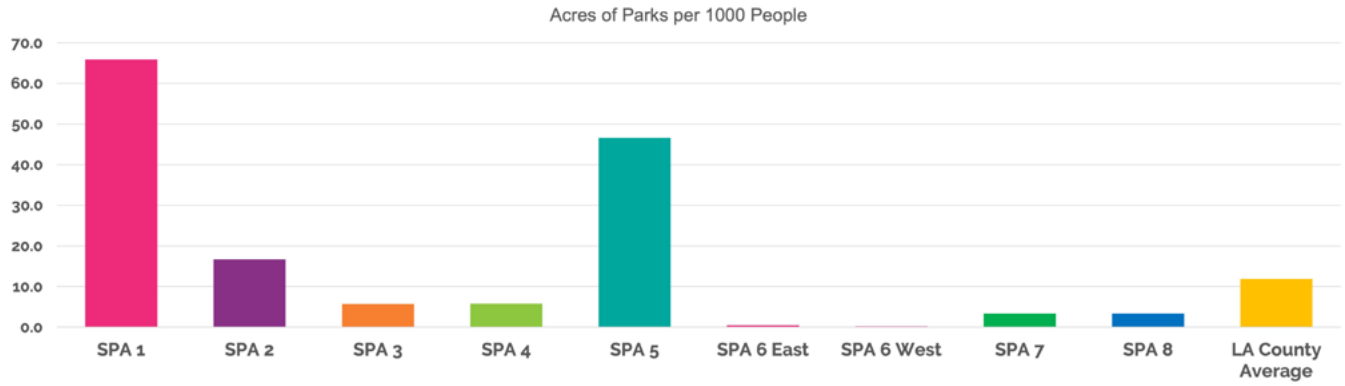
Green Space

Green space such as parks, community gardens, and other areas featuring natural amenities are important for not just quality of life but community health and climate mitigation as well. Areas that offer more green space tend to have residents who enjoy better physical and mental health outcomes and have lower levels of air pollution, noise sensitivity, and heat island effects.[30] SPAs in central Los Angeles and heavily urbanized areas are less likely to have green spaces. These also tend to be areas with lower-income households and higher shares of disadvantaged communities. Not surprisingly, SPA 6 South-East and South-West also have significantly lower accessibility to green spaces – at 0.5 and 0.2 acres per 1,000 people, respectively. These measures fall

30 Jeffrey Wilson and Xiao Xiao, "The Economic Value of Health Benefits Associated with Urban Park Investment," *International Journal of Environmental Research and Public Health*, March 9, 2023, 20(6):4815. doi:10.3390/ijerph20064815. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10049315/pdf/ijerph-20-04815.pdf

considerably short of the countywide average of 11.9 acres per 1,000 residents. Access to ample natural spaces and parks are predominantly found in SPA 1 (65.9 acres per 1,000 people), SPA 5 (46.6 acres per 1,000 people) and SPA 2 (16.7 acres per 1,000 people). Given its low population density, SPA 1 heavily drives up the county average with roughly 65.9 acres of green space per 1,000 residents, followed by SPA 5 (46.6) and SPA 2 (16.7). SPA 5 residents benefit from living near or in close proximity to the coastline, which provides easy access to public beaches and walkways. Access to natural spaces and green spaces improves air quality, and must be a component of economic development activities in regions with less access to green space.

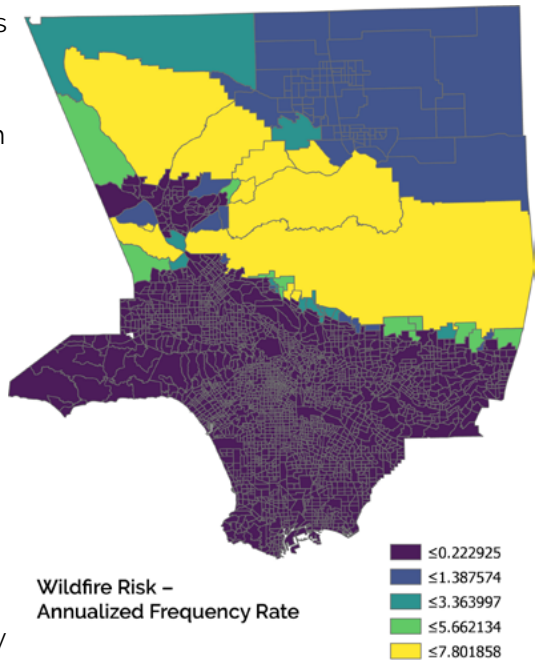
Figure 26: Acres of Green Space per 1,000 People by SPA – 2022



Source: Los Angeles County, Countywide Parks and Open Space. Analysis by CVL Economics.

Extreme Weather

Los Angeles County is prone to severe climate and environmental ris have a significant economic impact on the region. The frequency and severity of wildfire events is increasing by the decade across California. Between 1979 and 1988, a total of 2,413 fires occurred with total acreage burned at roughly 3.37 million. Between 2009 and 2018, this had gone up to 3,356 fires and a total of 7.08 million acres – more than double the damage just 30 years prior.[31] In 2020, emissions from California wildfires reached 127.7 million metric tons of CO2 equivalent (MMTCO2e),[32] surpassing all economic sectors except transportation. The economic impact of wildfires in 2020 amounted to over $19 billion in losses.[33]

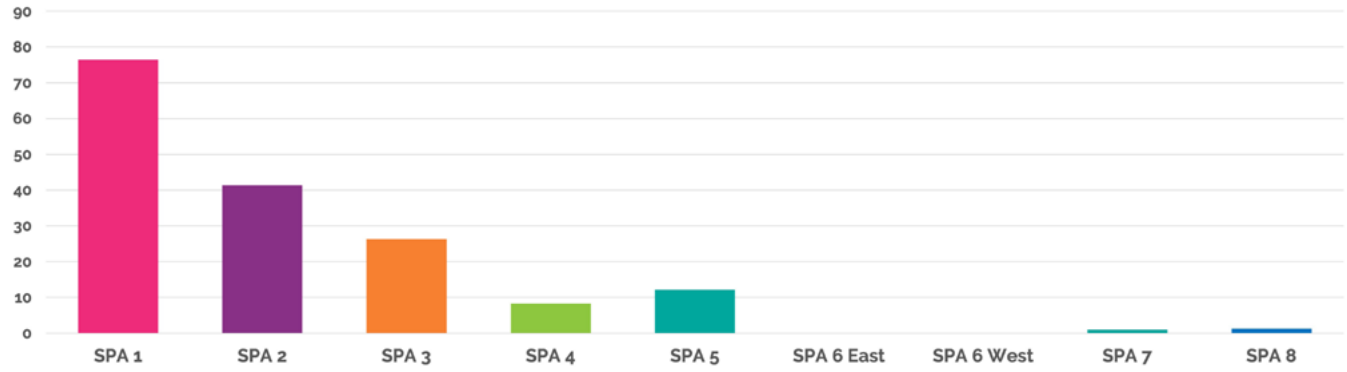


Approximately 18.7% of Los Angeles's properties are at risk of wildfire exposure, a measure determined by estimating the impact of vulnerable structures in high-risk areas over the next 30 years. Areas located in and around South Los Angeles (such as SPA 6, SPA 7, and SPA 8) have little to no wildfire risk. Conversely, SPA 1 (which includes Antelope Valley and surrounding regions) is in an especially high-risk zone. An astonishing 76% of SPA 1 properties are at some

31 Hannah Buechi, Dick Cameron, Sarah Heard, Andrew J. Plantinga, Paige Weber. "Long-term trends in wildfire damages in California". *Environmental Markers Lab.* 2019. https://emlab.ucsb.edu/sites/default/files/documents/wildfire-brief.pdf
32 California Air Resources Board.
33 Retrieved from: https://www.latimes.com/environment/story/2022-08-29/forests-wildfires-california-climate-plan

risk of wildfire exposure over the next 30 years – far above any other SPA in Los Angeles. The San Fernando SPA is the most susceptible to wildfire risk based on annualized frequency, with 41% of properties at risk. SPA 6 South-West and South-East have the lowest frequencies of wildfires.

Figure 27: Share of Properties at Risk of Wildfire Exposure in the Next 30 Years by SPA – 2022



Source: 2022 Climate Risk Data Access, Council on Environmental Justice. Analysis by CVL Economics

In addition to wildfires, certain parts of Los Angeles County are at risk of flood damage. The largest area at risk for flooding is in SPA 5, where 20% of SPA 5 properties are at risk, defined as an annualized 1% chance of flood damage over the next thirty years. SPA 2 is also at a higher risk compared to the county, with about 17.7% of properties at risk over the next thirty years. For context, the countywide share of properties at risk of flooding damage over the same period is estimated at just under 15%. SPA 1 faces the lowest flood risk since the Antelope Valley on average, recording much lower rainfall levels compared to the countywide average.

Figure 28: Share of Properties at Risk of Flooding in the Next 30 Years by SPA – 2022

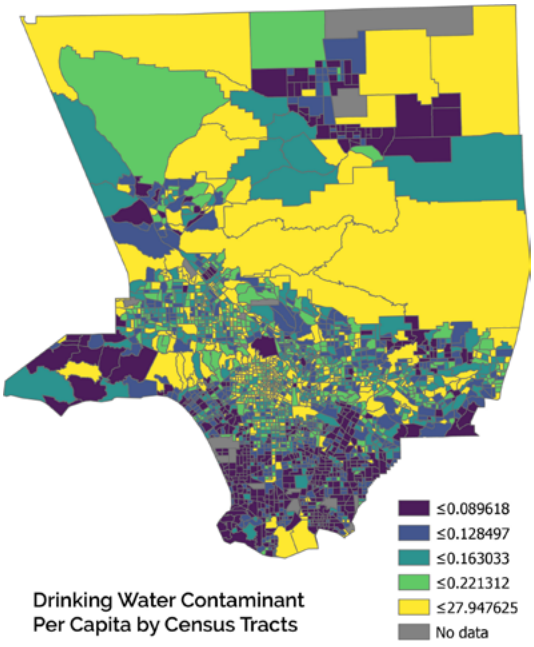
Source: 2022 Climate Risk Data Access, Council on Environmental Justice. Analysis by CVL Economics.

Drinking Water

In addition to air quality, another important measure of environmental quality and economic well being is the extent of water contamination present at the community level. The Office of Environmental Health Hazard Assessment uses a weighted measurement that aggregates the overall levels of contaminants in drinking

water.[34] Five of the eight SPAs scored in the 40th percentile or higher when it came to clean drinking water, meaning the census tracts in each of these SPAs fared better than at least 40% of census tracts statewide.

The highest levels of contaminants were in SPA 6 South-West and SPA 4 — these two SPAs were the only in the region to score in the 20th percentile, meaning the water in these areas had higher levels of water contaminants than 80% of all census tracts in California. As with PM2.5 measurements, SPAs with higher levels of drinking water contaminants tend to be areas with a higher share of disadvantaged communities, such as SPA 6 and SPA 3.



Drinking Water Contaminant Per Capita by Census Tracts

Table 18: Weighted Scores of Drinking Water Contaminants 2011 to 2019 Weighted Averages

Spa	Drinking Water Contaminant Score	Percentile
1	427	50th
2	704	30th
3	696	30th
4	738	20th
5	476	50th
6 East	626	40th
6 West	739	20th
7	539	40th
8	356	70th

Source: Office of Environmental Health Hazard Assessment. Analysis by CVL Economics.

Public Health Analysis

The combination of climate change and our existing infrastructure challenges are significantly impacting the region's public health. The health impacts of climate change are far-reaching, including direct and indirect impacts related to extreme heat, poor air quality, wildfires, infectious diseases, floods, and mudslides. While some populations will be more severely affected than others, everyone in the Los Angeles region will be impacted. In this section, we discuss the region's health disparities across SPAs and the influences causing these disparities.

34 This measure simply tracks the levels of contaminants, and not necessarily their impact on health. An area with higher levels of contaminants does not necessarily mean health is going to be impacted negatively at a greater rate than other areas.

Health Disparities

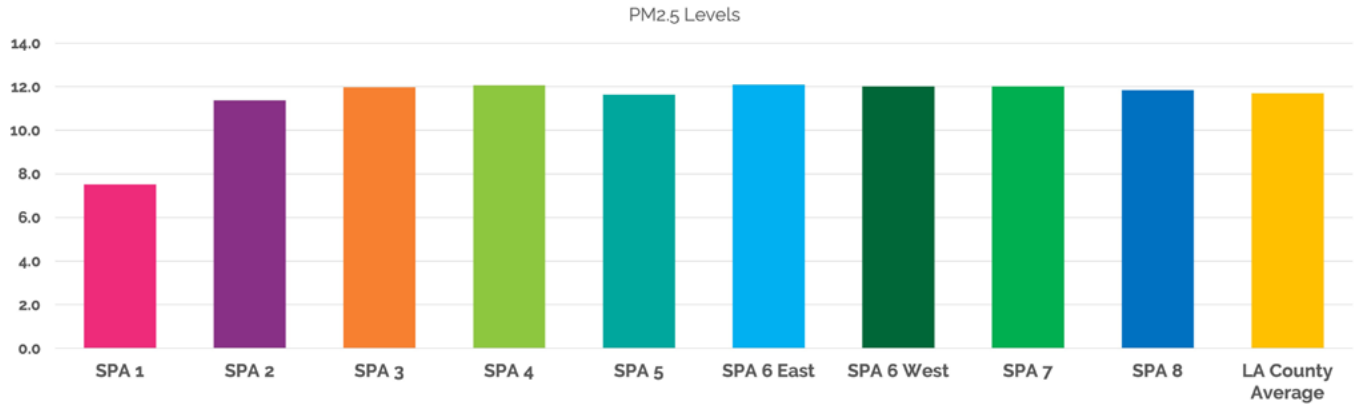
Health disparities are acute across the County and tend to reflect disadvantaged communities. SPA 6 South-East and SPA 6 South-West have 94% and 82% of their populations, respectively, living in disadvantaged communities. Social infrastructure (such as K-12 education, health services, and emergency services) in these disadvantaged communities remains poorer compared to other SPA areas. On the other end of the spectrum, only 6% of SPA 5 residents live in disadvantaged census tracts, and therefore show better health outcomes comparatively. SPA 6 South-East and South-West face dual challenges with the highest percentages in both environmental (71.4% and 64.0%, respectively) and economic (45.5% and 38.8%, respectively) disadvantaged categories. Notably, the East and Metro SPAs both have a 45.5% environmental disadvantage, while the South Bay and San Fernando exhibit comparable economic challenges at 14.7%. These ties underscore the need for targeted strategies to address both environmental and economic disparities in these regions, emphasizing the importance of equitable resource allocation. South-East has the highest three-year average PM2.5 concentration and annual average traffic Impacts.

Disadvantaged communities often face challenges related to inadequate infrastructure. These include poor road conditions, limited access to public transport, insufficient health care facilities, and a lack of essential services like clean water and sanitation. Residents in low-income neighborhoods often contend with substandard living conditions. Housing may be inadequate, with issues such as overcrowding, poor insulation, and insufficient ventilation. Disadvantaged communities are more likely to be located near industrial areas or factories. The proximity to such facilities can expose residents to environmental hazards, including air and water pollution.

Illness

Short-term exposure to air pollution, particularly particulate matter, has been linked to an increased risk of cardiovascular mortality shortly after a heart attack. Moreover, there is growing evidence that long-term exposure to air pollution may result in premature death, especially for those who have previously had a heart attack. The LA basin is still the smoggiest region in the nation, creating large impacts on human health (Federico et al. 2017, Section 3.1).[35] Poor air quality is linked to cardiovascular and respiratory illnesses and can increase the risk of stroke, asthma, and poorer lung development among children. Disadvantaged communities are at a higher risk of poor air quality given the greater likelihood of pollutant generators being located in low-income areas. The three SPAs with the largest share of residents in disadvantaged communities recorded PM2.5 levels at 12 µg/m3 or higher.

Figure 29: Pm2.5 levels by SPA – 2015 to 2017 average



Source: California Office of Environmental Health Hazard Assessment. Analysis by CVL Economics.

35 https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf

It has been estimated that PM2.5 is responsible for around 16 million incident cases of childhood asthma every year in the United States.[36] SPA 1 Antelope Valley has the highest asthma rate with a value of 96.9 per 10,000 residents. It also has the highest growth rate with a value of 46.5% from 2007 and 17.0% from 2011, compared to 2017 levels. East and Metro were the only two regions that had fewer ER visits from 2011 (-1.0% and -2.3%).

Table 19: Changes in Age-Adjusted Rate of Asthma ER Visits per 10,000 Across Services Planning Areas, 2003-2017

Services Planning Areas	2015-2017 Average Rate of Asthma ER Visits per 10,000	2003-17 Percent Change (%)	2011-17 Percent Change (%)
SPA 1 – Antelope Valley	96.9	46.5	17.0
SPA 6 – South-East	91.5	19.6	15.8
SPA 3 – San Gabriel	43.0	24.7	6.5
SPA 6 – South-West	91.7	8.6	5.5
SPA 2 – San Fernando	49.6	30.4	5.0
SPA 8 – South Bay	57.7	26.7	1.1
SPA 5 – West	26.1	5.7	0.7
SPA 7 – East	51.9	15.3	-1.0
SPA 4 – Metro	47.7	18.1	-2.3

Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

All SPAs had increased cardiovascular disease (CVD) rates from 2011 to 2017, with percentage changes ranging from 52.7% to 99.3%. SPA 6 South-East had the highest percentage change in CVD rates from 2011-2017, with a growth rate of 99.3%. It also had the highest cardiovascular ER visit rate of 22.0% between 2015 and 2017.[37] Cardiovascular diseases are the most prevalent causes of disability and death in working class people, often cutting short their ability to work.

36 Tiotiu, A. I., Novakova, P., Nedeva, D., Chong-Neto, H. J., Novakova, S., Steiropoulos, P., ... & Kowal, K. (2020). Impact of Air Pollution on Asthma Outcomes. International Journal of Environmental Research and Public Health, 17(17), 6212. https://doi.org/10.3390/ijerph17176212

37 Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

Figure 27: Changes in Cardiovascular Disease Age-Adjusted Rate of ER Visits per 10,000 Across Services Planning Areas, 2011-2017

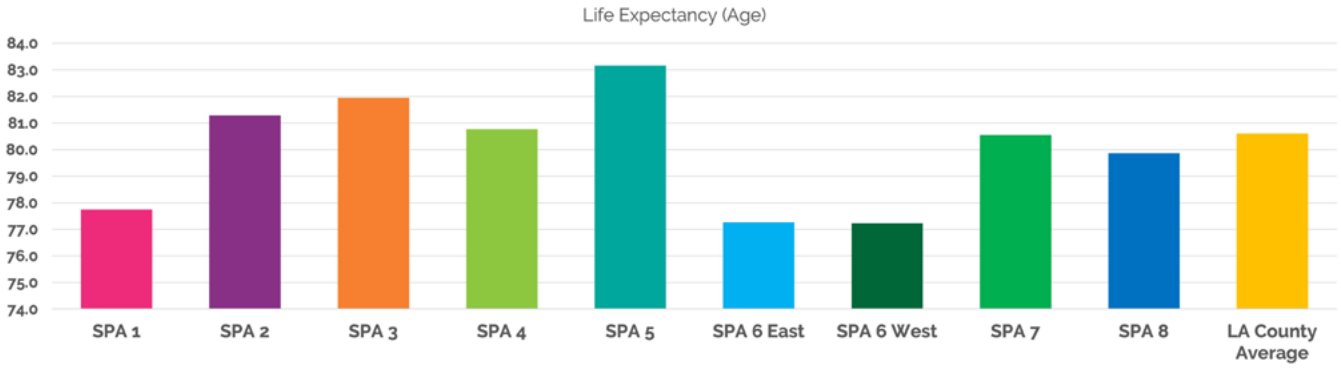
Services Planning Areas	2015-17 Average Cardiovascular Disease ER Visits Rate per 10,000	2011-13 Average Cardiovascular Disease ER Visits Rate per 10,000	2011-17 Percent Change (%)
SPA 6 – South-East	22.0	11.1	99.3
SPA 6 – South-West	16.4	8.9	84.2
SPA 8 – South Bay	14.0	8.0	74.5
SPA 4 – Metro	12.0	7.0	71.3
SPA 7 – East	17.4	10.4	66.8
SPA 2 – San Fernando	13.5	8.3	62.8
SPA 3 – San Gabriel	11.4	7.2	59.4
SPA 5 – West	9.8	6.2	56.8
SPA 1 – Antelope Valley	18.0	11.8	52.7

Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics.

Life Expectancy

Life expectancy rates can indicate potential issues in health care infrastructure, education, economic opportunity, and other socioeconomic factors. Average life expectancy in Los Angeles County is around 80.6 years, and it is not surprising that areas that have higher household incomes and fewer disadvantaged communities have higher life expectancy rates. At 83.2 years, SPA 5 has the highest life expectancy in Los Angeles County. Conversely, SPA 6 South-East and SPA 6 South-West have the lowest life expectancies at 77.3 and 77.2, respectively. Surveyed residents in SPA 6 overall have indicated that investment in health care infrastructure and emergency services has been poor, which has had a negative impact on adequate access to preventative and urgent care compared to higher-income SPAs. Similarly, SPA 1's population has a lower overall life expectancy. In addition to being largely low-income relative to the county average, the low-density character of the Antelope Valley makes it prone to food deserts and adversely affects access to health facilities.

Figure 30: Life Expectancy by SPA – 2010 – 2015 observed data

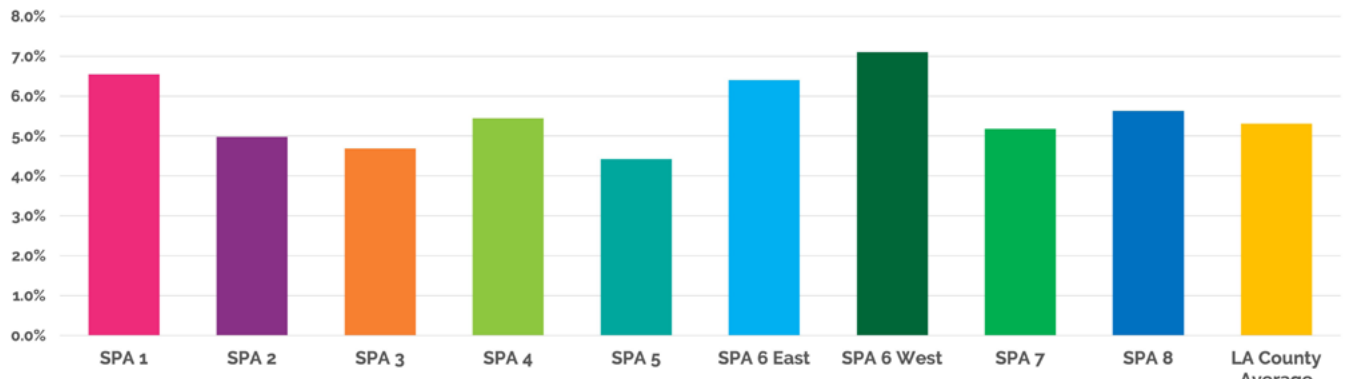


Source: Council on Environmental Quality. Analysis by CVL Economics.

Low Birthweight Infants

Tracking the share of low birthweight infants, defined as babies born weighing less than 5.5 pounds, can provide insights into a community's overall health profile and access to adequate health care. Lower birth weight babies can struggle with health issues later in life, especially in areas with poorer environmental quality, and are more likely to develop complications such as asthma and coronary heart disease.[38] On average, 5.3% of infants in Los Angeles County are considered low birthweight. Communities with higher shares of lower-income households, poorer health care infrastructure, and significant environmental pollution are more likely to have higher shares of low birthweight infants. The distribution of low birthweight infants varies by SPA region. The lowest share is in SPA 5, with 4.4% of infants identified as low birthweight. The highest shares of low birthweight infants are in SPA 6 South-West (7.1%) and SPA 1 (6.4%).

Figure 31: Share of Low Birthweight Infants by SPA – 2009 to 2015 average



Source: California Office of Environmental Health Hazard Assessment. Analysis by CVL Economics.

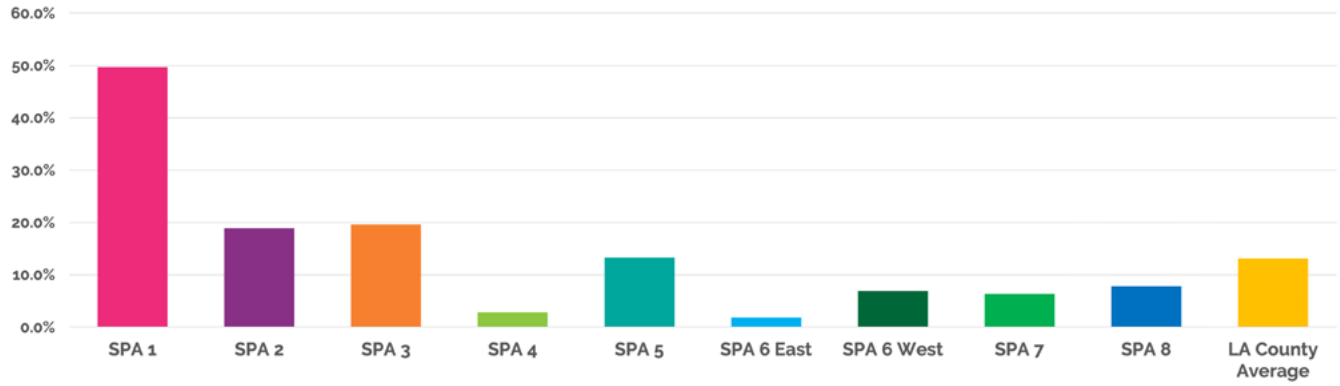
Food Security

Areas with limited access to grocery stores coincides with health issues as residents have less accessibility to healthy food. Los Angeles County's distribution of grocery stores and their respective proximity to households vary across the region. On average, roughly 13.1% of Los Angeles County residents live in "food deserts," defined as areas where residents are more than one mile away from the nearest grocery store in urban regions or 10 miles away in rural areas. Although a high number in absolute terms (1.3 million people), this share is far below the state (27.4%) and national (41.9%) averages. Some SPAs are densely populated and have more commercial activity in close proximity to residential areas; others are more suburban with grocery stores dispersed across a larger geography, and others still are underinvested and lack access to healthy foods despite their urban density.

Despite being an overwhelmingly low-income region, SPA 6 South-East has a low share (1.8%) of residents who lack adequate access to grocery stores, though neighboring SPA 6 South-West is significantly worse off (6.9%). At first glance, SPA 5's share appears to skew high given the high-income status of its residents, but this is due to the greater amount of uninhabited land and low population densities across large swaths of the area. Nearly half of all residents who live in SPA 1 live in food deserts — by far the highest in Los Angeles County, surpassing even the distressingly high U.S. average.

38 Laura August, Komal Bangia, Laurel Plummer, Shankar Prasad, Kelsey Ranjbar, Andrew Slocombe, and Walker Wieland, "CalEnviroScreen 4.0," California Office of Environmental Health Hazard Assessment, October 2021, https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf

Figure 32: Share of Residents who live in Food Deserts by SPA – 2019



Source: Economic Research Service, U.S. Department of Agriculture, Food Access Research Atlas. Analysis by CVL Economics.

Age of Residential and Commercial Properties

In Los Angeles County, there are several important aspects to consider with respect to aging residential and commercial buildings. For one, Los Angeles County has a high level of seismic activity. The possibility of a magnitude 7 earthquake in the next 30 years is estimated at 46%.[39] The average age of a commercial building is 58 years old (as of 2024), and residential buildings are on average even older at 61 years. Older buildings that have not been retrofitted are a cause of concern.

Building age for both commercial and residential properties is evenly distributed across most SPAs, with the exception of SPA 1, which has had the most recent developments, likely spurred by large influx of new residents in the last 40 years. The average year of construction for commercial properties in SPA 1 is 1983, and the average year of construction for residential properties is 1979. SPA 1 also has the highest share of residential units constructed after 2000 at 28.1% with 5.5% constructed after 2019. SPA 5 has also had considerable residential units constructed after 2000, with about 15.7% of properties developed in the last two decades.

Conversely, the oldest average year of properties for both residential (1954) and commercial (1955) units are in SPA 6 South-West. In fact, In SPA 6 South-West for example, almost 48% of residential units were built prior to 1950,[40] and only 7.8% have been built after 2000. SPA 4 also has a considerable share of older residential units, with about 45.6% of all residential developments constructed prior to 1950. This translates to poorer overall building safety in these communities, as well as poorer health outcomes.

Many factors influence health and safety in homes, including structural and safety aspects of the home (i.e., how the home is designed, constructed, and maintained; its physical characteristics; and the presence or absence of safety devices); quality of indoor air; water quality; chemicals; resident behavior; and the house's immediate surroundings. The link between these housing features and illness and injury is clear. Homes' structural and safety features can increase risk for injuries, elevate blood lead levels, and exacerbate other conditions. Poor indoor air quality contributes to cancers, cardiovascular disease, asthma, and other illnesses. Poor water quality can lead to gastrointestinal illness and a range of other conditions, including neurological effects and cancer. Some chemicals in and around the home can contribute to acute poisonings and other toxic effects. These issues are influenced both by the physical environment of the home and by the behavior of the people living in the home.[41]

39 Marc Sternfield, "Is Los Angeles due for another major earthquake?" *KTLA*, January 17, 2024, https://ktla.com/news/local-news/is-los-angeles-due-for-another-major-earthquake/#:~:text=The%20U.S.%20Geological%20Survey%20says,a%20magnitude%207.5%2C%20USGS%20says.

40 American Community Survey (ACS) data

41 Department of Health and Human Services 2009 Accessed https://www.urban.org/sites/default/files/

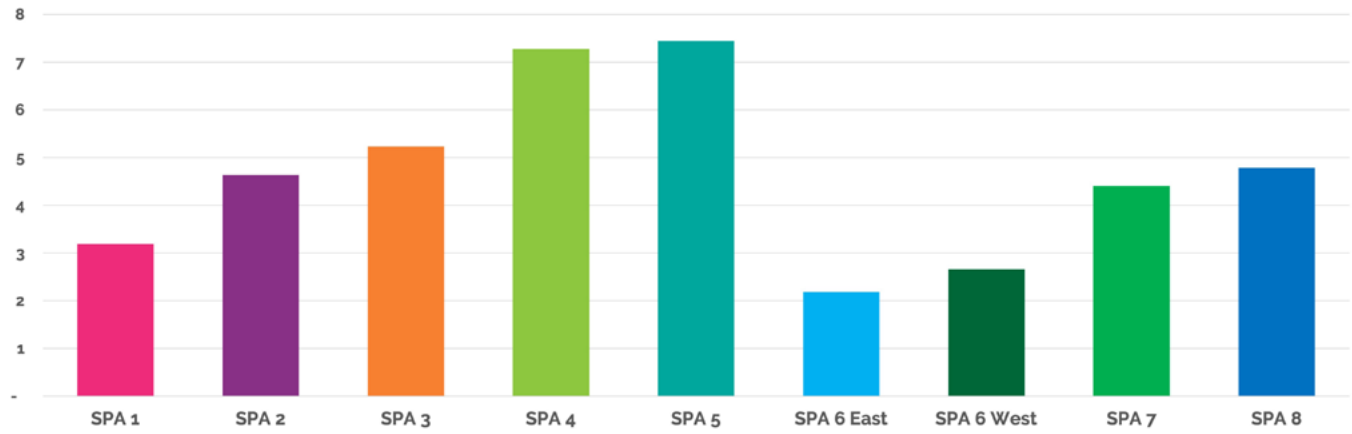
Figure 33: Average Year of Construction for Commercial and Residential Properties by SPA – 2021 (Residential) | 2023 (Commercial)

Source: CoStar, 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

Social Cohesion

Social cohesion is a critical social determinant of health. Numerous studies have demonstrated that strong social networks allow communities to weather and recover from crises more effectively than communities that are fragmented. Individuals who have the opportunity to participate in social clubs and organizations can increase their emotional and mental wellbeing, minimize health risks, and foster a sense of belonging. Organizations can include sports leagues, fitness centers, business networking groups, religious congregations, book clubs, and civic groups, among others. On average, there are about five social clubs and/or organizations per 10,000 residents across Los Angeles County. The largest numbers are in SPA 5 and SPA 4, each with seven social organizations per 10,000 residents. The lowest number of social organizations per capita is in SPA 6 South-East, with just two social clubs per 10,000 residents. Religious organizations, in particular, play an important role across the county; roughly two-thirds of all Los Angeles social clubs are religious organizations. Fitness centers are also a huge draw in the community – accounting for about 22% of all social clubs across Los Angeles County. In SPA 5, fitness centers account for over 40% of all social clubs.

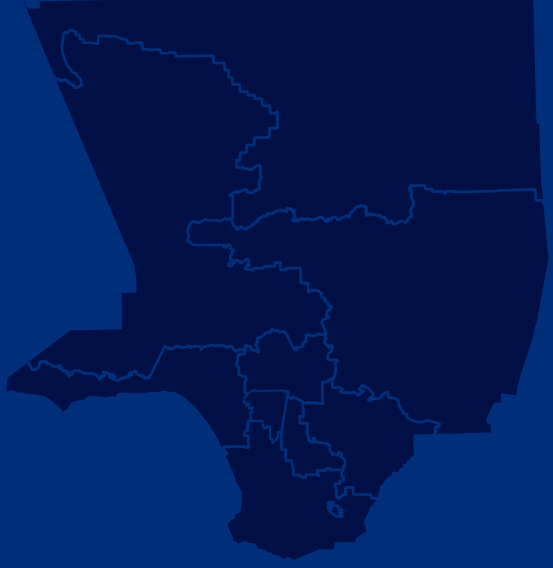
Figure 34: Social Clubs per 10,000 People – 2021



Source: County Business Patterns. Analysis by CVL Economics.

publication/89491/2017.04.03_urban_blight_and_public_health_vprn_report_finalized.pdf

Labor Market Analysis



Summary

The Los Angeles County labor market continues to post steady gains and is poised for further growth in the coming years. Nonfarm private-sector jobs grew by 1.2% from the first quarter of 2022 to the first quarter of 2023, according to the Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW). Employment gains have been seen across a broad range of sectors in Los Angeles in recent years, and the region is creating jobs at both ends of the wage spectrum. Some of the fastest- growing sectors of the last year were Education (6.7%), Other Services (7.8%), and Leisure and Hospitality (5.8%). High-skilled sectors such as Professional, Scientific, and Technical Services (1.4%), and Information (-7.8 %) showed divergent trends, with the Information sector especially hard hit by layoffs, labor disputes, and changes in consumer spending due to the pandemic-led recession. The decline in the Information sector equates to nearly 17,693 jobs lost. As this sector tends to pay high average wages, the decline is especially worrisome. It is also a reminder that concerns over workforce resilience can affect various sectors, even those that require skilled labor and pay high wages. Currently, labor markets are tight (i.e., vacancies are high relative to the number of unemployed workers) which is favorable for those seeking employment. The prime-age unemployment rate is fairly low in some SPAs, which means residents are employed and benefitting from the tight labor markets.

According to many economic indicators, by 2023 California's economy had recovered from the swift and deep recession that accompanied the COVID-19 pandemic. Employment levels recovered in nearly all regions of the state (Bohn et al. 2023), while low unemployment and high job vacancies reflected a tight labor market and decreasing employer market power (Autor, Dube, and McGrew 2023). Despite high inflation and corresponding Federal Reserve interest rate hikes, employment growth and high levels of job openings persisted in California throughout 2023 (Duan and Bohn 2023). Industries which have experienced strong growth in Los Angeles County coming out of the pandemic include education/health services and professional/business services, according to the 2023 Economic Forecast from the Los Angeles County Economic Development Corp.

In the short run—especially in critical sectors projected to grow, like health care, dependent care, climate, and infrastructure—growing workforce needs may be constrained by labor supply. In the longer run, declining participation, changing workforce needs, and an aging population may fundamentally shift the economy and require adjustments to current health, safety net, and education policies. Data on job postings provided by Lightcast shows that in 2023 there were an average of 86,122 job postings every month. For more information on LA County job postings, please see Appendix I.

Los Angeles County, in comparison with similar markets, has low labor force participation rates and high unemployment rates. Race, age, gender, marital status, disability status, nativity, educational attainment and number of children all play a role in the labor force participation rates among Los Angeles County residents. As

Los Angeles County is aging and declining in population the low labor force participation rate is a serious threat to Los Angeles County's economic health. However, it also presents an opportunity for employers to provide apprenticeship programs, bringing more under-employed residents into the labor force.

Our findings underscore the importance of education, skill attainment, and employer engagement in fostering economic mobility. Improved education and skill attainment are regarded as one of the best ways to alleviate poverty, as only 6% of residents with a bachelor's degree or higher live under the poverty line. However, as it pertains to economic mobility, the gap does not always lie in the skills an individual possesses, but in the opportunities before them. When employers are engaged with job training and upskilling programs, such as apprenticeships, this can lead to better economic outcomes for workers. As the green economy becomes a larger part of the region's economy, employer/trainer relationships can be critical to filling roles in occupations such as solar panel installers, turbine technicians and sustainable design specialists.

Major Occupations, Industries and Wages

Regional Outlook

The 2023 Los Angeles Business Journal's special report on the industries which have experienced strong growth in Los Angeles County coming out of the pandemic include education/health services and professional/business services, according to the 2023 Economic Forecast from the Los Angeles County Economic Development Corp. Educational/health services saw a total job loss of 25,700 jobs between 2019 and 2020, but the sector gained 64,700 jobs in the subsequent two years. Per the report, job growth in the region will be led by "educational/health services" for the next two years, with the expectation that 25,300 new jobs will be added to the sector. According to California's Economic Development Department, private education and health services grew 6.9% from July of 2022 to the same time in 2023 to a total of 921,200 jobs. Leading Los Angeles private employers in the healthcare space include Kaiser Permanente, Providence Health & Services and Kaiser Permanente, Providence Health & Services.

The information sector, which largely includes film, television work and media, lost 20,900 jobs between February 2020 and July of 2022, almost 7% of its labor force. The pandemic shut down many productions, and the film and television industry's 2023 labor strike hit the business especially hard, with as many as 7,000 jobs lost from May to June, per LAEDC. Top employers in this sector include Walt Disney Co. and NBCUniversal.

Los Angeles's government sector also dropped a significant number of jobs during the pandemic years that have not returned. The sector lost 14,800 jobs between February 2020 and June of2022, but that only represented 2.5% of total jobs in the sector. The leading employers in this area include Los Angeles County, the city of Los Angeles and the state of California.

Los Angeles's health care industry remains robust as the population ages and the need to access treatment increases. Top employers in the region include Oakland-based Kaiser Permanente, Providence Health & Services, which has multiple Southern California locations, and Cedars-Sinai. Cedars-Sinai Health System contributed $15.4 billion in economic benefit to Southern California in fiscal year 2021. The health system provided or indirectly contributed to 81,680 jobs for workers, who earned $6.5 billion in salary and benefits during that year, according to an analysis by the Los Angeles County Economic Development Corp.

Many hospitals in the region are expanding. Cedars-Sinai, for example, is working on a nine-story tower in Marina del Rey to replace its existing structure in the neighborhood that was built in the 1970s. The facility will eventually house 160 beds. In March 2023, construction began on UCLA Health's new neuropsychiatric hospital at 5900 Olympic Blvd. that will offer 119 inpatient beds. Harbor-UCLA Medical Center is another $1.7 billion project underway in West Carson.

While there is increased need for more medical facilities, rising costs have made it more challenging to keep these large employers profitable. In its 2022 financial report, Kaiser Permanente noted that an increase in health care expenses driven by "inflation, high Covid-19 costs, ongoing labor shortages and a rise in care volume" contributed to a loss in total income and other expenses of $3.2 billion last year, compared to a gain of $7.5 billion in 2021. In terms of hiring, many health care facilities are still having trouble filling nursing roles across the county. According to the Hospital Association of Southern California, nursing vacancy rates among local hospitals is more than 30%.

The media industry is in turmoil as the pandemic and labor strikes upend it, and long-term changes to the business remains unclear. Major employers, including Burbank-based Walt Disney Co., Universal City-based NBCUniversal, Burbank-based Warner Bros. Discovery, and Culver City-based Sony Pictures Entertainment weathered the 2020 production shutdown and subsequent increase in COVID production costs, only to become the central players in a major labor strike that began in May 2023. The information industry, which includes film and TV, print and online publishing, record production, telecommunications and radio, has shed 20,900 jobs since February 2020, down almost 9%, according to numbers from California's Economic Development Department. Just prior to the strike, Disney initiated layoffs eventually totaling 7,000 workers companywide through several rounds that ended in May. The number represented 3.2% of the company's total employees. Paramount Media Networks and Showtime/MTV Entertainment Studios, which are all under parent company Paramount Global, also laid off 25% of its workforce in May 2023. Warner Bros. Discovery also laid off a number of executives and staffers, a process which began in June 2023. Competition in the content business from tech companies such as Apple Inc., Amazon.com Inc. and Netflix Inc. have forced Hollywood's legacy media companies to make acquisitions and invest heavily in building their own streaming services – and load them with content. It was a strategy that was a boon to the business for a period, but that may now be coming to an end.

The aerospace industry is still going strong in Los Angeles County, currently employing about 60,000 workers directly at an average wage of $136,000, according to data from the Los Angeles County Economic Development Corp. Top Los Angeles employers in the sector include Northrop Grumman Corp. and The Boeing Co., both with facilities in El Segundo, and Hawthorne-based Space Exploration Technologies Corp., (SpaceX.) One issue for the industry is its retiring workforce. According to a McKinsey & Co. report entitled "Navigating the Grey-to-Green Transition in Aerospace and Defense," a large number of workers in the industry are leaving, and there is concern about replacing them. About a third of industry employees are aged 55 or older. The report noted that aerospace and defense companies often pay entry-level software engineers about half as much as do larger technology employers.

According to California's Economic Development Department (EDD), state government educational jobs are up 6% from July of last year to May. The county added 2,400 public sector K-12 education jobs from April to May. Los Angeles Unified School District, which is the second largest district in the nation and manages the education of nearly 500,000 students, is leading the charge in the region. The school district opened 6,000 new positions in 2021, including roles as teachers, psychiatric social workers and school nurses, according to EdSource, which tracks developments at LAUSD. College, universities and professional schools is another job sector that is set to grow 4% from 2022 through 2024. The University of Southern California is one of the largest private employers in the county, employing more than 23,227 faculty and staff.

The following table shows the Top 5 industries by SPA.

Table 20: Top 5 Industries by Share of Employment per SPA

SPA	Top 5 Industries by Share of Employment %	Average Annual Wages
1	Government (17.0%) Health Care (16.4%) Retail Trade (10.3%) Manufacturing (8.9%) Other Services (8.4%)	$84,830 $63,490 $44,730 $78,150 $34,140
2	Health Care (15.1%) Government (9.9%) Information (8.2%) Other Services (8.0%) Retail Trade (7.7%)	$51,820 $84,070 $127,320 $34,970 $44,380
3	Health Care (16.0%) Government (8.9%) Retail Trade (8.8%) Transportation/Warehousing (7.8%) Accommodation and Food Services (7.2%)	$50,810 $83,710 $44,700 $27,320 $32,990
4	Health Care (11.8%) Professional, Scientific, Technical Services (10.7%) Accommodation and Food Services (8.5%) Transportation/Warehousing (8.5%) Real Estate (8.3%)	$58,000 $99,800 $34,690 $18,150 $58,650
5	Professional, Scientific, Technical Services (14.0%) Accommodation and Food Services (8.8%) Government (8.7%) Information (8.4%) Health Care (8.2%)	$108,710 $35,560 $87,440 $130,900 $54,490
6 East	Health Care (14.5%) Government (12.1%) Manufacturing (11.0%) Retail Trade (9.3%) Transportation/Warehousing (8.1%)	$51,980 $79,030 $71,090 $43,100 $60,240
6 West	Government (26.9%) Health Care (15.0%) Other Services (7.4%) Admin Support (6.7%) Retail Trade (6.1%)	$89,970 $35,410 $34,310 $57,120 $42,720
7	Health Care (13.3%) Retail Trade (12.4%) Manufacturing (9.7%) Wholesale Trade (9.2%) Admin Support (8.3%)	$54,150 $42,830 $70,570 $80,600 $47,730
8	Health Care (12.6%) Transportation/Warehousing (9.7%) Retail Trade (8.6%) Manufacturing (8.5%) Government (8.4%)	$48,890 $69,500 $43,470 $105,170 $81,320

Wages

Employment gains have been seen across a broad range of sectors in Los Angeles in recent years, and the region is creating jobs at both ends of the wage spectrum. Some of the fastest-growing sectors of the last year were Education (6.7%), Other Services (7.8%), and Leisure and Hospitality (5.8%). High-skilled sectors such as Professional, Scientific, and Technical Services (1.4%), and Information (-7.8 %) showed divergent trends, with the Information sector especially hard hit by layoffs, labor disputes, and changes in consumer spending due to the pandemic-led recession. The decline in the Information sector equates to nearly 17,693 jobs lost. As this sector tends to pay high average wages, the decline is especially worrisome. It is also a reminder that concerns over workforce resilience can affect various sectors, even those that require skilled labor and pay high wages.

The other major sectors that saw declining employment over the last year were Transport/Warehouse (-2.4%), Wholesale Trade (-1.6%), and Financial Services and Real Estate (-1.2%). The latter was the only sector that saw an average wage decrease year-over-year from the first quarter of 2022 to the first quarter of 2023. Some sectors with stagnant employment growth, such as manufacturing, had strong wage growth from the first quarter of 2022 to the first quarter of 2023. The average wage in manufacturing grew by 12.1% to $94,066. Wholesale Trade saw employment decline by over 3,200 jobs but a wage increase of 8.1% from the first quarter of 2022 to the first quarter of 2023. However, it is noteworthy that the relative wage was -13.9%, which means that the average wholesale trade worker in Los Angeles County earns 13.9% less than the average wholesale trade worker in the United States. Overall, relative wages in Los Angeles County tend to be positive, meaning the average Los Angeles County worker in most industries earns more than the average American worker in the same industry.

Table 21: LA County Private-Sector Wages and Employment by Industry

Industry	Average Wage Q1-23	Wage Growth Rate (Year-over-Year)	Employment Q1-23	Employment Growth Rate (Year-over-Year)
Information	$154,442	6.10%	209,135	-7.80%
Fin. Svcs. and Real Estate	$133,998	-2.30%	210,316	-1.20%
Prof, Sci, Tech, and Mgmt.	$133,071	3.80%	368,919	1.40%
Manufacturing	$94,066	12.10%	319,710	0.40%
Wholesale Trade	$86,552	8.10%	198,156	-1.60%
NR/Construction	$82,378	8%	154,754	-0.70%
Transport/Warehouse	$80,415	6.20%	211,904	-2.40%
Education	$72,828	7.30%	114,116	6.70%
Health Care	$56,653	7.40%	760,963	1.80%
Admin Support	$56,433	5.80%	276,266	-0.10%
Leisure and Hospitality	$55,909	7.70%	531,795	7.10%
Retail Trade	$50,303	4.50%	405,366	0.50%
Total Private	$79,760	5.10%	3,917,212	1.20%

Source: BLS QCEW. Analysis by Beacon Economics

Source: BLS QCEW. Analysis by Beacon Economics

Occupations

Currently, three of the top four occupations with the largest number of projected openings are in health care. Many of these positions are lower-skilled such as home health aides and health care support occupations and tend to be filled by women. With an average wage of $118,328 in 2022, the top occupation in 2022 was other managers, according to the Census Bureau's American Community Survey (ACS) Public Use Microdata Sample (PUMS). Included in the top 10 occupations were many service positions such as cashiers (102,741 workers with an average wage of $20,979), customer service representatives (90,440 workers with an average wage of $40,059), and, retail service salespersons (82,339 workers with an average wage of $38,990). There were also 69,010 supervisors of retail workers, earning an average of $59,433. Other top occupations include registered nurses (average wage of $90,912), elementary and middle school teachers (average wage of $64,427), and truck drivers (average wage of $51,367).

Many SPAs share similarities in terms of prevalent occupations. Cashiers is a top five occupation in all SPAs except Metro and West. It is number two in the East, South Bay, South-West, and South-East. Although this is an occupation that might fit the needs of many people, it is not one that provides a career pathway to higher earnings and better benefits. Moreover, it is not a resilient occupation since it can be automated, and the number of openings is likely to decline as automation technology continues to increase. Truck driving is another top occupation, ranking number one in the Antelope Valley, East, San Gabriel, and South-East SPAs. One barrier issue with truck driving is that it requires a license, which can be time-consuming and expensive to attain.

Registered Nurse is a common occupation in four SPAs (Antelope Valley, San Fernando, San Gabriel, and South Bay). The nursing profession has experienced notable growth recently due to increased health care demands and an aging population. However, the field workforce development faces challenges such as shortages in qualified nurses, high retirement rates, and the need for ongoing education to meet evolving health care needs. Overcoming these challenges is essential to maintaining a resilient and capable nursing workforce.

Examining the growth of wages reveals that in the top 25 occupations, only four corresponded to a high school graduate education, and none corresponded to less than high school. For those with less than a high school diploma the highest wage growth occurred in health care office and administrative positions, which grew at a rate of 54% to around $38,000. This still leaves these residents at the lower end of the distribution, suggesting that upskilling remains an essential tool for raising incomes and improving quality of life. ("See Appendix H: Top 15 Highest-Paying Occupations by SPA for more data on wages by SPA.)

The occupational profile of SPA residents provides insight into the economic and social dynamics of the region. The following table highlights the top 10 most prevalent occupations among residents in SPAs, shedding light on workforce composition and providing an overview of the key occupations shaping these communities.

Table 22: Top Ten Most Common Occupations in Each SPA, 2022 (Numbered by Rank)

Occupation	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South West	South East	West
Accountants And Auditors					8				9
Cashiers	5	2		3	4	2	2	2	
Chief Executives And Legislators									4
Construction Laborers		10	4	5			1	5	

Occupation	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South West	South East	West
Cooks	10		5			9	6	3	
Customer Service Representatives	8	3		10	3	3		6	
Driver/Sales Workers And Truck Drivers	1	1		8	1	6	4	1	
Elementary And Middle School Teachers		9		6	5				
First-Line Supervisors Of Retail Sales Workers	3			9	6	8			
Janitors and Building Cleaners	9	8	7				8	8	
Laborers And Freight, Stock, And Material Movers, Hand	6	7			9	4		4	
Lawyers, Judges, Magistrates, and Other Judicial Workers			9						2
Maids And Housekeeping Cleaners			8				3		2
Other Managers	2	5	1	2	2	1	10		1
Personal Care Aides	7	6	2	1	10	5	7	7	0
Physicians									6
Postsecondary Teachers									3
Producers and Directors			6						5
Real Estate Brokers And Sales Agents									8
Registered Nurses	4			4	7	7			
Retail Salespersons		4	3	7		10	5	9	10
Security Guards And Gambling Surveillance Officers							9	10	
Software Developers									7
Waiters And Waitresses			10						

Source: U.S Census Bureau. Analysis by Beacon Economics

Table 23: Projected Labor Market Trends

Industry Title	Base Year Employment Estimate 2020	Annualized Average Employment Estimate 2022	Projected Year Employment Estimate 2030	Numeric Change 2020-2030	Percentage Change 2020-2030
Total Employment	4,468,400	4,739,900	5,170,100	701,700	15.70%
Self Employment	284,200		301,300	17,100	6.00%
Private Household Workers	12,500		12,300	-200	-1.60%
Total Nonfarm	4,167,300	4,538,500	4,852,500	685,200	16.40%
Construction	146,500	150,900	165,300	18,800	12.80%
Manufacturing	315,100	321,800	296,300	-18,800	-6.00%
Trade, Transportation, and Utilities	788,000	837,400	887,400	99,400	12.60%
Wholesale Trade	200,000	204,800	216,300	16,300	8.20%
Retail Trade	380,200	407,300	424,900	44,700	11.80%
Utilities	11,700	12,000	11,600	-100	-0.90%
Transportation and Warehousing	196,100	213,300	234,600	38,500	19.60%
Information	191,000	235,200	231,200	40,200	21.00%
Finance and Insurance	131,700	126,800	130,300	-1,400	-1.10%
Real Estate and Rental and Leasing	80,800	89,000	94,800	14,000	17.30%
Professional, Scientific, and Technical Services	289,300	320,700	341,200	51,900	17.90%
Management of Companies and Enterprises	62,200	61,600	68,800	6,600	10.60%
Administrative and Support and Waste Management and Remediation Services	248,200	286,700	297,200	49,000	19.70%
Educational Services (Private)	122,200	132,500	147,600	25,400	20.80%
Health Care and Social Assistance	698,100	741,100	850,500	152,400	21.80%
Arts, Entertainment, and Recreation	64,900	91,800	103,700	38,800	59.80%
Accommodation and Food Services	328,600	419,500	480,300	151,700	46.20%
Other Services (excludes 814-Private Household Workers)	128,700	153,500	161,300	32,600	25.30%
Other Services (excludes 814-Private Household Workers)	128,700	153,500	161,300	32,600	25.30%

Source: EDD Labor Projections (White Columns) & EDD Industry Employment Annualized Average Benchmark (Yellow Column)
NOTE: The blue columns are from EDD Industry Projections. The yellow column is an estimate based on EDD data as to what that industry's employment was in 2022.1

1 The blue columns are from EDD Industry Projections. The yellow column is an estimate based on EDD data as to what that industry's employment was in 2022.

The following are the 10 largest employers in the region in terms of numbers of employees in Los Angeles County.

Table 24: Major Employers in the Region

Employer	Type of Employer	Employees
County of Los Angeles	Public - Local Government	100,800
Los Angeles Unified School District	Public - Education K-12	90,900
City of Los Angeles	Public - Local Government	68,300
University of California, Los Angeles	Public - Colleges/ Universities	51,700
Federal Government - All Agencies Except Defense & State	Public - Federal Government	44,600
Kaiser Permanente	Private - Health Care	37,400
State of California (non-education)	Public - State Government	33,900
University of Southern California	Private - Colleges/ Universities	21,000
Northrop Grumman Corp.	Private - Aerospace Manufacturing	16,600
Amazon	Private - Online Retail	16,200

Source: Major Employers in California | Los Angeles County

Below is a list of the 10 largest (in terms of number of employees) Community-Based Organizations/Non-Profits in Los Angeles County

Table 25: Los Angeles County Major Non-Profit Employers

NAME	SPA NAME	SPA NUMBER	TYPES	NUM EMPLOYEES
Cedars Sinai	Metro	4	Health organizations; Headquarter / parent organizations; Hospitals	17096
Children's Hospital Los Angeles (CHLA)	Metro	4	Health organizations; Headquarter / parent organizations; Hospitals; Head Start programs	7191
Aerospace Corporation			Research centers; Charities; Social advocacy organizations	5009
Huntington Hospital	San Gabriel	3	Health organizations; Headquarter / parent organizations; Hospitals	4241
Torrance Memorial Medical Center	South Bay	8	Health organizations; Headquarter / parent organizations; Hospitals	3997
Azusa Pacific University (APU)	San Gabriel	3	Higher ed institutions; Schools; Headquarter / parent organizations	3758

NAME	SPA NAME	SPA NUMBER	TYPES	NUM EMPLOYEES
Adventist Health Glendale (GAMC)	San Fernando	2	Health organizations; Headquarter / parent organizations; Hospitals	2875
Goodwill Southern California	Metro	4	Employment organizations; Family service centers; Charities; Chapter / child organizations	2757
Pomona College	San Gabriel	3	Higher ed institutions; Schools; Headquarter / parent organizations	2596
Goodwill Southern California/ Goodwill Industries of Southern California	Metro	4	Employment organizations; Charities; Headquarter / parent organizations	2510

Source: Beacon Economics Partnership Database

Industry-specific labor standards that meet high-road priorities

The Good Jobs Initiative, led by the US Department of Labor and in collaboration with the US Department of Commerce, provides critical information to workers, employers, and government agencies as they work to improve job quality and create access to good jobs free from discrimination and harassment for all working people, with an emphasis on underserved communities, which includes minorities, LGBTQ+, women, immigrants, veterans, individuals with disabilities, individuals in rural communities, individuals without a college degree, individuals with or recovering from a substance use disorder, justice-involved individuals, and opportunity youth. Using their definition of a "good job," the LA County JFC seeks to ensure that the following key principles are met:[2]

1. **Recruitment and Hiring:** Qualified applicants are actively recruited – especially those from underserved communities. Applicants are free from discrimination, including unequal treatment or application of selection criteria that are unrelated to job performance. Applicants are evaluated with relevant skills-based requirements. Unnecessary educational, credentials, and experience requirements are minimized.
2. **Benefits:** Full-time and part-time workers are provided family-sustaining benefits that promote economic security and mobility. These include health insurance, a retirement plan, workers' compensation benefits, work-family benefits such as paid leave and caregiving support, and others that may arise from engagement with workers. Workers are empowered and encouraged to use these benefits.
3. **Diversity, Equity, Inclusion, and Accessibility (DEIA):** All workers have equal opportunity. Workers are respected, empowered, and treated fairly. DEIA is a core value and practiced norm in the workplace. Individuals from underserved communities do not face systemic barriers in the workplace.
4. **Empowerment and Representation:** Workers can form and join unions. Workers can engage in protected, concerted activity without fear of retaliation. Workers contribute to decisions about their work, how it is performed, and organizational direction.

2 United States Department of Labor. Good Jobs Principles. https://www.dol.gov/sites/dolgov/files/goodjobs/Good-Jobs-Summit-Principles-Factsheet.pdf Accessed 5 April 2024

5. **Job Security and Working Conditions:** Workers have a safe, healthy, and accessible workplace, built on input from workers and their representatives. Workers have job security without arbitrary or discriminatory discipline or dismissal. They have adequate hours and predictable schedules. The use of electronic monitoring, data, and algorithms is transparent, equitable, and carefully deployed with input from workers. Workers are free from harassment, discrimination, and retaliation at work. Workers are properly classified under applicable laws. Temporary or contractor labor solutions are minimized.
6. **Organizational Culture:** All workers belong, are valued, contribute meaningfully to the organization, and are engaged and respected especially by leadership.
7. **Pay:** All workers are paid a stable and predictable living wage before overtime, tips, and commissions. Workers' pay is fair, transparent, and equitable. Workers' wages increase with increased skills and experience.
8. **Skills and Career Advancement:** Workers have equitable opportunities and tools to progress to future good jobs within their organizations or outside them. Workers have transparent promotion or advancement opportunities. Workers have access to quality employer- or labor-management-provided training and education.

Barriers to Employment

Los Angeles County's recovery progress has been slower than other large Metro areas due to a lack of qualified labor supply. Although there is sufficient labor demand in Los Angeles, as evidenced by a high number of job postings and job openings, many of these jobs are not being filled because of employment barriers, such as a lack of education and skills in the workforce, exorbitantly high housing costs, and insufficient childcare affordability. Per the California Department of Finance, almost 300,000 Los Angeles residents have left the region since 2019, and more than half of that number was from the city of Los Angeles. A leading reason for the exodus was affordable housing. From an individual perspective, labor force participation decisions reflect myriad economic, social, and cultural factors and constraints. Not all Angelenos want to work. But policies to eliminate barriers to work can increase participation and improve household well-being.

This report finds that key barriers to labor force participation for people of prime working age include affordable childcare, discrimination by age, gender, and/or race, lack of well-paying work, past criminal justice history, poor health and disability, mismatch between the potential worker's skills and education levels and those demanded in the labor market, lack of relevant training, and lower educational attainment. The existence of these barriers—by education, gender, household structure, nativity, etc.—constitute ripe opportunities for policymakers to address ongoing aggregate labor supply issues by focusing on barriers to individual participation. Indeed, the impact of addressing these gaps may be large, could significantly offset the declines seen in recent decades, and could boost statewide economic output considerably. For example, recent Federal Reserve estimates suggest that closing racial and gender gaps in employment from 2005–2019 would have added $72 billion to California's GDP annually (Federal Reserve Community Development Staff 2021).

Education

Educational attainment is strongly associated with labor market participation rates. In 2001, 45% of all jobs in Los Angeles County that paid a living wage only required a high school education. By 2021, that number had fallen to 37%. On the other hand, in 2001, 38% of jobs that paid a living wage required a bachelor's degree; today it is 48%. This is increasingly true in the green economy as well: 56% of employees with "new and emerging" green jobs that utilize carbon reducing technology have bachelor's degrees, and one in five has a graduate degree. Unemployment rates are substantially lower for college graduates and jobs held by college graduates tend to have much higher wages and employee benefits—a stronger draw to work—than jobs held by workers without

a college degree (Cuellar Mejia et al. 2023). College graduates have labor force participation rates nearly 20 percentage points higher than those who have not completed high school. Recent trends also favor highly educated adults: labor market participation rates have declined over the past 15 years for every education group except those with at least a bachelor's degree; high school graduates and those who did not complete high school had still not fully recovered from pandemic losses by 2022.[3] Moreover, California's economy has increasingly demanded and relied on highly educated workers (Johnson et al. 2017). As such, lower educational attainment constitutes a notable barrier to labor force participation and labor market outcomes.

Table 26: Los Angeles County Unemployment by Educational Attainment for Residents 25 and Older (2022)

Educational Attainment	Unemployment Rate (%)	5-year Change in Unemployment Rate (p.p.)	10-year Change in Unemployment Rate (p.p.)
Less than High School Graduate	5.9	-0.4	-5.6
High School Graduate (includes Equivalency)	5.7	0.5	-6.1
Some College or Associate Degree	5.9	0.9	-4.7
Bachelor's Degree or Higher	4.0	-0.1	-2.6

Source: American Community Survey. Analysis by Beacon Economics

Table 27: Los Angeles County Labor Force Participation by Educational Attainment for Residents 25 and Older (2022)

Educational Attainment	Labor Force Participation Rate (%)	5-year Change in Labor Force Participation Rate (p.p.)	10-year Change in Labor Force Participation Rate (p.p.)
Less than High School Graduate	66.8	0.3	-1.3
High School Graduate (includes Equivalency)	74.6	-0.3	0.3
Some College or Associate Degree	81.1	1.1	1.3
Bachelor's Degree or Higher	88.0	1.4	1.9

Source: American Community Survey. Analysis by Beacon Economics

3 https://www.ppic.org/publication/labor-force-participation-in-california/#:~:text=For%20prime%2Dage%20college%20graduates,to%2048%20percent%20(Black).

Housing

High housing costs and lack of supply continue to be a burden on Los Angeles County families. In addition to the financial expense, Los Angeles County added fewer new houses than all peer metropolitan areas, both in absolute terms and percentage terms. The Los Angeles County housing crisis has made it difficult for workers to move as frequently or fluidly as they used to, and this has dire repercussions for the county workforce. The lack of mobility due to high housing costs is a major weakness that afflicts all Los Angeles County SPAs. Soaring housing costs hinder workers from moving to where their labor is most valuable, creating structural barriers that will prevent Los Angeles County from having a truly dynamic, productive economy, and will deny residents the chance to seek a better life. The Los Angeles County housing affordability crisis is key to explaining why county residents are not moving. Higher income residents are more likely to move than lower income residents. The decline in residential mobility within Los Angeles County is alarming because it hurts labor markets. If labor mobility is restrained this can lead to an increase in labor misallocation, which is when workers are not in the place where they are in most demand.[4]

The chart below shows that most SPAs have the lowest shares of housing tenure at the lower end of the distribution. The Metro and West SPAs have the highest shares of households with 12 months or less at their current address. This is because higher income households are more likely and able to move than low income households. All of this suggests that it is higher-income households that are moving to SPAs with the best amenities and work opportunities. This does not bode well for efforts to promote greater equity. Disadvantaged households with lower incomes might struggle to move closer to a job opportunity and may have to let an opportunity pass by even though it would be beneficial for them.

Table 28: Distribution of Housing Tenure in a Unit Across SPAs, 2022

Tenure	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West	Total
12 months or less	6.83	66.1	18.86	11.44	9.04	10.77	9.73	6.08	16.58	11.48
13 to 23 months	5.50	3.87	10.06	6.69	5.32	6.39	4.31	4.18	10.62	6.72
2 to 4 years	23.93	17.39	19.17	19.23	17.28	20.15	17.20	18.61	18.40	18.86
5 to 9 years	18.44	18.04	15.41	17.48	17.61	17.78	17.78	19.69	14.40	17.18
10 to 19 years	24.98	21.75	17.39	20.82	21.07	19.08	24.35	26.61	16.43	20.39
20 to 29 years	13.04	15.55	10.96	12.84	14.26	13.94	13.75	13.16	12.84	13.31
30 years or more	7.28	16.80	8.15	11.49	15.42	11.89	12.88	11.66	10.73	12.07

Source: U.S. Census Bureau. Analysis by Beacon Economics

Peer-reviewed economics research has shown the benefits of residential mobility. Indeed, when individuals or families move from low- to high-performing labor markets, they are more likely to be employed than those who don't – or can't – move.[5] Those who move are also more likely to enjoy higher incomes[6] and better health

4 Jia, Ning, Raven Molloy, Christopher Smith, and Abigail Wozniak. 2023. "The Economics of Internal Migration: Advances and Policy Questions." Journal of Economic Literature, 67 61 (1): 144-80.

5 Deryugina, Tatyana, Laura Kawano, and Steven Levitt. 2018. "The Economic Impact of Hurricane Katrina on Its Victims: Evidence from Individual Tax Returns." American Economic Journal: Applied Economics, 10 (2): 202-33.

6 Raj Chetty, Nathaniel Hendren, The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects, The Quarterly Journal of Economics, Volume 133, Issue 3, August 2018, Pages 1107–1162, https://doi.org/10.1093/qje/qjy007

outcomes.[7] The Los Angeles County housing affordability crisis is key to explaining why county residents are not moving. The decline in residential mobility within Los Angeles County is affecting the labor market. When labor mobility is restrained, it can lead to an increase in labor misallocation, which is when workers are not in the place where they are in most demand.[8]

Childcare

One often-cited barrier to labor force participation is the cost of childcare, which has risen dramatically in the last couple of years. Affordable and accessible childcare is critical to boosting the labor force, particularly among women. According to the U.S. Department of Labor, average childcare costs for preschool-age children amounts to around one-fifth of the County's median income – a figure that places most childcare out of reach for the majority of low-income households. In Los Angeles County, the advertised wage for childcare job postings has increased by more than 15% over pre-pandemic levels. Childcare access and costs often keep some prime-age workers from participating in the labor force. According to the Department of Labor, Los Angeles County's average infant care costs amount to 24% of the county median household income, and toddler-care prices are about 17% of the county median income.[9] Families with young children are often forced to choose between spending a large portion of their income on childcare, finding lower-quality options, or having one parent exit the workforce to take care of their children. This choice has a larger impact on lower-income families of color. SPA 6 South-East and South-West have some of the lowest labor force participation rates for women; only Antelope Valley is lower.

Table 29: Labor Force Participation (%) by Age and Sex, 2022

SPA	Men, 25 to 54	Men, 55 and older	Women, 25 to 54	Women, 55 and older
Antelope Valley	83.78	46.97	67.07	33.31
East	89.28	45.76	75.25	33.11
Metro	88.54	52.33	81.79	35.98
San Fernando	89.3	52.04	79.19	35.83
San Gabriel	88.88	47.36	79.66	33.88
South Bay	89.36	49.31	78.88	37.65
South-West	84.86	49.74	73.83	29.87
South-East	87.14	47.07	68.47	30.58
West	91.84	52.94	84.73	41.12

Source: U.S. Census Bureau. Analysis by Beacon Economics

Many childcare providers are paid directly by the state through reimbursement, although rates tend to be low. This is a threat to the Los Angeles County economy because the low reimbursement rates and resulting low wages are forcing a contraction in the childcare workforce. Interestingly, there is a link between low

7 Deryugina, Tatyana, and David Molitor. 2020. "Does When You Die Depend on Where You Live? Evidence from Hurricane Katrina." American Economic Review, 110 (11): 3602-33.
8 Jia, Ning, Raven Molloy, Christopher Smith, and Abigail Wozniak. 2023. "The Economics of Internal Migration: Advances and Policy Questions." Journal of Economic Literature, 67 61 (1): 144-80.
9 https://www.dol.gov/agencies/wb/topics/childcare/median-family-income-by-age-care-setting

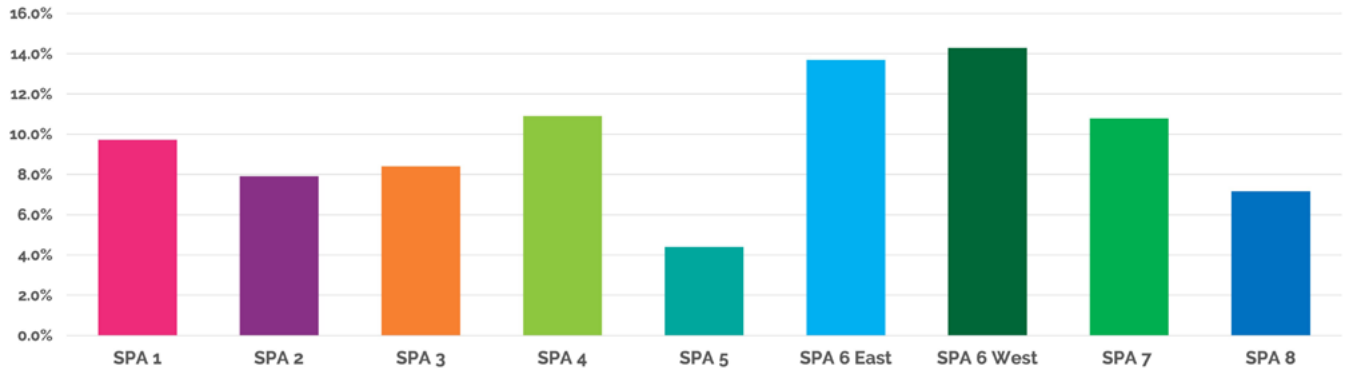
reimbursement rates and historical racism that excluded childcare workers from federal labor protections.[10] Childcare access and cost require policy changes that will result in more lower-income women joining the labor force and lead to their upward mobility.

Household Internet Access

In the post-COVID age of digitization, reliable internet access has become a necessity for work. Estimates from the U.S. Census Bureau's most recent American Community Survey show nearly 21% of Los Angeles County's residents work from home — nearly four times the pre-pandemic average. There is also evidence that remote work reduces the amount of time and money spent on commuting, and can serve as a salve for high housing prices, as people can afford to live further away from employment centers.[11]

However, remote work relies on connectivity. Households without internet access face numerous obstacles and barriers; from managing household tasks and performing job-related duties, an inability to go online can be detrimental to accessing high paid jobs. In Los Angeles, about 10% of households do not have broadband in their homes.[12] There is considerable variance in household access to the internet among SPAs. Based on our survey results, only 4.4% of households in SPA 5 do not have internet connectivity at home. SPA 6 South-West has the highest share of households without access to the internet (14.3%) closely followed by SPA 6 South-East (13.7%). Moreover, 26.7% of households in SPA 6 South-East and 23.6% in SPA 6 South-West do not have access to high-speed internet. Los Angeles County's average share of households without high-speed internet access is 16.3%. The only SPA region in Los Angeles County with fewer than 10% of households without access to high-speed internet is SPA 5, with 8.7% of households.

Figure 35: Share of Households without Access to Internet by SPA – 2021



Source: 2021 5-Year American Community Survey Public Use Microdata Sample. Analysis by CVL Economics.

Workforce Development Training Providers

Achieving economic development within the region requires that we orient our solutions towards not only sectors, but also people. There are numerous systemic barriers that have prevented communities of color and other marginalized groups from thriving in the workplace. By identifying strategies for addressing racial inequities in the workplace and so that vulnerable local communities can enter higher-paying jobs is crucial. Access to workforce development training is an important component for any region when it comes to economic development. Such programs provide workers with opportunities for economic mobility, upskilling, and a chance to transition to other higher-paying occupations. Millions of federal and state dollars have

10 https://calmatters.org/commentary/2023/02/failure-pay-child-care-providers/
11 https://www.upwork.com/press/releases/where-remote-work-saves-commuters-most
12 https://arnicusc.org/wp-content/uploads/2023/12/2023-Statewide-Digital-Equity-Survey-Final-Report.pdf

been invested in Los Angeles County for workforce development through local community colleges, regional occupational centers, adult schools, workforce development boards, and training programs. In some cases, these efforts were effective in creating job opportunities for both higher- and lower-skilled workers. However, the data suggests there is still much room for improving workforce resiliency and increasing labor force participation.

In 2017, the California Workforce Development Board (CWDB) launched the High Road Training Partnership (HRTP) to establish a workforce development framework in which partnerships of industry leaders–employers, workers, and representatives from union–work together to ensure that employers in California have a skilled workforce and increased marketed competitiveness, and that the workforce has ample opportunities for economic mobility. The HRTPs are industry-based, worker-focused training partnerships that build skills for California's High Road employers. The HRTPs provided an infrastructure of support in which industry leaders work collaboratively to address industry and workforce needs in real time.

The high road framework is meant to generate quality jobs that can support a family and places equity, climate resilience, and job quality at the center of the state's workforce development strategy. The HRTP framework trains a skilled workforce and addresses wage disparities statewide, thereby creating an ecosystem of shared prosperity: employers gain a high-performing and reliable workforce, which will improve productivity and the quality of their goods and services; new and incumbent workers gain access to job preparation programs and career pathways; and unions gain new members and can provide professional development opportunities.

There are several core components to the HRTP approach:[13]

1. **Industry Driven:** to better understand industries, HRTP analyses compile demographic and economic information about industry bases, as well as information about community organizations. This includes developing an understanding of workplace issues–emerging technologies, skills requirements changes in production processes and work structure, and opportunities for labor participation in creating jobs;
2. **Worker Centered:** Workers and worker representatives are involved as co-leaders in the full spectrum of HRTP activities, including program design, participant recruitment, outcome tracking, and career exploration. To engage workers, HRTPs utilize worker surveys, interviews, and focus groups, as well as including worker representatives in specialized committees;
3. **Equity:** the HRTP equity approach focuses on changing the underlying systems that perpetuate inequities by evaluating existing practices, and recognizes that diversity does not equal equity;
4. **Climate Resilience:** HRTPs priorities transitioning to a low-carbon economy by aligning workforce development agencies with climate reliance. This includes requiring that each firm determine its contribution to carbon emissions and make necessary changes, developing regional strategies to institutionalize sustainable practices, and recognizing the "ciliate hap" has profound consequences for health and economic outcomes, especially for the most vulnerable and disadvantaged populations; and
5. **Job Quality:** HRTPs make firms more competitive by improving job quality. This involves setting standards that raise the industry's wage floor, focusing on local career pathways to high road employment for the most economically vulnerable communities, and recognizing that "low road" employers who compete by disadvantaging their workers will no longer thrive in a high road economy. High-road training pathways have been utilized in numerous industries, including: 1) services to buildings and dwellings; 2) transit and ground passenger transportation; 3) hospitalitY; 4) port; 5) healthcare; 6) public sector; 7) distribution and logistics; 8) water and wastewater; and 9: electric bus manufacturing, among others.[14]

13 Gonzalez-Vasquez, A.L. & Lopez, M.N. (2021). The High Road to Economic Prosperity: An Assessment of the California Workforce Development Board's High Road Training Partnership Initiative. UCLA Labor Center.
14 Mollica, J. & Simon, P. (2023). Growing California's Electric Bus Manufacturing Workforce: How an Employer and a Union Built a High Road Training Pathway. AFL-CIO Working For America Institute.

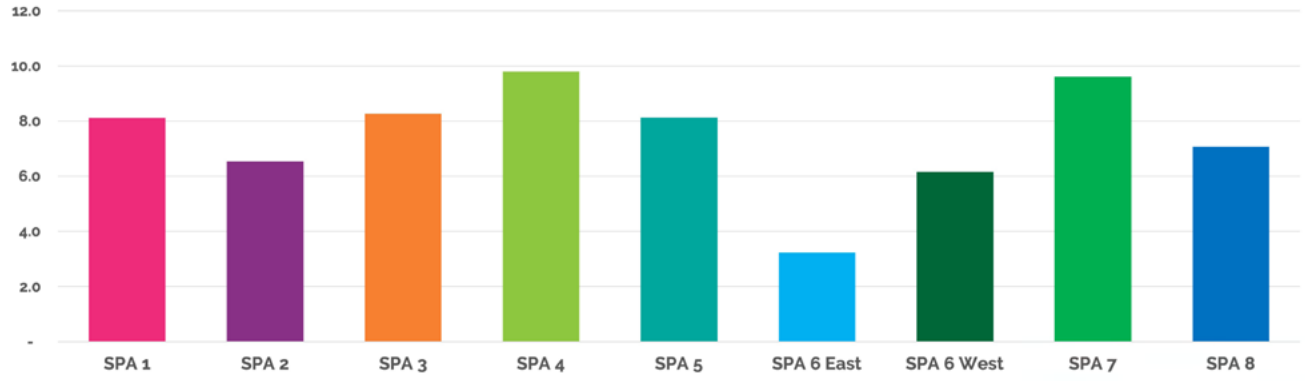
Current HRTPs in Los Angeles County include the Hospitality Training Academy (HTA), a labor management partnership (represented in our collaborative) that provides job training for more than 30,000 union members with over 170 affiliated employers committed to advancing quality jobs, equity, and climate resilience. Another example is the BYD-SMART HRTP for Bus Manufacturing, partnering ZEV bus manufacturer BYD with SMART Local 105 to develop a pre-apprenticeship program that will prepare the manufacturing workforce to meet the rising demand for ZEV buses in California and beyond. LAEDC recruited BYD to Los Angeles County and facilitated their relationship with SMART Local 105 which led to this HRTP. ZEV Bus Manufacturer Proterra also partners with USW Local 675, area community colleges, the county workforce board and several non-profits to prepare workers, especially those with employment barriers for careers in electric bus manufacturing.

In addition to the HRTP, there are hundreds of workforce development training providers in Los Angeles County, ranging from community colleges and technical training programs to federally registered apprenticeships and non-profit training centers. Many of these are members of the LA County Jobs First Collaborative. The County of Los Angeles administers workforce development and job training programs across many Departments, the largest of which is run through the Department of Workforce Development, Aging and Community Service (WDACS). The County trains adults, youth and young adults, as well as seniors and the veteran population. In addition to the workforce development programs managed by WDACS, the Departments of Children and Family Services, Public Social Services (DPSS), Health Services, Human Resources, Military and Veterans Affairs, and Probation each have their own job training and job placement services.

The average number of workforce development training providers per 100,000 residents in Los Angeles County is 7.6 institutions per capita. SPA 4 has the largest number of workforce training providers per capita at 9.8 institutions per 100,000 residents, and the highest number of workforce development training providers overall are in SPA 3 (159), SPA 2 (142), and SPA 7 (112). SPA 6 South-East has roughly only 3 workforce training providers per 100,000 people compared to 10 in SPA 4, which encompasses Downtown Los Angeles. SPA 4 and neighboring SPA 5 also have a higher concentration of high-skill, high-wage workers in sectors such as *Professional, Scientific, and Technical Services*, *Finance and Insurance*, and *Information*.

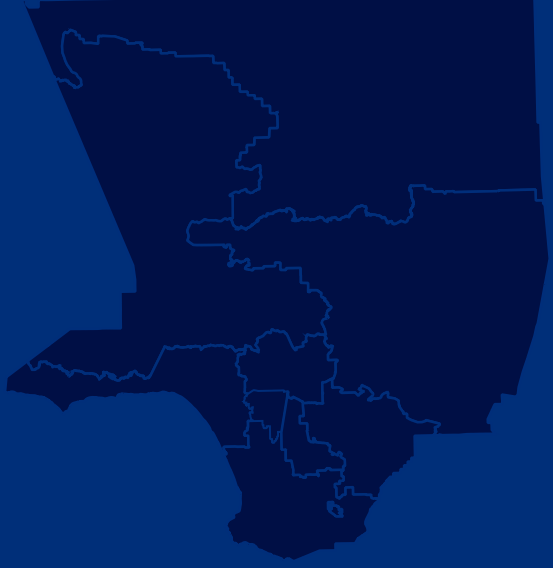
The lowest number of workforce development training providers is in SPA 6 South-East, with only 20 providers total (or approximately 3.2 institutions per 100,000 residents). SPA 6 South-East and SPA 1 are the only regions to have no federally registered apprenticeships available; SPA 6 South-East has the lowest number of state eligible training providers at 7 (tied with SPA 6 South-West). Three regions (SPA 6 South-East, SPA 6 South-West, and SPA 2) have a lower number of per capita workforce development training providers compared to the countywide average. While SPA 2 has a high number of providers, it also has the largest population among the SPAs, which accounts for its lower number relative to most of the other SPAs.

Figure 36: Number of Workforce Development Training Providers per 100,000 Residents – 2020 to 2022 observed data



Source: America's Job Center of California, CalJOBS, Workforce Almanac. Analysis by CVL Economics.

Industry Cluster Analysis



Summary

The Industry Cluster Analysis offers a detailed and nuanced examination of Los Angeles County SPAs, highlighting existing industry clusters and emerging opportunities crucial for steering the county toward a carbon-neutral future. Our sub-regional analysis of the various industry clusters located in Los Angeles County underscores the importance of a sub-regional approach to foster equitable and sustainable growth. We find which industry clusters exist in various SPAs and report the current state of potential growth industry clusters that have the potential for growth under targeted investments and national-level industrial policies, as well as their Environmental Impact Intensity (Appendix F) and Equity Index (Appendix G). By examining industry cluster dynamics at the sub-regional level, valuable insights are revealed into the region's competitive advantages, challenges, and potential risks to the environment and public health. This analysis, along with other research presented in the regional plan, will help push forward California's high-road strategies for sustainable and equitable economic growth.

At the heart of Los Angeles County's economy are diverse industry clusters ranging from Entertainment and Aerospace to Health Care and Financial Services. These clusters not only generate jobs but also stimulate the local economy by supporting various local-serving businesses, such as cafes, medical offices, and fitness centers. However, disparities exist among different Service Planning Areas (SPAs), with some regions facing fewer economic opportunities, highlighting the need for a sub-regional approach to ensure equitable and sustainable growth.

Carefully exploring the strengths and weaknesses of various industry clusters across SPAs, the analysis identifies clusters with promising growth prospects and those requiring targeted interventions. For instance, Aerospace Vehicles and Defense, Local Health Services, and Performing Arts emerge as sustainable and lucrative clusters in certain regions, while others such as Food Processing and Manufacturing require environmental mitigation efforts to align with California Jobs First mission goals.

Moreover, the analysis sheds light on emerging industries such as Green Energy, Advanced Transportation and Clean Technology, Biosciences, Food Manufacturing, and Construction, emphasizing their pivotal roles in transitioning to a greener economy. Despite facing challenges, these sectors offer opportunities for innovation, job creation, and environmental sustainability. Initiatives like the High Road Construction Careers program are instrumental in supporting workforce development in critical sectors (such as Construction) and can be replicated for other sectors.

Overall, the study underscores the importance of nurturing existing clusters, fostering emerging industries, and addressing environmental concerns to achieve sustainable and inclusive economic growth in Los Angeles

County. While certain SPAs boast diverse and sustainable industry clusters, others face challenges in providing sufficient economic opportunities. Efforts to promote diversity, sustainability, and workforce development are essential for maximizing the potential of existing clusters and nurturing new ones. By leveraging the strengths of each SPA and addressing its unique socio-economic dynamics, Los Angeles County can chart a path toward a prosperous future while ensuring equity and environmental stewardship for all residents.

Definitions

Industry clusters are regional concentrations of related industries. The clusters are made up of firms, suppliers, workers, and other institutions that support the regional economy, including government entities. This type of colocation of industries fosters essential economic relationships that positively benefit the regional economy through job creation and economic growth. Porter (1998) provides the California wine cluster as an example, which includes commercial wineries, grape growers, specialized suppliers of harvesting equipment and barrels, and institutions such as a research center at UC Davis and special committees in the California State Legislature. Industry clusters form due to underlying economic forces such as increased productivity that stem from labor market pooling, information spillovers that reduce production costs, the presence of specialized suppliers, and other factors. If an industry stands to benefit from these economic forces, then it's likely these clusters will form since it will reduce costs for all firms involved. Within each industry cluster is a number of specific industry types. For the full list of industry clusters please visit here, and for the full list of potential growth clusters, visit here.

Labor market pooling refers to a situation where workers with specialized skills concentrate in a particular region. This benefits both producers and workers since it reduces search-and-matching efforts between firms and workers, consequently reducing both labor shortages and unemployment. Producers benefit from having a pool of workers for when they need to expand, which leads to increased firm productivity. There is also an increase in favorable labor market outcomes for workers since firm concentration in a single location makes it easy to switch employers. Film production in Hollywood is a classic example of an industry cluster and offers a concrete example of labor market pooling. Talented actors, film crews, and other workers such as specialized attorneys and agents would be more costly to find and hire if they were spread out, according to Christopherson and Rightor (2010).

Information spillovers stem from increased interaction among workers that occurs when firms are clustered in a region. Companies acquire information through research and development efforts, and by studying their competitors. However, a lot of information and technology diffusion occurs on a personal level as employees of different companies mix together socially[1]. This type of information spillover increases firm productivity as they adopt and create better technology. Another benefit of clustering resulting from information spillovers is that firms are better able to price their products.[2]

Industries requiring specialized inputs for production are likely to cluster. By clustering, firms find it easier to source special inputs — and at better prices. Again, Hollywood serves as an excellent example of this phenomenon. Scott (2004) reports the various specialized suppliers in Los Angeles that provide inputs for film and television productions. Inputs such as costumes and soundstages have high fixed costs, so specialized suppliers benefit greatly from having a large market to serve, as is the case when there is an industry cluster. This allows specialized suppliers to charge lower prices. Overall, industry clusters facilitate these interactions between many buyers and sellers, which translates into better economic outcomes for all involved.

1 This is referred to as the "happy hour" effect by Brueckner (2011).
2 As discussed in Engelberg et. al. (2018).

Public sector policies are not necessary for forming or supporting industry clusters, but policies and strategies can help firms in industry clusters become more successful and competitive. For this reason, identifying clusters across various SPAs in Los Angeles County can help the California Jobs First program better target its strategies to benefit from these regional strengths.

Local Versus Traded Clusters

Industry clusters are categorized as traded and local. **Traded clusters** encompass industries predominantly focused on exports, signifying that most of their products are sold beyond regional boundaries. These clusters contribute external income to the local area, fostering growth in the local economy. Local clusters consist of industries predominantly catering to the local market. Although these clusters play a crucial role in generating economic activity, their income is mainly derived from local businesses or residents without bringing in additional funds from outside the region.

As discussed above, traded and local clusters contribute in different ways to the economy. Policymakers need to be cognizant of this since investments in clusters will yield different results depending on whether they are traded or local. There are often stark differences between local and traded industries when it comes to job counts and average wages. Broadly speaking, traded industries tend to have fewer but better-paying jobs than local industries, where job counts are considerably larger but average paychecks are smaller, although this gap has narrowed in recent years. Therefore, the primary outcome of direct efforts to grow traded industries will likely be an increase in smaller numbers of well-paying jobs, but the secondary effect will be growth in larger local industries.

With all this in mind, if the goal of economic development is simply to create large numbers of jobs, one could adopt strategies that promote local industries. However, the resulting jobs will offer relatively low pay, and the ripple effects throughout the economy will be somewhat muted. On the other hand, a strategy that promotes traded industries will result in fewer jobs created directly, but potentially larger ripple effects to the extent that traded industries draw inputs from local suppliers and better-paying jobs are created. Besides the cluster's impact on output and employment, another important consideration is how these industry clusters impact the environment and promote equity.

Identifying Clusters

Cluster mapping has emerged as a useful tool for economic development professionals and policymakers. Porter (2003) lays the foundation for cluster mapping. Porter's subsequent work with Mercedes Delgado and Scott Stern (Delgado et. al., 2016) provides the cluster definitions used in this analysis. These cluster definitions can also be found in the U.S. Cluster Mapping project.[3] Broadly speaking, each cluster combines one or more primary industries along with related industries integrated into its supply chain. To begin identifying essential clusters in Los Angeles County SPAs, we follow an adjusted version of the approach laid out by Barkley and Henry (2009).

The **location quotient** gauges how concentrated an industry is in a particular area compared to its concentration across the entire nation. **Concentration** refers to the share of employment for a particular industry cluster. Therefore, location quotients capture a region's industrial specialization.

3 U.S. Cluster Mapping, "Cluster Mapping Methodology," Harvard Business School Institute for Strategy and Competitiveness. https://clustermapping.us/content/cluster-mapping-methodology. Accessed February 1, 2024.

Methodology

We begin by identifying clusters that have a significant presence in each SPA based on the level of employment and location quotient (employment concentration). Next, we pinpoint the current presence of **potential growth industry clusters** such as Green Energy and Biosciences, which may benefit from investments made by the CJF program. Information about employment, employment growth, wages, and occupations are used to determine how much these potential growth industry clusters may contribute to the goals set forth by CJF.

First, we identify the sustainable and equitable growth potential of various industry clusters. The first step in identifying existing industry clusters is to determine which clusters employ more than 1,000 workers. Existing clusters were identified along two dimensions. First, we examine the level of employment to determine which clusters have a sizable employment presence in each SPA. Second, because clustering refers to regional concentration, Beacon Economics analyzed location quotients (LQ) of various clusters at the SPA level. The location quotient of an industry cluster (or sub-cluster) is the ratio of the share of employment in that cluster at the SPA level to the share of employment in that cluster in the nation. This provides information about the level of concentration of that cluster in the region compared to the rest of the United States. Industry clusters with an LQ greater than 1 are more concentrated in the corresponding SPA than in the United States overall.

These criteria are based on Barkley and Henry (2009), but we omit the use of the number of establishments since data is not available at the sub-regional level of our analysis.[4] The criteria are summarized in Table 30 below.

Table 30: Criteria for Existing Clusters

Description	Criteria
Level of Employment	Greater than 1,000
Location Quotient	Greater than 1

The existing clusters identified below play an important role in their respective SPAs and the county as a whole. However, not all clusters are necessarily a good match for the economic development goals set by California Jobs First. It is imperative to highlight the clusters that have the greatest potential for sustainable and equitable economic growth that can lead to high-quality and accessible jobs.

To that end, we selected three characteristics that best capture whether an industry cluster aligns with CJF's goals, and refer to these clusters as **CJF impact clusters** since they are likely to impact the economy through sustainable and equitable growth. CJF impact clusters share the following characteristics:

- They have very low or low environmental impact intensity and greenhouse gas impact intensity.
- Their employment growth exceeded the overall SPA-level cluster employment growth average.
- Their average wage is above the overall SPA-level average wage.

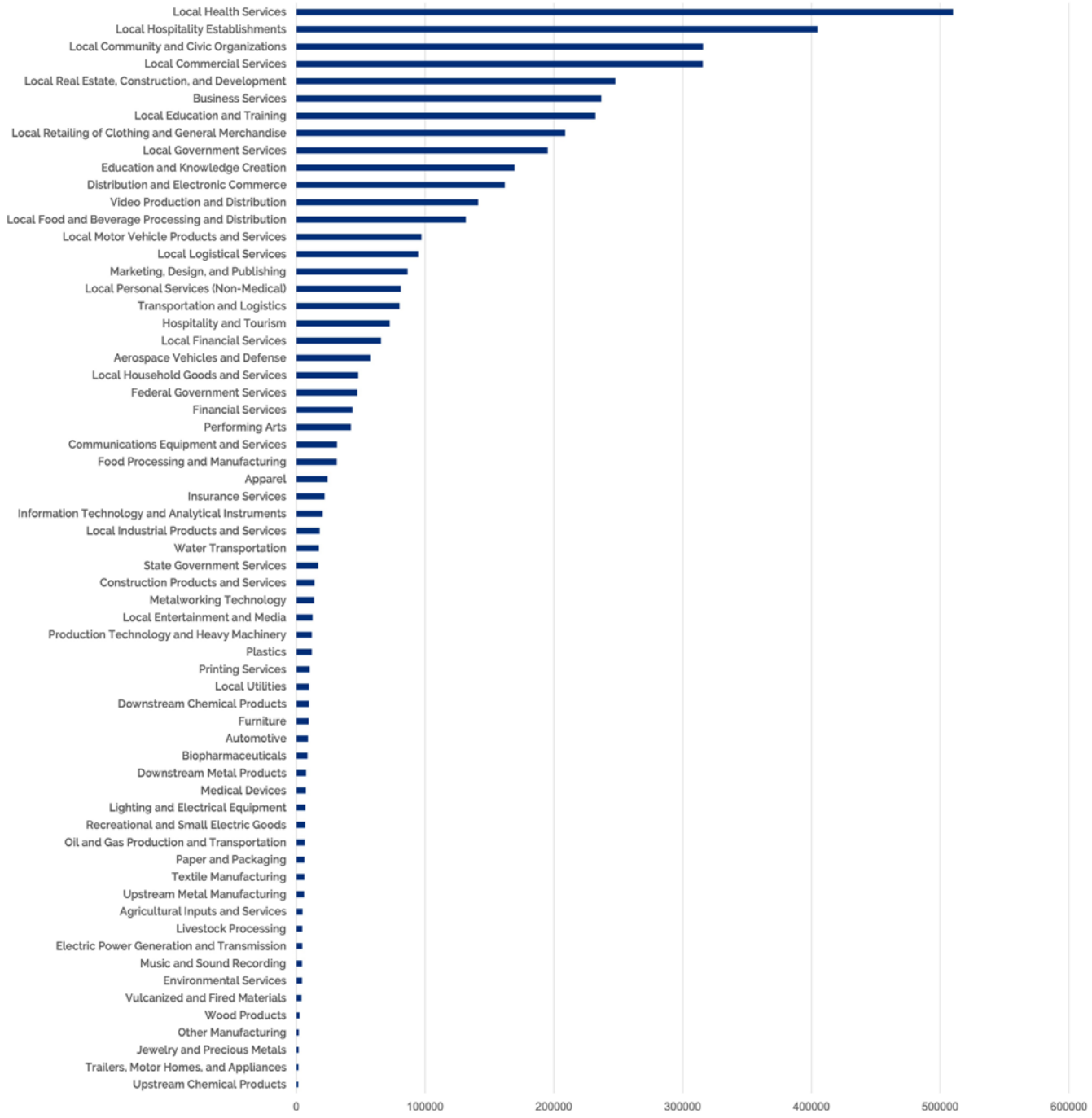
Industry clusters with these characteristics are the most sustainable clusters and most likely to provide high-quality jobs. Still, some industry clusters might have an outsized role in certain SPAs despite displaying high environmental impact intensity and not meeting these other criteria. We highlight these clusters on a case-by-case basis and provide context for why they are key industry clusters in their respective SPAs.

4 In any case, it is likely that employment would be highly correlated with the number of establishments.

Current Major Industry Clusters in Los Angeles County

The Los Angeles County economy is based on industry clusters related to entertainment, such as Video Production and Distribution, Music and Sound Recording, and Performing Arts. Other major industry clusters include Aerospace and Defense, Education and Knowledge Creation, Transportation and Logistics, and Marketing, Design, and Publishing. Apparel and Textile Manufacturing are still highly concentrated in the county when compared to the rest of the nation, but the industry clusters are clearly in decline. Local-serving industries such as Health Care, Community and Civic Organizations, Construction, Commercial Services, Hospitality, and Retail also play an essential role in the county's economy. Many SPAs depend heavily on these local-serving industry clusters.

Figure 37: Employment by Existing Industry Clusters in Los Angeles County – 2022



Source: Lightcast. Analysis by Beacon Economics.

Local industry clusters largely serve the local population while traded clusters are those that sell goods or services to customers outside the local economy. Sources of new growth for the local economy are likely to come from traded clusters. Spending that goes toward local industries essentially leads to recirculation of income within the local economy. Conversely, spending that goes toward traded industries tends to come from external sources, which represents new income entering the local economy. Looking at the top clusters based on regional specialization in Table 2, we see that many top clusters in Los Angeles County are traded. This bodes well for the county's growth prospects.

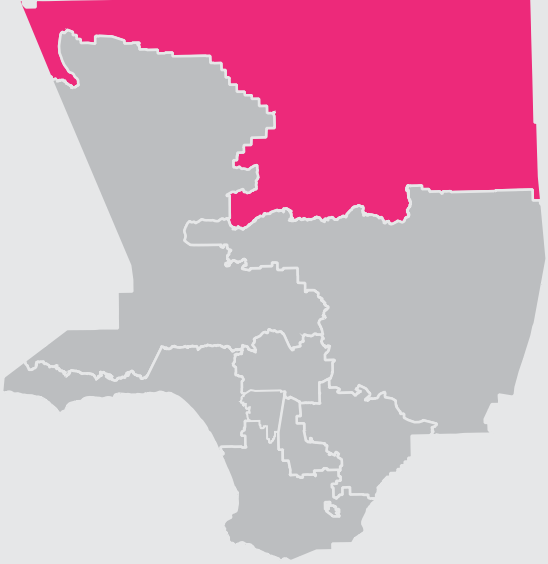
Table 31: Top-30 Regionally Concentrated Existing Industry Clusters in Los Angeles County

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Video Production and Distribution	141,164	26.9	26.6	15.6	124,794
Traded	Music and Sound Recording	4,411	51.7	34.4	7.2	142,514
Traded	Apparel	24,192	-28.3	-49.8	6.0	56,156
Traded	Performing Arts	42,329	15.3	65.9	4.0	229,422
Traded	Aerospace Vehicles and Defense	57,291	12.5	1.2	3.1	136,380
Traded	Jewelry and Precious Metals	1,788	3.3	9.0	2.7	55,268
Local	Local Community and Civic Organizations	315,800	14.3	312.8	2.5	29,996
Traded	Water Transportation	17,574	-2.4	6.3	1.9	139,267
Traded	Marketing, Design, and Publishing	86,425	9.8	24.2	1.8	149,254
Traded	Transportation and Logistics	80,199	11.0	55.3	1.5	89,293
Traded	Textile Manufacturing	6,318	-11.3	-29.5	1.2	58,084
Traded	Recreational and Small Electric Goods	6,634	-14.0	-5.3	1.2	100,406
Local	Local Commercial Services	315,632	6.7	20.5	1.2	74,600
Local	Local Entertainment and Media	12,580	-22.1	-14.7	1.2	108,777
Traded	Downstream Chemical Products	9,745	3.7	-4.0	1.2	76,979
Local	Local Government Services	195,051	-1.9	2.3	1.2	102,384
Traded	Education and Knowledge Creation	169,318	5.6	15.1	1.1	96,076
Local	Local Logistical Services	94,638	31.8	60.8	1.1	52,161
Traded	Environmental Services	4,410	9.6	-4.3	1.1	82,590
Local	Local Hospitality Establishments	404,728	-1.4	25.0	1.1	31,534
Local	Local Food and Beverage Processing and Distribution	131,536	0.6	5.2	1.0	44,416
Local	Local Industrial Products and Services	18,062	-15.1	-17.5	1.0	72,036
Traded	Metalworking Technology	13,514	-18.2	-21.2	1.0	66,808
Local	Local Personal Services (Non-Medical)	81,227	12.6	-59.6	1.0	43,392
Local	Local Retailing of Clothing and General Merchandise	208,478	-3.5	1.7	1.0	46,510
Local	Local Health Services	510,056	8.1	21.0	0.9	74,702
Local	Local Motor Vehicle Products and Services	97,124	-9.0	3.5	0.9	66,821
Traded	Electric Power Generation and Transmission	4,635	-2.5	11.1	0.9	159,709
Local	Local Education and Training	232,308	-2.5	3.2	0.9	64,033
Traded	Printing Services	10,203	-26.1	-32.9	0.9	58,037

Source: Lightcast. Analysis by Beacon Economics

Los Angeles County has various industry clusters in distinct regions. It is apparent in the data that some SPAs have fewer economic opportunities within their boundaries. The Antelope Valley, South-West, and South-East areas stand out due to the dearth of employment opportunities within internal industry clusters. This suggests a sub-regional approach that addresses a lack of opportunities is necessary for equitable and sustainable growth. Below, we break down the industry cluster analysis by SPA to provide a closer look at the region. For a closer look at countywide industry cluster trends, see the 2024 LAEDC Industry Cluster report.

SPA 1 Antelope Valley



There are 13 existing industry clusters located in the Antelope Valley SPA, and only three are traded clusters, which happen to be the most specialized in the region. These traded clusters are relatively small, with Aerospace Vehicles and Defense and Printing Services appearing near the bottom in terms of employment in our list of clusters. The prime existing CJF impact clusters in the Antelope Valley SPA are Aerospace Vehicles and Defense, and Local Health Services. Aerospace Vehicles and Defense is a legacy industry cluster in Los Angeles County that began to emerge during World War II as the Allies strategically moved production of aircraft from London to Southern California.[5] It continues to maintain an essential role in various SPAs.

Antelope Valley's 10 largest industry clusters are local serving, which suggests that SPA 1 does not have the traditional drivers for wealth creation that are present in its neighboring SPAs to the south. Yet, it's growing population that bucks the general trend for the county at large will continue to require more local-serving establishments to serve its residents. Local Health Services is the largest industry cluster employing 16,876 people in SPA 1, paying an average wage of $86,355. Growing by nearly 65% over the last 10 years, Local Health Services has become increasingly important to the 463,000 people residing in SPA 1.

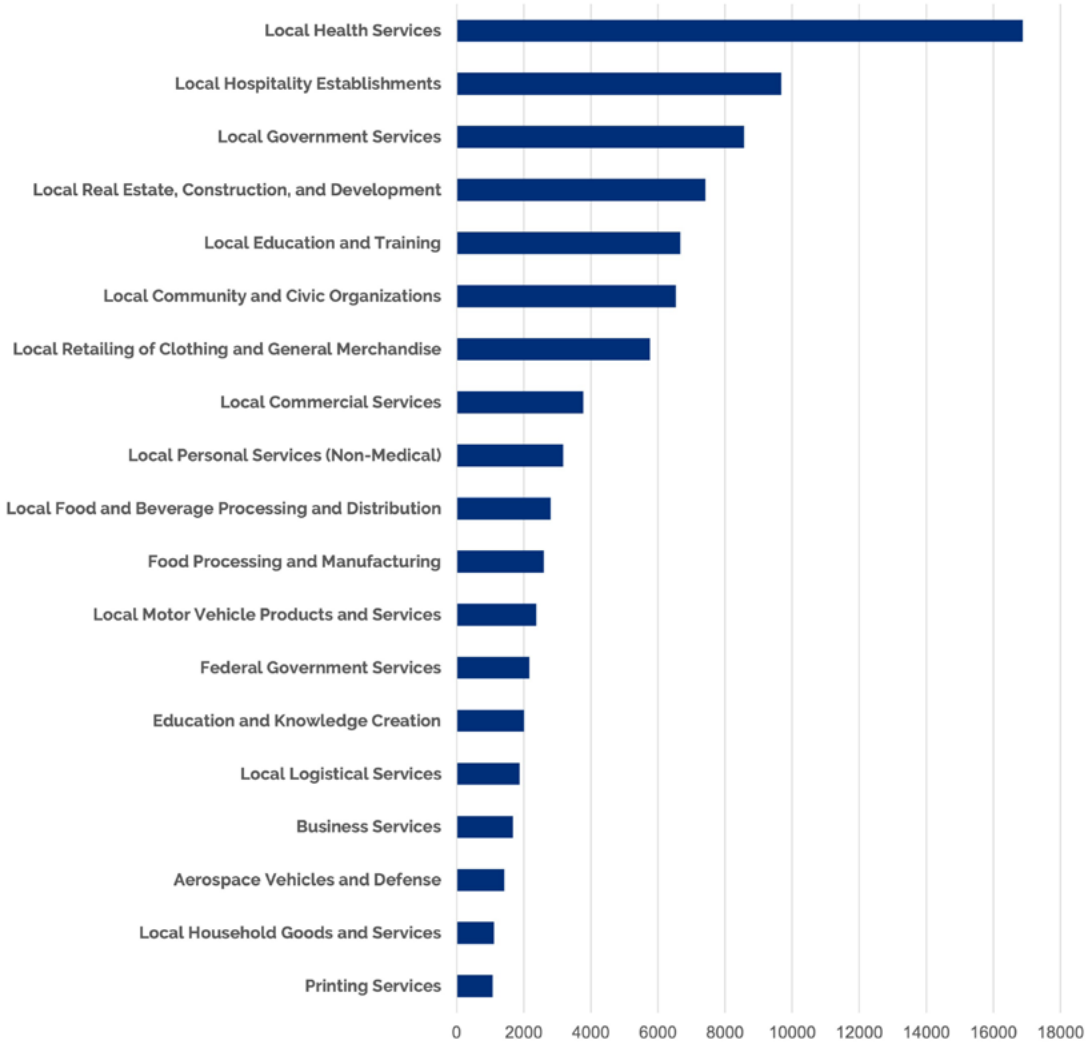
Antelope Valley's population growth has also led to similar booms in employment for Local Hospitality Establishments, and Local Real Estate, Construction and Development, growing at 21% and 37% respectively over the last 10 years. However, low wages for employees in the Local Hospitality Establishments industry cluster are under threat considering the housing costs have increased by 141% over the last 20 years. In SPA 1, the bulk of those working in Local Hospitality Establishments are employed in their growing restaurant industry. The Local Real Estate, Construction and Development industry cluster in SPA 1 includes Plumbing, Heating and Air-Conditioning Contractors, Home Centers, Drywall and Insulation Contractors, Electrical and Wiring Contractors, Building Construction and Residential Remodelers. This presents an opportunity for strategy coming out of the California Jobs First program as these are well paying jobs, paying on average more than $59,000 with the exception of Home Centers, and generally do not require a 4-year college degree.

The Aerospace Vehicles and Defense industry cluster has been a staple of their economy ever since to the point that nowadays, one might hear SPA 1 referred to as "Aerospace Valley" for its strong representation of Aerospace behemoths such as the NASA Armstrong Flight Research Center, Lockheed Martin, Boeing and Northrop Grumman.[6] Aerospace Vehicles and Defense has exhibited employment growth over the past 10 years, unlike other SPAs which have experienced a decline in employment in this cluster. The Aerospace Vehicles and Defense cluster provides 1,416 jobs that pay well, with the average wage being $156,778. Other

5 This is an excellent example of how a "historical accident" can lead to the formation of a cluster.
6 AEROSPACE VALLEY REGIONAL (avregional.org)

traded clusters pay lower wages but may offer easier entry for workers with lower skills. The other top traded industry clusters in SPA 1 are Printing Services and Food Processing and Manufacturing.

Figure 38: Employment by Existing Industry Clusters in Antelope Valley SPA – 2022



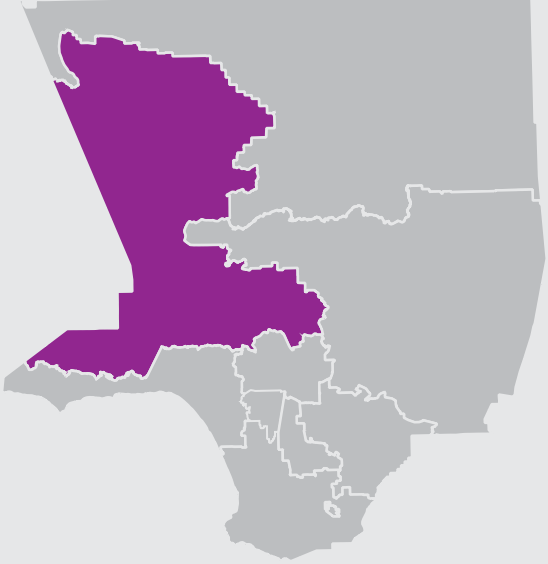
Source: Lightcast. Analysis by Beacon Economics.

Table 32: Existing Industry Clusters in Antelope Valley SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Printing Services	1,076	3.23	13.70	4.20	53,469
Traded	Aerospace Vehicles and Defense	1,415	36.21	35.09	3.39	156,778
Traded	Food Processing and Manufacturing	2,588	48.52	9.36	3.09	58,141
Local	Local Community and Civic Organizations	6,527	-2.15	270.53	2.31	30,963
Local	Local Government Services	8,563	-16.45	-10.02	2.29	102,384
Local	Local Personal Services (Non-Medical)	3,174	2.68	-60.75	1.75	40,132
Local	Local Health Services	16,876	4.60	64.58	1.40	86,355
Local	Local Retailing of Clothing and General Merchandise	5,755	5.56	4.97	1.20	41,126
Local	Local Education and Training	6,663	-26.04	-13.30	1.17	64,414
Local	Local Hospitality Establishments	9,675	22.04	20.56	1.14	31,499
Local	Federal Government Services	2,162	-17.88	-12.82	1.14	103,889
Local	Local Real Estate, Construction, and Development	7,416	21.32	36.56	1.01	71,314
Local	Local Motor Vehicle Products and Services	2,370	-22.02	-18.21	1.01	76,454

Source: Lightcast. Analysis by Beacon Economics.

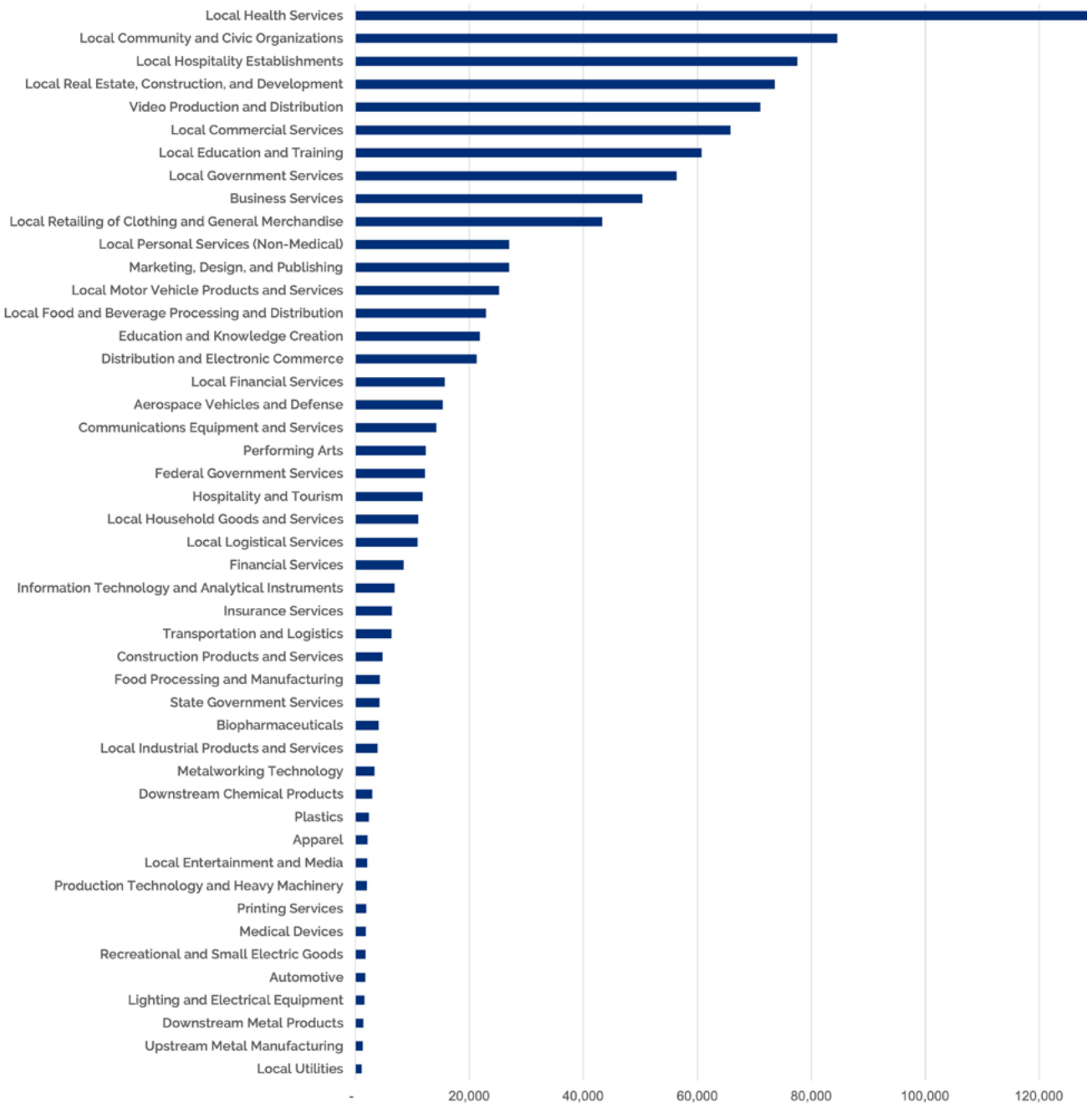
SPA 2 San Fernando



The San Fernando SPA contains many Los Angeles County legacy industries such as Video Production and Distribution and Aerospace Vehicles and Defense. Unlike the Antelope Valley and East SPAs, employment in Aerospace Vehicles and Defense has been declining in the San Fernando SPA. This means it's unlikely this industry cluster will provide job opportunities in the future.

Various entertainment-related industry clusters can offer well-paying jobs in the San Fernando SPA. Some key industry clusters are related to the health industry, such as Biopharmaceuticals and Medical Devices (Location Quotient of 0.92). These clusters can also offer job opportunities to workers once they have received some training to improve their skills. The CJF impact clusters identified are Video Production and Distribution, and Marketing, Design, and Publishing.

Figure 39: Employment by Existing Industry Clusters in San Fernando SPA



Source: Lightcast. Analysis by Beacon Economics.

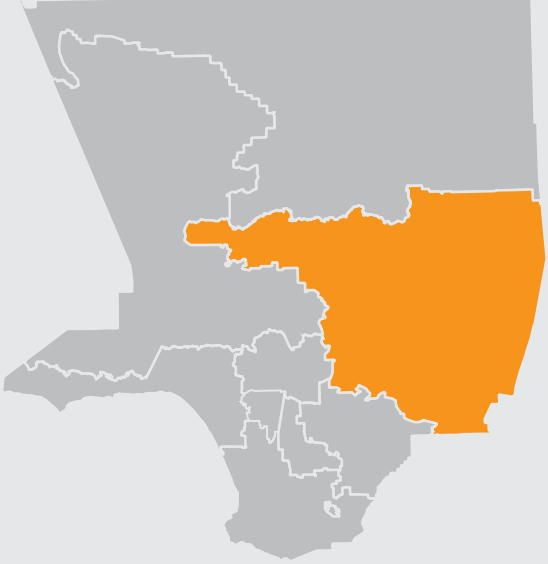
The largest local clusters in the San Fernando SPA are Local Health Services, of which Home Health Care Services has the most significant positive 5-year job growth projections; Local Community and Civic Organizations, of which Voluntary Health Organizations pays the best and has the most significant positive 5-year job growth projections; Local Hospitality Establishments, including restaurants which employ nearly 30,000 people; and Local Education and Training, an local cluster that employs over 60,000 people. The most impactful traded clusters in terms of wages, projected growth, and earnings are Aerospace and Performing Arts.

Table 33: Existing Clusters in San Fernando SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Video Production and Distribution	71,028	29.53	42.50	33.42	123,002
Traded	Performing Arts	12,299	10.11	88.27	4.95	233,033
Traded	Aerospace Vehicles and Defense	15,351	2.66	-11.49	3.49	120,992
Local	Local Community and Civic Organizations	84,523	13.89	418.39	2.84	29,176
Traded	Marketing, Design, and Publishing	26,934	9.02	32.60	2.34	174,997
Traded	Apparel	2,118	-43.09	-63.30	2.25	56,033
Traded	Biopharmaceuticals	4,088	-1.74	1.12	1.70	85,675
Traded	Downstream Chemical Products	2,919	2.70	-10.37	1.49	73,913
Traded	Communications Equipment and Services	14,228	-19.23	-2.60	1.47	137,184
Local	Local Government Services	56,348	2.20	21.07	1.43	102,384
Local	Local Personal Services (Non-Medical)	26,973	17.66	-53.40	1.42	43,811
Traded	Recreational and Small Electric Goods	1,780	-22.11	-11.82	1.34	103,964
Traded	Information Technology and Analytical Instruments	6,825	-23.96	-9.85	1.08	109,513
Traded	Metalworking Technology	3,307	-19.62	-24.69	1.05	64,056
Local	Local Commercial Services	65,810	16.35	23.34	1.04	65,753
Local	Local Health Services	131,175	8.70	28.64	1.04	74,647
Local	Local Motor Vehicle Products and Services	25,196	-9.41	14.98	1.02	65,277
Local	Local Education and Training	60,749	-0.66	7.56	1.02	64,723

Source: Lightcast. Analysis by Beacon Economics

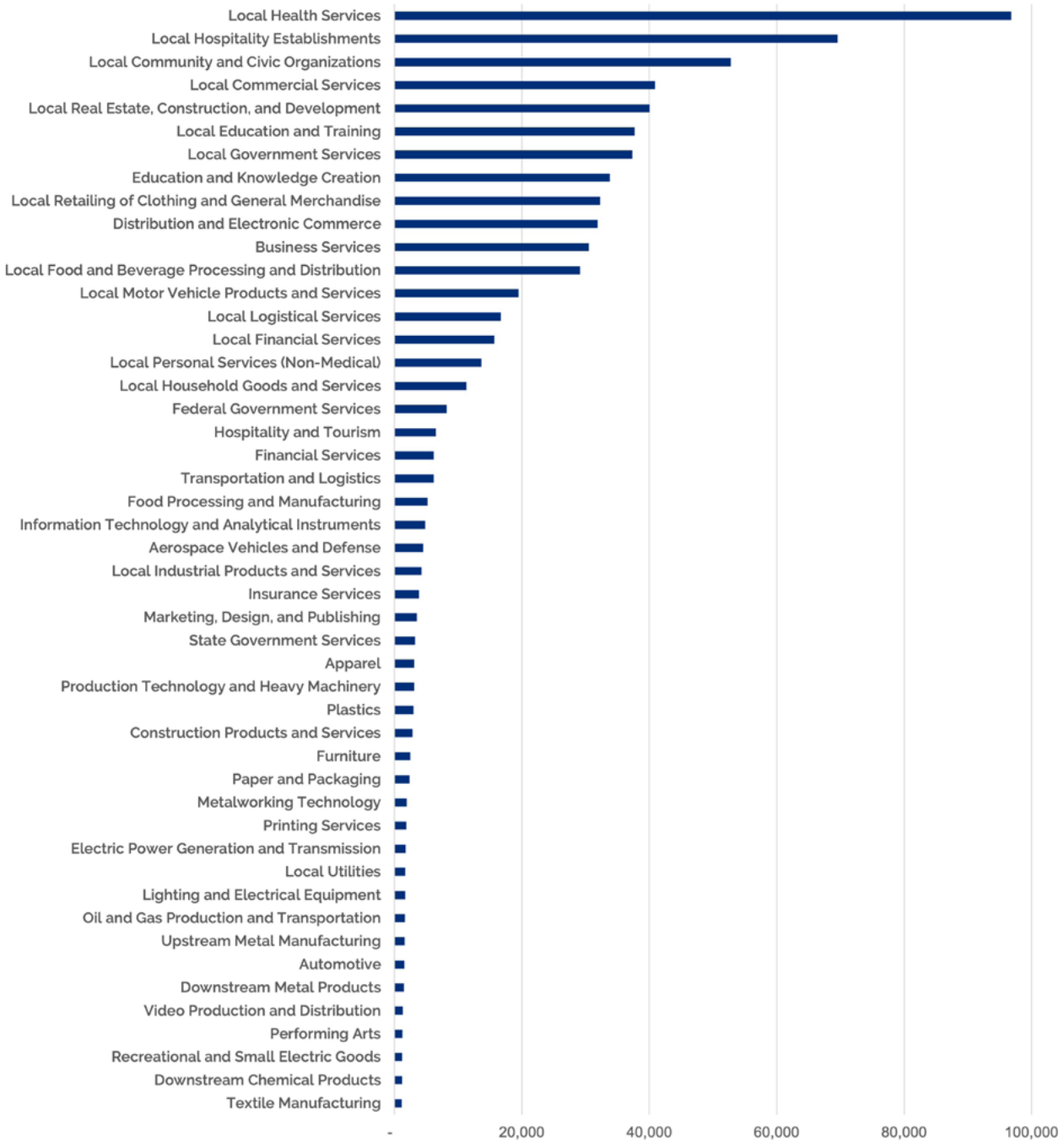
SPA 3 San Gabriel



Focusing on the most specialized industry clusters in the San Gabriel SPA with an LQ greater than 1, we find a good variety of industry clusters that can provide high-quality jobs. Aerospace Vehicles and Defense pays well and has sustained employment growth over the past 10 years.

Electric Power Generation and Transmission pays well but has undergone employment decline over the past 10 years. Moreover, this industry cluster includes Fossil Fuel Electric Power generation, so it has a high environmental impact. Still, this is a cluster worth exploring as jobs in this industry cluster can contribute toward the transition to a more sustainable economy. Investments that promote the reduction of greenhouse gas emissions by supporting green energy jobs can greatly contribute to the goals of California Jobs First. Ultimately, San Gabriel only has one CJF impact cluster: Aerospace Vehicles and Defense, which has a high growth trajectory, high wages for the SPA, and very low GHG impact.

Figure 40: Employment by Existing Industry Clusters in San Gabriel SPA



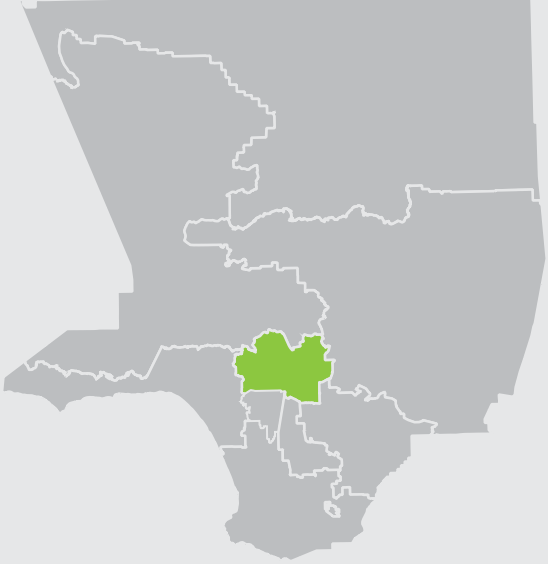
Source: Lightcast. Analysis by Beacon Economics

Table 34: Existing Clusters in San Gabriel SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Apparel	3,115	-23.00	-50.42	4.89	56,189
Local	Local Community and Civic Organizations	52,805	6.87	357.76	2.62	27,745
Traded	Electric Power Generation and Transmission	1,742	-22.89	-34.52	2.17	159,240
Traded	Aerospace Vehicles and Defense	4,502	35.02	8.92	1.51	133,713
Local	Local Industrial Products and Services	4,256	-11.21	-4.49	1.50	72,175
Local	Local Food and Beverage Processing and Distribution	29,110	-1.52	4.22	1.45	49,105
Traded	Textile Manufacturing	1,172	-22.39	-28.30	1.44	56,094
Traded	Furniture	2,474	-20.40	-20.34	1.40	56,287
Local	Local Government Services	37,365	9.43	9.33	1.40	102,384
Traded	Education and Knowledge Creation	33,822	5.22	34.33	1.40	89,731
Traded	Paper and Packaging	2,386	-3.41	-11.10	1.39	81,995
Traded	Recreational and Small Electric Goods	1,228	-6.99	0.65	1.37	102,218
Local	Local Logistical Services	16,704	48.65	93.00	1.23	50,516
Local	Local Motor Vehicle Products and Services	19,461	-4.21	29.17	1.16	69,317
Local	Local Household Goods and Services	11,311	-7.27	-5.32	1.15	54,525
Local	Local Hospitality Establishments	69,557	-2.17	23.22	1.15	31,371
Traded	Information Technology and Analytical Instruments	4,822	-3.26	17.41	1.13	89,455
Local	Local Health Services	96,809	5.06	14.03	1.13	69,360
Traded	Distribution and Electronic Commerce	31,907	-8.05	-0.44	1.08	84,385
Local	Local Financial Services	15,701	-3.23	-7.21	1.07	114,080
Traded	Lighting and Electrical Equipment	1,686	-19.29	-20.39	1.06	81,625
Local	Local Personal Services (Non-Medical)	13,683	15.09	-60.14	1.06	40,743
Traded	Printing Services	1,855	-28.29	-42.75	1.02	59,095

Source: Lightcast. Analysis by Beacon Economics..

SPA 4 Metro



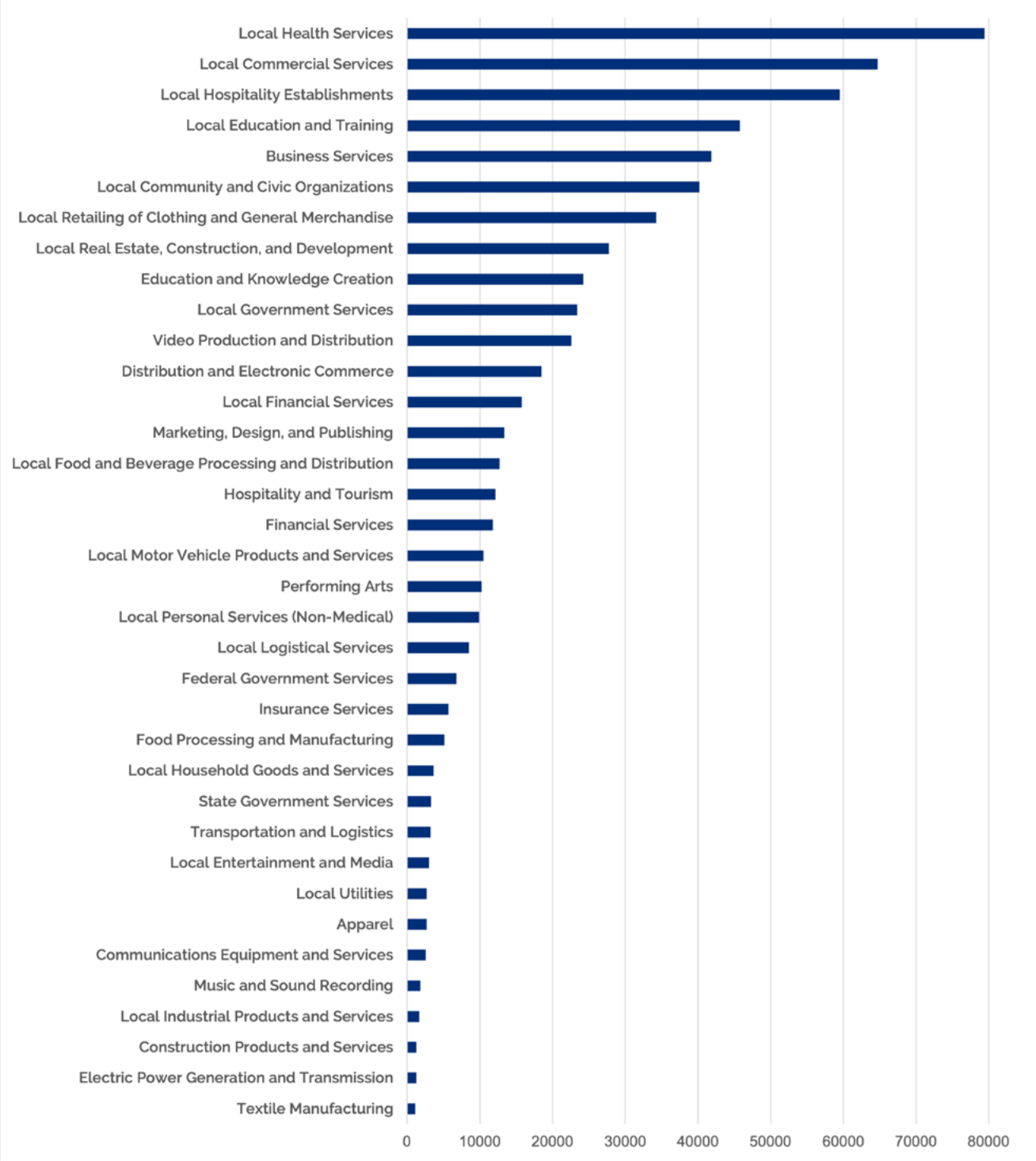
Major employers in the Metro SPA are local industry clusters such as Local Health Services and Local Education and Training. Traded industry clusters tend to include professional services such as Financial Services or are related to the entertainment and media industry.

There are 18 industry clusters with a location quotient greater than 1 and employment greater than 1,000 in the Metro SPA. Many of these industry clusters, such as Apparel, have experienced declining employment over the past 10 years, and often just over the last five years. Many industry clusters experiencing employment growth and paying a high average wage might be challenging for workers to join. Still, given the Metro SPA's specialization in industry clusters such as Music and Sound Recording and Performing Arts, it's crucial to explore ways to help disadvantaged workers break into these industries. This requires collaboration with industry leaders to determine what barriers keep workers from finding employment in these industries.

Local Health Services also is another key CJF impact cluster that pays slightly below the Metro SPA average wage and has continued growing over the past 10 years. Moreover, it is the top employer in the SPA. The data reveals that some effort should be made to promote greater diversity in industry clusters such as Music and Sound Recording, Video Production and Distribution, Performing Arts, and Marketing, Design, and Publishing.

A greater concern in the Metro SPA is that many industry clusters are not very diverse. Local Commercial Services is one cluster that stands out as it provides high-quality jobs, has a low environmental impact, and is already highly diverse. This industry cluster has also experienced robust employment growth over the last 10 years.

Figure 41: Employment by Existing Industry Clusters in Metro SPA



Source: Lightcast. Analysis by Beacon Economics.

Table 35: Existing Clusters in Metro SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Music and Sound Recording	1,844	156.43	81.35	20.91	143,401
Traded	Video Production and Distribution	22,580	-9.02	-16.91	17.28	131,703
Traded	Performing Arts	10,227	1.70	37.07	6.69	211,405
Traded	Apparel	2,691	-33.21	-53.41	4.65	54,241
Local	Local Community and Civic Organizations	40,185	15.78	249.27	2.20	34,266
Local	Local Entertainment and Media	3,028	-30.22	-22.31	1.96	69,787
Traded	Marketing, Design, and Publishing	13,337	21.25	27.44	1.89	130,148
Traded	Electric Power Generation and Transmission	1,255	27.72	326.60	1.73	158,824
Local	Local Commercial Services	64,720	11.17	17.78	1.67	92,909
Traded	Textile Manufacturing	1,109	-17.59	-40.43	1.50	57,310
Traded	Financial Services	11,806	8.26	19.86	1.37	253,881
Local	Local Utilities	2,694	61.22	533.77	1.35	119,049
Local	Local Education and Training	45,739	13.66	29.99	1.25	62,141
Local	Local Financial Services	15,766	3.12	-0.25	1.18	117,642
Local	Local Retailing of Clothing and General Merchandise	34,253	-6.38	-1.13	1.11	52,006
Traded	Education and Knowledge Creation	24,224	7.77	34.27	1.11	78,719
Local	Local Hospitality Establishments	59,479	-19.23	7.00	1.08	32,012
Local	Local Health Services	79,393	7.52	21.00	1.02	78,387

Source: Lightcast. Analysis by Beacon Economics.

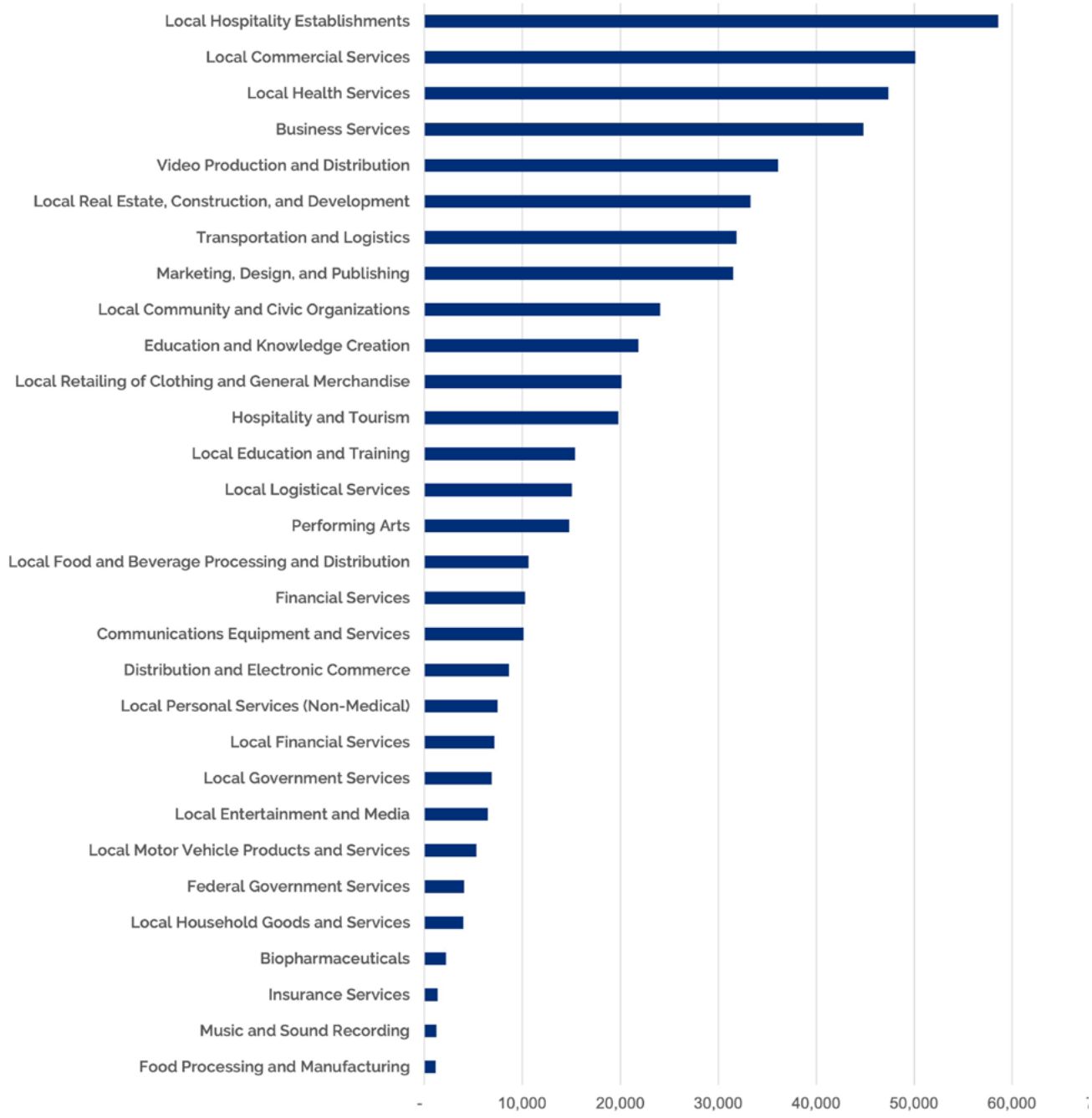
SPA 5 West

In terms of employment, the top-10 industry clusters in the West SPA include five local and five traded clusters. This parity between traded and local clusters is a stark contrast to other SPAs that mainly include local industries in the top-10 employer clusters. This means the West SPA is better positioned to experience economic growth.

The industry clusters with LQ greater than 1 are mainly traded clusters. This is a testament to the regional competitiveness of the West SPA. Many of the clusters concentrated in the West SPA pay excellent wages, but some have had employment growth over the past five years that is below the average in the SPA. For instance, Financial Services employment declined by 5% while the average industry cluster grew by nearly 6.5%. For this reason, many of these high-paying industries are not considered to be CJF existing impact industry clusters.

Overall, the top-performing and sustainable industry clusters that are already established in the SPA are Marketing, Design, and Publishing, Business Services, Communications Equipment and Services, Video Production and Distribution, and Performing Arts. Industry clusters like Biopharmaceuticals pay well in comparison to other SPAs; however, in the West SPA, the average wage in Biopharmaceuticals falls below the SPA average wage for all clusters. Moreover, Biopharmaceuticals produces moderate greenhouse gas emissions. For these reasons, we do not consider Biopharmaceuticals to be a CJF impact industry cluster, but it is an industry cluster that can benefit from investments aimed at reducing its carbon footprint.

Figure 42: Employment by Existing Industry Clusters in West SPA



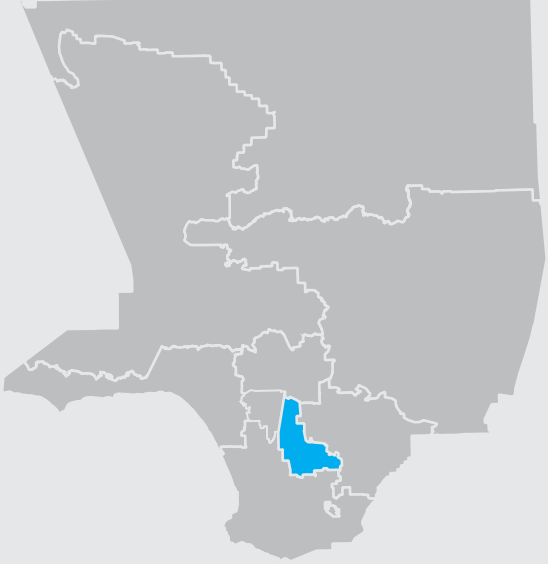
Source: Lightcast. Analysis by Beacon Economics.

Table 36: Existing Clusters in West SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Video Production and Distribution	36,121	32.96	22.82	31.80	123,808
Traded	Music and Sound Recording	1,236	8.63	-1.06	16.12	141,158
Traded	Performing Arts	14,781	59.88	94.29	11.12	245,324
Traded	Marketing, Design, and Publishing	31,533	6.99	37.42	5.13	143,677
Local	Local Entertainment and Media	6,473	-5.86	7.59	4.81	133,068
Traded	Transportation and Logistics	31,868	-1.44	32.17	4.64	95,320
Traded	Communications Equipment and Services	10,124	27.65	-7.66	1.96	178,476
Traded	Hospitality and Tourism	19,812	-7.17	17.72	1.82	68,326
Traded	Biopharmaceuticals	2,192	82.39	189.27	1.70	83,642
Local	Local Community and Civic Organizations	24,082	51.99	336.91	1.51	28,911
Local	Local Commercial Services	50,102	-4.72	26.55	1.49	100,235
Local	Local Logistical Services	15,049	72.78	98.04	1.41	49,139
Traded	Financial Services	10,289	-5.25	20.66	1.38	296,326
Local	Local Hospitality Establishments	58,577	-8.02	20.30	1.22	31,293
Traded	Business Services	44,812	4.07	22.19	1.17	138,472
Traded	Education and Knowledge Creation	21,835	24.87	9.51	1.15	98,669

Source: Lightcast. Analysis by Beacon Economics.

SPA 6 South-East



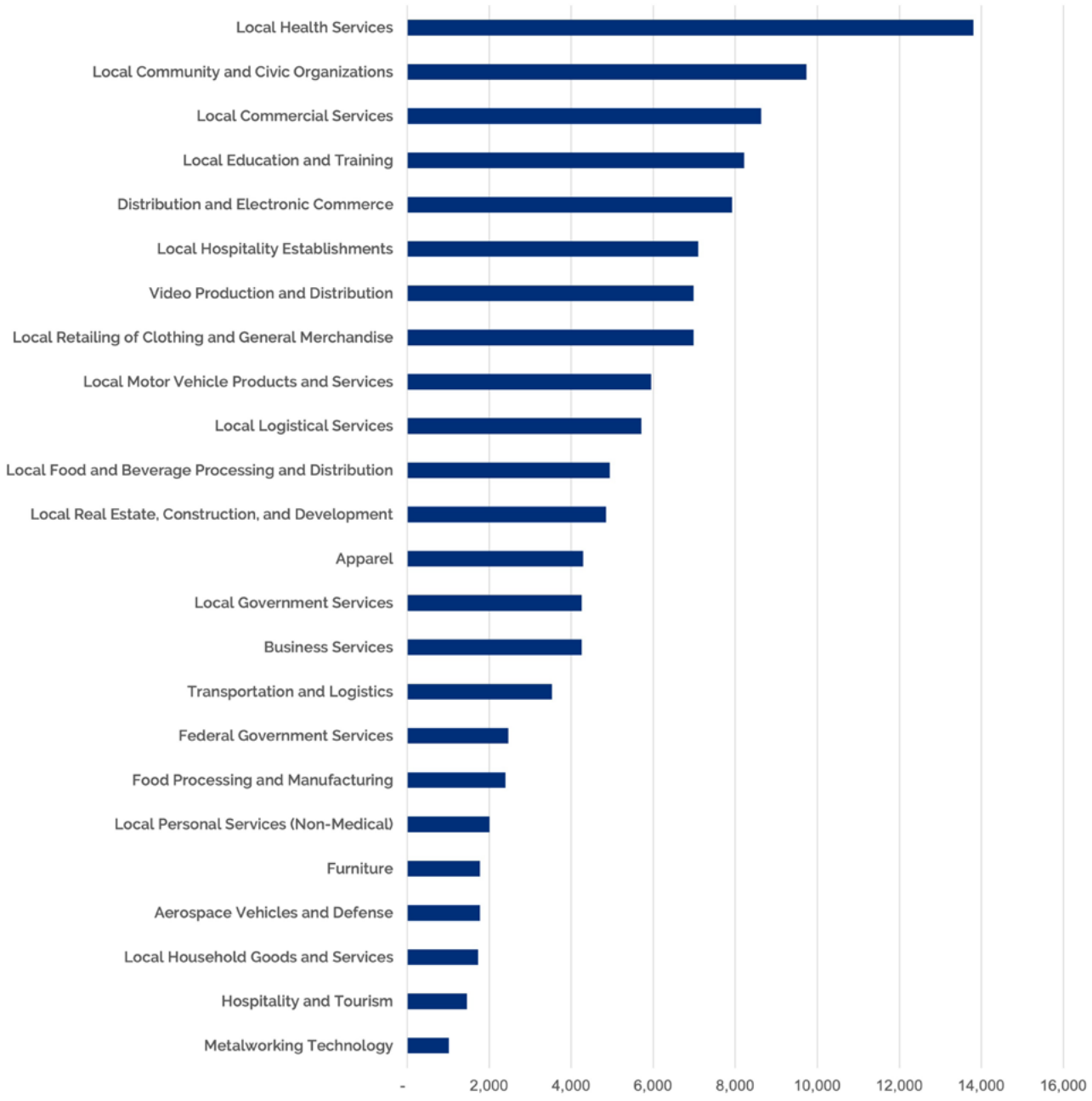
As discussed in the Regional Summary, the South-East SPA faces many disadvantages compared to other SPAs. This is also apparent when looking at industry clusters located in the South-East. Local Health Services is the top employer in the SPA, and most of the top industry clusters in terms of employment are local clusters. One of the top-traded clusters is Distribution and Electronic Commerce. Although this cluster pays a wage near the SPA average wage, employment has declined over the past five years. Moreover, its greenhouse gas emissions intensity is only moderate.

In South East SPA most of the top industry clusters in terms of employment are local clusters. One of the top-traded clusters is Distribution and Electronic Commerce. Although this cluster pays a wage near the SPA average wage, employment has declined over the past five years. Moreover, its greenhouse gas emissions intensity is only moderate.

Video Production and Distribution has experienced exorbitant growth over the past five years. Currently, Video Production and Distribution is the only CJF impact cluster in the South-East SPA. The Video Production and Distribution industry cluster pays well and has a low environmental impact intensity; however, it is not a very diverse industry. Diversity must be improved to ensure residents within the South-East SPA can benefit from this cluster's presence.

The Transportation and Logistics industry cluster has a significant concentration in this SPA and pays relatively well, while also being accessible to workers with lower educational attainment. Although this industry cluster produces high levels of greenhouse gas emissions it might be worth considering investments in this industry cluster that target sub-industries with low greenhouse gas emissions or be used to reduce emissions in the industry cluster. Given the lack of industry clusters currently aligned with CJF's mission, it is necessary to look at some of the key clusters in this SPA and explore how they can be brought into cohesion with the goals of CJF.

Figure 43: Employment by Existing Industry Clusters in South-East SPA



Source: Lightcast. Analysis by Beacon Economics.

Table 37: Existing Clusters in South-East SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Apparel	4,289	9.04	-16.41	35.56	57,362
Traded	Video Production and Distribution	6,980	1591.18	23790.33	25.61	123,331
Traded	Furniture	1,772	-17.40	-14.50	5.32	60,951
Traded	Aerospace Vehicles and Defense	1,772	1.22	-17.59	3.15	116,855
Local	Local Community and Civic Organizations	9,737	6.60	275.67	2.55	31,354
Traded	Metalworking Technology	1,014	-13.71	-15.29	2.52	61,113
Local	Local Logistical Services	5,709	31.57	22.46	2.23	55,270
Traded	Transportation and Logistics	3,534	37.06	39.72	2.15	81,373
Traded	Food Processing and Manufacturing	2,392	-0.51	33.01	2.12	67,124
Local	Local Motor Vehicle Products and Services	5,948	4.41	-14.68	1.88	62,647
Traded	Distribution and Electronic Commerce	7,921	-11.69	-4.46	1.42	76,137
Local	Local Food and Beverage Processing and Distribution	4,942	-2.79	3.10	1.30	42,710
Local	Local Retailing of Clothing and General Merchandise	6,980	-1.19	11.88	1.08	48,059
Local	Local Education and Training	8,220	-29.45	25.01	1.07	65,509
Local	Local Commercial Services	8,634	7.70	55.31	1.07	58,374

Source: Lightcast. Analysis by Beacon Economics.

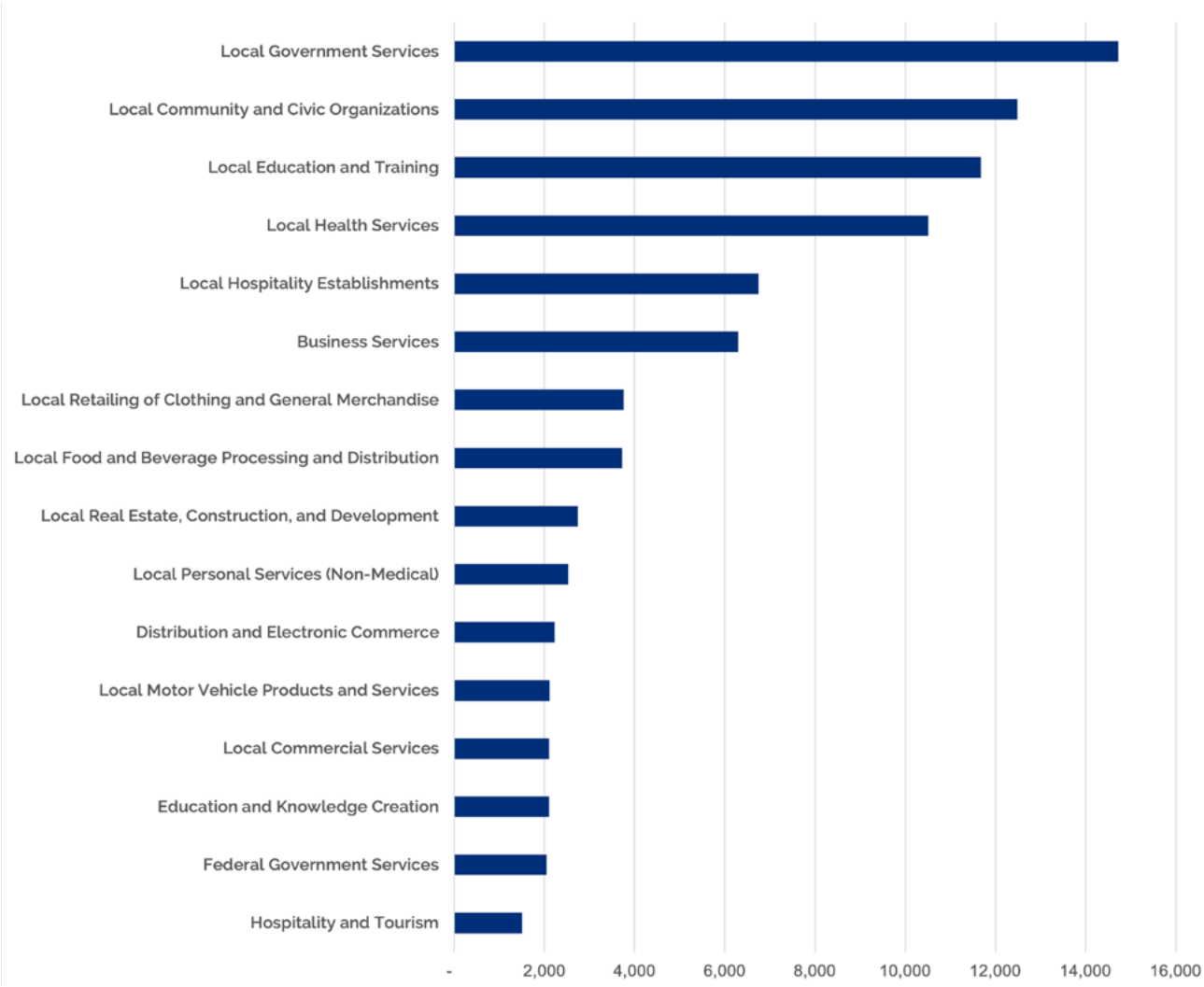
SPA 6 South-West

Government employment plays a large role in the South-West SPA, as two of the top three industry clusters in terms of employment involve the government. There are six existing clusters, all of which are local clusters. Local Government Services offers a strong wage of over $100,000 and employs nearly 15,000 residents. The federal government pays nearly the same, but employs far fewer people in this SPA, at 2,046. Business services is the top trade industry cluster in terms of employment but has an LQ of less than one.

Local Health Services is also a major employer, employing over 10,500 people. Medical Centers and Hospitals employ 647 people in the SPA and pay the most at over $100,000. However, within this cluster, the majority are employed at Residential Intellectual and Developmental Disability Facilities (1586 jobs) and Residential Mental Health and Substance Abuse Facilities (1179 jobs), where earnings are at $37,211 and $52,513, respectively. Investments in these industry clusters may be worth considering given the lack of other options. Notably, Local Community and Civic Organizations provide the most jobs in the SPA, with the most employed occupation in Services for the Elderly and Persons with Disabilities at over 9,300 jobs; however, the pay is meager at just over $21,000.

Once we account for the environmental impact intensity of the clusters, as well as how their employment growth and wages compare to SPA-level averages, there are no industry clusters that can achieve CJF goals, as the situation currently stands. This further underscores the dire situation in SPA 6 South-West discussed in the Regional Summary which shows that the South-West SPA economic landscape does not provide enough opportunities for its residents. This has negative ramifications for the economic prospects of the region and its residents.

Figure 44: Employment by Existing Industry Clusters in South-West SPA



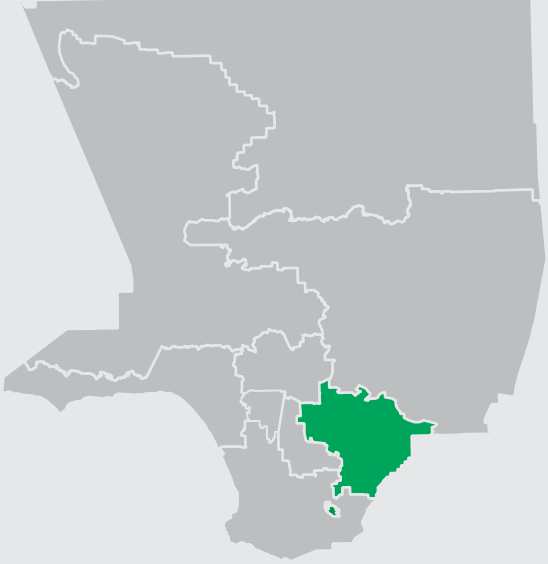
Source: Lightcast. Analysis by Beacon Economics.

Table 38: Existing Clusters in South-West SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Local	Local Community and Civic Organizations	12,479	13.25	229.71	4.55	30,173
Local	Local Government Services	14,723	-6.37	18.50	4.06	102,384
Local	Local Education and Training	11,678	-20.40	-16.86	2.12	65,851
Local	Local Personal Services (Non-Medical)	2,525	20.37	-67.12	1.44	40,560
Local	Local Food and Beverage Processing and Distribution	3,718	34.64	48.43	1.36	40,602
Local	Federal Government Services	2,046	8.63	37.25	1.11	103,119

Source: Lightcast. Analysis by Beacon Economics

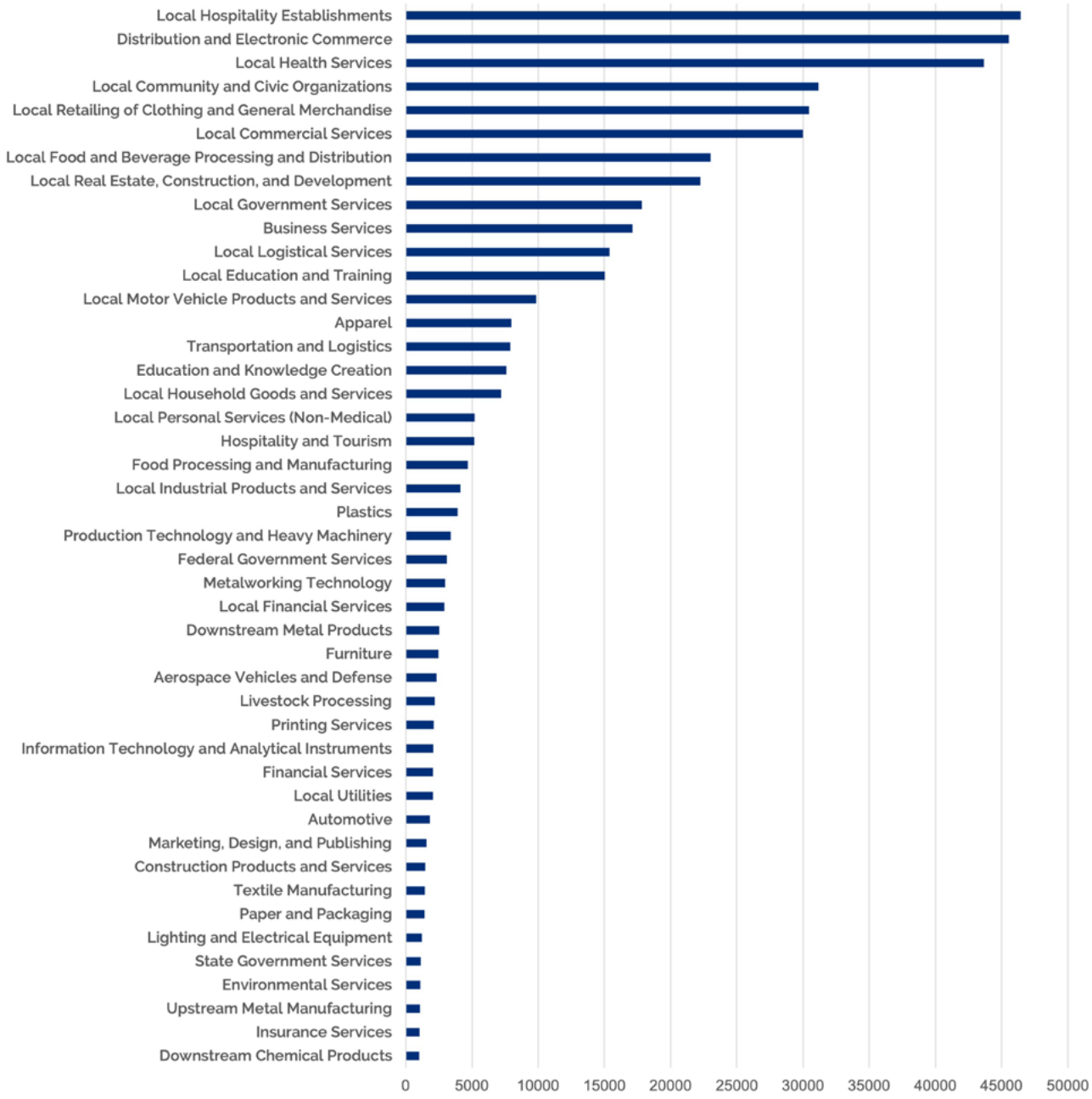
SPA 7 East



The East SPA features various clusters that employ more than 1,000 workers. Many of the top industry clusters in terms of employment are local clusters. Distribution and Electronic Commerce is the top-traded cluster, employing over 45,500 workers with an average wage of $80,170. Moreover, Distribution and Electronic Commerce industry cluster employment has grown nearly 12% over the past 10 years. As measured by the location quotient, Apparel is the most specialized cluster in the East SPA. However, this is partly driven by national trends that have seen apparel decline in most of the United States due to globalization. The declining employment over the past 10 years means this cluster is unlikely to foster sustainable and equitable growth.

The Local Community and Civic Organizations cluster is a major employer in the East SPA and has a very low environmental impact. However, it does not pay very well, with the average wage only being around $27,000. In summary, few industry clusters in the East SPA align with CJF's goals. The industry clusters most likely to create well-paying and sustainable jobs are Aerospace Vehicles and Defense; Distribution and Electronic Commerce; and Environmental Services. Distribution and Electronic Commerce and Environmental Services can become better-aligned with the CJF mission by lowering greenhouse gas emissions. Both industry clusters already maintain a relatively diverse workforce, so CJF efforts would likely have to focus on workforce development and training to help workers join these sectors and develop their skills.

Figure 45: Employment by Existing Industry Clusters in East SPA



Source: Lightcast. Analysis by Beacon Economics

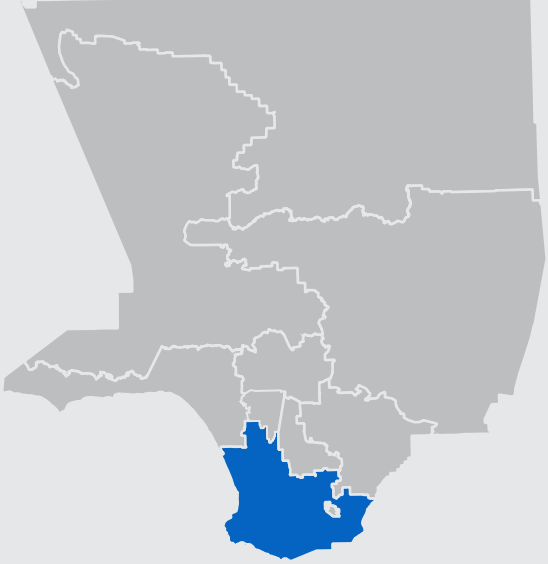
Table 39: Existing Clusters in East SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Apparel	7,976	-28.64	-46.74	19.64	56,105
Traded	Textile Manufacturing	1,422	26.98	21.78	2.74	61,570
Traded	Environmental Services	1,106	34.83	1.69	2.68	82,810
Traded	Distribution and Electronic Commerce	45,528	-3.67	11.70	2.43	80,172
Local	Local Community and Civic Organizations	31,165	14.08	395.19	2.43	26,961
Local	Local Industrial Products and Services	4,140	-20.24	-27.54	2.29	74,526
Traded	Metalworking Technology	2,973	-16.84	-23.03	2.20	68,745
Traded	Furniture	2,455	-26.53	-16.55	2.19	56,014
Traded	Plastics	3,908	6.44	3.16	1.90	67,672
Local	Local Food and Beverage Processing and Distribution	23,014	-2.66	6.67	1.80	48,404
Traded	Printing Services	2,086	-21.75	-29.15	1.79	57,159
Local	Local Logistical Services	15,383	31.07	66.71	1.78	53,815
Traded	Downstream Metal Products	2,511	-15.71	-6.63	1.75	69,213
Local	Local Utilities	2,031	20.81	11.22	1.44	99,911
Traded	Transportation and Logistics	7,889	16.64	59.25	1.42	85,525
Local	Local Retailing of Clothing and General Merchandise	30,434	-5.04	8.16	1.40	46,264
Traded	Livestock Processing	2,188	-4.85	-15.96	1.33	56,908
Traded	Paper and Packaging	1,410	7.56	-3.53	1.29	76,699
Traded	Production Technology and Heavy Machinery	3,376	12.66	-15.91	1.28	90,439
Traded	Food Processing and Manufacturing	4,691	-0.49	-2.03	1.23	67,252
Traded	Aerospace Vehicles and Defense	2,319	7.08	-4.95	1.22	143,182
Traded	Lighting and Electrical Equipment	1,218	-6.19	8.55	1.20	80,883
Local	Local Hospitality Establishments	46,432	13.68	50.27	1.20	31,319

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Downstream Chemical Products	1,006	20.12	1.94	1.19	73,678
Local	Local Household Goods and Services	7,191	-15.21	-1.38	1.15	56,248
Local	Local Commercial Services	29,987	4.16	12.79	1.10	52,038
Local	Local Government Services	17,815	-10.81	-0.63	1.05	102,384

Source: Lightcast. Analysis by Beacon Economics.

SPA 8 South Bay



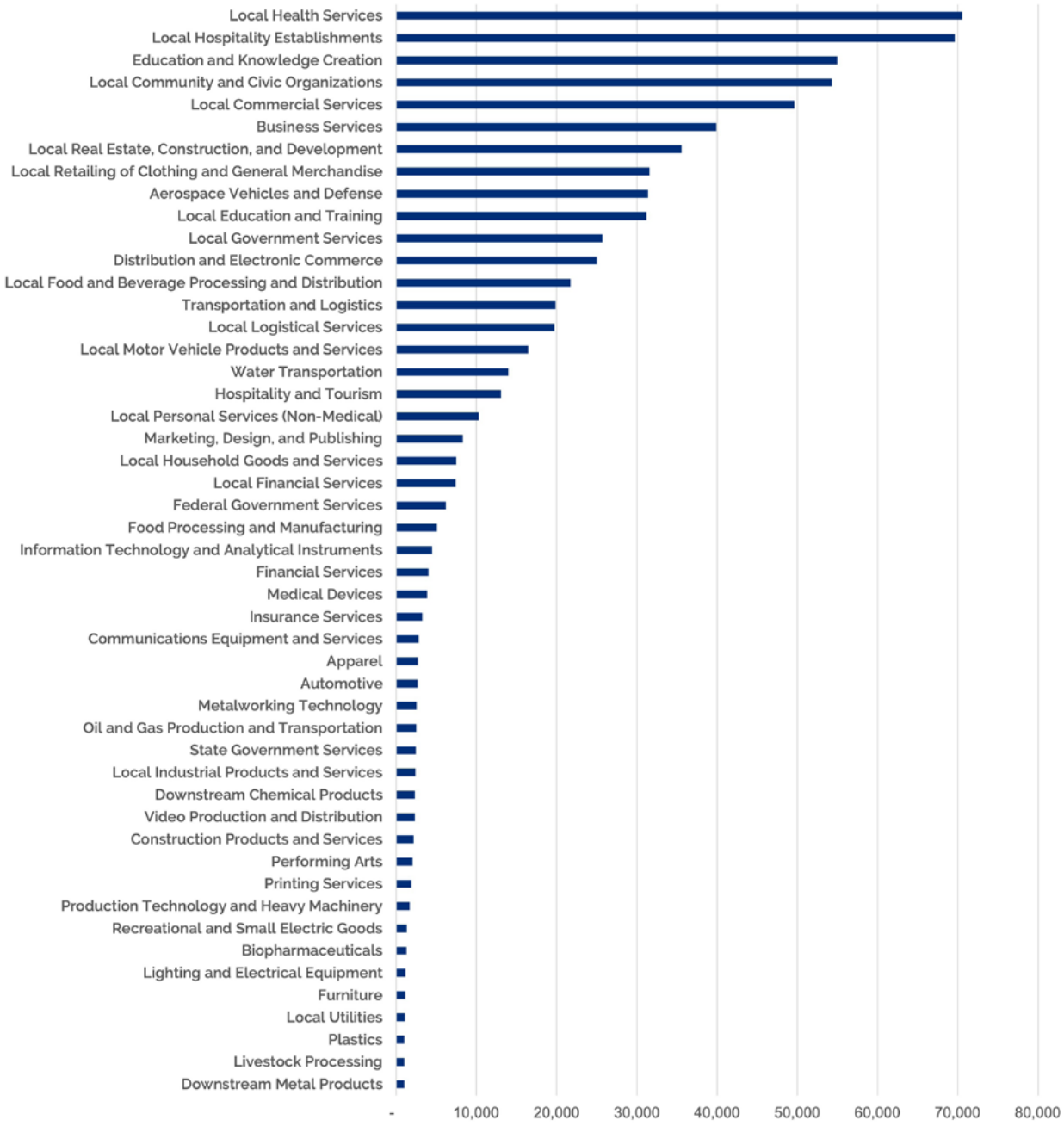
The Local Health Services industry cluster is the largest employer in the South Bay SPA. However, it does not have a large concentration in this SPA as its location quotient is less than 1. Local Hospitality Establishments is the largest employer with an LQ of less than 1, but it has a high environmental impact intensity, despite its greenhouse gas emission intensity being relatively low.

The Education and Knowledge Creation industry cluster is the largest traded cluster. This industry cluster pays well and is likely to have positive spillovers that benefit workforce development, although its greenhouse gas emissions impact intensity is moderate. Although we do not consider this to be a CJF impact cluster, it is an industry cluster that should be considered for programs related to greenhouse gas emission reductions.

Water Transportation is a major employer in the South Bay SPA, which is home to the Port of Long Beach and the Port of Los Angeles. This industry cluster pays well and has experienced employment growth over the past 10 years. However, this industry cluster has a high greenhouse gas impact intensity. It's crucial to lower greenhouse gas emissions in the water transportation sector since it is likely to remain a key industry cluster in the South Bay.

Overall, the existing CJF impact clusters in the South Bay are Performing Arts, Aerospace Vehicles and Defense, Medical Devices, and Marketing, Design, and Publishing. These industry clusters are concentrated in the South Bay SPA, environmentally friendly, pay a wage greater than the SPA average, and display employment growth greater than the SPA average.

Figure 46: Employment by Existing Industry Clusters in South Bay SPA



Source: Lightcast. Analysis by Beacon Economics

Table 40: Existing Clusters in South Bay SPA

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Aerospace Vehicles and Defense	31,373	15.47	9.58	10.25	143,841
Traded	Water Transportation	13,964	-2.39	0.61	9.21	142,704

Type	Cluster	Jobs (2022)	5-Year Job Growth (%)	10-Year Job Growth (%)	Location Quotient (LQ)	Avg. Wage ($) (2022)
Traded	Apparel	2,709	-43.67	-63.69	4.13	56,102
Traded	Medical Devices	3,827	5.86	1.08	2.71	91,970
Local	Local Community and Civic Organizations	54,297	12.96	215.34	2.62	32,127
Traded	Transportation and Logistics	19,879	18.48	72.87	2.22	86,480
Traded	Education and Knowledge Creation	54,968	3.34	13.14	2.21	108,330
Traded	Downstream Chemical Products	2,314	1.72	-0.60	1.70	78,509
Traded	Video Production and Distribution	2,289	-8.50	-17.30	1.55	128,629
Local	Local Logistical Services	19,725	16.37	54.10	1.41	52,339
Traded	Recreational and Small Electric Goods	1,303	-17.75	-4.91	1.41	111,639
Traded	Performing Arts	2,048	1.39	57.23	1.18	206,655
Traded	Metalworking Technology	2,549	-27.10	-27.48	1.17	71,617
Local	Local Commercial Services	49,615	10.27	20.81	1.13	65,443
Local	Local Hospitality Establishments	69,602	9.34	37.57	1.12	31,675
Local	Local Food and Beverage Processing and Distribution	21,706	6.98	8.99	1.05	41,508
Traded	Marketing, Design, and Publishing	8,290	8.83	6.64	1.03	131,100
Traded	Information Technology and Analytical Instruments	4,462	-13.81	18.57	1.02	153,075
Traded	Printing Services	1,897	-26.04	-10.58	1.01	59,327

Source: Lightcast. Analysis by Beacon Economics..

Potential Growth Clusters

Potential growth industry clusters in Los Angeles County are in Green Energy, Advanced Transportation and Clean Technology, Biosciences, Food Manufacturing, and Construction. Our data suggests that these industry clusters will play a key role in the transition to a green economy, and workers in these industries will be impacted by the transition to a green economy. For instance, general freight trucking is included as an occupation in Advanced Transportation and Clean Technology despite its high greenhouse gas emissions because the transportation of goods will continue to be necessary in our economy, and therefore, so will trucking. To move toward carbon neutrality, it is necessary to reduce emissions caused by trucking while understanding how to address the ramifications of such a change for firms and workers[7] in this industry. We therefore are focusing on employment trends and occupations in these pivotal industry clusters that are instrumental in steering us toward a green economy.

The Green Economy

The green economy has steadily grown in importance to both Los Angeles County and the nation's broader economy, with its employment and economic impact reaching record size. Green jobs, which make up the backbone of the green economy, represent jobs that contribute to the process of decarbonizing the economy, ranging from clean energy production to electric vehicle manufacturing to improving home energy efficiency. Many green jobs offer what many manufacturing jobs did in the 20th century: well-paying, stable careers, with most not requiring a college education, and with additional benefits of carbon emissions reduction and mitigation of climate change.

Across all five technological categories tracked by the Department of Energy's United States Energy & Employment Report (USEER), green jobs have grown significantly since 2020. Between 2021-2022, clean energy represented nearly 85% of new electric power generation jobs nationwide, and green jobs represented significant portions of employment gains in electric power transmission and storage, energy efficiency jobs like HVAC, and more than half of motor vehicle and component-related employment. Green jobs are more likely to be union jobs than their conventional counterparts, and many have contributed to an increase in employment diversity relative to the energy industry at large.

Los Angeles County's green economy contributes significantly to county employment. Green jobs account for 27% of the total employment in the county, a rise from 21% in 2012. Green jobs come in many forms. The Occupational Information Network (O*Net), which is a comprehensive online database and resource developed by the U.S. Department of Labor to classify occupations, classifies three types of green jobs:

1. Green Enhanced Skills occupations. These are often familiar jobs such as engineers, plant operators, and other types of technicians, which maintain the fundamental function of their conventional equivalent role, but with additional knowledge or skills that help reduce carbon emissions and environmental damage.
2. Green Increased Demand occupations are functionally identical to their non-green counterparts – everything from bus drivers to chemists to welders – whose demand is increased because of the production chain of the green economy.
3. Green New and Emerging occupations are jobs that O*Net classifies as being unique to the green economy. These range from the fairly obvious – solar power installers, turbine technicians, and

7 Truck driving is considered a "green" occupation because it is a Green Enhanced Skill, meaning the skill requirements are changing in response to green trends. https://www.onetcenter.org/reports/Green.html.

sustainable design specialists etc. – to more abstract roles, such as nanotechnology engineers, green investment underwriters, carbon credit traders, and supply chain managers. These are roles that emerged directly from the green economy and have specific skill and knowledge requirements that can differ significantly from their conventional equivalents, if any exist.

There were 1,286,000 green jobs in the county in 2022. Approximately half of these were Green Enhanced Skills jobs. Slightly more than 400,000 were categorized as Green New & Emerging, while another 370,000 were Green Increased Demand jobs. Approximately 120,000 were classified as two categories and are included in the sum of both job types, but not double-counted in the overall total. Not only did green jobs account for one in four jobs in 2022, it was also a major source of employment growth in the county. While non-green jobs stayed roughly stable between 2012- 2022, the county added 375,000 green jobs. Two-thirds of those job gains were in Green New & Emerging occupations, representing the core, most uniquely green-focused jobs. Another 108,000 jobs were added in Green Enhanced Skills jobs and 51,000 were added in Increased Demand green jobs. Therefore, an overwhelming proportion of new green jobs were either moderately or highly specialized in green industries.

Education

Green economy workers in Los Angeles County have a wide array of educational attainment, although this is more stratified by the green job category. Overall, 36% of workers have a four-year college degree or higher, while 41% have just a high school diploma or less. Furthermore, 14% of workers have a graduate or professional degree. Green Enhanced Skills jobs share a similar education distribution to the overall green economy, while 81% of Green

Increased Demand employees do not have a bachelor's degree and 52% have no Post-secondary education at all. On the other hand, 56% of Green New & Emerging employees have a bachelor's degree, and one in five has a graduate degree. Just 23% of these New & Emerging jobs go to workers with a high school degree or less. Overall, the green economy provides employment opportunities for workers of all educational attainments, and growing investment in the green economy means that demand for these workers will increase.

Racial Diversity

The green economy reflects Los Angeles County's racial and ethnic diversity. Hispanic and Latino workers represent approximately 52% of the county's green employment, slightly above the Latino share of the total Los Angeles County labor force (48.1%). Asian (13.2%) and Black/African American (5.4%) portions of green economy employment are slightly below shares of the county labor force (15.2% and 7.2% respectively). Furthermore, nearly 80% of the 375,000 new green jobs created between 2012 and 2022 employed racial or ethnic minorities, although the categorical distribution of these jobs has been unequal. 92% of new Green Enhanced Skills jobs and almost all new Green Increased Demand jobs went to minorities, and nearly 70% of both categories' new jobs employ Hispanic or Latino workers. However, just 70% of new Green New & Emerging jobs have gone to minorities, although this is still more diverse than overall employment in that category.

Gender

While women and men account for a similar portion of Los Angeles County's employment, green economy workers are overwhelmingly male, with nearly 74% of jobs held by men. However, a third of jobs in the Green New & Emerging jobs sector are held by women, and 40% of women who work in the green economy work in that sector, compared to 28% of men in the green economy. Given that the green economy is generally focused on the energy and heavy manufacturing sector, sectors that skew heavily toward men employment-wise, this split is unsurprising. Furthermore, of the 375,000 green jobs created in the past decade, 36% have gone to women. 70% of new women working in the green economy work in the Green New & Emerging sector.

Age

Compared to non-green jobs, the green economy employs fewer younger (age 30 and under) workers and more prime-age workers (30-55). Only in the Increased Demand green occupations are there more young workers (28% compared to 27%) and fewer older workers (age 55+; 17% compared to 20%) than non-green jobs. In the Green New & Emerging sector, there are significantly fewer younger employees (18%) than in non-green jobs, likely due to the high skill and educational requirements that these jobs demand.

Green economy workers are distributed similarly to the overall population – all but one SPA (South-West, which has 80% of the expected green jobs) have a share of countywide green jobs between 90% and 110% of their share of the countywide population. The highest relative concentration of green economy workers is in the West SPA, which has 8.4% of countywide workers and 7.8% of the total population. However, the internal distribution of workers by green job category reveals interesting patterns. While the Green Enhanced Skills category accounts for approximately half (alone or in combination) of all green jobs in every SPA, Green New & Emerging occupation employment has a large range – from 50% of green jobs in the West SPA to 17% in the South-East SPA. There is a strong inverse correlation between these Green New & Emerging jobs and Green Increased Demand employment by SPA; the South-East SPA has the highest proportion of such jobs (39% of local green employment), followed by the East SPA (36%), while it accounts for the fewest jobs in the West SPA (13%).

As evidenced by the current educational makeup of the green workforce, a college degree is not necessary for many jobs in the green economy. Nevertheless, these jobs could still require technical skills, and therefore technical training, whether through a higher education institution, workforce development, or on-the-job training. O*Net data reveals that, while individual green occupations may vary in their knowledge and skills requirements, several competencies are common across many careers. Among the competencies rated "important" or "extremely important," the following table illustrates the most common requirements. Knowledge of the English language, critical thinking, and reading comprehension are the most important across all categories and are not displayed for reasons of conciseness.

Competency Type	Increased Demand	Green-Enhanced Skills	New & Emerging Green
Knowledge	Mechanical and tools, Customer service, Mathematics, Production and Processing	Mathematics, Customer service, Engineering and Technology, Design	Mathematics, Engineering and Technology, Mechanical and tools, Computers and electronics, Physics
Skill	Speaking, Monitoring, Operations Monitoring, Operation and Control	Reading Comprehension, Complex Problem Solving, Judgement and Decision Making	Reading Comprehension, Writing, Judgement and Decision Making, Monitoring, Systems Analysis

The Green Energy Industry Cluster

This industry cluster includes industries dedicated to electric power generation without fossil fuels. This includes solar electric power generation, hydroelectric power generation, and wind electric power generation, among others. This cluster also includes the Electrical Contractors and Other Wiring Installation Contractors industry, as firms in this industry may be involved in the process of helping residential and commercial properties adopt green energy.

Table 41 demonstrates that Green Energy employment has been increasing throughout all SPAs over the past five years, with the average wage exceeding $82,000 in each SPA.

Table 41: Green Energy Employment by SPA

SPA	Employment (2022)	5-Year Employment Growth (%)	Avg. Wage ($) (2022)
Antelope Valley	498	35.7	83,166
East	2,540	7.9	84,011
Metro	1,260	12.6	83,551
San Fernando	7,530	14.6	82,019
San Gabriel	3,529	2.1	82,993
South Bay	2,991	4.7	85,023
Southeast	405	9.8	83,846
Southwest	53	55.9	95,085
West	1,540	4.3	82,720

Source: Lightcast. Analysis by Beacon Economics

Looking at Table 42, we see many of the top occupations in terms of employment are related to specialized trade work requiring a high school diploma or equivalent, or management positions that require a bachelor's degree. Electrician is the top occupation, and it has a relatively low barrier to entry. That being said, it requires an extensive apprenticeship. Supervisor and management occupations also make up the bulk of jobs in the Green Energy industry cluster. In the case of a Supervisor of Construction Trades, experience is the key barrier. Assisting workers to develop their leadership skills and move up the career path is crucial for promoting economic mobility.

Table 42: Top-10 Occupations by Employment in Green Energy

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Electricians	8,788	High school diploma or equivalent	None	Apprenticeship
First-Line Supervisors of Construction Trades and Extraction Workers	1,189	High school diploma or equivalent	Five years or more	None
Office Clerks, General	698	High school diploma or equivalent	None	Short-term on-the-job training
Project Management Specialists	571	Bachelor's degree	None	None
Helpers—Electricians	564	High school diploma or equivalent	None	Short-term on-the-job training

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
General and Operations Managers	462	Bachelor's degree	Five years or more	None
Security and Fire Alarm Systems Installers	431	High school diploma or equivalent	None	Moderate-term on-the-job training
Construction Managers	412	Bachelor's degree	None	Moderate-term on-the-job training
Telecommunications Equipment Installers and Repairers, Except Line Installers	403	Post-secondary non-degree award	None	Moderate-term on-the-job training
Telecommunications Line Installers and Repairers	397	High school diploma or equivalent	None	Long-term on-the-job training

Source: Lightcast. Analysis by Beacon Economics

Advanced Transportation and Clean Technology

Advanced Transportation and Clean Technology certainly has a lot of promise in Los Angeles County. There are various start-ups in the region, including EVgo based in Venice. EVgo builds electric charging stations and has found success receiving funding due to its ability in bringing so many charging stations online, as well as the increased usage of its charging stations.[8] Supporting these types of start-ups is the Los Angeles Cleantech Incubator (LACI), a nonprofit organization with a primary objective to expedite the growth of clean-tech startups by offering resources, mentorship programs, and networking.

Of course, not all start-ups achieve success in Los Angeles County. Proterra is a battery manufacturer specializing in batteries for electric buses. In 2017, it began operating a battery manufacturing plant in the City of Industry but had to close it at the end of 2023[9]. The production of these batteries was moved to South Carolina. There are myriad reasons for this move, including financial issues faced by the company. However, this anecdote illustrates how difficult success can be for start-ups, and it should make policymakers and economic development professionals reflect on what can be done to keep these types of start-ups operating in Los Angeles County.

Overall, employment in the Advanced Technology and Clean Technology industry cluster has grown across Los Angeles County, except in the Metro and West SPAs. The Antelope Valley SPA has experienced the highest employment growth in this cluster since 2017, but it pays the lowest average wage.

8 https://www.investopedia.com/evgo-stock-surges-on-revenue-beat-as-charging-station-use-soars-8605230, accessed March 25, 2024.

9 https://www.globenewswire.com/en/news-release/2023/01/19/2592128/0/en/Proterra-to-Concentrate-Electric-Bus-and-Battery-Manufacturing-in-Larger-South-Carolina-Facilities-With-2023-Exit-from-City-of-Industry-Plant.html, accessed March 25, 2024.

Table 43: Advanced Transportation and Clean-Tech Employment by SPA

SPA	Employment (2022)	5-Year Employment Growth (%)	Avg. Wage ($) (2022)
Antelope Valley	879	57.5	75,277
East	8,648	14.9	85,193
Metro	3,274	-13.2	91,331
San Fernando	6,407	37.6	86,325
San Gabriel	6,223	36.5	81,083
South Bay	19,929	18.4	86,482
South-East	3,594	36.8	81,495
South-West	459	10.3	84,966
West	31,875	-1.4	95,318

Source: Lightcast. Analysis by Beacon Economics..

The top occupation in terms of employment is Flight Attendant. Again, the idea is that various Transportation and Logistics industries such as Air Transportation will be impacted by the transition to a green economy, so occupations such as Flight Attendant must come under consideration as part of the Advanced Transportation and Clean Technology cluster. This occupation brings to light various issues surrounding the transition to the green economy. Although many people argue that environmental regulation will negatively impact airlines and reduce Flight Attendant jobs, there is growing evidence that Flight Attendants is already being impacted by the effects of climate change, which includes more severe turbulence that reduces workplace safety for flight attendants[10].

Heavy and Tractor-Trailer Truck Drivers is another occupation that employs many workers. This is an occupation with relatively low barriers to entry that can provide higher incomes for those without any college education in comparison to other job opportunities for that level of education. As trucking continues to become more environmentally friendly, it makes sense to continue to provide workforce development opportunities for prospective truckers.

Table 44: Top-10 Occupations by Employment in Advanced Transportation and Clean-Tech.

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Flight Attendants	8,581	High school diploma or equivalent	Less than five years	Moderate-term on-the-job training

10 https://www.vox.com/first-person/2019/4/17/18410615/green-new-deal-flight-attendants-alexandria-ocasio-cortez-sara-nelson, accessed March 26, 2024.

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Heavy and Tractor-Trailer Truck Drivers	6,598	Post-secondary non-degree award	None	Short-term on-the-job training
Laborers and Freight, Stock, and Material Movers, Hand	6,587	No formal educational credential	None	Short-term on-the-job training
Cargo and Freight Agents	5,770	High school diploma or equivalent	None	Short-term on-the-job training
Reservation and Transportation Ticket Agents and Travel Clerks	5,601	High school diploma or equivalent	None	Short-term on-the-job training
Airline Pilots, Copilots, and Flight Engineers	5,495	Bachelor's degree	Less than five years	Moderate-term on-the-job training
Aircraft Mechanics and Service Technicians	2,576	Post-secondary non-degree award	None	None
Industrial Truck and Tractor Operators	1,842	No formal educational credential	None	Short-term on-the-job training
First-Line Supervisors of Office and Administrative Support Workers	1,789	High school diploma or equivalent	Less than five years	None
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	1,746	High school diploma or equivalent	None	Moderate-term on-the-job training

Source: Lightcast. Analysis by Beacon Economics.

Biosciences

Biosciences, composed of the Biopharmaceutical and Medical Device industries, is a dynamic industry cluster with a strong foundation for growth in Los Angeles County. Positions in these two industries together pay an average wage almost 20% higher than the county average. Occupations in this industry include different types of Biological Device Manufacturing and Pharmaceutical Manufacturing among other things. Employment in Biopharmaceuticals and Medical Devices has steadily grown since 2007 contributing to some 3,000 new careers. With increasing investment and public interest inspired by events such as BioscienceLA, there is a focus on startups and innovation in the Biosciences industry. In addition, Cal State LA's BioSpace promotes emerging entrepreneurs with resources to spur economic development in this space. By providing entrepreneurs resources in industries like Bioscience, Los Angeles County can capitalize on clusters they are already competitive in to gain a regional advantage and provide its residents with high-road careers. The region's extensive and renowned university system produces individuals with specialized skills that firms within these industries require. These specialized workers are complemented by other workers with varying skills; thus, there is an increase in demand for workers along the spectrum of skills and educational attainment. The top-five occupations in Biosciences all require a high school diploma or equivalent, and some moderate on-the-job training. Still, it's noteworthy that this industry cluster has experienced a fall in employment in four SPAs

since 2017. The South-East and South-West were polar opposites in terms of their employment growth, with the South-East losing 374 Biosciences jobs and the South-West gaining 113 Biosciences jobs from 2017 to 2022.

Table 45: Biosciences Employment by SPA

SPA	Employment (2022)	5-Year Employment Growth (%)	Avg. Wage ($) (2022)
Antelope Valley	105	-1.9	90,790
East	957	21.8	90,421
Metro	230	-19.9	96,289
San Fernando	5,951	2.8	88,839
San Gabriel	761	-3.2	90,336
South Bay	5,096	8.5	90,707
South-East	339	-52.5	83,758
South-West	166	213.2	92,605
West	2,300	76.7	84,107

Source: Lightcast. Analysis by Beacon Economics.

Table 46: Top-10 Occupations by Employment in Biosciences

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Packaging and Filling Machine Operators and Tenders	1,047	High school diploma or equivalent	None	Moderate-term on-the-job training
Inspectors, Testers, Sorters, Samplers, and Weighers	652	High school diploma or equivalent	None	Moderate-term on-the-job training
Dental Laboratory Technicians	474	High school diploma or equivalent	None	Moderate-term on-the-job training
Chemical Equipment Operators and Tenders	444	High school diploma or equivalent	None	Moderate-term on-the-job training
First-Line Supervisors of Production and Operating Workers	441	High school diploma or equivalent	Less than five years	None
Chemists	370	Bachelor's degree	None	None
Production Workers, All Other	367	High school diploma or equivalent	None	Moderate-term on-the-job training
Medical Appliance Technicians	328	High school diploma or equivalent	None	Moderate-term on-the-job training

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Laborers and Freight, Stock, and Material Movers, Hand	317	No formal educational credential	None	Short-term on-the-job training
Industrial Engineers	305	Bachelor's degree	None	None

Source: Lightcast. Analysis by Beacon Economics.

Food Manufacturing

In Los Angeles County, the food manufacturing industry is a local industry. Employment in food manufacturing has declined broadly throughout the county, with most SPAs experiencing a negative growth rate since 2017. The average wage tends to be lower in food manufacturing compared to other potential growth clusters examined in this section.

Table 47: Food Manufacturing Employment by SPA

SPA	Employment (2022)	5-Year Employment Growth (%)	Avg. Wage ($) (2002)
Antelope Valley	2,588	48.6	58,141
East	4,691	-0.5	67,252
Metro	5,111	15.5	67,701
San Fernando	4,292	-11.2	66,898
San Gabriel	5,206	-18.4	70,525
South Bay	5,039	6.8	65,491
South-East	2,392	-0.5	67,124
South-West	897	-17.0	66,086
West	1,131	-23.4	63,216

Source: Lightcast. Analysis by Beacon Economics.

All of the top occupations have a low barrier to entry, with none requiring any college education and few requiring work experience. Most offer on-the-job training, so policymakers should examine how this training can be leveraged to help workers advance in their career paths.

Table 48: Top-10 Occupations by Employment in Food Manufacturing

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Packaging and Filling Machine Operators and Tenders	3,612	High school diploma or equivalent	None	Moderate-term on-the-job training

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Food Batchmakers	2,420	High school diploma or equivalent	None	Moderate-term on-the-job training
Laborers and Freight, Stock, and Material Movers, Hand	1,539	No formal educational credential	None	Short-term on-the-job training
Packers and Packagers, Hand	1,234	No formal educational credential	None	Short-term on-the-job training
Bakers	1,015	No formal educational credential	None	Moderate-term on-the-job training
Food Processing Workers, All Other	1,002	No formal educational credential	None	Moderate-term on-the-job training
Industrial Truck and Tractor Operators	988	No formal educational credential	None	Short-term on-the-job training
First-Line Supervisors of Production and Operating Workers	802	High school diploma or equivalent	Less than five years	None
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	796	High school diploma or equivalent	None	Moderate-term on-the-job training
Bartenders	783	No formal educational credential	None	Short-term on-the-job training

Source: Lightcast. Analysis by Beacon Economics.

Construction

Construction employment has grown over the past five years in most SPAs in Los Angeles County. The increased demand for construction workers will ensure this remains a solid option for many people in the labor force. The State of California is already supporting the expansion of the construction workforce with the High Road Construction Careers (HRCC)[11] program, which provides free training to place students directly into well-paid job and apprenticeship opportunities in Construction. The Construction industry cluster will play a pivotal role in reducing carbon emissions and overall environmental impact. Part of the transition toward a green economy will involve constructing "green" buildings using processes that are environmentally responsible and use resources efficiently. Creating green buildings requires skilled workers — such as architects, construction managers, and carpenters — with knowledge of new design and construction techniques.

11 https://cwdb.ca.gov/initiatives/hrcc/

Table 49: Construction Employment by SPA

SPA	Employment (2022)	5-Year Employment Growth (%)	Avg. Wage ($) (2002)
Antelope Valley	5,251	22.9	71,683
East	11,085	-3.1	73,904
Metro	10,150	25.5	77,839
San Fernando	42,881	10.9	72,960
San Gabriel	22,362	2.0	73,719
South Bay	17,894	4.4	75,335
South-East	3,270	-3.2	73,432
South-West	1,257	29.6	74,679

Source: Lightcast. Analysis by Beacon Economics.

Table 50: Top-10 Occupations by Employment in Construction

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Carpenters	14,158	High school diploma or equivalent	None	Apprenticeship
Construction Laborers	10,358	No formal educational credential	None	Short-term on-the-job training
First-Line Supervisors of Construction Trades and Extraction Workers	6,632	High school diploma or equivalent	Five years or more	None
Plumbers, Pipefitters, and Steamfitters	5,493	High school diploma or equivalent	None	Apprenticeship
Painters, Construction and Maintenance	4,874	No formal educational credential	None	Moderate-term on-the-job training
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	4,756	Post-secondary non-degree award	None	Long-term on-the-job training
Office Clerks, General	4,371	High school diploma or equivalent	None	Short-term on-the-job training
Drywall and Ceiling Tile Installers	4,146	No formal educational credential	None	Moderate-term on-the-job training
Construction Managers	4,060	Bachelor's degree	None	Moderate-term on-the-job training

Occupation	Employment (2022)	Entry-Level Education	Work Experience	On-the-Job Training
Cement Masons and Concrete Finishers	3,217	No formal educational credential	None	Moderate-term on-the-job training

Source: Lightcast. Analysis by Beacon Economics.

Major Sources of GHG Emissions

Appendix F details the Environmental Impact of Existing Industry Clusters in each of the SPAs. Looking closely at the green economy, we examine the impact of those industries on our overall environment, specifically greenhouse gas emissions (GHG).

In the Bioscience industry cluster, the Biopharmaceuticals industry has a high GHG emissions impact intensity. Given the importance of this industry cluster for improving the health of people and the quality jobs it creates, it's important to address the carbon footprint of Biosciences production. Globally, there is evidence the industry is working to reduce its carbon footprint. A recent report released by My Green Lab[12] finds that many top firms in the industry have reduced their Scope 1[13] and Scope 2[14] emissions by 5%. The authors of the report highlight that more accurate reporting can help the industry turn commitments into reality.

The food manufacturing industry has a large environmental impact due to greenhouse gas emissions and water usage, although the latter has been reduced in some cases through regulation. Some innovative firms are trying to improve the carbon footprint of Food Manufacturing in Los Angeles County and beyond. For instance, Beyond Meat, located in El Segundo (South Bay SPA), manufactures meat alternatives. This can substantially contribute to reducing carbon because it allows consumers to substitute meat that's sourced from meat production, which, along with dairy, contributes to most food-related carbon emissions. However, recent trends indicate that consumer demand for these meat alternatives is stagnating. Consequently, Beyond Meat recently had to lay off nearly 200 workers and is looking to sublease its office space in El Segundo[15].

Advanced Transportation and Clean Technology is not currently "green" in the usual sense. This industry cluster is made up of transportation and logistics industries that must become "green" to get us closer to carbon neutrality. This cluster includes air transportation and general freight trucking, two industries notorious for the emissions they produce. An online dashboard[16] tracking electrification of transportation reveals that long-haul trucking is at risk of failing to meet 2028 targets. Electrification of buses is faring much better, but there is still much progress to be made.

The industry cluster also includes turbine manufacturing and battery manufacturing. Again, these industries are broad and may include firms that have a high environmental impact in their production process, especially in battery manufacturing. Battery manufacturing is included since the production of batteries for electric vehicles, electric charging stations, and batteries for solar power energy storage will be essential for reducing greenhouse gas emissions.

12 https://www.mygreenlab.org/blog-beaker/2023-carbon-impact-of-biotech-pharma-report-collective-action-accelerating-progress-to-the-un-race-to-zero
13 Direct emissions from owned or controlled assets, such as a natural gas boiler burning fuel onsite.
14 Indirect carbon emissions from purchased energy consumed by the reporting firm, such as electricity.
15 https://www.costar.com/article/1344619066/beyond-meat-seeks-to-sublease-california-hq-space-as-sales-shrivel
16 https://zeroadmap.org/, accessed March 25, 2024.

The transportation industry in Los Angeles County revolves around the Los Angeles and Long Beach ports. These ports are both doing their work to make their industries more sustainable as we face the effects of the climate crisis head on. The Port of Long Beach has set a goal for transitioning terminal equipment to zero emissions by 2030 and on-road trucks by 2035.[17] Transitioning from diesel powered to zero-emissions yard equipment in conjunction with new developments for solar, geothermal and hydrogen fuel cell energy production facilities will make the port and as a byproduct, the Los Angeles County transportation industry, more sustainable.[18]

The San Pedro Bay Ports Clean Air Action Plan (CAAP) introduced in 2006, and updated in 2017, is a collaborative initiative on behalf of the Ports of Long Beach and Los Angeles to help "the region achieve its clean air goals and to support the statewide vision for more sustainable freight movement."[19] Clean vehicles and equipment technologies are a critical part of the sustainable transportation movement. By 2035, all trucks registered in the Ports Drayage Truck Registry must be zero emissions. Many different industries will be involved in this push towards cleaner transportation systems and this presents an incredible opportunity for training individuals to participate in these sustainable, high-road careers.

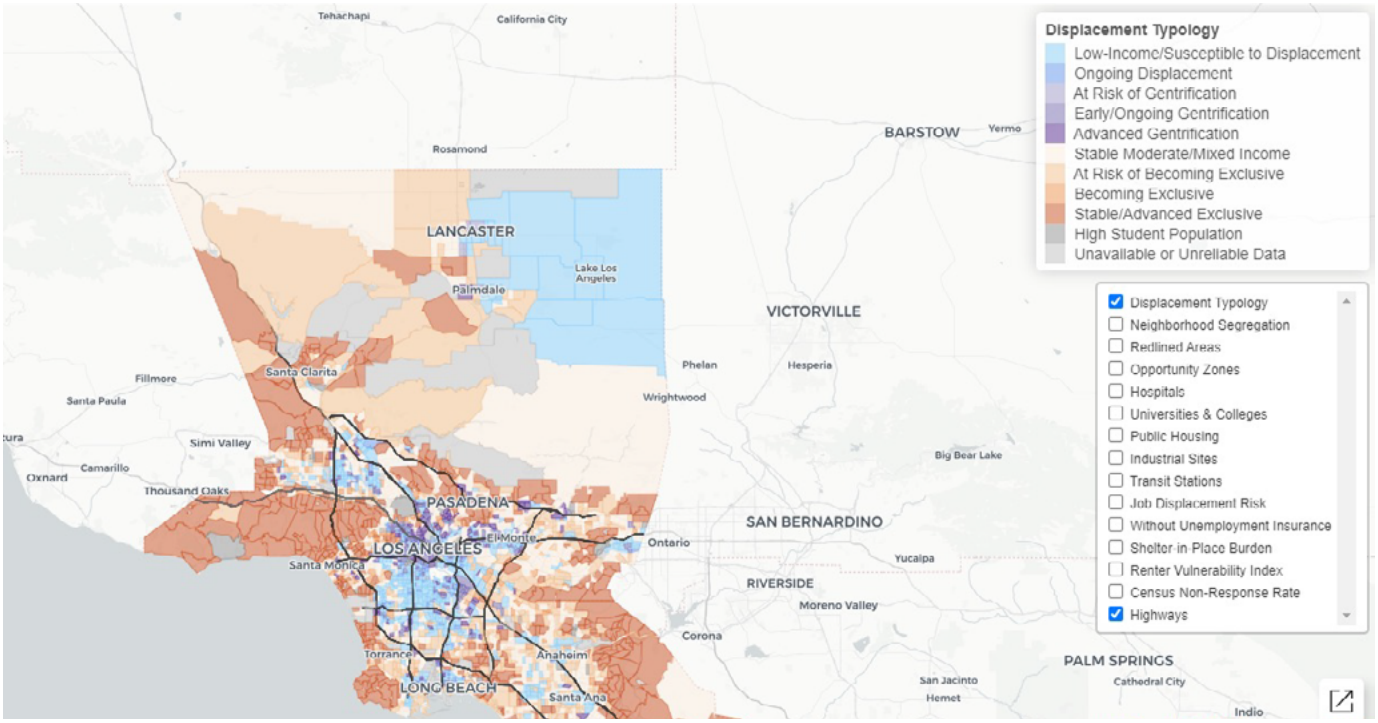
Workers at Risk of Displacement

One consequence of modernizing Los Angeles County's infrastructure is the automation of certain capital intensive jobs. Any repetitive task that is performed at a fixed location can be threatened by automation. We are seeing a risk of worker displacement in the manufacturing industry as it has become increasingly more capital intensive in the last 30 years. A mixture of automation and company relocation has strongly affected manufacturing in LA County.[20] Another way to show the effects of automation is by comparing employment to labor productivity. By taking a closer look we find that in LA County employment in the manufacturing industry has declined by 44% since 2001, but in the same period labor productivity increased by nearly 30%.

Workers are also at risk of displacement due to impacts from housing repairs and improvements, including those that are made to meet sustainable design guidelines, correct code violations, or address habitability issues. Investment in disadvantaged communities is instrumental to expanding economic opportunity, health, safety, and prosperity to historically marginalized populations. These investments are crucial, yet historically investment in underserved communities has led to displacement, disproportionately affecting people of color. The benefits of large-scale investments in disadvantaged neighborhoods are only realized if the long-term residents remain in their communities and are not forced out by higher rents and higher costs of living triggered by new investment.[21]

17 https://polb.com/environment/our-zero-emissions-future/#program-details
18 https://polb.com/port-info/mission-vision/#master-plan-update
19 https://kentico.portoflosangeles.org/getmedia/f614a4ad-8c3d-4044-ac3b-807b6dca27db/2017-CAAP-Draft-Discussion-Document
20 https://fred.stlouisfed.org/series/MPU9900082
21 https://www.americanprogress.org/article/localized-anti-displacement-policies/

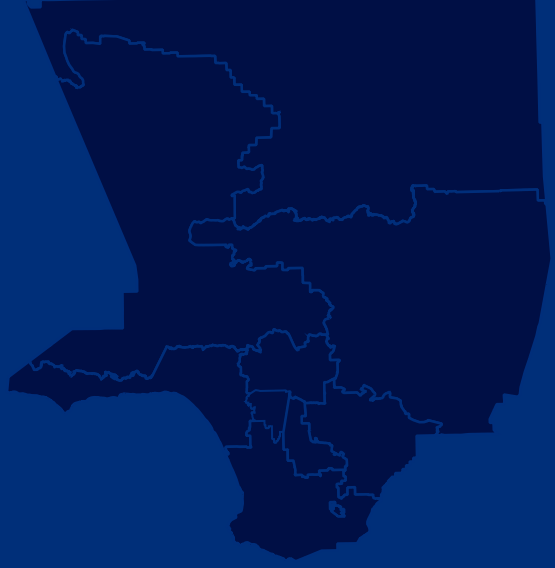
Gentrification remains a top concern for worker displacement. According to the Urban Displacement Project's 2018 map below, 10% of tracts are classified as At Risk of Gentrification, Early/Ongoing Gentrification, or Advanced Gentrification. In addition, 5% of tracts in Los Angeles County were not gentrifying but experienced Ongoing Displacement of Low-Income Households.[22]



Source: Urban Displacement Project

22 https://www.urbandisplacement.org/maps/los-angeles-gentrification-and-displacement/

SWOT Analysis



This section examines and assesses the current state of Los Angeles County's economy using the Strengths, Weaknesses, Opportunities, and Threats (SWOT) framework. The analysis is conducted at the regional level as well as by each of Los Angeles County SPAs. This type of subregional analysis will provide greater detail on which areas of Los Angeles County are thriving, which areas are falling behind, which have seen marked improvements, and which are precariously positioned in the changing economy.
The SWOT Analysis was informed by economic and demographic data as well as in-depth interviews held with subject matter experts and members of local communities. Ultimately, the SWOT framework delivers insights into the current economic conditions across the diverse Los Angeles County economy.

Regional SWOT

The regional SWOT takes a look at Los Angeles County as whole, and examines it from various angles, including economic, environmental, equity, jobs, and health.

Strengths

- Los Angeles County's massive size enables it to weather shocks, and it contains many of the economic inputs it needs to function.
- Los Angeles County has more Colleges and Universities than any other metropolitan area in the country.
- The Motion Picture Industry continues to be a source of economic strength.
- The number of Angelenos who live below the poverty line has fallen over the last decade, and incomes have risen.
- Since 2012, the median household income has grown 55.7% in Los Angeles County, a rate that exceeds Houston (MSA), Dallas (MSA), and Atlanta (MSA).
- Over the past 10 years, real income per capita has grown across all SPAs
- Healthy aerospace industry with positive job growth and workforce skills training including the Aircraft Fabrication and Assembly training program
- Los Angeles County has many education and workforce development opportunities that model high road employment. This includes multiple American Career College campuses, science and tech partnerships supporting school STEM programs, college and career readiness initiatives, and workforce development.
- there has been a noticeable decline (approximately 6% since 2012) in those living in overcrowded conditions

Weaknesses

- Inefficient economic policies and bureaucracy.
- Perception that Los Angeles is a dangerous place
- Divisive racial inequality
- Excessive regulations and taxes that are not business or family-friendly
- Childcare is too expensive
- Low housing affordability could lead to a misallocation of workers and reduced economic growth.
- High housing costs force longer commute times, prevent households from moving to neighborhoods that better meet their needs, consume a large proportion of income, and increase the prevalence of homelessness.
- The median renter household spends over 30% of their income on rent.
- Los Angeles County has a relatively low labor force participation rate, especially within disadvantaged communities.
- Los Angeles County has the 4th worst home price-to-income ratio amongst over 100 qualifying U.S. metropolitan regions.
- Key barriers to labor force participation for people of prime working age include lack of childcare access, a mismatch between workforce skills and the skills demanded by employers, and housing mobility frictions.
- Barriers exist to accessing higher education
- Excessive red tape throughout economic and community development processes.
- High homelessness rates
- Cashiers is a top five occupation in all SPAs except Metro and West. Although this is an occupation that might fit the needs of many people, it is not one that provides a career pathway to higher earnings and better benefits.

Opportunities

- Los Angeles County government is committing resources to addressing inequities at every level of society
- Positive outlook for community improvements such as green initiatives
- The nursing profession has experienced notable growth recently due to increased health care demands and an aging population.
- The green economy and the number of green jobs is growing.
- The Technology Industry has a strong foundation in the County and could provide high income employment opportunities. South Bay, San Fernando, and the West SPA account for 74% of the County's Tech employment.

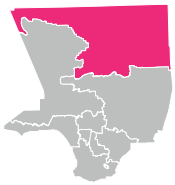
Threats

- Los Angeles County's declining population lowers the available labor supply, reduces the number of potential consumers, and makes future economic growth more difficult to achieve.
- Workforce development faces challenges such as shortages in qualified nurses, high retirement rates, and the need for ongoing education to meet evolving health care needs.
- Labor force participation of younger people (under 25) tends to be lower in Los Angeles County compared to other metropolitan areas.
- An aging population is causing lower labor force participation, lower worker productivity, and ultimately, lower economic growth
- Climate change-related threats including wildfire risk and the adverse effects of urban heat islands will worsen in the future.
- There is a high degree of spatial inequality between each of the SPAs.
- While the average level of education among Angelenos has increased, the number of jobs requiring higher levels of education has increased faster

SWOT By SPA

As detailed in the Regional Summary, Los Angeles County suffers from real disparities between SPAs. Below we highlight the top SWOT findings in industry, environment, health, income, job access, education, and economic mobility.

SPA 1
Antelope Valley



Strengths

- Boasts one of the best levels of air quality in Los Angeles
- Ample access to natural spaces and parks (65.9 acres per 1,000 people)

Weaknesses

- Lowest labor force participation rates of all the SPAs; has one of the highest jobless rates in the County at 21.2%
- Approximately 29% of residents have commute time longer than one hour, which is the largest share by far of any SPA
- The number of postsecondary teachers has seen a decline of 15.4% since 2013.
- Highest asthma rate with a value of 96.9 per 10,000 residents
- Nearly half of all residents live in food deserts

Opportunities

- Existing industry clusters that are sustainable, diverse, and pay well are Aerospace Vehicles and Defense and Local Health Services.
- The highest paying occupation in 2023 was general and operations managers. This occupation has grown by nearly 6% in the past year
- Sectors like restaurants and grocery stores continue to grow in terms of their concentration as there is higher demand for the goods and services provided by these types of establishments.
- Approximately 11.7% of the population has completed a bachelor's degree.
- Registered nurses are abundant with 2,831 jobs as of 2023. The decline of 1.8% over the last year is dwarfed by the 39.3% growth in the number of registered nurse jobs since 2013.
- Highest share of residential units constructed after 2000 at 28.1% with 5.5% constructed after 2019

Threats

- 76% of residential properties are at some risk of wildfire exposure over the next 30 years
- Education and Hospitals (local government) and Local Government are the largest sectors in the Antelope Valley and their concentration in the region has been decreasing..

SPA 2

San Fernando Valley

Strengths	Weaknesses
• Higher than average annual income for the County • Has the largest number of registered BEVs, with over 55,700 vehicles, accounting for 28.7% of all BEVs in the county. • The largest source of exports for Los Angeles County, with over $99 billion exported from the region in 2021 • Ample access to natural spaces and parks (16.7 acres per 1,000 people) • High business density	• Rent as a share of household income is 46.2% • 912,600 people live in disadvantaged communities

Opportunities	Threats
• Management of Companies and Enterprises is growth area for the SPA • Top industries are Motion Picture and Video, Education and Hospitals, and Individual and Family Services.	• Ozone concentrations exceed the 99th percentile. • Restaurant industry is declining • General Medical and Surgical Hospitals & Warehousing and Storage are in decline • Agencies, Brokerages, and Other Insurance Related Activities are in decline • 41% of properties are at risk of wildfires & 17% of properties are at risk of flooding • The two top-paying industries have been in decline over the past 10 years • The decline of the Individual and Family Services industry is a threat since the LQ had negative growth from 2018 to 2023..

SPA 3

San Gabriel Valley

Strengths	Weaknesses
• Highest number of workforce development training providers overall • Largest number of research and professional degree granting universities: home to 12 institutions including the California Institute of Technology, Claremont Graduate University, and California Polytechnic University, Pomona.	• Lowest share of workers employed in above-average paying industries • Chief executives earn the highest wages, but the number of chief executive jobs has declined by 9.1% since 2013..

Opportunities	Threats
• Good variety of industry clusters that can provide high-quality jobs • Highest number of solar development opportunities • Has two existing CJF impact clusters: Aerospace Vehicles and Defense, and Performing Arts • Medical and Surgical Hospitals industry has the most opportunity	• Poor air quality • The Individual and Family Services industry is a threat since the LQ fell by 5% over the past five years. • The Colleges, Universities, and Professional Schools LQ decreased by 1.2% from 2018 to 2023

SPA 4
Metro

Strengths	Weaknesses
• Roughly 67% of the population has earned at least a high school diploma or equivalent, and 31% have graduated from a 4-year year institution • Saw nearly a quarter of all new housing units and 40% of large multifamily units built • Largest number of workforce training providers per capita at 9.8 institutions per 100,000 residents	• Over 50% of households are disadvantaged • Few opportunities for solar development • Restaurants and Other Eating Places has become less concentrated over the past five years and is now less concentrated than in the rest of the United States
Opportunities	**Threats**
• Has a higher concentration of high-skill, high-wage workers in sectors such as Professional, Scientific, and Technical Services, Finance and Insurance, and Information • Individual and Family Services, and Education and Hospitals employ over 60,000 people and will likely employ more in the future as these industries become more concentrated	• 67% of residents live in disadvantaged areas • Highest level of drinking water contaminants • Highest diesel PM emissions • Industries under threat are General Medical and Surgical Hospitals and Depository Credit Intermediation industry

SPA 5
West

Strengths

- Highest labor force participation for women aged 25 to 54
- The most competitive region overall, with its highly educated workforce, large presence of research and higher education institutions, and volume of trade
- Has ample access to green space. Residents benefit from living near or in close proximity to the coastline, which provides easy access to public beaches and walkways
- 54.2% of resident hold at least a bachelor's degree, and roughly 22% have earned either a graduate or professional degree
- The highest average annual wages for all workers and across all sectors, has the largest concentration of workers employed in higher-paying industries relative to the countywide average.
- Roughly 49% of workers are employed in industries that pay higher wages compared to the countywide average
- Lowest share of jobless working-age individuals
- Highest life expectancy
- High degree of business activity with 637 businesses per 10,000 residents (or more than two times higher than the countywide average)
- Regional hub for higher education that includes Pepperdine University, Loyola Marymount University, and the University of California, Los Angeles

Weaknesses

- 6% of SPA 5 residents live in disadvantaged census tracts
- Lowest level of diversity in the County
- Physicians Offices and Employment Services have seen decreases in their LQ

Opportunities

- High concentration of high-skill, high-wage workers in sectors such as Professional, Scientific, and Technical Services, Finance and Insurance, and Information

Threats

- Has the most expensive real estate in the county
- Management, Scientific, and Technical Consulting Services industry which employs over 18,000. This sector saw its LQ reduce by 9.1% over the past five years
- Restaurants and Other Eating Places are seeing a decline in LQ

SPA 6

South-West

Strengths

- Grocery Stores LQ grew by 17.9% over the past five years
- Little to no wildfire risk
- Local Government employs nearly 30,000 people and has positive growth trajectory
- All the top-paying industries had positive employment growth from 2022 to 2023

Weaknesses

- The median (50th percentile) household income is lowest at $53,000.
- 58.4% of people younger than 18 live in disadvantaged households
- Jobless rates among residents aged 25 to 54 is 15.1%
- Households pay the largest share of household income for both rent and owner costs at 47.4% and 35%
- Highest share of households earning less than $25,000 (29%) of any SPA, which is significantly higher than the Los Angeles County average of 18%.
- Residents have shorter life expectancies and lower birth weights related to the environmental conditions found in the community.
- Water has higher levels of water contaminants than 80% of all census tracts in California.
- Highest share of households without access to the internet (14.3%)
- The lowest concentration of businesses relative to population at 77 businesses per 10,000 residents
- Lowest absolute number of businesses across Los Angeles County with just over 3,500 businesses. These firms are largely concentrated in the Health Care (which comprises 14.1% of all establishments in the region), Retail Trade (13.5%), and Other Services (11.4%) sectors
- Low level of available green spaces, low levels of BEV adoption, and a lack of solar energy opportunities

Opportunities

- Over 21% of residents 25 and older have a college degree, which is nearly six percentage points higher than in 2012
- Most of the 15 top-paying occupations do not require a college education
- Most diverse sub-region in the county
- Management of Companies and Enterprises has the most opportunity

Threats

- Gentrification will affect South Los Angeles as high-income households are priced out of other communities
- Cashiers is a top five occupation, which is not a career that provides a career pathway to higher earnings and better benefits
- Increase in the number of children living in overcrowded conditions between 2012 and 2022

SPA 6
South-East

Strengths	Weaknesses
• Little to no wildfire risk • The LQ in the Motion Picture and Video industry has skyrocketed, growing by 1,280% since 2018 • General Freight Trucking provides opportunities for low-educated individuals to significantly increase earnings and enhance prospects for self-employment • Management and Local Government jobs pay the highest wages in this SPA and have both grown over the past 10 years • 25.9% have a bachelor's degree	• Highest unemployment rate in the County • Lowest share of college graduates across SPAs • Low accessibility to green spaces • Lowest number of state eligible training providers at 7 • 94% are living in disadvantaged communities • Lack of available green spaces, low levels of BEV adoption, and a lack of solar energy opportunities • 13.7% of residents lack internet access • The lowest number of workforce development training providers, with only 20 providers total (or approximately 3.2 institutions per 100,000 residents) • No federally registered apprenticeships available • Jobless rates among residents aged 25 to 54 is 17.8% • Rent as a share of household income is 46.0%
Opportunities	**Threats**
• Most of the 15 top-paying occupations do not require a college education. • Video Production and Distribution is the only CJF impact cluster • Most diverse sub-region in the county	• Highest level of air pollution; SPA 6 East at 12.1µg/m3 – just over the 12.0µg/m3 recommended levels. • Aerospace Product and Parts manufacturing jobs contracted by nearly 19% • Federal Government jobs have also exhibited a negative growth rate of 16.4% since 2013

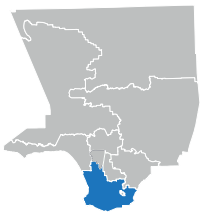
SPA 7
East

Strengths	Weaknesses
• Lowest homeowner costs as a share of household income, with households paying just under 28% for owner-related housing costs • High number of workforce development training providers (112) • Little to no wildfire risk • Management of Companies and Enterprises is the top paying industry at average wage of $172,915 • The top six highest-paying occupations, accounting for over 9,500 jobs, all had employment growth over the past 10 years	• Average annual wages are the lowest in the county ($59,630) • Low business density • General Medical and Surgical Hospitals, and Warehousing and Storage are showing signs of weakness

Opportunities	Threats
• Highest number of solar development opportunities • The Education and Hospitals industry is in the top five of the highest-paying jobs with a high growth rate of 16.4% in the last year, and a growth rate of 13.7% since 2013	• Employment Services and Grocery Stores are considered threats due a decrease in their LQ

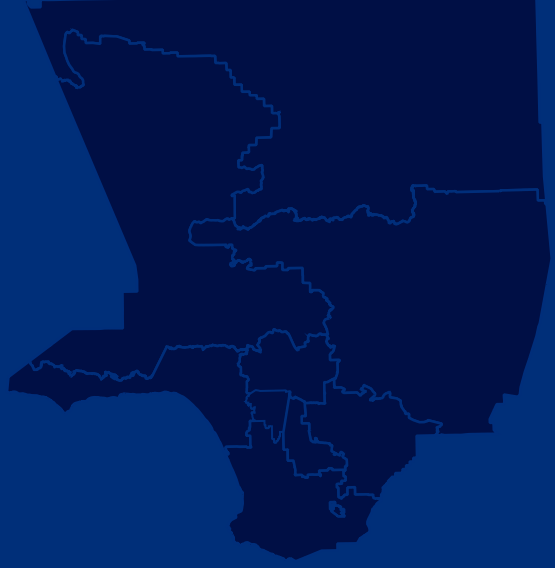
SPA 8

South Bay



Strengths	Weaknesses
• Most high-paying occupations continue to perform well in terms of employment growth • Most of the highest-paying jobs have experienced growth in recent years. • Computer and Peripheral Equipment manufacturing is a booming industry • Aerospace Product and Parts manufacturing employs over 25,000 people and shows no signs of slowing down as employment grew 9.6% last year • Lower percentage of disadvantaged communities compared to the county average	• Management-related industries have fewer jobs overall, including Management of Companies and Enterprises, Management, Scientific, and Technical Consulting Services, and Offices of Physicians • Below average levels of parks and open spaces • Hazardous waste exposure is nearly double the county average

Opportunities	Threats
• Highest number of solar development opportunities • Strong technology industry • Aerospace Engineer jobs declined by over 24% from 2013 to 2023. However, growth from 2022 to 2023 was nearly 20%, showing signs of continued health	• Freight Transportation Arrangement is a threat due to falling LQ • Local Government is seeing its growth diminishing. It is the largest industry with a contraction in jobs of 7.7% over the past 10 years



Appendices

Appendix A: Stakeholder Outreach Summary

Introduction

The Los Angeles County Regional Index analyzed 27 indicators across five dimensions (Equity, Sustainability, Job Quality and Access, Economic Competitiveness, and Resilience) for each of the eight Service Planning Areas (SPAs) to inform discussions with both community members and regional employers. By focusing on localized indicators, stakeholders were able to provide more targeted insights and input than would otherwise be possible from a county-level analysis; in turn, this input should guide the development strategies that are tailored to the specific economic realities and challenges they face.

The stakeholder outreach to residents and employers in the region was undertaken during the three months from November 2023 through January 2024. In the stakeholder engagement process, it was recognized that committees, partners, and strategic leadership entities often originate from positions of influence within the community. The research team prioritized the development of a statistically significant representative sample (n=800) of community members that mirrored the race and ethnicity population demographics for each of the eight SPAs.[1]

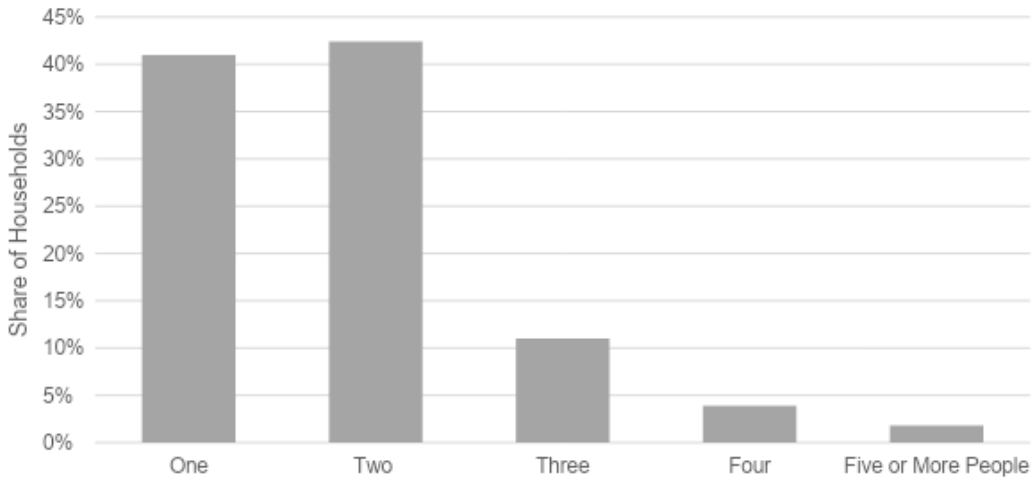
1 Details on CA Jobs First survey respondent demographics can be found in the Appendix.

Equity

Lived Experience: Household Characteristics and Residency in Community

The composition of the households, as well as the housing characteristics of those participating in community outreach mirrored estimates of socio-demographic indicators summarized in the *Equity Index*. Single-person households constituted 21.0% of the total surveyed population; two-person households were slightly more prevalent at 23.9%. Households with three and four members made up 21.3% and 19.3% of all respondents, respectively, and those with five or more individuals accounted for 14.6%. When considering the number of people in these households earning income, a considerable 41.0% were from single-income households. About 42.4% of households had two earners, highlighting a significant reliance on dual incomes across the county. Smaller percentages were seen for three- and four-earner households (11.0% and 3.9%, respectively), and only 1.8% of households have five or more earners.

Figure 1: Share of Households by Number of People in Household Earning Income

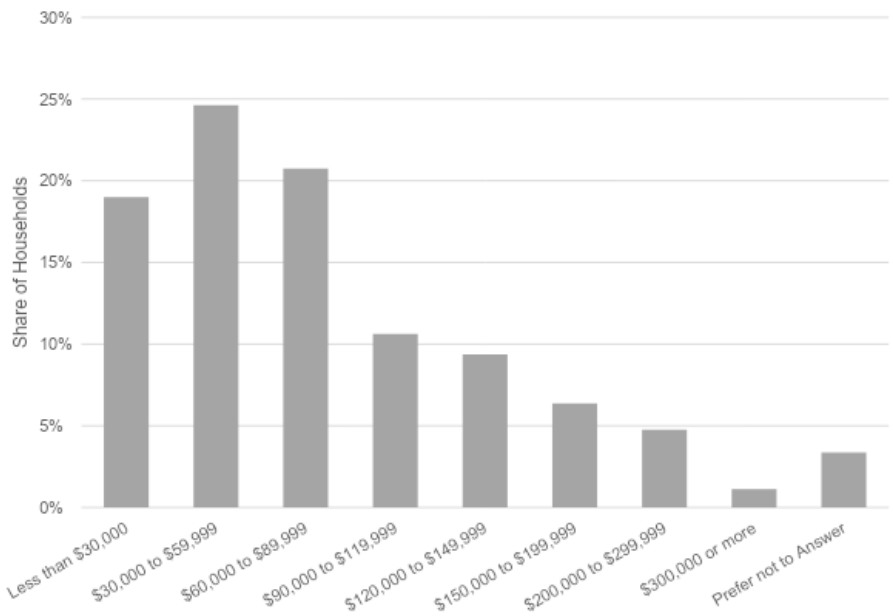


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Annual household income data spanned a wide spectrum. Households earning less than $30,000 per year represented 19.0% of the survey population, and those earning between $30,000 to $59,999 comprised 24.6%. The income bracket of $60,000 to $89,999 included 20.8% of households. As incomes rise, the percentage of households in each bracket decreases: 10.6% earned between $90,000 to $119,999, 9.4% between $120,000 to $149,999, and 6.4% between $150,000 to $199,999. Only a small fraction (4.8%) reported earning between $200,000 to $299,999, and an even smaller percentage (1.1%) earned $300,000 or more.[2]

2 Note: 3.4% of community respondents preferred not to disclose their household income.

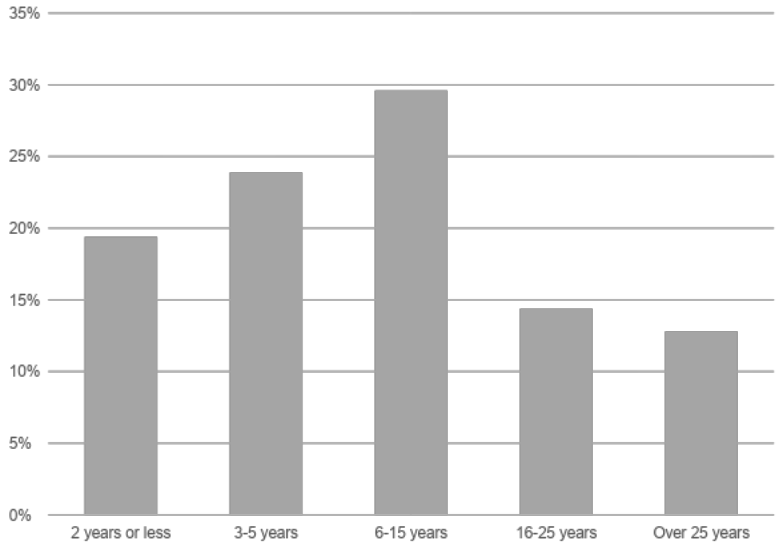
Figure 2: Annual Household Income



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

In terms of tenure in their current neighborhoods, responses were similarly varied. The largest group, (29.6% of the sample) had lived in their current neighborhood for 6-15 years, suggesting a significant degree of residential stability. Those residing in their neighborhood for 3-5 years accounted for 23.9%, and a similar proportion (19.4%) came in at 2 years or less, indicating a recent relocation or potential housing instability. Fewer residents had longer tenures, with 14.4% in the 16 to 25-year range and 12.8% exceeding 25 years. Approximately 38.0% of the surveyed households reported owning their homes, suggesting a substantial proportion of property investment despite the high costs associated with homeownership in the area, whereas 62% of participants said they were currently renting.

Figure 3: Share of Households by Number of Years Residing in Current Neighborhood

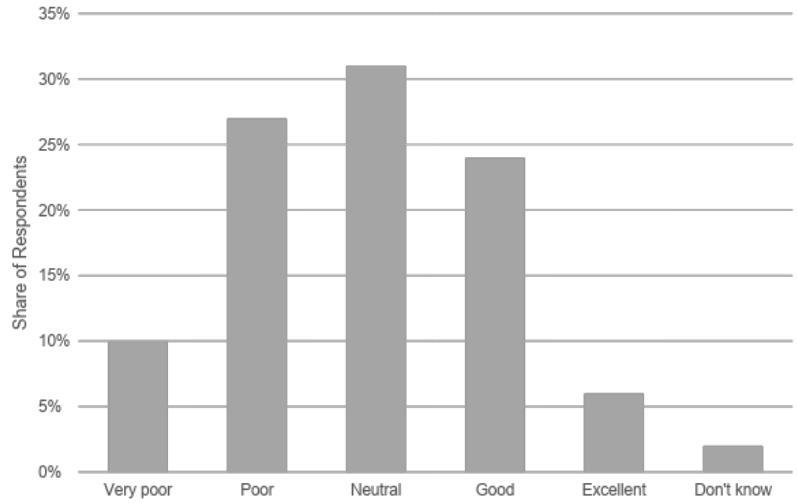


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Housing Supply and Affordability

About 37% of those surveyed viewed the availability of housing as "poor" or "very poor," with a slightly lower percentage (34%) having a negative impression of housing stock quality. This indicates a general dissatisfaction but suggests that the presence of housing is a slightly more pressing concern than its quality. Such sentiments reflect the housing affordability crisis, which remains a critical economic development challenge in Los Angeles County. With over a third of respondents finding the supply of housing to be an issue, coupled with the fact that housing costs continue to rise, an increase in homelessness will likely reduce the attractiveness of the area to new talent and businesses. Addressing housing concerns offers an opportunity to foster a more sustainable and inclusive economic growth by ensuring that workers can live affordably near their places of employment.

Figure 4: Respondent Rating on Availability of Housing in Respective Neighborhoods

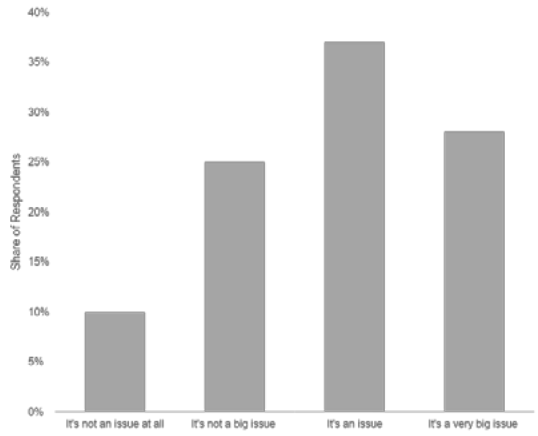


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Homelessness

Feedback from community stakeholders indicates that homelessness is a significant, though not universal, concern in their neighborhoods. A notable 37% of respondents considered it an issue, and 28% regarded it as a very big issue. In contrast, a quarter of the respondents did not believe homelessness to be a big issue; a smaller fraction (10%) did not consider it an issue at all. These perspectives underscore the varied perceptions of homelessness and its impact on local communities across the county.

Figure 5: Respondents View on Homelessness in their Neighborhoods

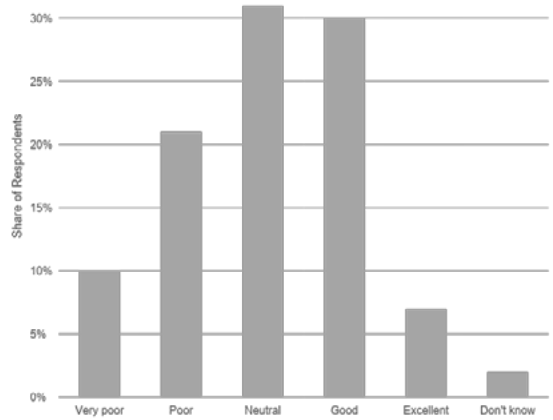


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Public Safety

Public safety is considered to be poor or very poor by 31% of community stakeholders, which is closely aligned with the 32% who are dissatisfied with the effectiveness of public safety infrastructure, policy, and enforcement. This close correlation may reflect a general concern for safety and security measures in the neighborhood. The concerns over public safety can have a broad impact on economic development. Safe communities are a cornerstone for business and resident attraction/retention. With 31% of respondents rating safety as poor, there is a need for investment in public safety services to improve community wellbeing and confidence among local businesses.

Figure 6: Respondents Rating on Public Safety in Respective Neighborhoods

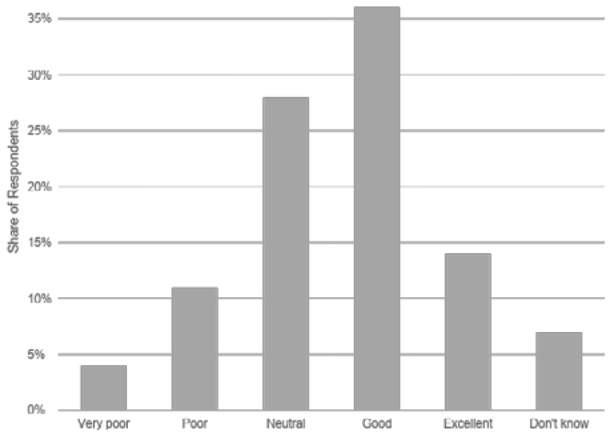


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: K-12 Education

The availability of K-12 education is viewed as poor by 15% of community members, and the same percentage feel the quality is lacking. These concerns point to the constraints underperforming primary and secondary schooling can have on long-term economic development. High-quality education is essential for developing a competent, adaptable workforce that will be able to meet future labor market demand. Quality education not only helps seed talent development at a young age but can also serve as an incentive to attract families to the region.

Figure 7: Respondents Rating on Availability of K-12 Education in Respective Neighborhoods



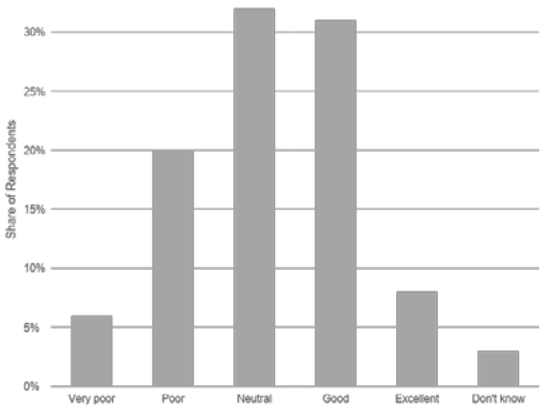
Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics

Sustainability

Lived Experience: Community Spaces

Availability and quality perceptions are similar for community spaces, with 26% rating the availability of community spaces negatively and 25% unhappy with their quality. Community spaces are vital for quality of life and can influence economic development by making neighborhoods more attractive for residents and businesses. With 26% rating their availability negatively, improving these spaces could lead to stronger social cohesion, healthier lifestyles, and a higher quality of life.

Figure 8: Respondents Rating on Availability of Community Spaces in Respective Neighborhoods

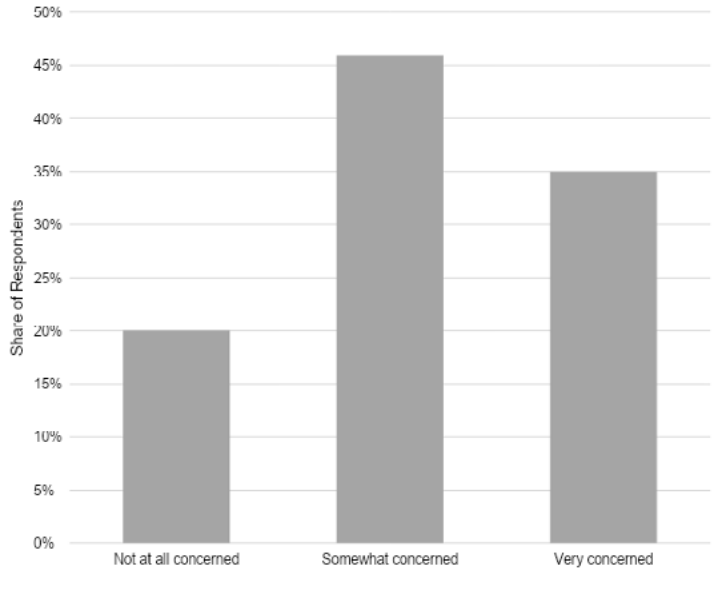


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Environmental Issues

Environmental concerns are significant among community stakeholders in Los Angeles County. Air pollution emerged as a primary concern in the survey, with 81% expressing some level of worry; 35% of community members reporting they are very concerned and an additional 46% somewhat concerned. These sentiments reflect the broader challenges Los Angeles County faces with smog and air quality issues, which have direct implications for public health as well as opportunities to attract new residents and businesses.

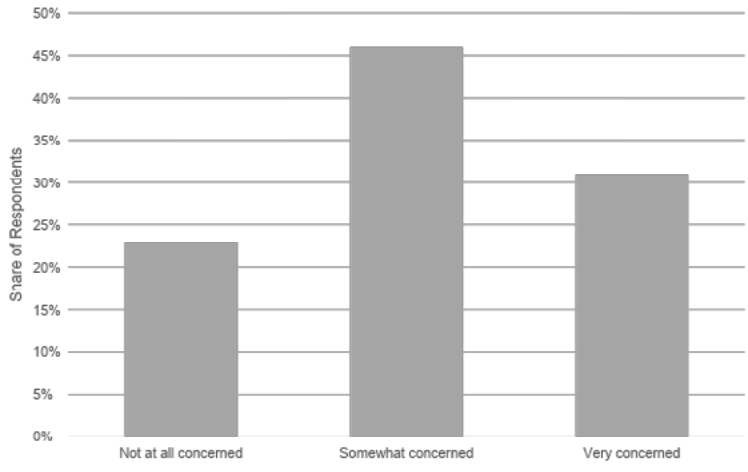
Figure 9: Level of Concern Regarding Air Pollution in Respective Neighborhoods



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Garbage and solid waste management is another significant issue, with 31% of community members feeling very concerned and 46% somewhat concerned (totaling 77% of the sample overall). This unease points towards the challenges in waste management infrastructure and the need for improved recycling and waste processing services. The quality of water is problematic for many as well. Thirty percent (30%) of respondents reported being concerned about unsafe drinking water and another 32% stated they were very concerned (totaling 77% of the sample overall). This signals a need to prioritize the upgrading of water infrastructure to ensure safety and public confidence.

Figure 10: Level of Concern Regarding Garbage and Solid Waste Management in Respective Neighborhoods



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

The loss of green spaces is also on the minds of community stakeholders, where 24% of respondents were very concerned and another 48% somewhat concerned. This reflects a history of disinvestment in some areas and urban expansion into others. In both cases, there is a need to integrate more green infrastructure and sustainable development practices into existing urban landscapes.

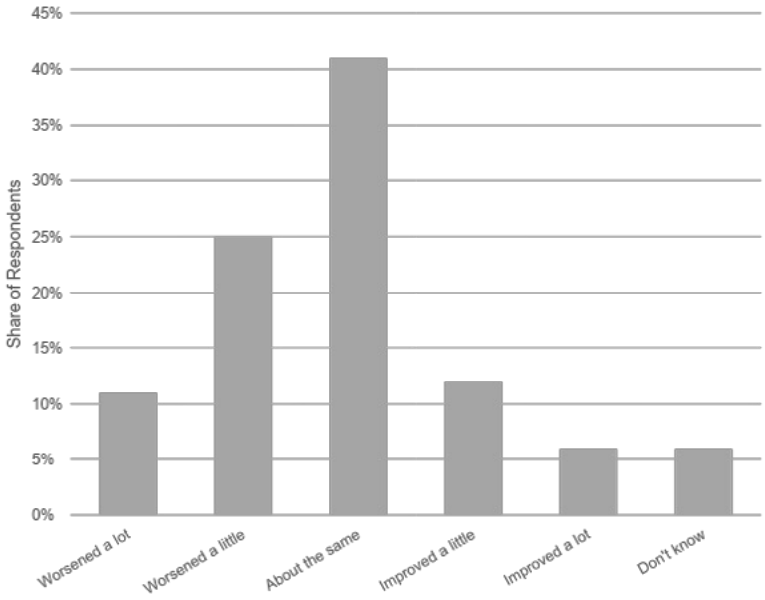
Overall, these environmental issues are deeply interwoven with economic development. They influence the quality of life, public health, and the ability to attract and maintain a vibrant workforce and businesses. Addressing these concerns through sustainable practices and infrastructure investments could not only alleviate the community's environmental worries but also present an opportunity to enhance economic

resilience, create jobs in emerging green industries, and position Los Angeles County as a leader in sustainable urban living.

Lived Experience: Air Quality

Community stakeholders in Los Angeles County expressed varied perceptions regarding changes in air quality over the past decade. A plurality of residents surveyed, 41%, believed that the air quality in their neighborhood has remained the same over the last 10 years. This suggests that a significant portion of the community may not perceive an improvement despite efforts to reduce pollution. However, there is a notable sense of deteriorating air quality among some community members, with 25% feeling that it has worsened slightly.

Figure 11: Air Quality Improvement in the Last 10 Years



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

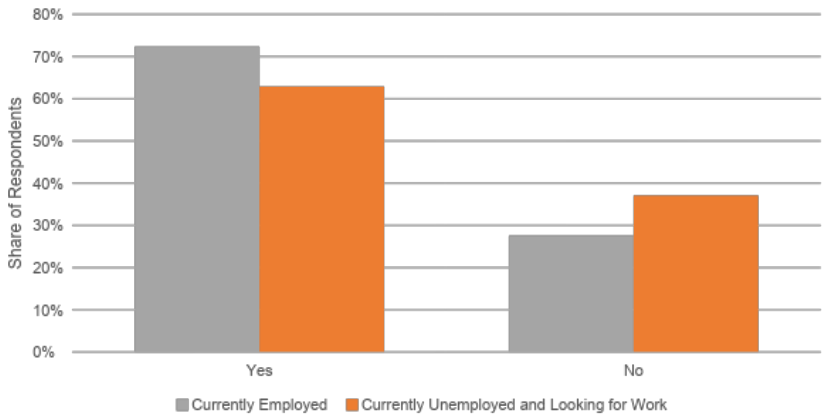
On the more positive side, 18% of community members responded that the air quality in their neighborhood has improved, indicating that while there are some community stakeholders who recognize significant improvements, they are not the majority. Conversely, 26% of the community indicated that air quality has worsened over the last 10 years. Such attitudes demonstrate that a considerable portion of the population may be experiencing negative effects of pollution or may not be aware of any positive environmental changes.

Job Quality and Access

Lived Experience: Employment

The survey demarcates the population into two primary categories: those currently employed and those not currently employed but looking for work. Of the total surveyed population, a substantial majority, 72.4%, indicated that they are currently employed, leaving 27.6% as not employed at the time of the survey. The subset of those not currently employed, which numbers 221 individuals, reveals that 62.9% are actively seeking employment, contrasted with 37.1% who are not. Of those employed (579), 262 responses reported employment in the private sector, 224 reported employment in the public sector, 46 reported employment in the non-profit sector, and 47 respondents indicated employment in 'other' conceptual categories which may indicate work that isn't necessarily formal employment but is none-the-less thought of as wage-earning employment.

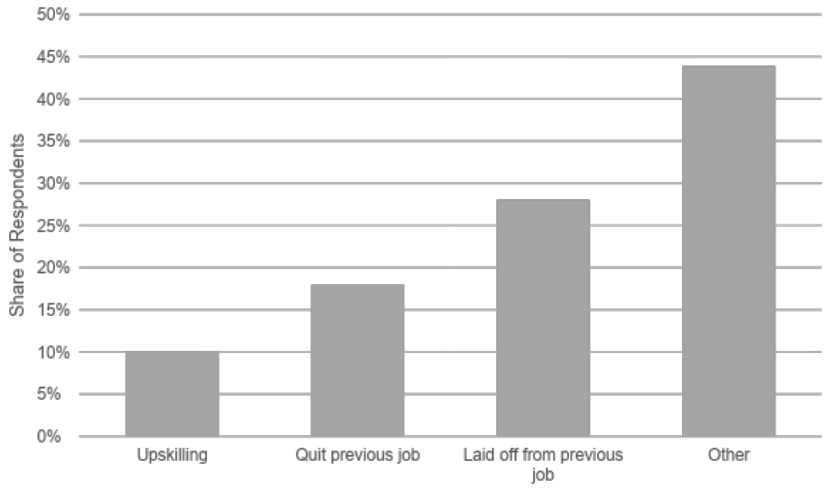
Figure 12: Employment and Unemployment Rates



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

The reasons for unemployment among the 139 individuals who are currently looking for work vary. A significant portion, 43.9%, cite reasons classified under 'Other', indicating a diverse array of factors not explicitly captured. The next largest group, 28.1%, attributed their unemployment to being laid off from their previous job. Those who quit their previous job form 18.0% of the subset, while a smaller percentage, 10.1%, are currently upskilling, indicating a proactive approach to improving their employability.

Figure 13: Reasons for Unemployment

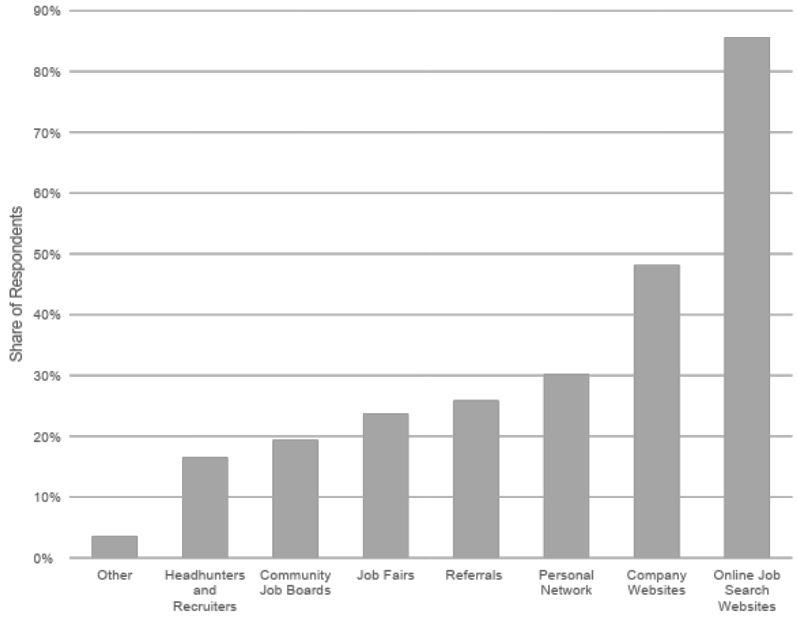


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Job search mediums used by these individuals also exhibit a clear preference. An overwhelming majority, 85.6%, utilize online job search websites, suggesting a high reliance on digital resources for employment opportunities. Company websites are used by nearly half, 48.2%, showcasing a direct approach to seeking

employment. Personal networks are leveraged by 30.2% of job seekers, followed by referrals at 25.9%, job fairs at 23.7%, community job boards at 19.4%, and headhunters and recruiters at 16.5%. A minimal 3.6% reported using 'Other' methods not specified in the survey.

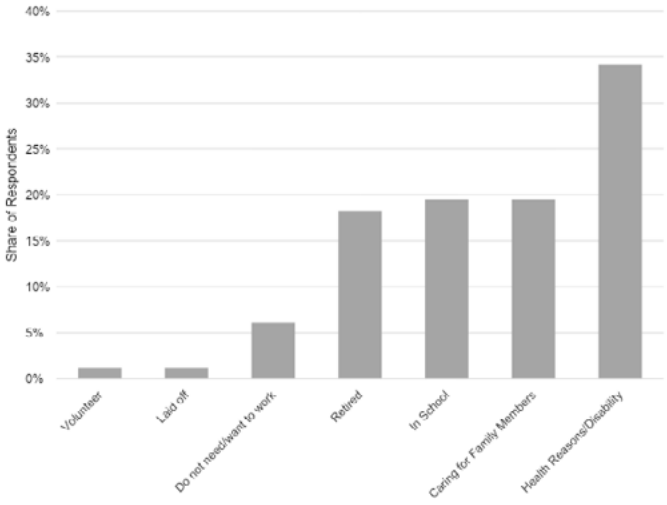
Figure 14: Job Search Medium (Multiple Responses)



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

When examining the reasons for not seeking employment among the 82 individuals who are not actively looking for work, a variety of factors come into play. The predominant reason, reported by 34.1%, is health reasons or disability. Caring for family members and being in school are each cited by 19.5% of respondents, indicating significant responsibilities outside of formal employment. A smaller proportion, 18.3%, are retired, and a notable 6.1% report they do not need or want to work, suggesting economic or personal choice. Only 1.2% are laid off and an equivalent percentage are volunteering.

Figure 15: Reasons for Not Seeking Employment (Multiple Responses)



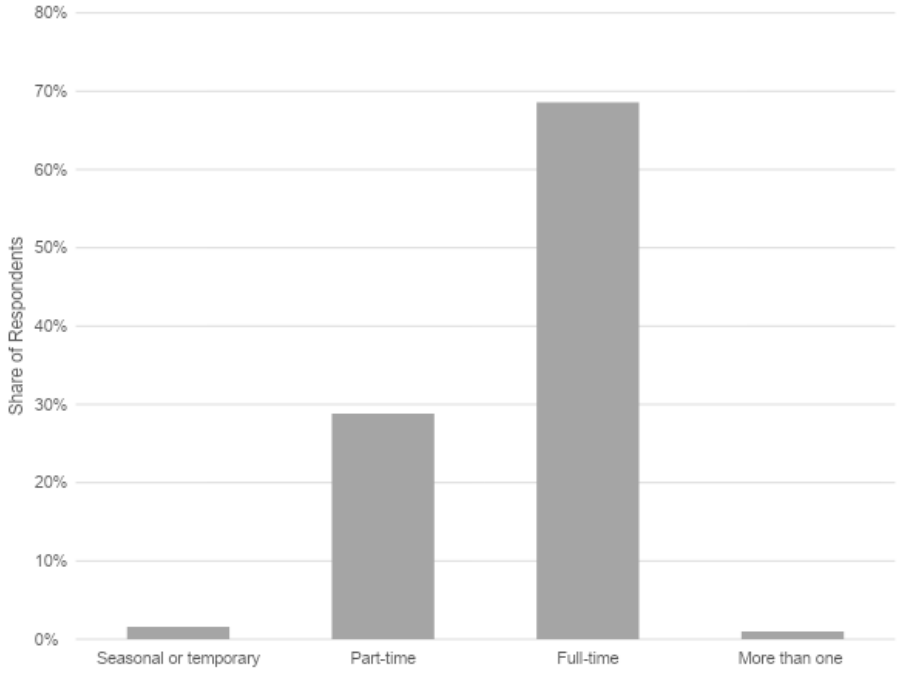
Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Regarding the number of jobs held by the currently employed individuals (n=579), the vast majority, 87.0%, report having just one job. A smaller segment, 12.1%, hold two jobs, which may reflect a need for additional income or personal choice for diverse work experiences. Very few, 0.9%, are engaged in three or more jobs. It's noteworthy that 262 responses come from the private sector, 224 from the public sector, and 46 from the non-profit sector, with 47 respondents indicating 'other'.

Finally, the employment status of the respondents indicates that a significant majority, 68.6%, are

employed full-time. Part-time workers account for 28.8%, which may align with the number of individuals holding multiple jobs. Seasonal or temporary workers constitute 1.6%, and 1.0% have more than one of the above-mentioned employment statuses, implying concurrent engagements in various types of employment.

Figure 16: Employment Status



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

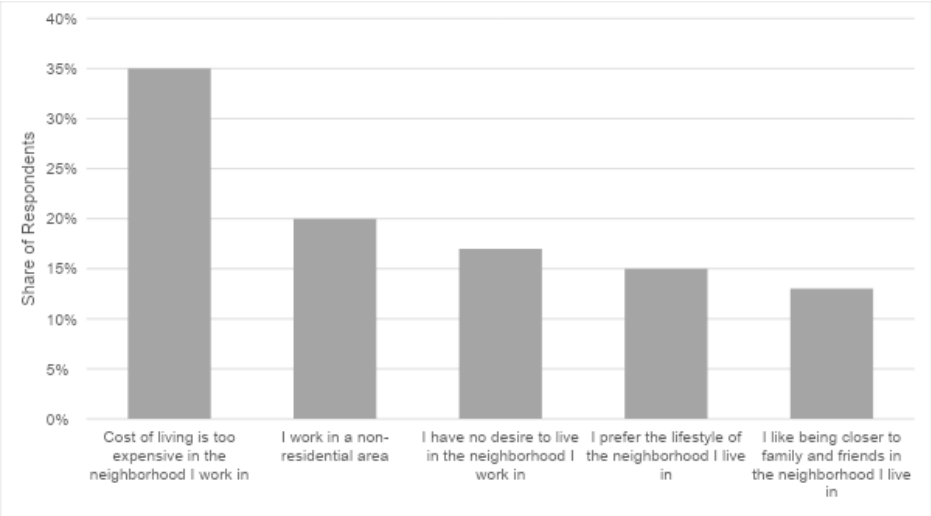
Lived Experience: Balanced Communities

The stakeholder outreach reveals that for over a third (35%) of community members who are employed and live in different neighborhoods than they work, the primary reason for not residing in the same neighborhood as their workplace is the high cost of living. This is a significant economic development challenge for Los Angeles County as it indicates a potential mismatch between wages and living costs in certain areas. It suggests the need for affordable housing initiatives or transportation solutions that can bridge the gap between where people work and where they can afford to live.

Additionally, 20% of individuals work in areas that are non-residential, which points to a need for better integration of residential and commercial planning or improved commuting options. For 17% of community stakeholders, there is no desire to live in the neighborhood where they work, which could be due to various factors such as the character of the neighborhood, perceived safety, or access to amenities and services.

A preference for the lifestyle of the neighborhood where they currently reside is the main reason for 15% of the participants, suggesting that local amenities, community culture, or personal connections are significant factors in housing decisions. Lastly, 13% choose to live in their current neighborhood to be closer to family and friends, emphasizing the importance of social bonds in living arrangements. This community feedback highlights the interconnected nature of housing, employment, and lifestyle choices. It points to opportunities for economic development in creating more balanced communities that offer affordable living, robust amenities, and access to social networks.

Figure 17: Main Reason why Respondents Live and Work in Different Neighborhoods



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Economic Competitiveness

Lived Experience: Job Training and Career & Technical Education

While 27% of members of the community feel that the availability of job training and education is lacking, a slightly lower percentage, 26%, are unhappy with the quality. This suggests that both the presence of and the quality of job training and education services are almost equally challenging. Nearly equal concerns about the availability and quality of job training and education suggest a skills gap challenge. Addressing this through enhanced vocational programs and partnerships with local industries can create a more skilled workforce, meeting the needs of a changing economy and fostering innovation and economic competitiveness.

Lived Experience: Businesses in Demand

Community stakeholders in Los Angeles County have expressed a desire for a diverse array of businesses in their neighborhoods, reflecting both the cultural tapestry of the region and its economic aspirations. Entertainment, arts, and culture businesses top the list, with 24% of community members wishing to see more of these in their neighborhoods and 64% ranking them within their top three preferences. This is a testament to Los Angeles's storied connection with the creative industries and points to opportunities for economic growth in these sectors.

Restaurants and dining establishments are also in demand, with 19% of members of the community prioritizing them as the top choice and 55% placing them in their top three. This preference highlights the potential for growth in the hospitality sector and underscores the importance of a vibrant culinary scene for local economic development and for attracting tourism.

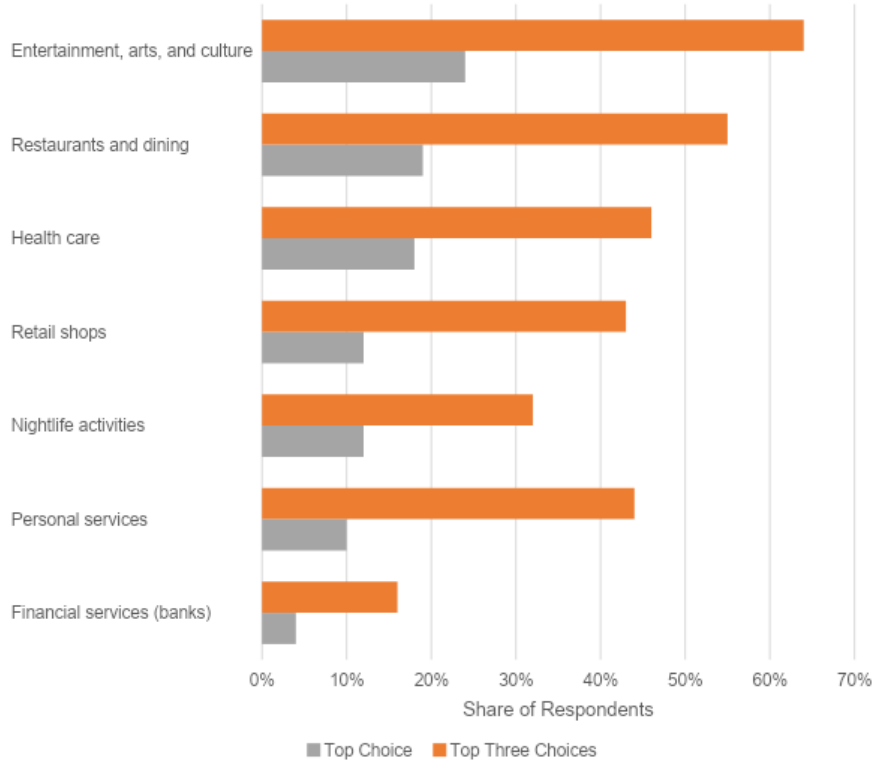
Health care is another significant area, with 18% of community members wanting to see more of these services and 46% ranking them in the top three. This reflects an awareness of health and wellness and presents opportunities for the expansion of medical facilities and services, which can be both a public service and a source of employment.

Nightlife activities and retail shops each garner attention from 12% of community members as a top choice, with 32% and 43% respectively ranking them in the top three. The interest in nightlife speaks to the community's desire for vibrant evening economies, which can create jobs and draw tourists. Retail's inclusion suggests opportunities for local commerce and the potential benefits of creating walkable shopping districts.

Personal services are a top choice for 10% of the community, with 44% ranking them in their top three, indicating an opportunity for small business development in services ranging from beauty salons to repair shops. Finally, financial services are a top preference for only 4% but appear in the top three for 16%, pointing to a more niche but still important need for economic growth in the financial sector.

These preferences for business development highlight both challenges and opportunities in Los Angeles County's economic landscape. The desire for more entertainment and arts businesses aligns with LA's existing cultural infrastructure yet indicates a demand for its expansion. The interest in more dining, health care, nightlife, and retail aligns with a push towards a service-oriented economy that can meet diverse local needs and attract investment. The lesser emphasis on personal and financial services may reflect a satisfaction with existing offerings or a focus on more visible sectors. In each area, there is a potential for job creation, increased quality of life, and a more robust economic environment.

Figure 18: Businesses Respondents Would Like to See in Respective Neighborhoods



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Entrepreneurship

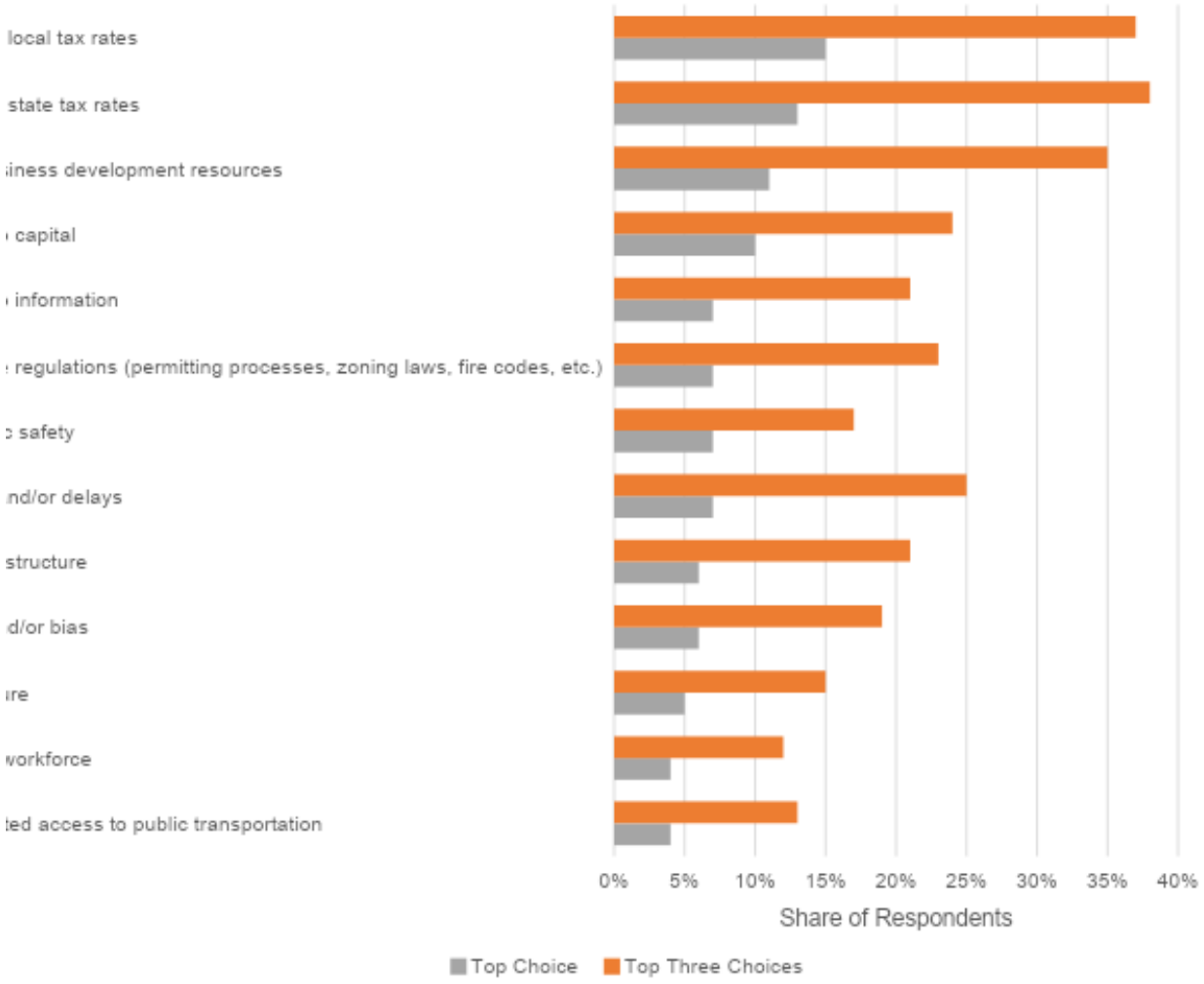
The perceptions of community stakeholders in Los Angeles County regarding obstacles to entrepreneurship reveal critical insights into the economic landscape and potential barriers to business development. The survey data, representing the views of 800 individuals, highlight several challenges and opportunities.

A significant 37% of the community members identify excessively high local tax rates as one of the top three barriers to entrepreneurship, which suggests a substantial economic challenge. High taxation can deter new startups and hinder the growth of existing businesses, potentially stymieing innovation, and economic diversification in the region. Similarly, 38% cite excessively high state tax rates, reinforcing concerns over the tax burden in California. This high state tax can impact the financial planning of entrepreneurs and the feasibility of business operations, potentially driving businesses to more tax-friendly environments.

The lack of small business development resources is seen as a major obstacle by 35% of members of the community. This underscores a need for more support mechanisms like business incubators, mentorship programs, and development centers that could facilitate business growth and innovation. Access to capital is a hurdle for 24% of community members, pointing to an opportunity for financial institutions and investors to play a more active role in supporting local entrepreneurs. Improved access to loans, venture capital, and grants could stimulate business creation and expansion.

Additionally, licensing costs and delays are a top concern for 25% of individuals, indicating that bureaucratic processes may be hindering the entrepreneurial ecosystem. Simplifying licensing procedures could foster a more business-friendly environment. Inadequate public safety and overburdensome regulations are highlighted by 17% and 23% of the community participants, respectively. These issues suggest that improving public safety and streamlining regulatory processes could not only boost business confidence but also make the county a more attractive location for entrepreneurs.

Figure 19: Obstacles to Entrepreneurship



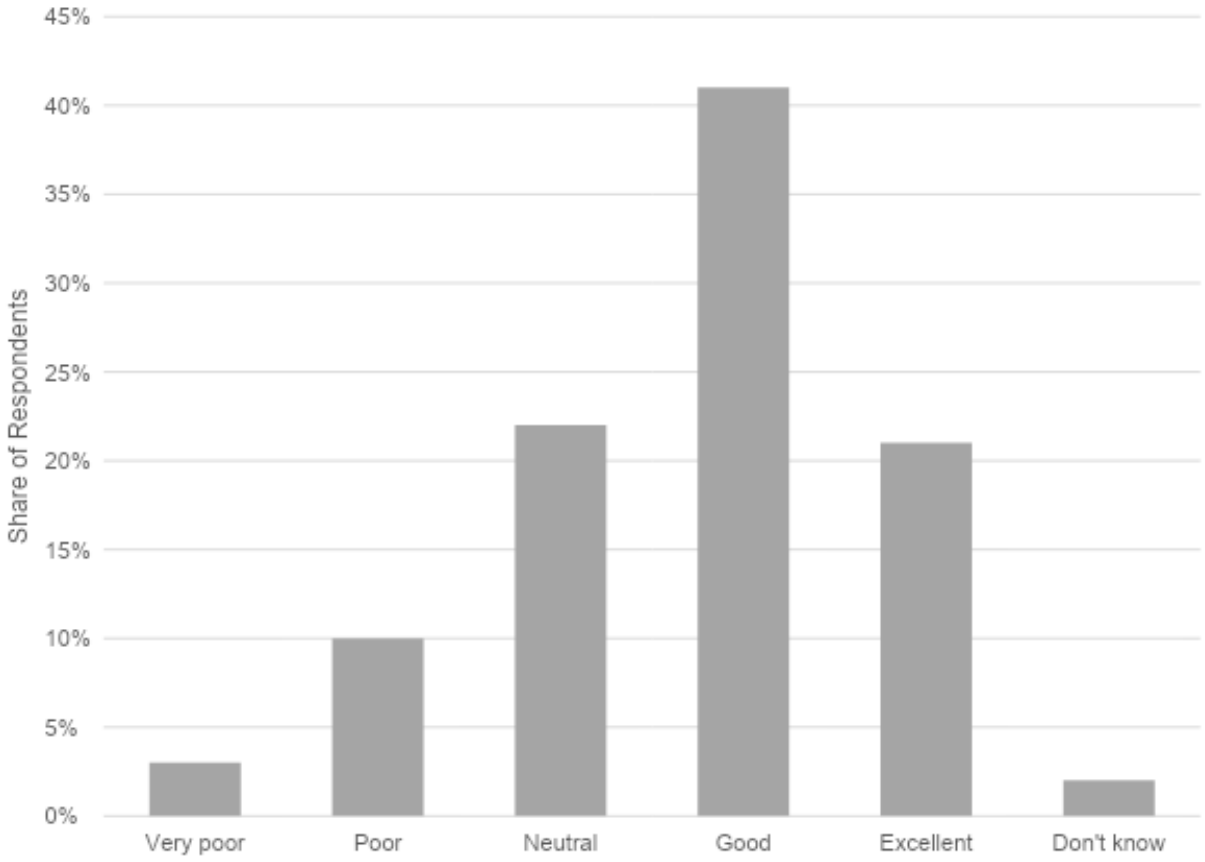
Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Resilience

Lived Experience: Broadband Access

Only 13% of members of the community find the availability of broadband services to be poor, but the quality is a concern for 15%. This suggests that while broadband services are widely available, there is room for improvement in terms of their quality. Broadband access is relatively well-rated in terms of availability, but quality concerns indicate an opportunity to enhance digital infrastructure. As the economy becomes increasingly digital, high-quality broadband services can enable new business models, support remote work, and improve access to markets and information, driving economic development and innovation.

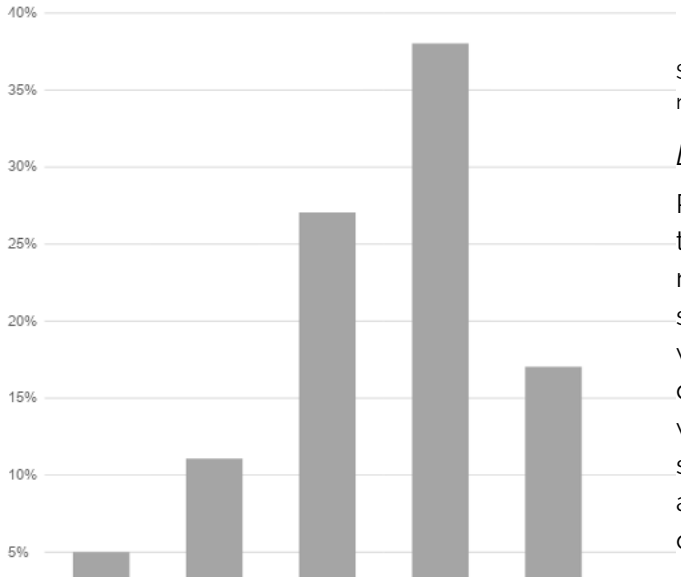
Figure 20: Respondents Rating on Availability of Broadband Access in Respective Neighborhoods



Lived Experience: Emergency Services

Emergency services have a slightly better perceived availability (only 16% of respondents rated emergency service availability "poor") compared to a slightly larger concern over quality (which was rated "poor" by 17% of respondents). The community seems to feel that while emergency services are accessible, the quality could be improved. The perceived gap in emergency services quality could deter new investments and affect residential and commercial insurance rates in the region.

Figure 21: Respondents Rating on Availability of Emergency Services in Respective Neighborhoods

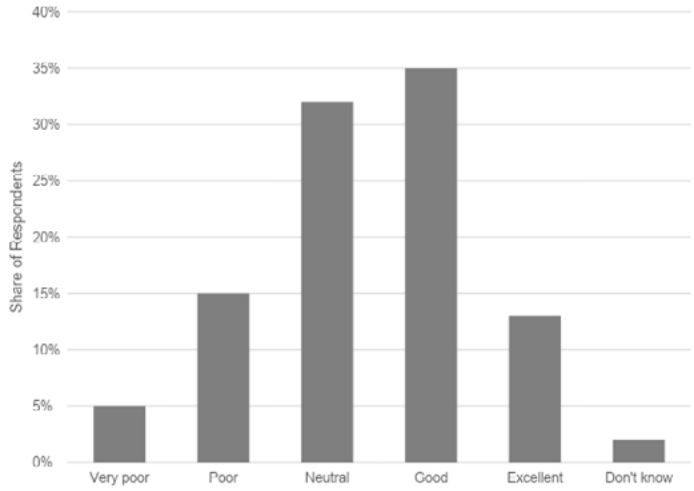


Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Lived Experience: Health Services

Perceptions of health services compare less favorably to emergency services. Of residents surveyed, 20% rated the availability of health services poorly and the same percentage felt that available health services were of poor quality. In an economic context, high-quality health services are crucial for a productive workforce. Investments in health infrastructure and services could improve workforce productivity and attract companies that value the health and well-being of their employees.

Figure 22: Respondents Rating on Availability of Health Services in Respective Neighborhoods



Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Employer Feedback and Perspectives

The Los Angeles County Jobs First Collaborative research team conducted outreach to businesses within the county, facilitated through the distribution of a survey and matchmaking for interviews, by select partners, including Economic Development Agencies, Employers, Businesses and Business Associations, and Government Agencies.[3] These entities played a crucial role in ensuring the team engaged with a broad

3 Special thanks to: Alhambra Chamber of Commerce; American Indian Chamber of Commerce of California; Antelope Valley Chambers of Commerce; BizFed; Black Business Association; California Manufacturing Technology Consulting (CMTC); Carson Chamber of Commerce; Century City Chamber of Commerce; Compton Chamber of Commerce; Gardena Valley Chamber of Commerce; Greater Los Angeles African American Chamber of Commerce; Los Angeles Area Chamber of Commerce Foundation; Los Angeles Business Council; Los Angeles Latino Chamber of Commerce; National Association of Minority Contractors; National Association of Women

audience of private enterprises and employers, all vested in the economic well-being of the Los Angeles region. The interviews and survey were structured around four pivotal categories—labor market opportunities, challenges, barriers, and workforce development initiatives—aimed to gather a comprehensive understanding of the current economic landscape from the point of view of businesses and employers in the region.

Labor Market Opportunities, Challenges, and Impacts

The analysis revealed a notable disparity in the labor market, characterized by a significant shortage of qualified candidates. This shortage is attributed to a gap between the skills available in the job-seeking population and those required by the evolving job market. Business leaders expressed concerns over the lack of applicants with the necessary skills or experience, pointing to a broader issue of industries or roles being either unknown or unattractive to potential job seekers. Furthermore, the mismatch between candidates' skills and job requirements, coupled with limited opportunities for career advancement within companies, were identified as pressing issues stifling the growth and dynamism of the labor market.

Labor Market Barriers

The analysis of the interviews and survey responses also highlighted several barriers impeding the labor market's efficiency. The high cost of living in Southern California stands out as a significant hurdle, making it challenging for employees to afford housing close to their workplaces. Traffic congestion and long commuting times further exacerbate this issue, diminishing the willingness of potential employees to travel great distances for work. Moreover, the rapid evolution of technology and the consequent changes in skill requirements pose a challenge to the current workforce's ability to stay relevant and competitive**.**

Workforce Development

In response to these challenges, the findings underscore the necessity for streamlined regulatory processes to reduce the operational burdens on businesses. The dialogue among business leaders leans heavily on the potential of public-private partnerships to foster innovative workforce development solutions. There is a unified call for increased support for small businesses, recognizing them as crucial to the economic fabric of the region and pivotal in enhancing their competitive edge in attracting and retaining talent.

The capacity for economic growth in Los Angeles County is dispersed across multiple entities, leading to a situation where the collective impact is weaker than it could be if these efforts were more united. Various local government bodies and educational institutions manage aspects of economic, community, and workforce development independently. While there is a wealth of initiatives, the lack of a coordinated approach diminishes their overall effectiveness and the fair distribution of benefits to residents. There is a pressing need to develop and implement a unified strategy that ensures better alignment and cooperation among different departments, local initiatives, and community stakeholders. By doing so, businesses and employers believe there is substantial untapped potential that could be realized, resulting in improved economic development services, and fostering more inclusive growth. Without clear lines of authority and accountability, it's challenging to bring together disparate efforts under a common vision and produce more responsiveness by including employers and industry more organically in meeting regional needs at the SPA or community level.

Business Owners - Los Angeles; Pasadena Small Business Development Center (SBDC); Veterans Chamber of Commerce; Los Angeles County Department of Economic Opportunity.

Table 1: Race and Ethnicity by SPA

SPA 1 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	5.0%	3.9%
Black or African American	17.0%	15.7%
Hispanic or Latinx	57.0%	52.0%
American Indian and Alaskan Native	1.0%	0.5%
White	18.0%	24.8%
Other	2.0%	3.0%

SPA 2 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	11.1%	10.9%
Black or African American	3.0%	3.8%
Hispanic or Latinx	40.4%	41.5%
American Indian and Alaskan Native	1.0%	0.2%
White	40.4%	39.9%
Other	4.0%	3.6%

SPA 3 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	29.3%	28.9%
Black or African American	3.0%	3.2%
Hispanic or Latinx	47.5%	46.8%
American Indian and Alaskan Native	1.0%	0.2%
White	17.2%	18.2%
Other	2.0%	2.8%

SPA 4 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	17.2%	17.8%
Black or African American	6.1%	5.4%
Hispanic or Latinx	42.4%	49.3%
American Indian and Alaskan Native	1.0%	0.2%
White	30.3%	24.0%

SPA 4 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Other	3.0%	3.2%

SPA 5 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	14.4%	12.8%
Black or African American	6.2%	6.2%
Hispanic or Latinx	18.6%	15.4%
American Indian and Alaskan Native	1.0%	0.2%
White	57.7%	59.4%
Other	2.1%	5.9%

SPA 6 East Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	1.5%	0.8%
Black or African American	13.6%	14.4%
Hispanic or Latinx	81.8%	82.2%
American Indian and Alaskan Native	0.0%	0.1%
White	1.5%	1.3%
Other	1.5%	1.1%

SPA 6 West Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	3.1%	4.8%
Black or African American	28.1%	29.7%
Hispanic or Latinx	53.1%	56.5%
American Indian and Alaskan Native	3.1%	0.1%
White	9.4%	6.2%
Other	3.1%	2.7%

SPA 7 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	10.1%	10.0%
Black or African American	4.0%	3.8%
Hispanic or Latinx	75.8%	74.1%

American Indian and Alaskan Native	1.0%	0.2%
White	8.1%	10.4%
Other	1.0%	1.6%

SPA 8 Race/Ethnicity	CA Jobs First Survey	2021 ACS 5-Year Survey
Asian and Pacific Islander	15.5%	16.1%
Black or African American	11.3%	12.9%
Hispanic or Latinx	42.3%	41.5%
American Indian and Alaskan Native	0.0%	0.2%
White	25.8%	25.5%
Other	5.2%	3.9%

Source: Community Outreach, 11/23 – 01/24; Analysis by CVL Economics.

Appendix B: Regional Summary Index

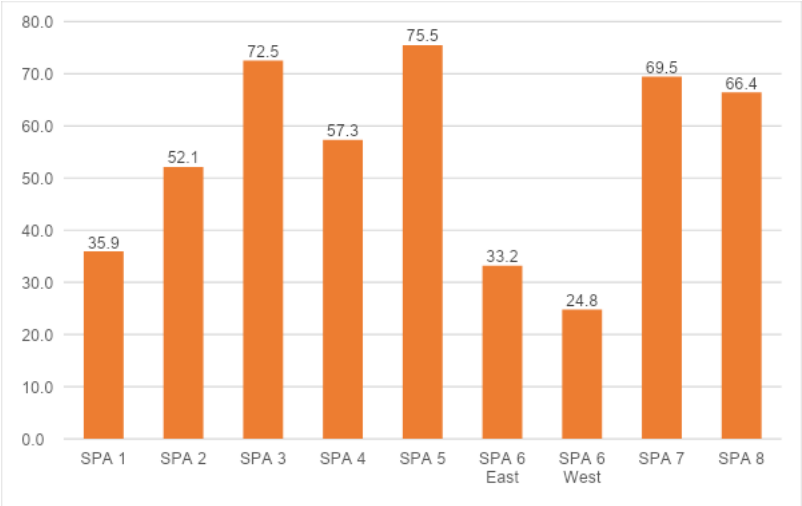
The Los Angeles County Regional Index was conducted by CVL Economics to summarize the region's economic development environment through the compilation and analysis of key economic, demographic, educational, health, and community-related indicators across eight Service Planning Areas (SPAs). The Los Angeles County Regional Index aims to inform economic development initiatives that foster equity, resilience, and prosperity work towards a more inclusive future for all residents. This analysis evaluates each SPA across five dimensions: Equity, Sustainability, Job Quality and Access, Economic Competitiveness, and Resilience. As a series of benchmarking tools, each index can help inform future economic development plans and provide policymakers with the ability to assess progress towards strategic goals. We utilize this data to better understand the demographic and socio-economic conditions of the region, the industry trends that are impacting the regional economy, as well as regional economic, health, and environmental inequities currently facing the region.

By combining the five socioeconomic variables (*Equity*, *Sustainability*, *Job Quality and Access*, *Economic Competitiveness*, and *Resilience)*, the resulting *Equity Index* highlights how each SPA is performing overall. The areas with higher-earning households are likely to fare better, given how strong social wellbeing informs economic well being. SPA 5 (with an indexed score of 75.5), SPA 3 (72.5), and SPA 7 (69.5) are at the top of this list in this regard. The lowest ranking SPAs, across nearly every indicator, are SPA 6 South-West (24.8), SPA 6 South-East (33.2), and SPA 1 (35.9), which have higher-than-average shares of low-income households, greater housing cost burdens, and lower access to adequate health care.

Equity Index

Los Angeles County benefits from being a highly diverse county, with roughly 75% of the population belonging to a minority group. Two SPAs fall short of the countywide average in terms of diversity: SPA 5 (40.6%), and SPA 2 (60.1%). South Los Angeles and East Los Angeles are the most diverse sub-regions in the county, with SPA 6 East's share of diverse population at 98.7%, SPA 6 West at 93.8%, and SPA 7 at 89.6%. These three SPAs (as well as SPA 4) are also home to the highest shares of residents living in disadvantaged areas (94%, 82%, 54%, 67%, respectively). In contrast, the fewer minority group residents a SPA has, the higher its average annual household income tends to be. SPA 5's average annual household income of $149,000 is far above the $101,200 county average, with SPA 2 ($107,000) and SPA 8 ($105,100) coming in at a distant second and third.

Figure 1: Equity Index Summary by SPA

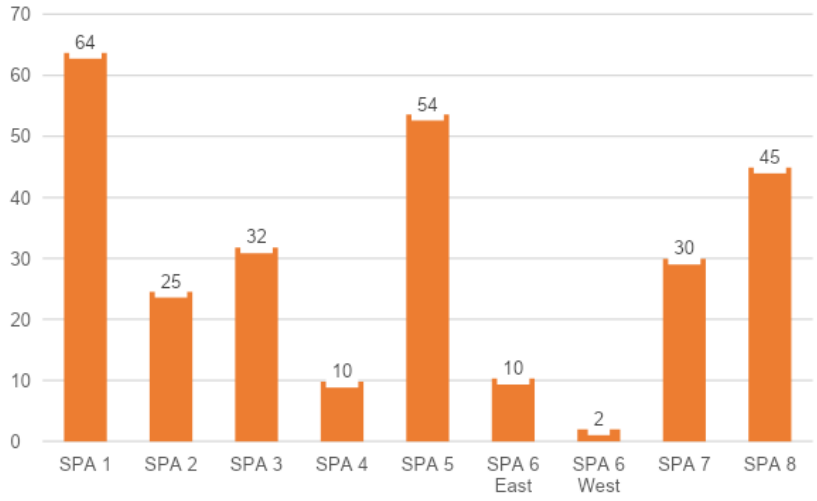


Source: Analysis by CVL Economics.

Sustainability Index

A SPA's likelihood to be rated high on the Sustainability Index is affected by several factors ranging from income, urban density, and environmental justice. In recent years, Los Angeles has seen significant improvement in overall air quality, with average levels of PM2.5 (inhalable particle matters with diameters less than 2.5 micrometers) dropping below the threshold of risk. The best levels of air quality in Los Angeles are in the northern parts of the county, with SPA 1 and SPA 2 having the lowest levels of PM2.5, yet neighborhoods in South Los Angeles suffer from the highest level of air pollution; SPA 6 East at 12.1µg/m3 – just over the 12.0µg/m3 recommended levels. Not surprisingly, SPA 6 East and SPA 6 West also have significantly lower accessibility to green spaces – at 0.5 and 0.2 acres per 1,000 people respectively — compared to other parts of the county. Access to ample natural spaces and parks are predominantly found in SPA 1 (65.9 acres per 1,000 people), SPA 5 (46.6 acres per 1,000 people) and SPA 2 (16.7 acres per 1,000 people).

Figure 2: Sustainability Index Summary by SPA

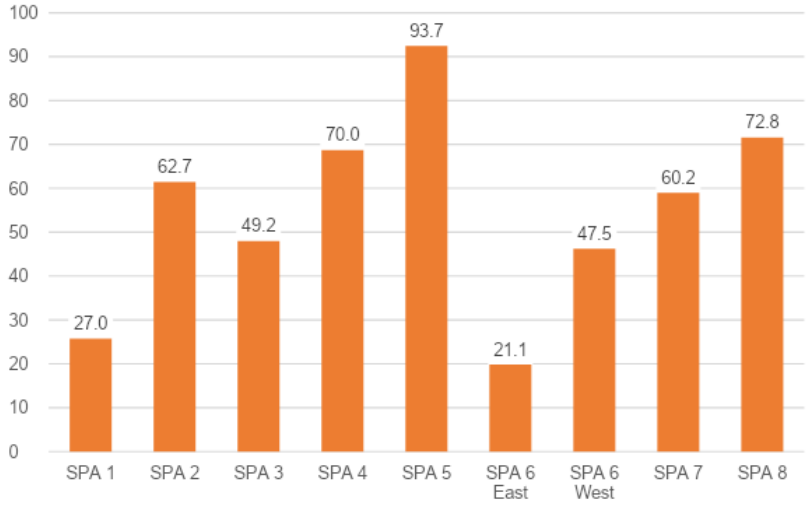


Source: Analysis by CVL Economics.

Job Quality and Access Index

Although Los Angeles boasts some of the most dynamic and innovative economies in the world, not all residents get to benefit. Areas with larger shares of disadvantaged communities suffer from higher shares of working-age populations who do not have a job. Jobless rates among residents aged 25 to 54 are highest in SPA 1 (21.2%), SPA 6 East (17.8%) and SPA 6 West (15.1%). These regions also tend to be the ones with the fewest resources for economic mobility. SPA 6 East has roughly only 3 workforce training providers per 100,000 people compared to 10 in SPA 4, which encompasses Downtown Los Angeles. SPA 4 (as well as neighboring SPA 5, which includes Santa Monica, Westwood, and Culver City) also has a higher concentration of high-skill, high-wage workers in sectors such as *Professional, Scientific, and Technical Services*, *Finance and Insurance*, and *Information*. Less prosperous areas, conversely, tend to have lower-paying jobs in the *Health Care and Social Assistance* and *Accommodations and Food Services* sectors.

Figure 3: Job Quality and Access Summary by SPA



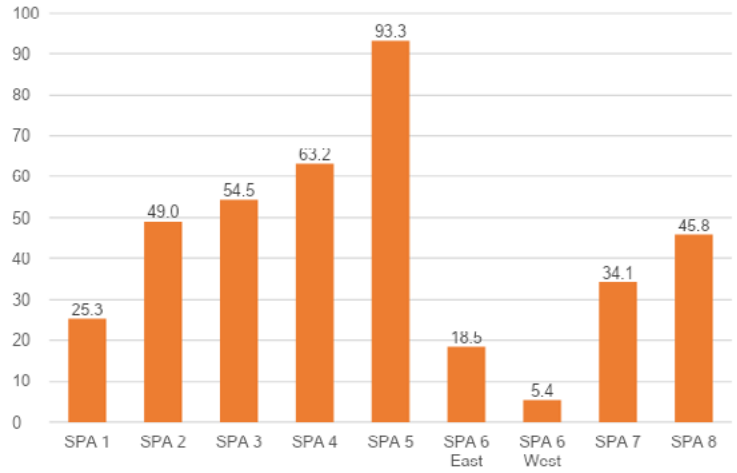
Source: Analysis by CVL Economics.

Economic Competitiveness Index

An educated workforce and a high density of business activity are key determinants of a region's economic competitiveness. Skilled workers are vital for local economies in terms of establishing, attracting, and retaining businesses in innovative, export-oriented industries. Lower-income communities tend to have fewer residents who have attended a four-year institution. In SPAs 6 East and 6 West, the shares of residents with at least a bachelor's degree are 6.0% and 15.1%, respectively — far below the countywide average of 27.8%. Conversely, this share is 54.2% in higher-income SPA 5. SPA 5 is also has a high degree of business activity with 637 businesses per 10,000 residents (or more than two times higher than the countywide average); in absolute terms, its 44,700 establishments is only surpassed by SPA 2 (73,250) and SPA 3 (51,320). SPA 6 West, SPA 6

East, and SPA 7 are the regions with the lowest business density and are also the ones that took the longest to recover jobs lost during the Great Recession.

Figure 4: Economic Competitiveness Summary by SPA

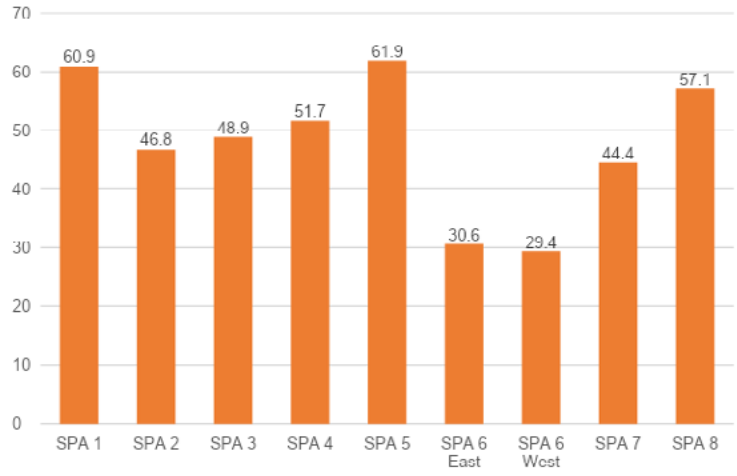


Source: Analysis by CVL Economics.

Resilience Index

A region's resilience is predicated on how strong its physical and social infrastructure is. Low-income areas and disadvantaged communities tend to fare poorly in this regard. South Los Angeles not only has a high share of residents without internet access (14.3 % in SPA 6 West and 13.7% in SPA 6 East, compared to a countywide average of 8.8%), it is home to some of the oldest commercial and residential building stock across Los Angeles. In SPA 6 West for example, almost 48% of residential units were built prior to 1950. The region fares considerably better with respect to climate risks and environmental hazards, which are more pronounced in regions north and west. In SPA 1, for example, 76% of residential properties are at some risk of wildfire exposure over the next 30 years. The risk of wildfires is also relatively high for SPA 2 (with 41% of properties at risk), which also must contend with flood risks (with 17% of properties at risk). This is second only to SPA 5, where the risk of property damage over the next 30 years is 20%.

Figure 5: Resilience Index Summary by SPA



Source: Analysis by CVL Economics

Appendix C: Los Angeles County Regional Indicators

This document summarizes Los Angeles County's socio-economic landscape based on the analysis of several economic, demographic, educational, health, and community-related indicators. These indicators are organized across five dimensions: Equity, Sustainability, Job Quality and Access, Economic Competitiveness, and Resilience. Data were collected both at the county level and for eight designated Service Planning Areas.

Appendix D: Los Angeles County Regional Index Methodology

Developing the *Los Angeles County Regional Index* required an in-depth, sub-regional analysis across multiple variables to determine the overall health and wellbeing of the region's population, economy, environment, and infrastructure. Data was collected from several sources at a granular level (either by zip code or census tract) to assess current trends for each of Los Angeles's SPAs. Some publicly available data sources were used for multiple indicators, such as the Public Use Microdata Sample American Community Survey, the Office of Environmental Health Hazard Assessment, and the Council on Environmental Quality. Proprietary data was used for certain indicators as well, such as IMPLAN for trade volume and Lightcast for total employment (which includes self-employed and gig workers in addition to W2 employees).

Regional Index Indicator Definitions

In line with the CJF's goals, we address the key measurements of Equity, Sustainability, Job Quality and Access, Economic Competitiveness, and Resilience. The following table provides an overview of each category and lists the indicators used to calculate index scores:[4]

Table 1: Regional Index Indicator Definitions

Category	Description	Indicators
Equity	Understanding the demographic overview of Los Angeles County's SPAs, including health metrics, housing affordability, and disadvantaged residents.	• Diversity (by race and ethnicity) • Average household income • Housing costs as percent of household income • Share of residents living in disadvantaged areas • Food security (access to supermarkets) • Life expectancy • Share of low birthweight babies
Sustainability	Assessing the environmental health of SPAs.	• Air quality (PM2.5) • Drinking water • Green spaces • Battery Electric Vehicle adoption • Solar energy opportunities
Job Quality and Access	Analyzing employment and earnings, access to job training and education, and job quality.	• Working-age population jobless rate • Salaries • Commute times • Workforce development training providers
Economic Competitiveness	Assessing the overall stability of the local economy, including overall presence of businesses, education facilities, trade, and historical economic recovery patterns.	• Establishments per resident • Research institutions • Exports • Population educational attainment • Recession recovery

4 See the methodology section for more information on the technical processes in developing the index.

Category	Description	Indicators
Resilience	Understanding the health of infrastructure in the region, including commercial and residential properties, utilities, environmental risks, and available community engagement organizations.	• Household internet access • Age of residential units • Age of commercial units • Risk of flood • Risk of fires • Social cohesion (access to social clubs)

Data Sources

The most recent data available varied by source. For most indicators, the most recent data available was from 2021 or 2022. However, this was not the case for some of the health and environmental indicators, so data had to be averaged based on availability. For example, drinking water contaminant data was collected between 2011 and 2019, PM2.5 data was collected between 2015 and 2017, and low birthweight infant data was collected between 2009 and 2015. The following table summarizes data sources by category and respective indicator as well as the year(s) of data used in the analysis.

Table 2: Summary of Data Sources

Category	Indicator	Data Source	Year(S) Available
Equity	Race & Ethnicity Household Income Housing Affordability	5-Year Public Use Microdata Sample	2021
	Share of Residents in Disadvantaged Communities	Office on Environmental Health Hazard Assessment, Council on Environmental Quality	2021
	Access to Supermarkets	U.S. Department of Agriculture Food Access Research Atlas	2015 to 2019
	Life Expectancy	Council on Environmental Quality	2011 to 2015
	Low birthweight Infants	Office on Environmental Health Hazard Assessment	2009 to 2015
Sustainability	Air Quality	Office on Environmental Health Hazard Assessment	2015 to 2017
	Drinking Water Contaminants	Office on Environmental Health Hazard Assessment	2011 to 2019
	Available Green Spaces	Los Angeles County Countywide Parks and Open Space	2022
	Battery Electric Vehicle Population	California Energy Commission	2022
	Solar Energy Opportunities	UCLA Solar Energy Atlas	2017 to 2022

Category	Indicator	Data Source	Year(S) Available
Job Quality and Access	Jobless Working-Age Population Rate	5-Year Public Use Microdata Sample	2021
	Worker Salaries and Earnings	Lightcast	2022
	Commute Times	5-Year Public Use Microdata Sample	2021
	Workforce Development Training Providers	American Job Center of California, CalJOBS, Workforce Almanac	2020 to 2022
Economic Competitiveness	Establishments per Capita	County Business Patterns	2021
	Research Institutions (PhD and Professional Degrees)	Lightcast	2022
	Exports and Trade	IMPLAN	2022
	Recession Recovery	Lightcast	2008 to 2012
	Educational Attainment	5-Year Public Use Microdata Sample	2021
Resilience	Household Internet Access	5-Year Public Use Microdata Sample	2021
	Age of Residential Properties	5-Year Public Use Microdata Sample	2021
	Age of Commercial Properties	CoStar	2023
	Environmental Risks (Flooding and Fire)	Council on Environmental Quality	2022
	Social Clubs per Capita	County Business Patterns	2021

There are several methods to quantify economic mobility. The above rankings come from calculating the mean household income of people in their mid-thirties, while considering their parent's income when they were born. These income data come from federal income tax records and provide the birth location of people born between 1978 and 1983, their parents income at that time, and the annual income of those children in adulthood, specifically their income from 2014 to 2015. This allows us to track the story of children from different locations and from different families of different incomes. Because we know the demographics of these children, we can analyze how different factors are associated with children who climbed the economic ladder compared to those who did not.Using this set of data, we can analyze economic mobility in Los Angeles County. Tracking this cohort, we see that there is a difference in incomes, on average, based on whether children were born to wealthy parents or poor parents.

Index Development

Given the diversity in value types by indicator (percentages, dollar figures, absolute numbers, etc.), an index was developed to help scale and easily summarize the overall conditions for each SPA by category. The index was constructed using data points to create a unique ranking by SPA per indicator. For each of the five categories, a summary index was developed to average values across all indicators. The scaled index process results in values distributed between 0 and 100 for all SPAs, where higher values mean better performing areas in the respective indicator and categories, while lower values mean lower performing areas. For example, an index of 100 in Race & Ethnicity indicates the SPA region is the most diverse out of all subregions in Los Angeles County. The following equations highlight the scaling process used to determine the index for each variable:

(A) Indicators where a higher value is better

Examples: diversity, household income, green spaces

$$Indexed\ Value = \left(\frac{Value_{actual} - Value_{lowest}}{Value_{highest} - Value_{lowest}}\right) \times 100$$

(B) Indicators where a lower value is better

Examples: jobless working-age population rate, commute times, share of low birthweight infants

$$Indexed\ Value = 100 - \left[\left(\frac{Value_{actual} - Value_{lowest}}{Value_{highest} - Value_{lowest}}\right) \times 100\right]$$

Appendix E: References

Lightcast: To examine the industrial composition of a specific area, we utilize industry data categorized according to the North American Industrial Classification System (NAICS). Lightcast (https://lightcast.io/about/data is a proprietary data provider that aggregates economic data from approximately 65,000 sources. Lightcast industry data include relevant government data that has been unsuppressed and is enhanced using a proprietary methodology to help create the most complete and comprehensive insight possible. Lightcast industry data is more complete than other data sources, and the sub-regional analysis in this report could not have been done without this data source.

IMPLAN: Beacon Economics used IMPLAN to gather industry-level data on environmental impact. IMPLAN's environmental data consist of ratios representing physical emissions or inputs per dollar of Industry Output, with the physical unit depending on the particular pollutant or input under consideration. For IMPLAN's environmental ratios use the EPA's USEEIO data (version 2.0).

Appendix F: Existing Cluster Sustainability by Service Planning Area

Note: The sustainability data represents the environmental impact intensity of clusters at the county level. Therefore, these tables show the prominent industry clusters in each SPA along with their environmental impact intensity at the county-level.

Table 1: Environmental Impact of Existing Industry Clusters in Antelope Valley SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Printing Services	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Food Processing and Manufacturing	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Government Services		
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Personal Services (Non-Medical)	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Health Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Education and Training	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Retailing of Clothing and General Merchandise	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Federal Government Services		
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 2; Environmental Impact of Existing Industry Clusters in East SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Textile Manufacturing	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Environmental Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Traded	Distribution and Electronic Commerce	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Industrial Products and Services	Very High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Furniture	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Metalworking Technology	Very High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Plastics	High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Food and Beverage Processing and Distribution	Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Printing Services	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Downstream Metal Products	Very High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Logistical Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Local	Local Retailing of Clothing and General Merchandise	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Production Technology and Heavy Machinery	Moderate Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Livestock Processing	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Paper and Packaging	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Food Processing and Manufacturing	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Downstream Chemical Products	Moderate Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Lighting and Electrical Equipment	Moderate Environmental Impact Intensity	Moderate GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Local	Local Utilities	Very High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Transportation and Logistics	Low Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Household Goods and Services	Moderate Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Government Services		
Local	Local Commercial Services	Low Environmental Impact Intensity	Very Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 3; Environmental Impact of Existing Industry Clusters in Metro SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Music and Sound Recording	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Video Production and Distribution	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Entertainment and Media	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Marketing, Design, and Publishing	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Commercial Services	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Textile Manufacturing	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Financial Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Education and Training	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Local	Local Financial Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Education and Knowledge Creation	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Retailing of Clothing and General Merchandise	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Hospitality and Tourism	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Food Processing and Manufacturing	High Environmental Impact Intensity	Moderate GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 4: Environmental Impact of Existing Industry Clusters in San Fernando SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Video Production and Distribution	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Marketing, Design, and Publishing	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Biopharmaceuticals	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Downstream Chemical Products	Moderate Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Government Services		
Traded	Communications Equipment and Services	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Personal Services (Non-Medical)	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Recreational and Small Electric Goods	Moderate Environmental Impact Intensity	Low GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Local	Local Entertainment and Media	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Information Technology and Analytical Instruments	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Metalworking Technology	Very High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Motor Vehicle Products and Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Education and Training	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Health Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Commercial Services	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Industrial Products and Services	Very High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Medical Devices	Low Environmental Impact Intensity	Very Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 5: Environmental Impact of Existing Industry Clusters in San Gabriel SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Electric Power Generation and Transmission	Very High Environmental Impact Intensity	Very High GHG Impact Intensity
Local	Local Food and Beverage Processing and Distribution	Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Industrial Products and Services	Very High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Furniture	High Environmental Impact Intensity	Moderate GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Textile Manufacturing	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Paper and Packaging	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Recreational and Small Electric Goods	Moderate Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Education and Knowledge Creation	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Government Services		
Local	Local Utilities	Very High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Household Goods and Services	Moderate Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Motor Vehicle Products and Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Health Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Logistical Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Traded	Information Technology and Analytical Instruments	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Distribution and Electronic Commerce	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Lighting and Electrical Equipment	Moderate Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Financial Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 6: Environmental Impact of Existing Industry Clusters in South Bay SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Water Transportation	Low Environmental Impact Intensity	High GHG Impact Intensity
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Medical Devices	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Education and Knowledge Creation	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Transportation and Logistics	Low Environmental Impact Intensity	High GHG Impact Intensity
Traded	Downstream Chemical Products	Moderate Environmental Impact Intensity	High GHG Impact Intensity
Traded	Video Production and Distribution	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Logistical Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Traded	Recreational and Small Electric Goods	Moderate Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Metalworking Technology	Very High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Commercial Services	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Marketing, Design, and Publishing	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Food and Beverage Processing and Distribution	Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Information Technology and Analytical Instruments	Low Environmental Impact Intensity	Very Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 7: Environmental Impact of Existing Industry Clusters in South-East SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Apparel	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Video Production and Distribution	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Furniture	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Vulcanized and Fired Materials	High Environmental Impact Intensity	High GHG Impact Intensity
Traded	Aerospace Vehicles and Defense	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Metalworking Technology	Very High Environmental Impact Intensity	High GHG Impact Intensity
Local	Local Logistical Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Local	Local Motor Vehicle Products and Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Transportation and Logistics	Low Environmental Impact Intensity	High GHG Impact Intensity
Traded	Food Processing and Manufacturing	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Distribution and Electronic Commerce	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Food and Beverage Processing and Distribution	Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Education and Training	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Retailing of Clothing and General Merchandise	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Federal Government Services		

Source: Lightcast. Analysis by Beacon Economics.

Table 8: Environmental Impact of Existing Industry Clusters in South-West SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Government Services		
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Education and Training	Very Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Food and Beverage Processing and Distribution	Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Hospitality and Tourism	High Environmental Impact Intensity	Moderate GHG Impact Intensity
Local	Local Personal Services (Non-Medical)	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Business Services	Low Environmental Impact Intensity	Low GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Table 9: Environmental Impact of Existing Industry Clusters in West SPA

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Traded	Video Production and Distribution	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Music and Sound Recording	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Performing Arts	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Transportation and Logistics	Low Environmental Impact Intensity	High GHG Impact Intensity
Traded	Marketing, Design, and Publishing	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Entertainment and Media	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Communications Equipment and Services	Very Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Traded	Hospitality and Tourism	High Environmental Impact Intensity	Moderate GHG Impact Intensity

Type	Cluster	Sustainability Category	Greenhouse Gas (GHG) Category
Local	Local Commercial Services	Low Environmental Impact Intensity	Very Low GHG Impact Intensity
Local	Local Logistical Services	Moderate Environmental Impact Intensity	Very High GHG Impact Intensity
Local	Local Community and Civic Organizations	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Financial Services	Very Low Environmental Impact Intensity	Low GHG Impact Intensity
Local	Local Hospitality Establishments	High Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Biopharmaceuticals	Low Environmental Impact Intensity	Moderate GHG Impact Intensity
Traded	Business Services	Low Environmental Impact Intensity	Low GHG Impact Intensity
Traded	Education and Knowledge Creation	Low Environmental Impact Intensity	Moderate GHG Impact Intensity

Source: Lightcast. Analysis by Beacon Economics.

Appendix G: Racial/Ethnic Diversity by Existing Industry Clusters by Service Planning Area

Note: The racial/ethnic diversity data represents how diverse clusters are at the county level. Therefore, these tables show the prominent industry clusters in each SPA along with their diversity category at the county-level.

Table 1: Racial/Ethnic Diversity by Existing Industry Clusters in Antelope Valley SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Printing Services	Low Diversity
Traded	Aerospace Vehicles and Defense	High Diversity
Traded	Food Processing and Manufacturing	Low Diversity
Local	Local Government Services	Very High Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Local	Local Personal Services (Non-Medical)	High Diversity
Local	Local Health Services	Very High Diversity
Local	Local Education and Training	Moderate Diversity
Local	Local Retailing of Clothing and General Merchandise	High Diversity
Local	Federal Government Services	Very High Diversity
Local	Local Hospitality Establishments	High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 2: Racial/Ethnic Diversity by Existing Industry Clusters in East SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Apparel	Moderate Diversity
Traded	Textile Manufacturing	Low Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Environmental Services	Very Low Diversity
Traded	Distribution and Electronic Commerce	High Diversity
Local	Local Industrial Products and Services	Moderate Diversity
Traded	Furniture	Very Low Diversity
Traded	Metalworking Technology	Very Low Diversity
Traded	Plastics	Very Low Diversity

Type	Cluster	Racial/Ethnic Diversity Category
Local	Local Food and Beverage Processing and Distribution	Moderate Diversity
Traded	Printing Services	Low Diversity
Traded	Downstream Metal Products	Very Low Diversity
Local	Local Logistical Services	Moderate Diversity
Local	Local Retailing of Clothing and General Merchandise	High Diversity
Traded	Production Technology and Heavy Machinery	Moderate Diversity
Traded	Aerospace Vehicles and Defense	High Diversity
Traded	Livestock Processing	Very Low Diversity
Traded	Paper and Packaging	Very Low Diversity
Traded	Food Processing and Manufacturing	Low Diversity
Traded	Downstream Chemical Products	Low Diversity
Local	Local Hospitality Establishments	High Diversity
Traded	Lighting and Electrical Equipment	Low Diversity
Local	Local Utilities	Low Diversity
Traded	Transportation and Logistics	Very High Diversity
Local	Local Household Goods and Services	Very Low Diversity
Local	Local Government Services	Very High Diversity
Local	Local Commercial Services	Very High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 3: Racial/Ethnic Diversity by Existing Industry Clusters in Metro SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Music and Sound Recording	Moderate Diversity
Traded	Video Production and Distribution	Very Low Diversity
Traded	Performing Arts	Moderate Diversity
Traded	Apparel	Moderate Diversity
Local	Local Entertainment and Media	Moderate Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Marketing, Design, and Publishing	Moderate Diversity
Local	Local Commercial Services	Very High Diversity

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Textile Manufacturing	Low Diversity
Traded	Financial Services	High Diversity
Local	Local Education and Training	Moderate Diversity
Local	Local Hospitality Establishments	High Diversity
Local	Local Financial Services	High Diversity
Traded	Education and Knowledge Creation	Very High Diversity
Local	Local Retailing of Clothing and General Merchandise	High Diversity
Traded	Hospitality and Tourism	High Diversity
Traded	Food Processing and Manufacturing	Low Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 5: Racial/Ethnic Diversity by Existing Industry Clusters in San Fernando SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Video Production and Distribution	Very Low Diversity
Traded	Aerospace Vehicles and Defense	High Diversity
Traded	Performing Arts	Moderate Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Apparel	Moderate Diversity
Traded	Marketing, Design, and Publishing	Moderate Diversity
Traded	Biopharmaceuticals	Moderate Diversity
Traded	Downstream Chemical Products	Low Diversity
Local	Local Government Services	Very High Diversity
Traded	Communications Equipment and Services	Very High Diversity
Local	Local Personal Services (Non-Medical)	High Diversity
Traded	Recreational and Small Electric Goods	Moderate Diversity
Local	Local Entertainment and Media	Moderate Diversity
Traded	Information Technology and Analytical Instruments	Very High Diversity
Traded	Metalworking Technology	Very Low Diversity
Local	Local Motor Vehicle Products and Services	Low Diversity

Type	Cluster	Racial/Ethnic Diversity Category
Local	Local Education and Training	Moderate Diversity
Local	Local Health Services	Very High Diversity
Local	Local Commercial Services	Very High Diversity
Local	Local Industrial Products and Services	Moderate Diversity
Traded	Medical Devices	High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 6: Racial/Ethnic Diversity by Existing Industry Clusters in San Gabriel SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Apparel	Moderate Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Electric Power Generation and Transmission	High Diversity
Local	Local Food and Beverage Processing and Distribution	Moderate Diversity
Traded	Aerospace Vehicles and Defense	High Diversity
Local	Local Industrial Products and Services	Moderate Diversity
Traded	Furniture	Very Low Diversity
Traded	Textile Manufacturing	Low Diversity
Traded	Paper and Packaging	Very Low Diversity
Traded	Recreational and Small Electric Goods	Moderate Diversity
Traded	Education and Knowledge Creation	Very High Diversity
Local	Local Government Services	Very High Diversity
Local	Local Utilities	Low Diversity
Local	Local Household Goods and Services	Very Low Diversity
Local	Local Motor Vehicle Products and Services	Low Diversity
Local	Local Health Services	Very High Diversity
Local	Local Hospitality Establishments	High Diversity
Local	Local Logistical Services	Moderate Diversity
Traded	Information Technology and Analytical Instruments	Very High Diversity
Traded	Distribution and Electronic Commerce	High Diversity

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Lighting and Electrical Equipment	Low Diversity
Local	Local Financial Services	High Diversity
Traded	Performing Arts	Moderate Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 7: Racial/Ethnic Diversity by Existing Industry Clusters in South Bay SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Aerospace Vehicles and Defense	High Diversity
Traded	Water Transportation	High Diversity
Traded	Apparel	Moderate Diversity
Traded	Medical Devices	High Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Education and Knowledge Creation	Very High Diversity
Traded	Transportation and Logistics	Very High Diversity
Traded	Downstream Chemical Products	Low Diversity
Traded	Video Production and Distribution	Very Low Diversity
Local	Local Logistical Services	Moderate Diversity
Traded	Recreational and Small Electric Goods	Moderate Diversity
Traded	Performing Arts	Moderate Diversity
Traded	Metalworking Technology	Very Low Diversity
Local	Local Commercial Services	Very High Diversity
Local	Local Hospitality Establishments	High Diversity
Traded	Marketing, Design, and Publishing	Moderate Diversity
Local	Local Food and Beverage Processing and Distribution	Moderate Diversity
Traded	Information Technology and Analytical Instruments	Very High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 8: Racial/Ethnic Diversity by Existing Industry Clusters in South-East SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Apparel	Moderate Diversity
Traded	Video Production and Distribution	Very Low Diversity
Traded	Furniture	Very Low Diversity
Traded	Vulcanized and Fired Materials	Very Low Diversity
Traded	Aerospace Vehicles and Defense	High Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Metalworking Technology	Very Low Diversity
Local	Local Logistical Services	Moderate Diversity
Local	Local Motor Vehicle Products and Services	Low Diversity
Traded	Transportation and Logistics	Very High Diversity
Traded	Food Processing and Manufacturing	Low Diversity
Traded	Distribution and Electronic Commerce	High Diversity
Local	Local Food and Beverage Processing and Distribution	Moderate Diversity
Local	Local Education and Training	Moderate Diversity
Local	Local Retailing of Clothing and General Merchandise	High Diversity
Local	Federal Government Services	Very High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 9: Racial/Ethnic Diversity by Existing Industry Clusters in South-West SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Performing Arts	Moderate Diversity
Local	Local Government Services	Very High Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Local	Local Education and Training	Moderate Diversity
Local	Local Food and Beverage Processing and Distribution	Moderate Diversity
Traded	Hospitality and Tourism	High Diversity
Local	Local Personal Services (Non-Medical)	High Diversity

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Business Services	Very High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Table 10: Racial/Ethnic Diversity by Existing Industry Clusters in West SPA

Type	Cluster	Racial/Ethnic Diversity Category
Traded	Video Production and Distribution	Very Low Diversity
Traded	Music and Sound Recording	Moderate Diversity
Traded	Performing Arts	Moderate Diversity
Traded	Transportation and Logistics	Very High Diversity
Traded	Marketing, Design, and Publishing	Moderate Diversity
Local	Local Entertainment and Media	Moderate Diversity
Traded	Communications Equipment and Services	Very High Diversity
Traded	Hospitality and Tourism	High Diversity
Local	Local Commercial Services	Very High Diversity
Local	Local Logistical Services	Moderate Diversity
Local	Local Community and Civic Organizations	Very High Diversity
Traded	Financial Services	High Diversity
Local	Local Hospitality Establishments	High Diversity
Traded	Biopharmaceuticals	Moderate Diversity
Traded	Business Services	Very High Diversity
Traded	Education and Knowledge Creation	Very High Diversity

Source: Lightcast. Analysis by Beacon Economics.

Appendix H: Top 15 Highest-Paying Occupations by SPA

SPA 1 – Antelope Valley

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
General and Operations Managers	1,305	67.92	5.8	3.1
Registered Nurses	2,831	60.67	-1.8	39.3
Postsecondary Teachers	1,348	53.16	-0.4	-15.4
Police and Sheriff's Patrol Officers	1,008	50.98	-4.4	-20.0
Elementary School Teachers, Except Special Education	1,273	45.01	-2.5	5.7
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,155	24.27	0.0	-7.1
Customer Service Representatives	1,004	22.27	5.5	37.9
Office Clerks, General	1,615	21.69	-3.8	-11.5
Medical Assistants	1,025	20.95	8.7	147.0
Teaching Assistants, Except Postsecondary	1,164	20.64	2.1	-12.2
Retail Salespersons	2,224	19.25	-4.4	-20.6
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,381	18.97	12.3	-3.0
Laborers and Freight, Stock, and Material Movers, Hand	1,514	18.67	1.1	19.6
Waiters and Waitresses	1,371	18.47	19.3	-13.4
Stockers and Order Fillers	1,623	18.35	19.2	20.7

* Includes occupations with at least 1,000 jobs.

SPA 2 – San Fernando

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Chief Executives	2,235	145.83	-4.7	9.3
Lawyers	5,538	96.95	-2.7	36.4
Computer and Information Systems Managers	4,360	89.08	3.0	103.5

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Broadcast Announcers and Radio Disc Jockeys	1,193	88.58	13.1	95.6
Financial Managers	5,873	88.29	0.8	35.7
Architectural and Engineering Managers	1,648	84.12	6.0	2.2
Marketing Managers	3,411	82.29	1.7	120.6
Managers, All Other	6,326	81.48	11.2	195.5
Human Resources Managers	1,436	77.45	-3.9	88.7
Art Directors	2,014	73.61	31.5	161.2
Software Developers	9,561	72.31	7.3	53.2
Nurse Practitioners	1,107	71.24	7.6	153.3
Pharmacists	2,376	69.62	0.6	41.1
General and Operations Managers	16,692	67.94	3.7	8.8
Sales Managers	5,585	66.89	11.7	47.9

* Includes occupations with at least 1,000 jobs.

SPA 3 – San Gabriel

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Chief Executives	1,258	145.83	1.5	-9.1
Lawyers	2,772	96.94	-0.8	5.2
Computer and Information Systems Managers	2,162	89.06	3.9	65.3
Financial Managers	3,848	88.28	2.7	19.7
Architectural and Engineering Managers	1,009	84.12	1.2	-11.3
Marketing Managers	1,766	82.28	21.0	86.3
Managers, All Other	3,539	81.48	6.1	149.6
Software Developers	3,926	72.30	6.4	21.9
Pharmacists	1,810	69.62	1.2	29.5
General and Operations Managers	10,357	67.93	3.7	-4.5
Sales Managers	4,054	66.89	14.8	39.9

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Dentists, General	1,216	66.61	33.0	59.4
Medical and Health Services Managers	2,258	65.88	4.2	64.1
Education Administrators, Kindergarten through Secondary	1,195	63.29	6.1	37.2
Education Administrators, Postsecondary	2,086	61.74	18.7	123.6

* Includes occupations with at least 1,000 jobs.

SPA 4 – Metro

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Chief Executives	1,472	145.83	2.5	8.8
Lawyers	6,543	96.96	-2.1	21.3
Computer and Information Systems Managers	2,529	89.08	4.5	97.4
Financial Managers	5,164	88.29	1.7	49.6
Marketing Managers	2,334	82.29	12.4	124.6
Managers, All Other	3,682	81.48	9.2	172.3
Art Directors	1,275	73.61	33.6	129.3
Software Developers	4,501	72.30	7.4	66.9
Pharmacists	1,145	69.62	0.4	31.9
Agents and Business Managers of Artists, Performers, and Athletes	1,892	68.63	1.8	43.6
General and Operations Managers	10,499	67.94	4.7	5.9
Sales Managers	3,478	66.89	15.3	47.4
Media and Communication Workers, All Other	1,506	66.49	59.0	2.8
Special Effects Artists and Animators	2,437	66.30	65.1	51.6
Medical and Health Services Managers	1,892	65.88	3.4	54.1

* Includes occupations with at least 1,000 jobs.

SPA 5 – West

Top 15 Highest-Paying Occupations*: West	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Chief Executives	1,420	145.84	2.3	25.4
Airline Pilots, Copilots, and Flight Engineers	4,454	122.38	11.4	99.9
Lawyers	9,431	96.96	-1.6	37.0
Computer and Information Systems Managers	3,113	89.08	5.8	117.7
Financial Managers	3,762	88.29	2.7	53.1
Marketing Managers	2,672	82.30	13.9	149.5
Managers, All Other	3,426	81.48	16.7	183.1
Art Directors	1,773	73.61	34.3	148.3
Software Developers	7,142	72.31	12.6	84.0
Agents and Business Managers of Artists, Performers, and Athletes	2,368	68.63	1.4	45.5
General and Operations Managers	9,932	67.95	6.4	15.7
Sales Managers	3,444	66.89	17.4	59.0
Media and Communication Workers, All Other	1,793	66.49	69.8	3.3
Special Effects Artists and Animators	2,839	66.30	55.4	50.0
Medical and Health Services Managers	1,236	65.88	3.9	75.3

* Includes occupations with at least 1,000 jobs.

SPA 6 – South-East

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
General and Operations Managers	2,317	67.93	2.4	3.7
Producers and Directors	1,370	65.40	5.3	4,792.9
Registered Nurses	2,647	60.67	-0.9	51.1
Elementary School Teachers, Except Special Education	1,783	45.06	-0.8	55.2
Secondary School Teachers, Except Special and Career/Technical Education	1,160	43.72	5.4	31.4
Business Operations Specialists, All Other	1,182	39.86	-0.8	69.3

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	2,014	37.56	5.0	-0.9
First-Line Supervisors of Office and Administrative Support Workers	1,282	34.62	5.8	7.1
Bus Drivers, Transit and Intercity	1,178	26.89	11.8	-5.7
Heavy and Tractor-Trailer Truck Drivers	2,954	25.99	3.6	21.3
Bookkeeping, Accounting, and Auditing Clerks	1,503	25.39	2.5	-2.7
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,559	24.28	-1.4	-2.6
Light Truck Drivers	1,357	22.45	0.7	22.7
Customer Service Representatives	1,542	22.27	4.0	13.6
Office Clerks, General	2,344	21.69	-4.4	-7.6

* Includes occupations with at least 1,000 jobs.

SPA 6 – South-West

Top 15 Highest-Paying Occupations*: South-West	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
General and Operations Managers	1,314	67.91	5.6	-3.0
Registered Nurses	1,175	60.67	9.5	58.8
Police and Sheriff's Patrol Officers	1,651	50.99	0.7	5.0
Elementary School Teachers, Except Special Education	2,168	44.94	2.8	-3.2
Secondary School Teachers, Except Special and Career/Technical Education	1,362	43.55	9.5	-19.2
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	1,393	24.27	2.5	-8.0
Customer Service Representatives	1,010	22.27	4.0	30.2
Office Clerks, General	1,832	21.69	1.9	-9.0
Teaching Assistants, Except Postsecondary	1,936	20.62	7.2	-19.7
Retail Salespersons	1,808	19.25	-3.3	0.9

Top 15 Highest-Paying Occupations*: South-West	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1,508	18.96	14.2	-15.7
Laborers and Freight, Stock, and Material Movers, Hand	1,276	18.68	5.0	0.6
Stockers and Order Fillers	1,331	18.35	14.7	38.6
Fast Food and Counter Workers	1,501	16.65	6.9	-0.3
Cashiers	2,198	16.58	0.9	20.0

* Includes occupations with at least 1,000 jobs.

SPA 7 – East

Top 15 Highest-Paying Occupations*: East	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Computer and Information Systems Managers	1,175	89.07	8.8	65.5
Financial Managers	2,040	88.28	6.1	15.8
Marketing Managers	1,241	82.29	27.7	107.2
Managers, All Other	1,984	81.48	7.5	144.6
Software Developers	2,056	72.30	10.7	28.2
Pharmacists	1,058	69.62	-0.7	29.0
General and Operations Managers	7,549	67.94	4.1	-3.0
Sales Managers	3,460	66.89	16.5	48.9
Medical and Health Services Managers	1,052	65.88	3.8	60.9
Registered Nurses	7,350	60.67	0.6	18.1
Postsecondary Teachers	2,660	53.29	7.4	4.7
Transportation, Storage, and Distribution Managers	1,316	53.03	22.4	121.2
Police and Sheriff's Patrol Officers	1,995	50.99	-3.9	-14.3
Project Management Specialists	1,923	50.86	22.3	101.6
Computer Occupations, All Other	1,157	50.71	2.8	102.6

* Includes occupations with at least 1,000 jobs.

SPA 8 – South Bay

Top 15 Highest-Paying Occupations*:	Jobs	Hourly Wage	1-Yr. % Change Emp	10-Yr. % Change Emp
Chief Executives	1,456	145.83	2.4	2.3
Lawyers	3,039	96.92	0.2	22.9
Computer and Information Systems Managers	3,048	89.05	7.1	87.6
Financial Managers	3,936	88.27	7.8	29.6
Architectural and Engineering Managers	1,786	84.12	5.7	6.4
Marketing Managers	2,263	82.28	25.4	116.1
Managers, All Other	4,502	81.48	12.3	166.9
Human Resources Managers	1,093	77.46	4.7	63.1
Software Developers	7,134	72.30	12.3	43.0
Aerospace Engineers	1,617	71.38	19.5	-24.4
Pharmacists	1,525	69.62	1.1	35.0
General and Operations Managers	11,542	67.94	6.2	0.4
Sales Managers	4,027	66.89	18.0	46.2
Medical and Health Services Managers	1,970	65.89	4.1	62.3
Producers and Directors	1,123	65.39	0.4	70.2

* Includes occupations with at least 1,000 jobs.

Appendix I: Los Angeles County Job Posting Data 2010-2024

Table 1: Top Companies Posting in LA County

Company	Total Postings (Jan 2010 - Mar 2024)	Unique Postings (Jan 2010 - Mar 2024)	Median Posting Duration
Robert Half	616,044	217,994	22 days
Elevance Health	249,311	143,119	21 days
CyberCoders	533,004	105,807	26 days
University of California	382,344	83,287	27 days
AppleOne	200,172	70,066	19 days
Northrop Grumman	406,245	69,321	24 days
University of Southern California	286,597	63,438	22 days
Kaiser Permanente	276,454	63,361	22 days
OxnardRecruiter.com	135,988	60,037	0 days
Randstad	177,560	58,854	23 days
Disney	219,785	57,784	19 days
Cedars-Sinai	342,451	53,099	22 days
Marriott International	304,362	50,867	30 days
Providence	189,434	48,572	20 days
Allied Universal	288,549	48,479	22 days
Aerotek	154,446	47,765	16 days
Care.com	97,598	40,535	24 days
Amazon	230,887	40,223	24 days
Deloitte	101,639	36,672	21 days
Boeing	155,750	36,581	19 days
Kforce	98,477	35,266	15 days
Macy's	165,492	34,292	17 days
Bank of America	118,047	32,134	15 days
California State University	87,043	30,684	17 days
Healthcare Employment Network	162,591	28,283	34 days
PIH Health	159,637	27,685	22 days

City of Hope	112,512	27,262	22 days
DaVita	113,048	27,179	21 days
Spectrum	140,711	26,482	14 days
Raytheon Technologies	107,497	24,912	21 days
Wells Fargo	165,834	24,761	20 days
NBC	74,018	24,464	16 days
Kelly Services	61,228	24,275	24 days
Nordstrom	82,467	22,591	16 days
AT&T	125,423	21,891	19 days
Adecco	64,832	20,382	15 days
Lee Hecht Harrison	48,258	20,217	5 days
GPAC	82,023	19,732	34 days
Soliant Health	60,567	19,665	24 days
The Home Depot	123,042	19,450	21 days
SpaceX	60,566	19,198	24 days
Volt	81,839	19,003	18 days
CommonSpirit Health	79,430	18,005	24 days
Sears	68,869	17,888	19 days
CVS Health	92,397	17,658	22 days
Hilton	71,875	17,138	25 days
Starbucks	67,832	16,962	25 days

Source: Lightcast

Table 2: Top Posted Occupations in LA County

Occupation (SOC)	Total Postings (Jan 2010 - Mar 2024)	Unique Postings (Jan 2010 - Mar 2024)	Median Posting Duration
Registered Nurses	3,125,327	525,267	25 days
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,244,956	366,786	19 days

Software Developers	1,086,290	345,782	18 days
Retail Salespersons	1,303,968	302,121	22 days
Customer Service Representatives	854,386	223,179	22 days
Managers, All Other	636,896	217,248	20 days
First-Line Supervisors of Retail Sales Workers	725,452	211,399	21 days
Computer Occupations, All Other	668,072	207,318	18 days
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	609,054	178,047	21 days
Accountants and Auditors	514,683	162,265	21 days
Heavy and Tractor-Trailer Truck Drivers	762,816	160,853	30 days
Medical and Health Services Managers	499,127	153,287	23 days
Bookkeeping, Accounting, and Auditing Clerks	419,335	146,474	21 days
Sales Managers	430,870	138,000	19 days
Marketing Managers	382,385	133,550	21 days
Financial Managers	414,746	130,733	21 days
Fast Food and Counter Workers	560,211	126,218	29 days

Source: Lightcast

Table 3: Top Qualifications in LA County

Qualification	Postings with Qualification
Valid Driver's License	807,746
Registered Nurse (RN)	639,154
Basic Life Support (BLS) Certification	336,032
Cardiopulmonary Resuscitation (CPR) Certification	191,460
Advanced Cardiovascular Life Support (ACLS) Certification	163,669
Master Of Business Administration (MBA)	147,942
Security Clearance	110,597
Licensed Vocational Nurse (LVN)	109,504
First Aid Certification	89,388

Pediatric Advanced Life Support (PALS)	76,750
Certified Nursing Assistant (CNA)	70,902
Secret Clearance	66,702
Board Certified/Board Eligible	66,311
Food Handler's Card	64,561
CDL Class A License	63,381
Basic Cardiac Life Support	55,787
Top Secret-Sensitive Compartmented Information (TS/SCI Clearance)	55,456
Certified Public Accountant	54,815
Nurse Practitioner (APRN-CNP)	54,535
Project Management Professional Certification	48,371
Commercial Driver's License (CDL)	44,025
CDL Class C License	43,964
Licensed Clinical Social Worker (LCSW)	43,163
Licensed Practical Nurse (LPN)	40,716
ServSafe Certification	34,318
Critical Care Registered Nurse (CCRN)	28,825
Forklift Certification	28,573

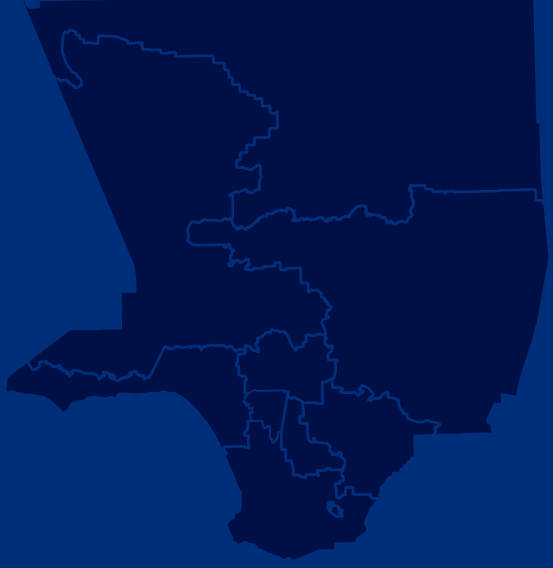
Source:Lightcast

Appendix J: Disclaimer Regarding California Native American Tribes

The use of "American Indian/Alaska Native" in this report includes reference to California Native American Tribes and other American Indian/Alaska Natives residing in Los Angeles County as requested by the American Indian Chamber of Commerce of California (AICCC).

The American Indian Chamber of Commerce of California (AICCC) has also raised concerns about the use of the term "Other" as a label for the group of racial categories with small populations as offensive in the SWOT Analysis conducted by Beacon Economics. Beacon Economics has been notified of this and will rectify the language in the updated Regional Plan Pt 1.

Acknowledgements



CJF PROGRAM DIRECTOR

Charles Johnson

CJF RESEARCH ANALYST

Arman Koohian

RESEARCH & ANALYSIS

CVL Economics

Beacon Economics

STRATEGIC WRITING

Julie Zeisler

Julie Zeisler Consulting

DESIGN & COVER ILLUSTRATION

Jay Toffoli

Jay Toffoli Design Co.