



## CALIFORNIA JOBS FIRST

Los Angeles High Road Transition Collaborativ

LAEDC

**DECEMBER 2023** 



CALIFORNIA JOBS FIRST

LOS ANGELES HIGH ROAD TRANSITION COLLABORATIVE

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#### **Executive Summary**

The Los Angeles Regional Plan Part 1 for the California Jobs First (CJF) Program, formerly the Community Economic Resilience Fund (CERF), provides a comprehensive snapshot of socio-economic conditions in the region through its mapping of stakeholders, Regional Summary and SWOT Analysis. As the Industry Cluster Analysis begins to provide insights on industry and labor conditions within the county, the Steering Committee can begin to utilize those insights to fulfill the CJF objectives. In addition, Affinity Hub, Subregional meetings, and Community based forums taking place over the next six 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. Ultimately, all the information gathered from formal research vendors and community-derived lived experience data will be synthesized to foster strategies and solutions to support the creation of 2-5 data-driven, community-led initiatives to support sustainable, equitable economic growth in Los Angeles County.

The stakeholder mapping is divided into three different sections: 1) Potential roles of entities represented in our governance structure in developing the plan, engagement and implementation 2) Overview of the state of disinvested communities in Los Angeles County 3) A review of potential opportunities for collaboration from existing proposals and plans of our onboarded partners. Integrating these three sections should provide a snapshot of the historically active stakeholders that can influence creating a high-road economy in the CJF region and/or benefit from it.

For the CJF program, three research projects have been outsourced to external research vendors: The Regional Summary which is being completed by CVL Economics, the Industry Clusters Analysis which is to be done by Beacon Economics and the SWOT Analysis which is also being done by Beacon Economics. The Labor Market Analysis draws upon data from the other three reports to provide a summary of industries, occupations and wages within LA County.

The Regional Summary Research within the Regional Plan Pt.1 is a draft from CVL Economics. It provides a general analysis of demographic, public health, workforce and

environmental data within each LA County Service Planning Area (SPA). In its final version, projected to be received in early February, the Regional Summary will feature an Equity, Sustainability, Job Quality & Access, Economic Competitiveness and Resilience index for each SPA that will show its condition relative to the others. These indices will be developed in conjunction with their community engagement which is in the form of 800 surveys and interviews with top employers from each SPA.

LA County has almost half of its population living within disinvested communities. These communities are primarily concentrated in predominantly non-white, lesser educated and historically marginalized areas such as SPA 6 East and SPA 6 West. Disinvestment affects individuals in ways beyond income as seen in the shorter life expectancies and lower birth weights for people in SPAs 1 Antelope Valley 6 South-East and 6 South-West. These effects on public health are related to the environmental conditions found in the community. Though LA County has improved its air quality as a whole over the past few decades, certain communities such as SPA 6 South-East and SPA 3 San Gabriel Valley have particulate matter measures above the recommended threshold for little risk.

The Labor Market Analysis is designed to extract relevant information from the current iterations of the Regional Summary and SWOT Analysis that provide readers with an overview of Los Angeles labor force, job training opportunities and prominent industries and occupations. LA County, in comparison with similar markets like Houston, Phoenix, Atlanta and Dallas, 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 low labor force participation rates among LA County residents. As LA County is aging and declining in population the low labor force participation rate must be considered to be a serious threat to the county's economic health. However, this also presents an opportunity for employers to provide apprenticeship programs to the significant number of 25-54 year olds outside of the labor force. In its final version, this section will feature a great deal of information from the upcoming Industry Clusters Analysis.

Beacon Economics will continue work on the Industry Cluster Analysis in the first week of January 2024.

The SWOT Analysis provided more insight on LA County's low labor force participation rate, an industry SWOT for each SPA, relevant case studies, a summary of the green economy and policy recommendations. 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 such as in an apprenticeship program, this increases their efficacy as it aligns the program's curriculum with labor demand. And as the green economy becomes a larger part of the total economy, employer-training relationships can be critical to filling roles in occupations such as solar panel installers, turbine technicians and sustainable design specialists.

In conclusion, the Los Angeles Regional Plan Part 1 serves as a comprehensive overview of socio-economic conditions in the region. Through stakeholder mapping, a Regional Summary, SWOT Analysis, and ongoing Industry Cluster Analysis, the LA HRTC is poised to leverage valuable insights for achieving CJF objectives. The forthcoming Hub Lead and Subregional Table/Micrograntee meetings, along with Community Planning forums will provide a platform for community feedback, ensuring a robust validation and contextualization of research findings. The collaborative effort, guided by three outsourced research projects, aims to synthesize information for development of 2-5 data-driven, community-led initiatives for sustainable and equitable economic growth in Los Angeles County. The Regional Summary, Industry Clusters Analysis, and SWOT Analysis, conducted by CVL Economics and Beacon Economics, contribute vital perspectives on demographic, economic, and environmental aspects. As LA County addresses disinvested communities and confronts challenges in labor force participation, the report underscores the importance of education, skill attainment, and employer engagement in fostering economic mobility. Looking ahead, the Industry Cluster Analysis, scheduled for January 2024, promises additional insights crucial for shaping the region's economic landscape. Ultimately, this comprehensive approach sets the foundation for informed decision-making and strategic initiatives to propel Los Angeles County towards a more resilient and equitable future.

## **Core Values**

The LA HRTC adopted the following core values that have informed this 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 LA 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 disinvested communities. The governance process will center, lower barriers, and proactively seek to tip the scales toward community-led decision-making.

## Key Findings

The analyses in this plan include an economic development summary, labor market analysis, SWOT analysis, and industry cluster analysis.

The Economic Development Summary conducted by CVL Economics found:

- 1. About 50% of Los Angeles County residents live in disadvantaged areas<sup>1</sup>
  - a. These areas tend to be home to higher shares of non-White populations
- Disinvested areas tend to have lower educational attainment, life expectancies and access to healthcare
- LA County has about 6.7 million employees working across nearly 300,000 establishments

<sup>&</sup>lt;sup>1</sup> 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.

- 4. LA County has a large percentage of working-age individuals currently unemployed or outside the workforce entirely
  - a. The disparities increase along racial and ethnic lines as American Indian and Alaska Native, Black, Hispanic and Asian individuals have higher rates of joblessness than their white counterparts
- 5. Health Care is in the top 5 industries for each SPA
- 6. Disadvantaged communities are at a higher risk of poor air quality and water contaminants
- 7. SPAs 1&2 face considerable risk from wildfires over the next thirty years

The SWOT Analysis conducted by Beacon Economics found:

- 1. Los Angeles County has low labor force participation when compared with other comparable markets
  - a. The likelihood an individual is not a part of the labor force changes when taking into consideration race, ethnicity, educational attainment, marital status, disability status, gender and number of children
    - i. Labor Force participation rates for those who did not graduate high school dropped from 2017-2022
- 2. Private sector support for education will help students and employers alike
- 3. 5 key factors in economic mobility
  - a. Income Inequality
  - b. School Quality
  - c. Family Structure
  - d. Racial Segregation
  - e. Social Capital
- "One major weakness in Los Angeles County is that childcare access and costs often keep some prime-age workers from participating in the labor force" (Beacon Economics 55)
- 5. "...training someone who has a low-income for an occupation with a higher income is not enough to set them on a pathway out of disadvantaged status. More support

must be provided throughout a person's career development so they can sustain their economic mobility." (Beacon Economics 65)

- 6. LA County's housing affordability crisis has reduced the ability for people to move around to where their labor is most valued
  - a. Reduced housing mobility hurts LA's economy making it "...difficult for people to live near their workplace" (Beacon Economics 73)
- 7. Longer commute times impact the sustainability, environmental health and quality of life of our residents
  - a. Physical mobility is closely related to economic mobility as it can increase access to high quality jobs
  - b. "...a pilot program providing targeted riders with unlimited, fare-free cards could have a significant impact on economic outcomes for recipients" (Beacon Economics 80)
- 8. Industry SWOT by SPA
  - a. SPA 1
    - i. Antelope Valley's two largest industries (Education and Hospitals, and Local Government) are under threat as they have shown declines in their employment over the last year. Overall five of their top six largest industries are under threat as Individual and Family Services, Outpatient Care Centers and the Federal Government are showing signs of decline. As their population is projected to increase, they have opportunities in the Restaurants, Hospitals and Grocery Stores sectors.
  - b. SPA 2
    - i. The San Fernando Valley's two largest industries are the strong Motion Picture and Video, and the threatened Individual and Family Services industries. In the San Fernando Valley, there are opportunities in the Employment Services, and Management of Companies and Enterprises industries. The Restaurants industry has declined by 2.6% over the last 5 years and is considered a weakness.
  - c. SPA 3
    - i. In contrast to SPA 2, the San Gabriel Valley has a strong, but stagnant Restaurants industry. There are threats to their Individual and Family

Services, and Colleges, Universities, Merchant Wholesalers, and Primary and Secondary Schools industries. SPA 3 is ripe with opportunity in the Hospitals, Grocery Stores, Building Services, and Company Management Services industries.

- d. SPA 4
  - i. The Metro SPA's top industry (Restaurants) have followed the nationwide trend of decreasing concentration over the past five years. There are opportunities in the Employment Services sector. There are threats to the Hospitals, and Depository Credit Intermediation industries. The highest paying positions are high-skill positions.
- e. SPA 5
  - SPA 5 West is the strongest SPA in LA County, but their largest industry (Restaurants) is under threat. There are no specific industries highlighted as an opportunity. Still, the West SPA has experienced exciting growth over the last 10 years in some of their highest paying industries such as Independent Artists, Information Services, and Software Publishers.
- f. SPA 6 East
  - i. 2 of SPA 6 East's 3 largest industries are listed as strengths, Individual and Family Services, and Motion Picture and Video Industries. However, their largest industry Education and Hospitals is threatened. Like many other SPAs there are opportunities in the Restaurants sector, but this is not an industry that offers many resilient careers. Another opportunity is in the Hospitals industry. An industry which is strong that provides good earnings for low-educated individuals is the General Freight Trucking industry.
- g. SPA 6 West
  - i. The top industries in SPA 6 West are Local Government, Education and Hospitals, and Individuals and Family Services. The latter industry is under threat along with the high-paying Federal Government industry. There are opportunities in the highest paying industry in this SPA which is Management of Companies and Enterprises.
- h. SPA 7
  - The East SPA's 4 largest industries (Restaurants, Individual and Family Services, Local Government, Education and Hospitals) are all categorized as

strengths. However, two of their top paying industries (Management of Companies and Enterprises, and Navigational, Measuring, Electromedical and Control Instruments Manufacturing) have been in decline over the past 10 years. Opportunities can be found in the Offices of Physicians, and Management of Companies and Enterprises.

#### i. SPA 8

 The South Bay's largest industries are Education and Hospitals, Restaurants, and Individual and Family Services. They have opportunities in Restaurants, Grocery Stores, Employment Services and Hospitals. One strength unique to the South Bay is its Aerospace Product and Parts Manufacturing Industry. Their weaknesses are industries with fewer jobs overall. Another thing the South Bay is known for is its Transportation and Warehousing industry, which employs about 60,000 people. In this industry, Support Activities for Water Transportation are considered a strength while Freight Transportation Arrangement is under threat.

### Introduction

The planning process and its stages for CJF in the LA region has been detailed in a process map (<u>Appendix A</u>), which was developed by The Mark, USA. The plan entails four stages:

- (1) *Prepare* Develop relationships and tools to sustain the LA HRTC's equity-focused outreach and engagement work across Los Angeles County.
  - (a) Activities include:
    - (i) Conduct research for the CJF required analyses
    - Generate resources and reports, data tools, systems, and feedback loops
    - (iii) Collect initial community data through onboarding partners to conduct stakeholder mapping
    - (iv) Build relationships within and across LA HRTC participants and partners

- (2) *Share* Build shared understanding of needs and opportunities across Los Angeles County's disinvested communities through learning, data analysis, and dialogue.
  - (a) Activities include:
    - (i) Conduct table convenings with LA HRTC partners that entail the analysis of data and dialogue responding to data
    - (ii) Summarize and share out themes for use in strategy development
    - (iii) Flow information from the Subregional Tables/Micrograntees to the Affinity Hub Leads and Table Partner Leads, which will then be uplifted to the Steering Committee
- (3) *Co-Create* Create and refine data-informed, inclusive economic development strategies and potential projects for building an equitable and sustainable regional economy.
  - (a) Activities include:
    - Engage disinvested communities and stakeholders to compile potential strategies based on shared work and feedback to date
    - Develop criteria to support transparent prioritization and selection of strategies
    - (iii) Compile and incorporate feedback from tables and community strategy development activities
- (4) Adopt Select two to five strategic projects or investments that are well positioned to support long-term economic resilience and our region's transition towards a carbon neutral economy.
  - (a) Activities include:
    - Develop and present draft report containing proposed projects and strategic investments
    - (ii) Invite, catalog, and respond to public comment
    - (iii) Revise report with summary of changes
    - (iv) Finalize and submit final report

Using this framework, the LA HRTC will conduct an inclusive planning process informed by ground-truthed data that will engage the communities that will ultimately be

impacted by this effort. The outlined stages of the planning process emphasize the participation of disinvested communities in analyzing and responding to reliable data that includes the community's lived experiences which challenges or validates the quantitative and qualitative findings from the research vendors.

The analytical approach and methods were based on the four definitions of disinvested communities as defined by the CERF Planning Phase SFP. Researchers located these communities at the appropriate geographic level which mainly was census tract. These tracts were then combined making up the 9 SPAs within the county. As Los Angeles County has nearly 2500 census tracts, and about 10 million people, each tract can tell a different story about the lives of our residents.

### **Stakeholder Mapping**

### Introduction

The Los Angeles High Road Transition Collaborative is comprised of 425 partners, including grassroots and community-based organizations, community organizers, and community members, employers, businesses, and business associations, education and training providers, disinvested communities, economic development agencies, government agencies, workforce entities, environmental justice organizations, philanthropic organizations, labor organizations, worker centers, and California Native American Tribes. The full list of LA HRTC Partners can be found in <u>Appendix B</u>. The LA HRTC continues to strive for balanced representation across all entity types and stakeholder entity types, as depicted in *Figure 1* and *Figure 2* respectively. As seen in the breadth of the LA HRTC's diversity, the governance model of the LA HRTC also holds true to this practice of balanced representation and shared decision-making by geography and entity types.

## Figure 1



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

## Figure 2



This figure conveys the breakdown of LA HRTC Partners based on their headquarters. Additional information about LA HRTC Partners such as the SPAs they serve is included in the Stakeholder Analysis section.

## **Steering Committee**

The Steering Committee is comprised of influential voices from government, labor, business, industry, and community stakeholders:

- Education (1 seat) Dr. Narineh Makijan, Los Angeles Regional Consortium (LARC).
  - Entity Type: Education and training provider

- Headquarter: SPA 3 San Gabriel
- Business and Industry (1 seat) Luis Portillo, San Gabriel Valley Economic Partnership (SGVEP)
  - Entity Type: Economic development agency
  - Headquarter: SPA 3 San Gabriel
- Municipal Partners (1 seat) Rita Kampalath, LA County Chief Sustainability Office
  - Entity Type: Government agency
  - Headquarter: SPA 4 Metro
- Labor (6 seats)
  - Kristal Romero, LA County Federation of Labor, AFL-CIO
    - Entity Type: Labor organization
    - Headquarter: SPA 4 Metro
  - Adine Foreman, LA Hospitality Training Academy (Unite HERE 11)
    - Entity Type: Labor organization
    - Headquarter: SPA 4 Metro
  - Patrick Hogg, Worker Education & Resource Center (SEIU 721)
    - Entity Type: Labor organization
    - Headquarter: SPA 4 Metro
  - Sal Vasquez, International Association of Machinists and Aerospace Workers
    - Entity Type: Labor organization
    - Headquarter: SPA 3 San Gabriel
  - Eddie Alvarez, LA/OC Building Trades Council
    - Entity Type: Labor organization
    - Headquarter: SPA 4 Metro
  - Pending Representative, SEIU-UHW
    - Entity Type: Labor organization
    - Headquarter: Pending
- Residents/Workers (5 seats)
  - Jennifer Zellet
    - Entity Type: Community member
    - Resides in: SPA 1 Antelope Valley

- Kevin Clark
  - Entity Type: Community member
  - Resides in: SPA 4 Metro
- Sam Lewis
  - Entity Type: Community member
  - Resides in: SPA 4 Metro
- Dr. Najuma Smith
  - Entity Type: Community member
  - Resides in: SPA 6a South East
- Steven D. Turner
  - Entity Type: Community member
  - Resides in: SPA 2 San Fernando
- Community-Based Leaders (12 seats)
  - Libby Williams, Vermont Slauson Economic Development Corporation (VSEDC)
    - Entity Type: Economic development agency
    - Headquarter: SPA 6b South West
  - Toni Symonds, American Indian Chamber of Commerce of California (AICCC)
    - Entity Type: Employers, businesses, business associations/Tribal organizations
    - Headquarter: SPA 4
  - Derek Steele, Social Justice Learning Institute
    - Entity Type: Grassroots and community-based organizations, community organizers, and community members
    - Headquarter: SPA 8 South Bay/Harbor
  - Rudy Espinoza Inclusive Action for the City
    - Entity Type: Economic development
    - Headquarter: SPA 4 Metro
  - Veronica Padilla Pacoima Beautiful
    - Entity Type: Environmental justice organization
    - Headquarter: SPA 2 San Fernando

- Ricardo Mendoza Coalition for Responsible Community Development (CRCD)
  - Entity Type: Economic development agency
  - Headquarter: SPA 6a South East
- Robert Sausedo Community Build, Inc.
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - Headquarter: SPA 4 Metro
- Zahirah Mann South Los Angeles Transit Empowerment Zone (SLATE-Z)
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - Headquarter: SPA 6a South East
- Drew Mercy Antelope Valley Economic Development and Growth Enterprise (AV-EDGE)
  - Entity Type: Economic development agency
  - Headquarter: SPA 1 Antelope Valley
- Hyepin Im Faith And Community Empowerment (FACE)
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - Headquarter: SPA 1 Antelope Valley
- Matt Horton Milken Institute
  - Entity Type: Education and training provider
  - Headquarter: SPA 5 West
- Sharon Evans Business Resource Group Community Development Corporation
- Entity Type: Economic development agency
  - Headquarter: SPA 8 South Bay/Harbor

## Affinity Hub Leads

The Affinity Hub Leads convene and facilitate dialogue across LA county in 12 thematic areas while focusing on empowering underrepresented subgroups:

- Youth Affinity Hub Lead Cheyanne Capelo, Lost Angels Children's Project
  - Entity Type: Education and training provider
  - SPA 1 Antelope Valley
- Families Affinity Hub Lead Bobby Lee Davis III, Dylette Family Foundation
  - Entity Type: Environmental justice organization
  - SPA 2 San Fernando
- Economic Development Affinity Hub Lead Tunua Thrash-Ntuk, The Center by Lendistry
  - Entity Type: Economic development agency
  - SPA 4 Metro
- Employers and Business Affinity Hub Lead Kevin Harbour (Steering Committee Chair), BizFed Institute
  - Entity Type: Employers, businesses, and business associations
  - SPA 7 East
- Labor and Workers Affinity Hub Lead Brady Collins, Koreatown Immigrant Workers Alliance (KIWA)
  - Entity Type: Worker center
  - SPA 4 Metro
- Institutional and Government Affinity Hub Lead Kelly LoBianco, County of Los Angeles Department of Economic Opportunity
  - Entity Type: Government agency
  - SPA 4 Metro
- Homeless, Veterans, and Seniors Affinity Hub Lead Linda Kelly, Fathers and Mothers Who Care
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - SPA 6b South West

- Civic Engagement and Place-Based Coalitions Affinity Hub Lead Benjamin Torres, Community Development Technologies Center
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - SPA 6a South East
- Underemployed Adults Affinity Hub Lead Jessica Quintana, Centro CHA
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - SPA 8 South Bay/Harbor
- Sustainability Affinity Hub Lead Stella Ursua (Steering Committee Vice Chair), GRID Alternatives Greater Los Angeles
  - Entity Type: Environmental justice organization
  - SPA 4 Metro
- Academia Affinity Hub Lead Andrea Slater (Steering Committee Vice Chair), UCLA Labor Center
  - Entity Type: Education and training provider
  - SPA 4 Metro
- Immigrants Affinity Hub Lead Sejal Patel, Rising Communities
  - Entity Type: Grassroots and community-based organizations, community organizers, and community members
  - SPA 6a South East

## Roles in Plan Development and Implementation

Considering the extensive diversity among the partners of the LA HRTC 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 LA 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 Lost Angels Children's Project stands out as a training program that distinctly focuses on skills development for disinvested populations. By integrating such targeted initiatives, the LA HRTC aims to foster inclusivity and address the unique needs of marginalized communities within the broader economic development framework.

The economic development agencies, such as 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), 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, 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 HRTC 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 HRTC 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), LA 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 community members can strengthen and participate in LA 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 HRTC 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 assumes a pivotal role in seamlessly connecting the various elements across the region. Renowned for its extensive experience, the County of LA Department of Economic Opportunity has demonstrated its proficiency 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 County of LA Department of Economic Opportunity actively engages in strategic partnerships with community-based organizations to drive impactful workforce and business development initiatives within LA 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.

In conclusion, the LA HRTC'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 HRTC's capacity to create a comprehensive, inclusive, and impactful economic development plan for the region.

## Overview of the State of Disinvested Communities in the Region

According to the Regional Summary, 48.8% of Los Angeles County residents live in disinvested communities. Geographically, certain areas tend to have higher percentages of residents in disinvested communities. SPA 5 - West for example has 4.2% of its population living in disinvested communities while SPA 6 East has 93.9% of its population living in

disinvested communities. 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 East which is nearly 98.7% non-White. Our Regional Summary also speaks on 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. For instance, 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." (CVL Economics 3). Unfortunately the residents living in disinvested communities face a whole host of issues that their counterparts in wealthier neighborhoods do not. From access to supermarkets, broadband access, exposure to environmental hazards such as waste, diesel particulate matter and clean drinking water to advanced institutions where one can improve their skill set to a lack of green spaces and social organizations, those in disinvested communities are subject to many difficulties.

Each community is unique and no set of characteristics is a rule. For example, SPA 8 South Bay has a lower percentage of folks living in disinvested communities compared to the county average, but they still face a myriad of environmental challenges as seen in their below average levels of parks and open spaces or in their hazardous waste exposure which is nearly double the county average. Another example is SPA 4 Metro and their abundance of job training opportunities. Even though SPA 4 has an above average share of their population living in disinvested communities at 64.9%, they have above average opportunities for job training.

SPA 6 West and SPA 6 East are the two most disinvested SPAs in the LA County Region. These two areas have average household incomes of \$66,034 and \$63,151, respectively. For more insight on where each SPA stands please see the appendix of the Regional Summary.

The SWOT Analysis highlights that "A demographic consistent with disadvantaged households is persons who are not in the labor force" (Beacon Economics 50). The issue surrounding labor force participation is touched upon throughout the Regional Plan Pt.1 analyses. Please see the SWOT Analysis for further research on various disinvested communities.



Source: California Energy Commission. California and Justice40 Disadvantaged or Low-Income Communities; Analysis by Beacon Economics.

California Jobs First also defines individuals of American Indian and Alaska Native descent as belonging to disinvested communities. 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. American Indian and Alaska Natives make up 0.2% of the population county wide and only in SPA 1 Antelope Valley do they have a larger proportion of American Indian and Alaska Native individuals as opposed to the county share. American Indian and Alaska Natives often face high disconnection rates and this is shown in them having the highest share of jobless working-age population at 19% compared to 13% countywide. The final SWOT Analysis to be received on December 22nd will contain a more thorough analysis of the American Indian and Alaska Native community. The Regional Summary will also include a section dedicated to American Indian and Alaska Natives.

The plan to outreach to organizations that will be utilized during the planning process are encompassed by the Hub Lead structure, particularly through grassroots outreach by Subregional Tables/Micrograntees. As part of their role, the 90 Subregional Tables/Micrograntees will outreach to and engage their respective constituents and other organizations that serve and reside in the same Serving Planning Area to ensure their constituents have a voice in this planning process. Subregional Tables/Micrograntees will leverage their existing network within their specialized area of focus to increase engagement efforts and participation at convenings. Subregional Table/Micrograntee convenings will provide adequate resources for representatives of community-based organizations and residents to participate. This includes language interpretation services and participant stipends. Furthermore, Beacon Economics has provided a partnership database that includes 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 Tables/Micrograntees to succeed in their outreach efforts. In addition to the convenings held by the Subregional Tables/Micrograntees, the LA HRTC will host Geographic and Ethnic Planning Forums. The purpose and projected outcomes of these forums will be defined by the Steering Committee, based on the qualitative and quantitative data. Success metrics will include pairing the quantitative data from our research partners with qualitative "lived experience data" from the community to make informed decisions about the direction of the 2-5 strategic projects for the Los Angeles region. Another success metric could be leveraging the comprehensive data to include other projects from other regions. Theoretically, the development of the Planning Phase Plan and the activities that benefit the community could attract new LA-HRTC members, additional subject matter experts, businesses who see financial and workforce placement opportunities, and philanthropists who have initiatives towards social justice. New LA HRTC Partners onboarded by Subregional Table/Micrograntees will be tracked and also used as a success metric to ensure the reach of the LA HRTC continues to expand.

## Stakeholder Analysis

As of December 18th, 2023, the LA HRTC has 425 partners. This collaborative includes each of the mandated entity types (see *Figure 1*) and representation from all service planning areas (see *Figure 2*). The LA HRTC has been intentional in analyzing the required entity types by the constituencies that are being served by each respective entity type to ensure that the partners are representative of all constituents (see Table 1).

# Table 1. Geographic Diversity of LA HRTC Partners by Organizational Headquartersand Affinity Hub (Constituency Served)

LA HRTC Affinity Hub	SPA 1	SPA 2	SPA 3	SPA 4	SPA 5	SPA 6a	SPA 6b	SPA 7	SPA 8	Total
Academia	4	3	3	1	4	2		1	1	19
Civic Eng. & Placed Based Coalitions	2	2	1	6	1	4	4	1	3	24
Economic Development	3	3	4	7	3	3	4		12	39
Employers, Business & Associations	3	5	б	15	11	2	9	4	10	65
Families	11	5	5	8		5	8	2	20	64
Homeless, Veterans & Seniors	2	2	2	6	3	3	9	1	8	36
Immigrants		2	1	3	1	2		2	2	13
Institution & Government	1	1	1	6				3	3	15
Labor & Workers	1	1	2	11	1		1	1	2	20
Sustainability		2	3	13	4	1	2		4	30
Underemployed Adults		2	5	9	2	б		1	8	33
Youth	5	7	3	9	7	7	4	6	16	64
Total Count - LA HRTC Partners	32	35	36	94	37	35	41	22	89	422

In addition to analyzing the HRTC 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 HRTC includes organizations that exclusively focus on serving each of the SPAs (see Table 1).

Other - All of LA County	129	30.57%
SPA 1 - Antelope Valley	34	8.06%
SPA 2 - San Fernando	30	7.11%
SPA 3- San Gabriel	24	5.69%
SPA 4 - Metro	41	9.72%
SPA 5 - West	19	4.50%
SPA 6a - South - East	30	7.11%
SPA 6b - South - West	49	11.61%
SPA 7 - East	10	2.37%
SPA 8 - South Bay/Harbor	56	13%
Total	422	100%

Table 1. Geographic Breakdown of LA HRTC Members by Primary Service Area

The stakeholder analysis has revealed deficits serving as barriers to the HRTC achieving balanced representation which include the following:

Entity Types

- California Native American Tribes
- Worker Centers
- Labor Organizations
- Philanthropic Organizations

Service Planning Areas (Organization Headquarters)

- Organizations serving
  - SPA 7 East Los Angeles

Constituencies Served

- Immigrants
- Institutional & Government
- Labor & Workers
- Academia

## Primary Service Areas

- Organizations serving
  - SPA 7 East Los Angeles
  - SPA 5 West Los Angeles

The deficits such as the lack of representation from organizations headquartered in SPA 7 - East Los Angeles will be addressed through the outreach and engagement of the Subregional Tables/Micrograntees once they are funded to collect data from the community. It is also important to distinguish that 53 LA HRTC Partners are individual residents, representing their community without affiliation to any organization and furthering the extent to which this effort reaches the community. With the extensiveness and diversity of the makeup of the LA HRTC, opportunities for synergy and collaboration with regional and subregional plans have been identified.

## **Potential Synergies & Collaboration**

The LA County OurCounty Sustainability 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. Strategy 4A of the plan seeks to "Promote inclusive growth across the changing economy", which encompasses actions that advance this strategy. Action 59 calls for "Collaborat[ion] with the City of Los Angeles and others to develop a 'Just Transition' plan and task force that examines the impact of the transition to a cleaner economy on disadvantaged workers, identifies strategies for supporting displaced workers, and develops recommendations for ensuring inclusive employment practices within growth sectors of the economy" (OurCounty Sustainability Plan, Action 59). Similarly, LA County plans to "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" (OurCounty Sustainability Plan, Action 60). Evident in the governance model and LA HRTC body as a whole, the California Jobs First LA HRTC includes a wide range of community-based organizations, educational institutions, and private sector partners ready to push this initiative forward. The Los Angeles Regional Consortium (LARC), which consists of the 19 community colleges in LA 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. Notably, the LA County Chief Sustainability Office holds a seat on the Steering Committee, furthering alignment between the County of Los Angeles and the efforts of California Jobs First.

Given the alignment between the LA County OurCounty Sustainability Plan and CJF, 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. 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 America's Job Centers of California, job seekers from disinvested populations can be effectively reached. This collaboration not only expands employer connections for both entities but also targets specific populations in identified disinvested 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 from research conducted during this study to equip the City of Los Angeles with adequate knowledge to succeed in transitioning Los Angeles 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 HRTC Partners including: Council District 03, 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 HRTC's planning and implementation process.

In essence, the LA 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 HRTC 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 California Jobs First Partners are already intertwined in these LA County and City of LA strategies, it is certain that the strategies implemented in Phase 2 of CJF will be embedded and work harmoniously with LA County, City of LA, and other sub regional 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.

## **Regional Summary by CVL Economics:**

### Introduction

With roughly 10 million residents, Los Angeles County boasts the largest population of any county in the United States. It spans over 4,000 square miles and is so vast that socioeconomic data aggregated at the county-level can often mask diverging trends on the ground. To that end, the analysis in the following pages is conducted through a sub-regional lens. Los Angeles County is officially divided into eight Service Planning Areas (SPAs): (1) Antelope Valley; (2) San Fernando Valley; (3) San Gabriel Valley; (4) Metro LA; (5) West; (6) South; (7) East; and (8) South Bay. For the purposes of this analysis, SPA 6 — or South — is divided into SPA 6 East and SPA 6 West, with the Interstate 110 dividing the two sub-geographies. The table below details which communities and neighborhoods are in each SPA.

Los Angeles Service	<b>Planning Areas</b>
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SPA	Name	Communities Included
1	Antelope Valley	Acton, Agua Dulce, Gorman, Lake Hughes, Lake Los Angeles, Lancaster, Littlerock, Palmdale, Quartz Hill, and others
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
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
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

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
6 East	South East	Athens, Compton, Lynwood, South Gate, Watts, and others.
6 West	South West	Baldwin Hills, Crenshaw, Exposition Park, Florence, Hyde Park, Paramount, West Adams, and others.
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
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

Source: Los Angeles County Department of Public Health. Analysis by CVL Economics.

Assessing the strengths and weaknesses of Los Angeles County's SPAs requires an in-depth look into the economic, environmental, health, demographic, and other socioeconomic landscape across each region. Historically marginalized groups continue to face significant barriers when seeking higher paying jobs, improved health outcomes, finding affordable housing, and rectifying poor environmental conditions. Moreover, restrictions that arise from structural and institutionalized racism have impacts that can suppress overall regional growth. Understanding the spatial dynamics of inequality can provide policymakers the insights needed to appropriately allocate resources towards marginalized groups and disinvested communities.

## **Economic Development Opportunities and Forces in Los Angeles County**

### Demographic Analysis

Los Angeles County is a highly diverse county. Roughly 75% of its population is composed of non-White residents — including those identifying as Hispanic or Latinx (49%), Asian and Pacific Islander (15%), Black or African American (8%), and American Indian and Alaska Native (0.2%) — making the county more diverse than the state overall where non-White residents comprises approximately 64% of all Californians.

On a more troubling note, nearly 50% of Los Angeles County residents live in disadvantaged areas. These historically under-resourced and disinvested communities tend to be home to higher shares of non-White populations. For example, in SPA 6 East — which includes communities like Compton, Watts, South Gate and Lynwood — about 94% of residents reside in federally-designated disadvantaged communities. The situation is notably better in SPA 6 West — which includes communities like West Adams, Baldwin Hills, and Exposition Park — but approximately 78% of the population live in similarly disinvested neighborhoods. In total, these two SPAs have 934,000 residents living in disadvantaged communities, which accounts for 20% of all Los Angeles County residents living in similar conditions. These SPAs also happen to be overwhelmingly inhabited by non-White populations. The share of non-White residents in SPA 6 East is just under 99%; SPA 6 West is approximately 94%.

SPA	Share of Non-White Residents	Number of Residents in Disadvantaged Communities	Share of Residents in Disadvantaged Communities
1	75.2%	185,148	51.8%
2	60.1%	882,479	40.6%
3	81.8%	930,164	48.4%
4	76.0%	696,138	64.9%
5	40.6%	29,772	4.2%

Figure 1: Residents by Race/Ethnicity; Residents living in Disadvantaged Communities

6 East	98.7%	581,057	93.9%
6 West	93.8%	352,563	77.5%
7	89.6%	592,965	50.9%
8	74.5%	641,211	41.2%
County Average	74.5%	4,891,496	48.8%

Source: Council on Environmental Quality, U.S. Census 5-Year American Community Survey. Analysis by CVL Economics.

Figure 1 highlights how the share of residents living in disadvantaged communities varies across Los Angeles County's nine SPAs. For example, SPA 5 — which includes communities like Santa Monica, Westwood, Marina del Rey, Beverly Hills, and Culver City — has by far the lowest share of residents living in disadvantaged communities at just 4.2% (or just under 30,000 people). This accounts for less than 1% of Los Angeles County's total residents in disadvantaged communities. SPA 5 also has the lowest share of minority populations compared to the other SPAs, with over 40% of the population identifying as non-White. SPA 3, which includes communities across the San Gabriel Valley has the largest absolute number of residents in disadvantaged communities, with just over 930,000 residents in total.

Beyond the racial and ethnic make-up of Los Angeles County, there are also significant differences when it comes to educational background, household income, life expectancy and other related factors. Levels of educational attainment vary considerably across the SPAs. About half of all Los Angeles County residents have graduated from high school and gone on to attend some college or earn an associates, bachelor's, or graduate/professional degree. SPA 5 (West Los Angeles communities) has the highest share of individuals who have completed more than a high school degree; roughly 76% of its population have proceeded to higher education with 22% of SPA 5 residents holding a graduate or professional degree. In contrast, about 24% of residents in SPA 6 East have completed more than a high school degree, the lowest among all SPAs. Conversely, roughly 56% of residents of SPA 6 East have not completed a high school degree; approximately 33% of Los Angeles County residents have not completed high school by way of comparison.



Figure 2: Share of Residents with More than High School Diploma or Equivalent by SPA

Source: U.S. Census 5-Year American Community Survey. Analysis by CVL Economics.

Disparities in educational attainment amongst the SPA geographies highlight the lack of access to opportunities among marginalized groups. Similar to the ethnic and racial makeup of populations residing in disadvantaged 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. For instance, SPAs where minority groups account for 85% or more of the population (specifically SPA 6 East, SPA 6 West, and SPA 7) also have the lowest shares of individuals who have obtained a graduate or professional degree.

#### Health of the Population

Population health depends on several factors, including economic outcomes, genetics, and even environmental impacts. Average life expectancy from birth in Los Angeles County is around 81 years, slightly higher than the national average of approximately 77 years. Across Los Angeles' SPAs, life expectancy averages differ. Regions with more disadvantaged communities tend to suffer from lower life

expectancy averages. For example, SPAs 6 East and 6 West, regions with some of the highest shares of residents in disadvantaged communities also suffer from the lowest life expectancy averages in Los Angeles County at roughly 77 years each, in line with the overall national average. Conversely, areas with higher economic prosperity and therefore better access to healthcare, lower risk to environmental hazards, and higher quality of life record the highest average life expectancy across the county. SPA 5 has the highest average life expectancy at 83 years.



Figure 3: Average Life Expectancy by SPA

Source: Council on Environmental Quality Climate and Economic Justice Screening Tool. Analysis by CVL Economics.

Several factors contribute to variations in life expectancy rates across SPAs. Health metrics collected by Children's Hospital Los Angeles in 2022 note that 22.3% of adults in SPA 6 East and West are considered to have fair or poor health status, significantly higher than the 14.1% share of adults with fair or poor health status countywide. This is unsurprising given the high correlation between economic prosperity and health outcomes. Better paying jobs generally offer quality employer-subsidized health insurance, which means individuals are more likely to afford healthcare costs and can spend more money on healthier food and groceries that improve overall health conditions.

Another health issue that significantly impacts marginalized groups is incidences of low birthweight babies. Low birthweight babies have a higher likelihood of getting health complications including
respiratory issues, infections, heart disease and diabetes compared to normal birthweight babies. In Los Angeles County, about 5.3% of babies are born low birthweight. Sub-regionally, higher shares of low birthweight babies also tend to be in SPAs with larger shares of disadvantaged communities. The highest share is in SPA 6 West, with 7.1% of low birthweight babies.



Figure 4: Share of Low Birthweight Babies by SPA

Source: Council on Environmental Quality Climate and Economic Justice Screening Tool. Analysis by CVL Economics.

#### The Economy and Economic Development Analysis

Los Angeles County is an economic powerhouse that is not only vital to the economic lifeline of California, but also that of the U.S. There are roughly 6.7 million employees in Los Angeles County– including salaried (W2), self-employed, and gig workers-- working at the roughly 300,000 businesses and establishments across the County.

Yet, a large percentage of working-age adults in the county are unemployed or outside the labor force entirely. The jobless working-age population[1], defined as individuals of prime working-age between 25 and 54 who do not have a job, hovers around 12% for Los Angeles County. The range differs by SPA, however. SPA 5 has the lowest share of jobless individuals, with around 7.3% of the working-age population without a job. The regions with the highest shares of jobless individuals are SPA 1 – Antelope Valley Communities -- (21.2%), SPA 6 East (17.8%), and SPA 6 West (15.1%). Several factors that play a

role in barriers of entry to jobs and contribute to a high jobless rate for prime working-age residents, including educational requirements, experience, and skill. The disparities in employment amongst the working-age population increases substantially when examined by race and ethnicity.

Across the county, the share of non-White groups aged 25-54 without a job is 13.0%, compared with 9.0% for White individuals. The highest share of jobless working-age population across the county is American Indian and Alaska Natives, at roughly 19.3%, followed by Black or African American (15.5%), Hispanic (13.5%), and Asian (10.9%). Even in SPAs with considerably low jobless rates overall, such as SPA 5, there are still discrepancies amongst race or ethnicity. For example, in SPA 5, the jobless rate for individuals aged 25-54 who are White is around 6.1%, while that rate is 21.7% for American Indian and Alaska Natives, 9.5% for Hispanic individuals, and 9.3% for Black or African Americans. Certain SPAs have high jobless rates regardless of the race or ethnicity and compared to the countywide average. For example, in SPA 6 East, the largest share of jobless working-age population is amongst White (31.6%), American Indian and Alaska Natives (26.1%), and Black or African American (31.6%).

Figure 4: Share of Population Age 25-54 Without a Job



Source: U.S. Census 5-Year American Community Survey. Analysis by CVL Economics.

Workers are dispersed across many industries. The largest shares of employment across the County are in Health Care (13.2%); Government (9.1%); Retail Trade (8.0%); Professional, Scientific, and Technical Services (7.7%); and Accommodation and Food Services (7.2%). Together these five industries represent just over 45% of all workers across Los Angeles County. On a sub-regional level, there are some variations to what the countywide average trend is. Unsurprisingly, Health Care is in the top five industries with regards to share of employment to respective regional totals for every SPA. This is common beyond Los Angeles County – Health Care is consistently one of the largest growing industries in the United States due to aging demographics and large spending that goes into the industry. Sub-regional economic landscapes differ based on the demographic make-up. For example, SPA 5 has by far the largest share of employment in Professional, Scientific, and Technical Services, which is also one of the highest paying industries. This has to do with the high educational attainment amongst the population – with 54% of SPA 5's residents having at least a bachelor's degree, and 22% having a professional or graduate degree.

Figure 5 below provides a comprehensive list of top industries of employment by SPA as well as the respective average salary for each industry in that geography. On average, the top 5 industries in each SPA represents roughly 52% of all employees across the SPA geographies. The ranges of salaries differ quite heavily based on the industries. Service and customer-facing industries like Accommodation and Food Services are on the lower end of the salary spectrum, with LA County's average salary in the industry at just under \$34,000. The higher end of the spectrum are industries such as Information and Professional, Scientific, and Technical Services, with countywide average salaries at \$126,500 and \$100,500 respectively. These two industries only appear together on SPA 5's top 5 industries by share of employment, with the only other SPA to feature Information being SPA 2.

Figure 5: Top 5 Industries by Share of Employment and Respective Salaries by SPA

SPA	Top 5 Industries by Share of Employment %)	Average Annual Wages
1	Government (17.0%)	\$84,830
	Health Care (16.4%)	\$63,490
	Retail Trade (10.3%)	\$44,730
	Manufacturing (8.9%)	\$78,150
	Other Services (8.4%)	\$34,140

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2	Health Care (15.1%)	\$51,820
	Government (9.9%)	\$84,070
	Information (8.2%)	\$127,320
	Other Services (8.0%)	\$34,970
	Retail Trade (7.7%)	\$44,380
3	Health Care (16.0%)	\$50,810
	Government (8.9%)	\$83,710
	Retail Trade (8.8%)	\$44,700
	Transportation/Warehousing (7.8%)	\$27,320
	Accommodation and Food Services (7.2%)	\$32,990
4	Health Care (11.8%)	\$58,000
	Professional, Scientific, Technical Services (10.7%)	\$99,800
	Accommodation and Food Services (8.5%)	\$34,690
	Transportation/Warehousing (8.5%)	\$18,150
	Real Estate (8.3%)	\$58,650
5	Professional, Scientific, Technical Services (14.0%)	\$108,710
	Accommodation and Food Services (8.8%)	\$35,560
	Government (8.7%)	\$87,440
	Information (8.4%)	\$130,900
	Health Care (8.2%)	\$54,490

		1
6 East	Health Care (14.5%)	\$51,980
	Government (12.1%)	\$79,030
	Manufacturing (11.0%)	\$71,090
	Retail Trade (9.3%)	\$43,100
	Transportation/Warehousing (8.1%)	\$60,240
6 West	Government (26.9%)	\$89,970
	Health Care (15.0%)	\$35,410
	Other Services (7.4%)	\$34,310
	Admin Support (6.7%)	\$57,120
	Retail Trade (6.1%)	\$42,720
7	Health Care (13.3%)	\$54,150
	Retail Trade (12.4%)	\$42,830
	Manufacturing (9.7%)	\$70,570
	Wholesale Trade (9.2%)	\$80,600
	Admin Support (8.3%)	\$47,730
8	Health Care (12.6%)	\$48,890
	Transportation/Warehousing (9.7%)	\$69,500
	Retail Trade (8.6%)	\$43,470
	Manufacturing (8.5%)	\$105,170
	Government (8.4%)	\$81,320
	3	

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

While the salary ranges differ based on industry overall, average salaries in total by region are quite close. Average salary and earnings in Los Angeles County across all industries hovers around \$66,220. The average is skewed slightly higher primarily due to SPA 2 and SPA 5 – which, as aforementioned, contain two of the highest paying industries in the area in their top 5 industries by share of employment. The remaining SPA regions fall under the \$66,220 average but are close in range. The lowest average salary is in SPA 7, at \$59,630, and the highest is with SPA 5 at \$75,680.



Figure 6: Average Salary Across All Industries by SPA

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

The industry make-up of the various SPA geographies present different challenges for each region when it comes to external shocks that impact employment and industry stability. During prominent recessions in the past two decades, primarily the Great Recession and the COVID-19 induced recession, the impact and subsequent recovery patterns varied since the cause of the downturns differed. During the Great Recession, the housing market crash led to a series of industries in the financial sector to be severely disrupted. Employment between 2008 and 2010 in Los Angeles County dropped by 4.3% across all types of workers (W2, self-employed, ang gig-workers), with almost a quarter of a million jobs lost.

Sub-geographically, employment decline between 2008 and 2010 ranged from 2.6% in SPA 1 to 5.9% in SPA 6 East.

The post-Great Recession recovery was considerably slow, with the county not recovering all jobs lost until 2012. However, recovery was not consistent across all sub-geographies – specifically geographies with high concentrations of disadvantaged communities. Of the nine SPAs, three still had not fully recovered all lost jobs from the Great Recession by 2012. In SPA 6 West, employment was down a whopping 12% by 2012 – with substantial losses in educational services. SPA 6 East also had not recovered all jobs yet by 2012 – with employment still down around 1%. The fastest recoveries from the Great Recession occurred in SPA 5 and SPA 4 – specifically areas on the westside of Los Angeles County, and Metro LA. Recovery for the latter two regions paced at 3.7% and 3.3% respectively between 2008 and 2012.

The COVID-19 Recession differed from the Great Recession in that service-providing industries, primarily in Leisure & Hospitality all came to a halt due to the COVID lockdowns. Employment decline across Los Angeles County between 2019 and 2020 totaled over 350,000 jobs, falling by 5.4% across all types of employment. Almost 120,000 of those job losses occurred in Accommodation and Food Services, the largest decline of any industry, followed by Other Services (45,650 jobs lost), and Arts, Entertainment and Recreation (41,200 jobs lost). Sub-geographically, SPA 6 West suffered the largest jobs lost between 2019 and 2020, with a loss of 7.0% in total employment, followed by SPA 4 (-6.9%), and SPA 7 (-5.9%). The recovery patterns from the COVID-19 induced recession have varied. Four of the nine SPAs have not fully recovered from the 2019 levels of employment, with SPA 6 West lagging further behind with 4,300 jobs fewer than 2019.

Figure 7: Impact of Recessions on Employment and Subsequent Recovery by SPA

SPA	Great Recession Change in Employment (%)		COVID-19 Recession Change in Employment		
	2008 to 2010	2008 to 2012	2019 to 2020 (%)	2019 to 2022 (%)	2019 to 2022 Abs. Change
1	-2.6%	2.0%	-4.8%	-0.6%	-810

2	-3.9%	1.9%	-5.6%	1.4%	20,900
3	-5.0%	-0.5%	-3.5%	2.5%	26,070
4	-3.4%	3.3%	-6.9%	-0.2%	-1,780
5	-4.5%	3.7%	-5.0%	3.6%	32,710
6 East	-5.9%	-0.5%	-5.5%	-0.2%	-440
6 West	-0.3%	-11.5%	-7.0%	-3.7%	-4,320
7	-5.3%	-0.6%	-5.9%	0.1%	450
8	-4.6%	1.3%	-5.3%	1.3%	12,010
County Avg.	-4.3%	1.3%	-5.4%	1.3%	84,790

Source: U.S. Bureau of Labor Statistics, Current Employment Statistics, Quarterly Census of Employment and Wages, Nonemployer Statistics. Analysis by CVL Economics. Note: Totals may not sum due to rounding.

#### **Environmental Assessment of Los Angeles County and its SPAs**

When it comes to assessing the environmental quality across Los Angeles County's subregions, there are many factors to consider – including sustainability and renewable energy developments, air pollution, water contaminants, access to parks and green space, and threats to households including fire and flooding.

#### Air Quality

Over the years, Los Angeles County has become synonymous with smog and air pollution, with the millions of vehicles driven on its roads releasing pollutants into the air. One of the most popular measures of air pollution is PM2.5 – or particle matters that are less than 2.5 microns in diameter. Despite the reputation of smog, Los Angeles County has improved immensely over the past few decades improving air quality across its SPAs. Using a historical multiple year average, Los Angeles County has been recorded to have pollutant levels of approximately 11.7 micrograms per cubic meter of air ( $\mu$ g/m3), just under the recommended levels of 12  $\mu$ g/m3 that denote little risk of exposure. Sub-geographically, air quality based on PM2.5 matter differs.

SPA 1 (Antelope Valley) has the cleanest air, with pollutant levels at 7.5 µg/m3. By contrast, SPA 6 East and SPA 3 (San Gabriel Valley) have the poorest air quality, each with pollutant levels at 12.1 µg/m3—just above the recommended threshold. Disadvantaged communities are at a higher risk of poorer air quality, with larger likelihood of pollutant generators in the region. The three SPAs with the largest share of residents in disadvantaged communities recorded PM2.5 levels at 12 or higher. It is important to note that the designation of disadvantaged communities involved environmental risks as well, including air pollutants.

Another measure of air quality is toxic chemicals release, which is a weighted measure of chemicals from factories that impact local regions. Results varied by SPA, with more industrial areas, such as SPA 6 East and SPA 8 (South Bay) scoring in the 10th percentile (higher than 90% of average census tract in California), while areas such as SPA 2 score in the 40th percentile. The highest concentrations of toxic chemical releases by SPA were found in SPA 8 (South Bay), SPA 6 East, SPA 1 (Antelope Valley), and SPA 7 (East Los Angeles).

#### Figure 8: PM2.5 Levels by Region



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

#### Water Contaminants

Beyond air quality, another important measure to determine environmental quality is levels of water contaminants. The Office of Environmental Health Hazard Assessment has created a weighted measurement of various water contaminants that sums the overall levels of contaminants in drinking water. It is important to note that this measure simply tracks the levels of contaminants, and not necessarily their impact on health. A region with higher levels of contaminants does not mean health is going to be impacted negatively at a greater rate than other areas.

Overall, most of Los Angeles County's SPAs scored in the 40th percentile when it came to drinking water, meaning the census tracts in each respective region fared better than 40% of the statewide average. The highest levels of contaminants were in SPA 6 West and SPA 4 – with the two SPAs the only in the region to score in the 20th percentile, faring worse than 80% of California's census tracts. Similar to the PM2.5 score and the toxic chemical weights – Los Angeles's SPAs with higher levels of drinking water contaminants tend to fall under areas with higher percentages of disadvantaged communities – including SPAs 6 East and 6 West, and SPA 3.

Figure 9: Weighted Scores of Drinking Water Contaminants

SPA	Drinking Water Contaminant Summed 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
County Average	608	40th

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

#### Environmental Hazards: Fire and Flooding Risks

When it comes to potential hazards in Los Angeles County, risks of fire have become an annual worry for residents, emergency service providers, and policymakers in Los Angeles County. With the impacts exacerbated by climate change, frequent drought makes areas much drier that triggers a bigger likelihood for wildfire. Not only do fires create massive issues with evacuations and property loss, but they also have a significant impact on air quality for the county as a whole.

By far, the highest risks of fires for properties by SPA is in Lancaster and Palmdale, areas that represent SPA 1. Historically, these regions have seen the worst fire damage in Los Angeles County, and in the next thirty years, it is estimated that an astonishing 77% of properties in those areas can be impacted by wildfires. SPA 1's neighbors to the west, specifically in the Santa Clarita areas that represent SPA 2, also have considerable risks of fire damage to properties, with roughly 43% of properties in SPA 2 at risk of fire damage in the next thirty years. Impact of fire risks dramatically decline when moving south. In fact, SPAs 5, 6 East and West, 7 and 8 all have property damage risks of 1.5% in the next thirty years from wildfires.



Figure 10: Share of Properties at Risk of Fire Damage in the Next Thirty Years

Source: Council on Environmental Quality Climate and Economic Justice Screening Tool. Analysis by CVL Economics.

Risks of flooding to properties is much less of a worry compared to fire when it comes to Los Angeles County, however, poor infrastructure for flash flooding and heavy rain can cause some worry in areas that have older buildings. The highest risk of property damage to flooding in the next thirty years is in SPA 5 on the westside of Los Angeles County, with up to 20% of properties at risk, followed by SPA 2 and 7 at 17% respectively. The lowest risks are in SPA 1 at 4%, followed by SPA 6 West (11%), and SPA 4 (12%).





Source: Council on Environmental Quality Climate and Economic Justice Screening Tool. Analysis by CVL Economics.

[1] Jobless working-age population includes individuals who are unemployed, as well as persons who are not included in the labor force but are 25 to 54 years of age.

**Regional Summary Appendix** 

#### Labor Market Analysis

The Regional Summary, proposed Industry Cluster Analysis, and SWOT Analysis reports all capture characteristics of the Los Angeles County labor market.

This section will provide a high level overview of some of the key findings on the Los Angeles County Labor Market.

- 1. Los Angeles County has a low labor force participation rate and a high unemployment rate when compared to similar areas.
  - a. In 2022, Los Angeles County had an unemployment rate of 5.8% while the Dallas and Phoenix metropolitan areas stood at 3.8%. Atlanta and Houston had unemployment rates of 4% and 5% respectively.
  - b. In 2022, Los Angeles County also had a lower labor force participation at 65%, when compared to Houston (67%), Atlanta (64%), and Dallas (70%).
    While we do have a slightly higher rate than Phoenix at 64% this can be attributed to their large retirement community.
  - c. The SWOT Analysis in particular tries to zero in on the low labor force participation in LA County. Their analysis found that:
    - "Women of prime working age tend to have slightly higher unemployment rates compared to their male counterparts" (Beacon Economics 7).
    - ii. "College graduates have a significantly lower unemployment rate compared to other educational attainment groups" (Beacon Economics 8).
    - iii. "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" (Beacon Economics 8). In the same period, there was also a "slight decrease in labor force participation among L.A. County high school graduates" (Beacon Economics 8).
  - d. Potential barriers and explanations for employment and labor force participation rates

- Our unemployment rates are higher and labor force participation rates lower among workers under 25 in LA County compared to similar markets. In regards to this youthful lethargy, Beacon Economics states in the SWOT Analysis "This suggests there might be some workforce development challenges in Los Angeles County that are specifically affecting younger workers" (Beacon Economics 7).
- ii. Gender, marital status and children also interact to affect labor force participation negatively as married women with and without children tend to have lower rates than their male counterparts.
  - "One major weakness in Los Angeles County is that childcare access and costs often keep some prime-age workers from participating in the labor force. According to the Department of Labor, L.A. 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. For many disadvantaged households these costs are too high. (Beacon Economics 55).
- iii. Non-English speakers also have lower labor force participation rates.
- iv. Disabled individuals only have a 57% probability of participating compared to their counterparts without disabilities at 83%. This is important as Los Angeles County has over 1 million disabled individuals. However, the trend over the last decade is that individuals with disabilities are increasingly likely to be a part of the labor force, Beacon Economics attributes this to "increasingly tight labor market" (Beacon Economics 19).
- v. Age is also an important factor as the average of the LA County labor force has aged in the last decade. Beacon Economics notes "some research has linked the aging population to lower labor force participation, lower worker productivity, and ultimately, lower economic growth" (Beacon Economics 52). This trend applies to all SPAs.

- 1. The high cost of living is influencing people's fertility decisions
- 2. LA County is aging as a whole
- 3. LA County's population declined in the last 2 years
- vi. Currently the number of job vacancies are high relative to the number of unemployed workers.
- vii. Skills Gap vs Opportunity Gap
  - While educational attainment is still extremely important, Beacon Economics notes that simply improving one's skill set does not yield more opportunities. This is especially true for individuals from low-income backgrounds.
- viii. Commute times
  - 1. The housing crisis makes it difficult for individuals to live near their workplace.
  - 2. Long commute times present environmental and economic challenges.
  - 3. One policy recommendation is to make public transport free.
    - a. "L.A. County Census tracts with lower rates of car ownership broadly correlate with lower rates of employment and labor force participation" (Beacon Economics 76).
- 2. High-Road Labor Standards
  - In the SWOT Analysis, the section "Sustainability: Labor Demand and Green Jobs" provides insight on workforce development in the green economy
    - The green economy has grown significantly in the last 3 years, representing nearly 85% of new electric power generation jobs nationwide
    - ii. In LA County, green jobs account for over a quarter of total employment
      - About half of these jobs are roles that are familiar enough such as engineers and technicians, but with some additional skillset to address carbon emissions and environmental damage

- Positions like these can be useful for segments of the labor force who have a lot of experience in their field and now need some new skills to adapt to green economy needs
- Of the 375,000 green jobs the county recently added two-thirds were occupations unique to the green economy that have specific skill and knowledge requirements differing greatly from more traditional positions
  - Positions like these require a completely novel skillset from their traditional counterparts "pre-green economy" as they emerge directly from the green economy
  - b. These are positions like solar power installers, turbine technicians, nanotechnology engineers, green investment underwriters, etc.
- iii. Green jobs are more likely to be union jobs
- iv. Education for green jobs
  - 36% of workers have a four-year degree or higher, and 14% have a graduate or professional degree
  - 41% of workers have a high school diploma as their highest level of educational attainment
- v. Green economy skills demand

#### From P. 153 of SWOT Analysis

Competency	Increased	Green-Enhanced	New & Emerging
Type	Demand <sup>2</sup>	Skills <sup>3</sup>	Green <sup>4</sup>
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,	Reading	Reading
	Monitoring,	Comprehension,	Comprehension,
	Operations	Complex Problem	Writing, Judgement
	Monitoring,	Solving, Judgement	and Decision
	Operation and	and Decision	Making, Monitoring,
	Control	Making	Systems Analysis

<sup>&</sup>lt;sup>2</sup> These types 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." (Beacon Economics 150)

<sup>&</sup>lt;sup>3</sup> "These types, often familiar roles such as engineers, plant operators, and other types of technicians, maintain the fundamental function of their conventional equivalent role, but with additional knowledge or skills that help reduce carbon emissions and environmental damage" (Beacon Economics 150)

<sup>&</sup>lt;sup>4</sup> "These are roles that emerge directly out of the green economy and have specific skill and knowledge requirements that can differ significantly from their conventional equivalents, if such exist." (Beacon Economics 150)

- 3. Programs, Colleges, Workforce Development Centers
  - a. The <u>Regional Summary Appendix</u> written by CVL Economics provides great insight into the location of Job Training Opportunities.

	SPA								
	1	2	3	4	5	6 E	6 W	7	8
Job Training Opportunity	29	142	159	105	57	20	28	112	110

- 4. Occupations, Industries and Wages
  - a. The Regional Summary provides a general overview of the industries which individuals work in broken down by SPA.

SPA	Top 5 Industries by Share of Employment %)	Average Annual Wages
1	Government (17.0%)	\$84,830
	Health Care (16.4%)	\$63,490
	Retail Trade (10.3%)	\$44,730
	Manufacturing (8.9%)	\$78,150
	Other Services (8.4%)	\$34,140
2	Health Care (15.1%)	\$51,820
	Government (9.9%)	\$84,070
	Information (8.2%)	\$127,320
	Other Services (8.0%)	\$34,970
	Retail Trade (7.7%)	\$44,380

3	Health Care (16.0%)	\$50,810
	Government (8.9%)	\$83,710
	Retail Trade (8.8%)	\$44,700
	Transportation/Warehousing (7.8%)	\$27,320
	Accommodation and Food Services (7.2%)	\$32,990
4	Health Care (11.8%)	\$58,000
	Professional, Scientific, Technical Services (10.7%)	\$99,800
	Accommodation and Food Services (8.5%)	\$34,690
	Transportation/Warehousing (8.5%)	\$18,150
	Real Estate (8.3%)	\$58,650
5	Professional, Scientific, Technical Services (14.0%)	\$108,710
	Accommodation and Food Services (8.8%)	\$35,560
	Government (8.7%)	\$87,440
	Information (8.4%)	\$130,900
	Health Care (8.2%)	\$54,490
6 East	Health Care (14.5%)	\$51,980
	Government (12.1%)	\$79,030
	Manufacturing (11.0%)	\$71,090
	Retail Trade (9.3%)	\$43,100
	Transportation/Warehousing (8.1%)	\$60,240
L		•

6 West	Government (26.9%)	\$89,970
o west		
	Health Care (15.0%)	\$35,410
	Other Services (7.4%)	\$34,310
	Admin Support (6.7%)	\$57,120
	Retail Trade (6.1%)	\$42,720
7	Health Care (13.3%)	\$54,150
	Retail Trade (12.4%)	\$42,830
	Manufacturing (9.7%)	\$70,570
	Wholesale Trade (9.2%)	\$80,600
	Admin Support (8.3%)	\$47,730
8	Health Care (12.6%)	\$48,890
	Transportation/Warehousing (9.7%)	\$69,500
	Retail Trade (8.6%)	\$43,470
	Manufacturing (8.5%)	\$105,170
	Government (8.4%)	\$81,320

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

Occupation Type	2012	2017	2022
Management, Business, Science, and Arts	35.2	37.0	41.3
Sales and Office	24.9	23.5	20.1
Service	19.3	19.1	18.1
Production, Transportation, and Material Moving	12.9	12.7	12.9
Natural Resources, Construction, and Maintenance	7.7	7.7	7.6

# b. The SWOT Analysis provides a table of the Occupation type countywide

Source: American Community Survey; Analysis by Beacon Economics

c. 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	15.7%
Self					
Employment	284,200		301,300	17,100	6.0%
Private					
Household					
Workers	12,500		12,300	-200	-1.6%
Total Nonfarm	4,167,300	4,538,500	4,852,500	685,200	16.4%
Construction	146,500			18,800	12.8%
Manufacturing	315,100	321,800	296,300	-18,800	-6.0%
Trade,					
Transportation,				•	
and Utilities	788,000	837,400	887,400	99,400	12.6%
Wholesale					
Trade	200,000	204,800		16,300	8.2%
Retail Trade	380,200	407,300	424,900	44,700	11.8%
Utilities	11,700	12,000	11,600	-100	-0.9%
Transportation					
and					
Warehousing	196,100	213,300		38,500	19.6%
Information	191,000	235,200	231,200	40,200	21.0%
Finance and	101 700				
Insurance	131,700	126,800	130,300	-1,400	-1.1%
Real Estate and					
Rental and				44.000	47.00
Leasing	80,800	89,000	94,800	14,000	17.3%
Professional,					
Scientific, and Technical					
Services	289,300	320,700	341,200	51,900	17.9%
Management of	209,300	320,700	341,200	51,900	17.970
Companies and					
Enterprises	62,200	61,600	68,800	6,600	10.6%
Administrative	02,200	01,000	00,000	0,000	10.070
and Support					
and Waste					
Management					
and					
Remediation					
Services	248,200	286,700	297,200	49,000	19.7%

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
Educational					
Services					
(Private)	122,200	132,500	147,600	25,400	20.8%
Health Care					
and Social	000 400	744.400	050 500	450.400	04.00/
Assistance	698,100	741,100	850,500	152,400	21.8%
Arts, Estatoisment					
Entertainment, and Recreation	64,900	91,800	103,700	38,800	59.8%
Accommodation		31,000	103,700	50,000	33.070
and Food					
Services	328,600	419,500	480,300	151,700	46.2%
Other Services					
(excludes 814-					
Private					
Household					
Workers)	128,700	153,500	161,300	32,600	25.3%
Other Services					
(excludes 814-					
Private Household					
Workers)	128,700	153,500	161,300	32,600	25.3%
(forkers)	120,700	155,500	101,500	52,000	20.070

Source: EDD Labor Projections (White Columns) & EDD Industry Employment Annualized Average Benchmark (Yellow Column)<sup>5</sup>

- 5. Major Employers in the Region
  - a. One function of the Regional Summary from CVL Economics is to identify major employers in LA County and their final report will provide some of those employers
  - b. Below is a list of major employers in LA County from EDD that is derived from America's Labor Market Information System (ALMIS)

<sup>&</sup>lt;sup>5</sup>Since I combined data sources with this table some caution should be exercised. The white columns are from EDD Industry Projections. The yellow column is my estimate, using EDD data, as to what that industry's employment was in 2022. Those are only estimates because some of the NAICS codes changed slightly. When reading this table I would look at the projected growth between 2020-2030 and then look at the 2022 numbers for an idea of how much more growth we might expect in a given industry.

Employer Name	Location	Industry
AHMC Healthcare Inc	Alhambra	Health Care Management
California State Univ Nrthrdg	Northridge	Schools-Universities & Colleges Academic
Cedars-Sinai Health System	West Hollywood	Health Care Management
Infineon Technologies Americas	El Segundo	Semiconductor Devices (mfrs)
Kaiser Permanente Los Angeles	Los Angeles	Hospitals
LAC + USC MEDICAL CTR	Los Angeles	Hospitals
Long Beach City Hall	Long Beach	City Hall
Longshore Dispatch	Wilmington	Nonclassified Establishments
Los Angeles County Sheriff	Monterey Park	Government Offices-County
Los Angeles Intl Airport-Lax	Los Angeles	Airports
Los Angeles Medical Ctr	Los Angeles	Pathologists
Los Angeles Police Dept	Los Angeles	Police Departments
National Institutes of Health	Pasadena	Physicians & Surgeons
Northrop Grumman	Whittier	Aerospace Industries (mfrs)
Security Industry Specialist	Culver City	Security Systems Consultants
Six Flags Magic Mountain	Valencia	Amusement & Theme Parks
Sony Pictures Entrtn Inc	Culver City	Motion Picture Producers & Studios
Space Exploration Tech Corp	Hawthorne	Aerospace Industries (mfrs)
Twentieth Century Fox	Los Angeles	Motion Picture Producers & Studios
UCLA Community Based Learning	Los Angeles	Junior-Community College-Tech Institutes
University of CA Los Angeles	Los Angeles	Schools-Universities & Colleges Academic
University of CA Los Angeles	Los Angeles	University-College Dept/Facility/Office
Vision X	Los Angeles	Call Centers
Walt Disney Co	Burbank	Amusement & Theme Parks
Water Garden Management	Santa Monica	Office Buildings & Parks

### Source: Major Employers in California | LA County

# c. Here is a list of the 10 largest (in terms of number of employees) Community-Based Organizations/Non-Profits in LA County

name	•	city	SPA NAME 👻	SPA Number 🝸
Cedars Sinai		Los Angeles	Metro	4
Children's Hospital Los Angeles (CHLA)		Los Angeles	Metro	4
Aerospace Corporation		Los Angeles		
Huntington Hospital		Pasadena	San Gabriel	3
Torrance Memorial Medical Center		Torrance	South Bay	8
Azusa Pacific University (APU)		Azusa	San Gabriel	3
Adventist Health Glendale (GAMC)		Glendale	San Fernando	2
Goodwill Southern California		Los Angeles	Metro	4
Pomona College		Claremont	San Gabriel	3
Goodwill Southern California / Goodwill Industries of Southern California		Los Angeles	Metro	4

# Source: Beacon Economics Partnership Database

#### **Industry Cluster Analysis**

Formal work on the Industry Cluster Analysis will be done by Beacon Economics, beginning in January 2024. In the meantime, we have gathered data and research on potential growth clusters in Los Angeles County, environmental effects of existing and proposed clusters, potential job growth and industries at risk of displacement. Charts and visuals were not available for the Industry Cluster Analysis in its current form, but we will include visuals in a follow up report once Beacon Economics completes their analysis.

Industry clusters are analyzed to understand the level of competitive advantage a region has in an industry compared to the U.S. as a whole. One way of quantifying this is through a Location Quotient (LQ) for employment. A LQ for employment measures the concentration of jobs in a region as a proportion of total employment and compares that proportion to its equivalent in the U.S. as a whole. Industries with an LQ greater than 1 are more concentrated in LA County than the U.S. as a whole, and industries with an LQ less than 1 are less concentrated than the U.S. as a whole. There are two types of industry clusters: Traded clusters and Local clusters. Traded clusters refer to industries that are wealth-generating, selling their products and services to markets beyond the region they reside in like Business Services, Apparel and Water Transportation. Traded clusters are often concentrated in locations that provide them with the most advantages. On the other hand, Local clusters are industries that serve their local population and exist regardless of a region's specific advantages like Local Health Services, Local Hospitality and Local Commercial.

# Figure 1: Critical Los Angeles County Industry Clusters

LA COUNTY CLUSTERS	EMPLOYMENT	AVERAGE WAGE	LOCATION QUOTIENT (LQ)
Video Production & Distribution	150,098	\$127,596	12.3
Apparel	22635	\$56,659	6.5
Performing Arts	42092	\$228,538	3.9
Aerospace Vehicles & Defense	57076	\$136,473	3
Water Transportation	17573	\$139,266	1.9
Marketing Design & Publishing	70376	\$141,934	1.6
Transportation & Logistics	79852	\$89,466	1.4
I.T. & Analytical Instruments	34748	\$151,896	0.7
Biopharmaceuticals	8476	\$88,738	0.8

Source: LAEDC Institute of Applied Economics

#### Identification of Potential Growth Clusters

As of 2022, LA County's most competitive Traded industry clusters are in Video Production and Distribution (LQ = 12.3), Music and Sound Recording (7.0), Apparel (6.5), Performing Arts (3.9) and Aerospace Vehicles and Defense (3.0). These 5 are followed by Water Transportation (1.9), Marketing, Design and Publishing (1.6), Transportation and Logistics (1.4), Communications Equipment and Services (1.3), Textile Manufacturing (1.2) and Education and Knowledge Creation (1.1). Clusters where LA County has room to increase it's competitiveness are Distribution and Electronic Commerce (0.9), Medical Devices (0.9), Hospitality and Tourism (0.8), Food Processing and Manufacturing (0.8), Biopharmaceuticals (0.8), Information Technology and Analytical Instruments (0.7) and Financial Services (0.7). It is important to note that in the last year significant labor movements such as the Hollywood Guilds Strikes have affected the landscape of LA County's economy and thus some of the data may be skewed. We may be able to supplement the data in order to account for these events.

#### In-Depth Analysis of Potential Growth Clusters

Certain industries like Hospitality and Tourism, Water Transportation, Transportation and Logistics and Distribution and Electronic Commerce have not yet reached their pre-pandemic levels of employment. Other industries like Financial Services, Apparel and Textile Manufacturing were on the decline even before the pandemic began and have continued this trend into 2022. As CJF is focused primarily on providing career opportunities that pay a living wage[1], we can focus on trends in industries where LA County has a competitive advantage, and whose average wage exceeds \$66,750. Primarily these potential growth industries include the wealth-generating Traded clusters such as Video Production and Distribution, Education and Knowledge Creation, Transportation and Logistics, Marketing, Design and Publishing, Aerospace Vehicles and Defense, Performing Arts, Water Transportation and Communications Equipment and Services.

The Video Production and Distribution, Performing Arts and Music and Sound Recording clusters are closely related. LA County has 38% of jobs nationally in Video Production and Distribution and with similarly strong LQs in the other similar clusters LA County is one of the world's entertainment powerhouses. Within these general entertainment clusters Independent Artists, Writers and Performers have the highest annual wage at nearly \$360,000 per year, but even the lower paid occupations like those in Teleproduction and Postproduction services make close to \$117,000 yearly. Though these entertainment industries saw heavy declines in 2020, they made some of the largest gains in 2021 and 2022. These industries are heavily concentrated in the LA City specifically in cities like Hollywood and Burbank.

Undeveloped land and temperate weather originally made the Los Angeles basin attractive for many industries which are now mainstays in the County's economy including Aerospace. During World War II, the Los Angeles Area produced nearly 300,000 airplanes and maintained a sizable share of nationwide employment in Aerospace for most of the remainder of the 20th century<sup>6</sup>. Nowadays the Aerospace Vehicles and Defense industry cluster pays a great wage at an average of \$136,473 and has a strong concentration in LA County with an LQ of 2.98. Employing nearly 60,000 residents of LA County in occupations ranging from Guided Missile and Space Vehicle Manufacturing to Aircraft Engine and Parts Manufacturing, the Aerospace Industry provides good careers with livable wages. While the industry has not returned to its peak 21st century employment in 2007 of roughly 65,000 employees, it maintained steady growth throughout the last 7 years. SPA 1 Antelope Valley, SPA 8 South Bay and SPA 7 East all have strong Aerospace presence.

#### **Potential Job Growth**

Nearly 86% of the jobs in the Video Production and Design Category are from the Motion Picture and Video Production Industry. The Motion Picture and Sound Recording Industries are projected to add over 4,000 jobs in the next four years. Transportation related industries are also going to see strong growth in the next few years. The Support Activities for Transportation, Truck Transportation, Air Transportation and Transit and Ground Passenger Transportation industries will combine to create 6,600 new jobs by 2027. A lot of the new jobs in transportation go along with policies and infrastructure

<sup>&</sup>lt;sup>6</sup> The History and Revival of Southern California's Aerospace Industry | Blue Sky Metropolis | PBS SoCal

spending from the government which is projected to create its own fair share of careers in construction such as the projected 2,000 new jobs in Heavy and Civil Engineering by 2027.

The new jobs in these industries could make use of the workforce assets LA County currently has. Approximately 28% of LA County residents have a bachelor's degree or more. As Beacon Economics identified in their SWOT Analysis, there is a slightly higher percentage of individuals with just a high school degree not participating in the labor force in the last 10 years. There is an opportunity for these individuals to be enrolled in workforce development programs in partnership with companies in these high growth clusters related to Transportation and Infrastructure. Beacon Economics references research that shows the most promising outcomes from workforce development are those in partnership with industry.

As the governments at state and federal level increasingly invest in infrastructure, and sustainable economic development in general, there is going to be demand for many new jobs. Bills like the Inflation Reduction Act and the Infrastructure Investment and Jobs Act will give California the ability to invest up to \$180 billion in clean infrastructure.<sup>7</sup> LA County has an opportunity to leverage its current advantages in the Transportation industry to its advantage. The Port of Los Angeles is the "#1 container port in Western Hemisphere for 23 consecutive years"<sup>8</sup>. In addition, the Port of Long Beach is "the nation's leading export seaport)<sup>9</sup>. Both of these ports are attempting to reduce their emissions and by preparing them with a strong workforce, their current advantages will put them in a prime position, and thus LA County as a whole, to benefit.

#### Major Sources of GHG Emissions

In California, nearly 39% of total Greenhouse Gas emissions come from the transportation sector. Senate Bill 1, the Road Repair and Accountability Act of 2017, is a legislative package investing an average of \$5.4 billion annually " to rebuild California by fixing roads, freeways, and bridges in communities"[2]. Thus far, 14,856 miles of pavement

<sup>&</sup>lt;sup>7</sup> <u>Governor Newsom Unveils New Proposals to Build California's Clean Future, Faster | California</u> <u>Governor</u>

<sup>&</sup>lt;sup>8</sup> Facts and Figures | Statistics | Port of Los Angeles

<sup>&</sup>lt;sup>9</sup> Port of Long Beach Closes 2022 with Second-Busiest Year - Port of Long Beach (polb.com)

have been rehabilitated, 1,512 bridges have been repaired, and 619 transportation management systems have been rehabilitated through SB 1 funding. One benefactor of the improvements to our transportation systems is the Transportation industry. By increasing the quality of our transportation systems logistical delays can be shortened thereby reducing Greenhouse Gas emissions from vehicles goods are transported in. The transportation industry in LA 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[3]. 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 LA County transportation industry, more sustainable[4]. 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"[5]. 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 LA 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. As the manufacturing industry 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.[6] 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%.

#### LA County Innovation Ecosystem

A recently published report from McKinsey & Company asks the question "How can LA create a business environment that supports the growth and retention of both small and large businesses?". In response, the report argues that partnerships between industry and entrepreneurs "could ensure that LA's future generations have access to pathways to employment in high-demand fields"[7].

One industry cluster that has been identified as a breeding ground for innovation is the Biosciences (including the Biopharmaceuticals and Medical Devices industries). 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, LA County can capitalize on clusters they are already competitive in to gain a regional advantage and provide its residents with high-road careers.

[1] Living wage is considered an income that is above the threshold for low income set by the Department of Housing and Urban Development (HUD). Specifically, in 2022 for a single-person household in LA County this is any income over \$66,750.

[2] The History and Revival of Southern California's Aerospace Industry | Blue Sky Metropolis | PBS SoCal [3] Overview | Rebuilding CA

[3] Our Zero Emissions Future - Port of Long Beach (polb.com)

[4] Mission & Vision - Port of Long Beach (polb.com)

[5] 2017-CAAP-Draft-Discussion-Document (portoflosangeles.org)

[6] Manufacturing Sector: Capital Intensity (MPU9900082) | FRED | St. Louis Fed (stlouisfed.org)

[7] LA's opportunity for inclusive economic growth | McKinsey

## **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.

# CALIFORNIA JOBS FIRST

Los Angeles Region High Road Transition Collaborative: Economic Analysis and S.W.O.T. of Los Angeles County

December 2023

BEACON

ECONOMICS

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## Executive Summary

SUMMARY

Los Angeles County is vast. It has the largest economy of any county in the United States.<sup>1</sup> At \$790 billion annually its economy would be the 20<sup>th</sup> largest if it were its own country, ranking between Poland and Switzerland.<sup>2</sup> It's also the most populous county in the United States, almost double the second most populated county.<sup>3</sup>

It is diverse as well, both economically and demographically. No one industry dominates Los Angeles County's economy. It is famously home to movie production and creative industries, but it also has manufacturing, logistics, healthcare, technology, and many other industries. Hispanics represent a plurality of the population (49%) but not a majority, and Asians, Blacks, and Whites each represent sizable portions of the population.

This report was commissioned by California Jobs First Los Angeles High Road Transition Collaborative to provide a broad overview of the economic, social and environmental conditions across Los Angeles County. It utilizes a "S.W.O.T." framework – Strengths, Weaknesses, Opportunities, and Threats – to provide strategic information for future economic development efforts. The research covers an array of topics from employment issues, to housing policy, to L.A. Industries, to the environment, to the green economy. Given the short research timeline, it aims to present key metrics on a wide array of economic development issues that are important to improving the lives of Angelinos, rather than deep analysis of any one specific topic.

The study has two primary analysis lenses – equity and sustainability. The report first addresses important equity issues, such as income disparity, job opportunities, poverty, labor supply, and economic mobility. Next, it provides analysis on sustainability. It offers findings about climate change issues such as wildfires, man-made environmental concerns such as pollution, and the green economy in Los Angeles.

### How To Read This Report

The purpose of this report is to provide a broad overview of the economy and living conditions in L.A. County – its strengths, weaknesses, opportunities, and threats. It is not intended to focus on a particular issue, nor build a certain argument. Rather, it was written to serve as a reference document, providing high-level metrics on all economic, social, and environmental issues that are relevant to the County's economic development. Accordingly, it is not necessary to read the report end-to-end, or read the sections in order.

Further this report was researched, written, and designed in just eight weeks. A significant amount of data is presented, but there is certainly opportunity for deeper analysis on several of these topics. A longer, more thorough study could be useful in estimating the driving factors of key economic and social outcomes identified.

This report does include sections called "Digging Deeper", where we conduct explanatory modeling for labor participation rates and shifts in housing dynamics. There are also three case studies, and a "Spotlight" section on American Indian/Alaskan Natives, which provide further details on specific topics. Last, the Policy Recommendation section provides strategic direction and actionable programs to address some of the key economic weaknesses and threats identified in the research.

The report was informed by in-depth interviews held with subject matter experts and members of local communities. These interviews provided diverse, knowledgeable, and grounded perspectives.

### 1 https://www.bea.gov/sites/default/files/2023-12/lagdp1223.pdf

New York City is split into five Boroughs, or Counties. All together these five countries have a larger economy, at \$1.05T, but no single County is larger.

- 2 <u>https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most\_recent\_value\_desc=true&year\_high\_desc=true</u>
- 3 https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html

### Los Angeles County Summary SWOT Findings

Overall, Los Angeles County's economy experienced robust growth over the last several years and made substantial improvements. The economy grew 9.6% in real terms from 2017, and Angelenos across the income spectrum benefited. The poverty rate declined from 23% in 2017 to 16.6% in 2022, which means more than 630,000 residents rose above the federal poverty level. Moreover, wage growth has been strong across all income and education levels since the pandemic.

However, these improvements are largely true in most metro areas in the South and Southwest. A significant part of Los Angeles' success is due to wider macroeconomic trends across the United States, as the national economy steadily recovered from the great recession. Actually, many of Los Angeles County's peer metro areas outperformed L.A. over the last decade. For example, L.A. County's current unemployment rate is very low at 5.6%, but is still higher than the metro areas of Phoenix, Atlanta, Dallas, and Houston, which have unemployment rates around 4%. These other areas are seeing faster economic growth and growing populations.

Why is Los Angeles County's population declining and its progress slower than other large metros? There are many interrelated reasons, but a primary factor is a lack of available labor, or rather, lack of qualified labor supply. There is sufficient labor demand in Los Angeles, as evidenced by a high number of job postings and job openings. However, many of these jobs are not being filled because of employment barriers. There are three employment barriers apparent in the data – a lack of education and skills in the workforce, exorbitantly high housing costs, and insufficient childcare options.

First, L.A.'s job market increasingly requires higher levels of education, yet Angelinos have less education on average than other comparable metros. 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; now it's 48%. This is increasingly true in the green economy as well. A full 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.

Another employment barrier is housing costs. As of November 2023, the County has the 4<sup>th</sup> 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. 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. Also, high housing costs make it more expensive to move within the County, meaning many workers can't relocate to areas that offer them more economic opportunity.

Last, affordable and accessible childcare is important for both parents and children. According to the U.S. Department of Labor,<sup>4</sup> average childcare costs for pre-school-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. Many studies have shown that a reduction in the price of childcare leads to an increase in maternal employment.<sup>5</sup> While CalWORKS and other social benefits programs offer support, far fewer families enroll than are actually eligible because of application challenges and a lack of eligibility understanding.

<sup>4 &</sup>lt;u>https://www.dol.gov/agencies/wb/topics/childcare/median-family-income-by-age-care-setting</u>

<sup>5</sup> Morrissey, Taryn W. "Child care and parent labor force participation: a review of the research literature." *Review of Economics of the Household* 15, no. 1 (2017): 1-24.

Reducing these barriers and helping to connect employees to employers would help families in Los Angeles, as well as businesses. This report includes a specific analysis on the occupations and industries that are strengths, weaknesses, opportunities, or threats, for each region in the County. The largest share of employed Los Angeles County residents work in Management, Business, Science, and Arts occupations. The share of L.A. County residents in these occupations grew by 4.3 percentage points to 41.3% from 2017 to 2022. This reflects the integral role that high-skilled labor plays in the Los Angeles County economy. Many of the occupations in this category require workers to perform cognitive non-routine tasks that cannot be easily automated. 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 occupation.

### Service Planning Areas:

In order to provide sub-county analysis, the L.A. High Road Transition Collaborative decided to use the County's eight Service Planning Areas (SPAs) as the key unit of analysis. SPAs were created by Los Angeles County to help the County administer government services across the expansive and heavily populated region.

The South SPA, which encompasses 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. The South SPA is split into these two regions because it has a high poverty rate, so is of particular interest, and the eastern and western halves have different demographic profiles.

### Figure 1: Los Angeles Service Planning Areas

SPA 1 - Antelope Valley	SPA 4 - Metro	SPA 6 - SouthEast	SPA 7 - East
SPA 2 - San Fernando	SPA 5 - West	SPA 6 - SouthWest	SPA 8 - South Bay
SPA 3 - San Gabriel			



### Table 1: 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	9722000	52%	\$82,500	16.6%	5.8%	6.3	27.0%	6.3%
SPA 1 – Antelope Valley	463000	76%	\$85.00	11.5%	7.8%	4.0	29.9%	5.8%
SPA 2 – San Fernando	1930000	42%	\$81,650	13.2%	5.9%	6.2	25%%	5.7%
SPA 3 – San Gabriel	1679000	34%	\$85,000	11.4%	4.3%	6.4	28.7%	6.3%
SPA 4 – Metro	1106000	70%	\$69,800	16.6%	6.6%	6.8	23.1%	6.6%
SPA 5 – West	757000	8%	\$113,000	9.5%	5.6%	6.0	26.0%	10.7%
SPA 6 – South-East	700000	99%	\$58,000	22.1%	7.9%	7.2	30.3%	4.1%
SPA 6 – South-West	451000	91%	\$53,000	22.4%	7.9%	6.2	24.1%	4.8%
SPA 7 – East	1138000	62%	\$77,300	12.5%	4.9%	6.8	29.7%	5.2%
SPA 8 – South Bay	1498000	52%	\$83,000	11.5%	4.9%	6.3	28.0%	6.7%

### **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.

In total, these four criteria offer a broad definition, and 52% of the County's population is considered disinvested for one reason or another. As the table above shows, the percent of the population that is disinvested in each SPA ranges dramatically. Only 8% of the population is disinvested in the West SPA, whereas 99% of the population is disinvested in the South-East SPA. The following map depicts each disinvested census tract in red, illustrating that most of the disinvested areas are in the South-East, South-West, Metro, and Antelope Valley SPAs.

### Figure 2: 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. Most disinvested areas do not meet all four criteria. In fact, Lancaster City is the only city that meets all them. 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 conclusion, Los Angeles County's economy has exhibited robust growth and notable improvements, such as its commendable reduction in the poverty, lifting several hundred thousand residents above the federal poverty level. Despite these strengths, the region faces substantial weaknesses, evident it is declining population and sluggish growth in comparison to other cities. 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.

# EXECUTIVE SUMMARY

### Introduction: Los Angeles County



In the expansive economic landscape of Los Angeles County, there are a myriad of opportunities and challenges that unfold across its vast landscape. This report starts with a broad overview of Los Angeles County as a whole, before subsequently diving into the sub-county regions. This analysis of the Los Angeles County economy highlights its strengths as well as persistent weaknesses that undermine opportunities for equitable and sustainable growth.

The County's economy has seen marked improvements over the past decade. Even so, much more could be done to improve the quality of life for residents. To help us differentiate national trends from local trends, we compare Los Angeles County to peer metropolitan areas in this section – Houston, Dallas, Atlanta, Phoenix, and Chicago.

In general, we find that wages grew considerably across all income groups over the last ten years, and outpaced inflation. However, workers with higher level of education saw faster wage growth than those with lower levels of education. This suggests that upskilling could help workers obtain needed employment. Unemployment is historically low, around 5.9%, however it is higher compared to other cities who have unemployment rates around 4%. Labor participation is lower in LA than other cities, and this is especially true for mothers with children.

Moreover, high housing costs continue to be a burden on LA families. In addition to the financial expense, high prices make it costly to move to new housing. This means many families are physically stuck where they are and cannot afford to relocate closer to good employment opportunities. Housing costs are high because of a lack of supply. L.A. County added fewer new houses than all peer metropolitan areas, both in absolute terms and percentage terms. This also explains why the county has a declining population.

### Median Household Income and Per Capita Income

One of the greatest strengths exhibited by Los Angeles County over the past 10 years is the robust 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 couple of years (27.5% since 2012), but the rate of growth of incomes was still high enough for real incomes increased overall.





### Table 2: 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

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 increasing incomes in the county.

Accounting for inflation, the growth in real incomes (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. 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.

### Table 3: 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

Wages account for around 75% of income for the average Los Angeles County household, so it is worth examining which residents are seeing the highest wage increase. 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.

### Labor Force Participation and Unemployment

The unemployment rate in Los Angeles County was 5.8% in 2022, half the 2012 figure (11.6%) when the county economy still faced fallout from the Great Recession. Although L.A. County labor markets have recovered from the past two recessions, that recovery has not been as robust as certain comparable markets. The Dallas and Phoenix metropolitan areas both had unemployment rates of around 3.8% in 2022, while the Atlanta MSA had a 4.0% unemployment rate. The Houston metropolitan area unemployment rate was closest to L.A. County but was still 0.8 percentage points lower in 2022.

### Table 4: Los Angeles County Unemployment and Labor Force Participation Rates

Variable	2012	2017	2022
Unemployment Rate	11.6	6.0	5.8
Labor Force Participation Rate	64.6	64.5	65.0

Source: American Community Survey. Analysis by Beacon Economics

L.A. 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%. Understanding why labor force participation is relatively low in Los Angeles County is of paramount importance for improving workforce development in the county.

Millions of federal and state dollars have been invested in Los Angeles County for workforce development through local community colleges, regional occupation 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.

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 5: Los Angeles County Unemployment by Age (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

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. The prime-age labor participation rates align more closely with the metropolitan areas mentioned above.

Age	Total Labor Force Participation Rate (%)	Male Labor Force Participation Rate (%)	Female Labor Force Participation Rate (%)
Under 25	52.8	52.7	53.0
25 to 34	84.3	87.7	80.8
35 to 44	83.7	89.5	77.7
45 to 54	81.5	88.4	74.4
55 to 64	67.8	74.8	60.9
Over 65	20.7	26.4	16.3

### Table 6: Los Angeles County Labor Force Participation by Age (2022)

Source: American Community Survey. Analysis by Beacon Economics



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.

### Table 7: 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

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 that saw declines in labor force participation rates from 2017 to 2022 was Dallas, for those who did not complete high school.

### Table 8: 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

There are many reasons to be optimistic about the Los Angeles County labor market. Still, the data above demonstrates that some groups might not be reaping the rewards of a strong labor market. Promoting targeted workforce development efforts will help address some of the issues that may undermine the health of the Los Angeles County economy.

### **Digging Deeper: Labor Force Dynamics in Los Angeles**

This report presents deeper levels of analysis on certain key issues. Here we present additional analysis on who is working on Los Angeles, and who is not. We analyze the labor force participation rate for various groups and apply empirical modeling techniques to allow us to control for, and compare, different population characterisitcs. For example, we analyze how much someone's gender, age, and household makeup affect the likelihood that they are in the workforce, in order to understand barriers to working. To start, there are some notable demographics shifts. The county's population is aging, and the number of births is at a multi-decade low. 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.<sup>1</sup> 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 and the California Department of Finance currently projects that persons 50 and older will comprise 49% of Angelenos by 2060.

### Figure 3: Age Distribution in Los Angeles<sup>2</sup>



- 1 Due to top-coding in earlier years, we truncate the population to make the estimates more comparable across time.
- 2 Excludes persons 90 and older

The shift in the age composition has significant implications for the Los Angeles County labor market and the labor force participation rate. The participation rate was previously highest among the most educated Angelenos, but they saw the largest declines between 1990 and 2022.





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

Part of the decline is structural. Los Angeles had a large manufacturing base that began to dwindle in the 90s, which explains a large part of the drop between 1990 and 2000 of those with less than a highschool education, but aging is one of the largest contributors to the overall decline across groups.

Figure 5: Los angeles County Labor Force Participation Rate by Age



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

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. The teenage rate has also declined markedly over the years, but the labor force participation for persons in their 20s has remained fairly consistent since the 1990s.

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.

### Figure 6: Los Angeles County Labor Force Participation Rate<sup>3</sup>



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

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 of Los Angeles are foreign-born.

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.

As it stands, there is still a segment of the population that is prime-aged and not participating in the labor force or attending college. Of the nearly 72,000 Angelenos that fit this description, roughly 39% have either never worked or last worked more than five years ago. The average age among this group is 33. Females comprise nearly 65% of prime-aged persons not in the labor force, and almost half are Hispanic.

To better understand the labor force dynamics in Los Angeles County, we look at a set of "choice models" to understand the factors that affect an individual's choice to participate in the labor force. Labor force participation is modeled as a binary variable that is a function of nativity, age, educational attainment, marital status, and other factors that influence an individual's choice to participate in the labor force. We fit a set of logit models by gender using

microdata from the Census for the County of Los Angeles. The data reflects the adult population from ages 25 to 64 and is weighted using probability weights with successive difference replication (SDR) estimation used for the standard errors. In non-technical terms, the models are estimated appropriately based on the structure of the survey.

The table below shows the difference between the segments of men, women, and the overall population. We interpret the sign, but not the magnitude of the coefficients. The direction tells us whether or not the outcome of labor force participation is more or less likely while holding the effect of other factors constant. The table also tells us which factors are statistically significant in influencing labor force participation.

Nativity doesn't appear to affect an individual's participation in the labor force in totality. However, there are noticeable differences between males and females. Foreign-born females are less likely to participate in the labor force, the opposite is true for men: foreign-born males are more likely to participate in the labor force than comparable (i.e., similar attributes) natives. The results also show how marital status and number of children affect labor force participation, which has important implications for childcare policy. We statistically "interact" the number of children someone has with their marital status and in doing so, allow the effect of children to differ between married and single persons with children.

We find that marital status is an insignificant predictor for labor force participation among men, but that women are less likely to participate in the labor force. The presence of children in a household has a significant and negative impact on women's participation in the labor force. These findings suggest that single women have no choice but to work, whereas married women can more easily opt out of the labor force.



### Table 9: Adult Labor Force Participation Rate Los Angeles County (2022)

	Male	Female	Total		Male	Female	Total
Foreign Born	0.290***	-0.144***	-0.00264	Married x # Kids	0.0584	-0.122***	-0.0422
	[0.0576]	[0.0411]	[0.0332]		[0.0749]	[0.0327]	[0.0302]
35 to 44	-0.0388	0.223***	0.113*	Non-English	-0.111	-0.134**	-0.0990*
	[0.0773]	[0.0585]	[0.0467]		[0.0681]	[0.0515]	[0.0413]
45 to 54	-0.118	0.0689	0.0223	Asian	-0.218*	0.236***	-0.00158
	[0.0777]	[0.0573]	[0.0496]		[0.0887]	[0.0612]	[0.0526]
55 to 64	-0.932***	-0.582***	-0.654***	Black	-0.250**	-0.108	-0.174**
	[0.0715]	[0.0596]	[0.0466]		[0.0921]	[0.0747]	[0.0602]
HS Graduate	-0.909***	-1.048***	-0.921***	Hispanic	0.465***	0.249***	0.293***
	[0.0755]	[0.0621]	[0.0478]		[0.0704]	[0.0558]	[0.0459]
Less HS	-1.179***	-1.479***	-1.242***	Other	-0.00550	0.00466	0.00216
	[0.0951]	[0.0593]	[0.0529]		[0.132]	[0.101]	[0.0833]
Some College	-0.441***	-0.538***	-0.480***	Disability	-1.836***	-1.117***	-1.424***
	[0.0755]	[0.0532]	[0.0434]		[0.0631]	[0.0496]	[0.0372]
# Kids	0.117*	-0.154***	-0.0861***	Constant	2.568***	2.366***	2.419***
	[0.0525]	[0.0295]	[0.0234]		[0.0650]	[0.0601]	[0.0418]
Married	0.441***	-0.524***	-0.134**	Ν	25422	27279	52701
	[0.0767]	[0.0430]	[0.0422]	χ2	1999.2	2396.7	3926.4

Standard errors in brackets

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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

Women with more children are less likely to participate in the labor force regardless of marital status. We present this result graphically below to make the interaction effect more interpretable than the regression table. As shown in the graphic below, married women have lower levels of participation regardless of the presence of children in the household, and the more children in the household, the greater the effect on married women relative to single women. The results are compared by age bucket, showing that labor force participation also declines with increases in age, which is an expected result.

### Figure 7: Predicted outcome of labor force participation by number of children for married and single women.

Not Married Married

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



The table below shows the labor participation rates for major groups in the dataset across the entire Los Angeles County population. As alluded to earlier, there is no significant difference between foreign and native-born populations' participation in the labor force, with both having a predicted probability of labor force participation of 81%. We do see some evidence of differ-

ences across age groups and present pairwise differences in the table below for the groups. 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 10: Selected Predictions of Labor Force Participation

	Pr(LF = 1)	S.E.	<b>[95% con</b>	f. interval]		Pr(LF = 1)	S.E.	[95% con	f. interval]
Nativity					Marital Status				
Foreign Born	0.808	0.003	0.802	0.814	Married	0.798	0.004	0.791	0.805
Native	0.809	0.003	0.803	0.814	Not Married	0.820	0.003	0.815	0.825
Ages					Races				
25 to 34	0.828	0.005	0.819	0.838	Asian	0.788	0.006	0.776	0.800
35 to 44	0.843	0.004	0.836	0.850	Black	0.761	0.010	0.742	0.781
45 to 54	0.831	0.004	0.824	0.839	Hispanic	0.829	0.003	0.823	0.834
55 to 64	0.726	0.004	0.717	0.734	Other	0.788	0.012	0.765	0.812
Education					White	0.788	0.005	0.778	0.798
Less HS	0.697	0.007	0.683	0.710	Disability Status				
HS Graduate	0.756	0.005	0.746	0.766	Disability	0.568	0.008	0.553	0.583
Some College	0.824	0.004	0.815	0.832	No Disability	0.833	0.002	0.829	0.837
Bachelor's +	0.880	0.003	0.874	0.886	Source: U.S. Census Burea	au; Analysis by Beaco	n Economics		

As a natural extension, we contrast the predicted outcome of labor force participation among the groups in our models. In the table above, someone with a bachelor's degree or higher has a probability of labor force participation of 88%, whereas a high school graduate has a 76% likelihood. The next table presents pairwise comparisons of all groups. The table below reflects the difference: HS Graduate vs Bachelor's + has a difference of -0.1240 (12.4 percentage points) and the difference is statistically significant. In some cases, the differences between groups are not meaningfully or statistically significant. All else constant, the predicted difference in the probability of labor force participation is not statistically significant between Asians and Whites, while the largest differences exist between the disabled and non-disabled cohorts.

### Table 11: Pairwise Comparisons of Labor Force Predictions

Age         Image         I		Delta	p-value	[95% con	f. interval]		Delta	p-value	<b>[95% con</b>	. interval
Age         Image         I	Nativity					Marital Status				
35 to 44 vs 25 to 34       0.0140       0.0170       0.0030       0.0260         45 to 54 vs 25 to 34       0.0030       0.6540       -0.0100       0.0160         55 to 64 vs 25 to 34       -0.030       0.0000       -0.1170       -0.0890         45 to 54 vs 25 to 34       -0.0100       0.0160       -0.0200       -0.0200         55 to 64 vs 25 to 34       -0.0100       0.0180       -0.0210       -0.0200         55 to 64 vs 35 to 44       -0.0170       0.0000       -0.1290       -0.0150         55 to 64 vs 45 to 54       -0.0600       0.0000       -0.170       -0.0940         Keduato vs Bachelor's +       -0.1240       0.0000       -0.1370       -0.1110         Less HS vs Bachelor's +       -0.0560       0.0000       -0.0400       0.0010       -0.0500         Some College vs Bachelor's +       -0.0590       0.0000       -0.0400       0.0010       -0.0500       -0.070       -0.0400         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810       White vs Hispanic       -0.0400       0.0000       -0.0550       0.002         Some College vs Less HS       0.1270       0.0000       0.0110       0.1430       White vs Other       0.0000       0.0250 </th <th>Native vs Foreign Born</th> <th>0.0000</th> <th>0.9360</th> <th>-0.0090</th> <th>0.0090</th> <th>Not Married vs Married</th> <th>0.0220</th> <th>0.0000</th> <th>0.0120</th> <th>0.0320</th>	Native vs Foreign Born	0.0000	0.9360	-0.0090	0.0090	Not Married vs Married	0.0220	0.0000	0.0120	0.0320
45 to 54 vs 25 to 34       0.0030       0.6540       -0.0100       0.0160         55 to 64 vs 25 to 34       -0.1030       0.0000       -0.1170       -0.0890         45 to 54 vs 35 to 44       -0.0110       0.0180       -0.0210       -0.0200         55 to 64 vs 35 to 44       -0.1170       0.0000       -0.1290       -0.1050         55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940         55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940         Education	Age					English Speaking				
S5 to 64 vs 25 to 34         -0.1030         0.0000         -0.1170         -0.0890         Black vs Asian         -0.0270         0.0210         -0.0490         -0.0070           45 to 54 vs 35 to 44         -0.1170         0.0000         -0.1290         -0.1050         Other vs Asian         0.0410         0.0000         0.0280         0.028           55 to 64 vs 45 to 54         -0.1170         0.0000         -0.1290         -0.0940         White vs Asian         0.0010         0.9670         -0.0260         0.028           6ducation	35 to 44 vs 25 to 34	0.0140	0.0170	0.0030	0.0260	Non-English vs English	-0.0140	0.0150	-0.0250	-0.003
55 to 64 vs 25 to 34       -0.1030       0.0000       -0.1170       -0.0890         45 to 54 vs 35 to 44       -0.0110       0.0180       -0.0210       -0.0020         55 to 64 vs 35 to 44       -0.1170       0.0000       -0.1290       -0.1050         55 to 64 vs 35 to 44       -0.1170       0.0000       -0.1290       -0.0940         55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940         Education       -0.1240       0.0000       -0.1370       -0.1100         HS Graduate vs Bachelor's +       -0.1240       0.0000       -0.1370       -0.1100         Some College vs Bachelor's +       -0.0560       0.0000       -0.0740       -0.0400       0.0010       -0.0550       -0.0020         Some College vs HS Graduate       0.0680       0.0000       -0.0740       -0.0400       0.0010       -0.0550       -0.0020         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810       White vs Hispanic       -0.0400       0.0000       -0.0530       -0.0250         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810       White vs Diashility vs Disability       0.2650       0.0000       0.2490       0.2490 </td <td>45 to 54 vs 25 to 34</td> <td>0.0030</td> <td>0.6540</td> <td>-0.0100</td> <td>0.0160</td> <td>Paces</td> <td></td> <td></td> <td></td> <td></td>	45 to 54 vs 25 to 34	0.0030	0.6540	-0.0100	0.0160	Paces				
45 to 54 vs 35 to 44       -0.0110       0.0180       -0.0210       -0.0020         55 to 64 vs 35 to 44       -0.1170       0.0000       -0.1290       -0.1050         55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940         cducation       -0.1240       -0.0000       -0.1370       -0.0110       Mhite vs Asian       0.0000       0.9760       -0.0260       0.001         tducation       -0.1240       0.0000       -0.1370       -0.1110       Mhite vs Asian       0.0070       0.0670       -0.0200       0.0670       -0.0020       0.0670       -0.0020       0.0670       -0.0020       0.0670       -0.0020       0.0670       -0.0020       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0070       0.00670       -0.0020       0.0070       0.00670       0.0000       0.0070       0.00670       -0.0020       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070       0.0070	55 to 64 vs 25 to 34	-0.1030	0.0000	-0.1170	-0.0890		-0.0270	0 0210	-0.0490	-0.004
55 to 64 vs 35 to 44       -0.1170       0.0000       -0.1290       -0.1050         55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940         Education       -0.1240       0.0000       -0.1370       -0.1100         HS Graduate vs Bachelor's +       -0.1830       0.0000       -0.1370       -0.1100         Some College vs Bachelor's +       -0.0560       0.0000       -0.0670       -0.0400       0.0010       0.0050       0.0020         Some College vs HS Graduate       0.0680       0.0000       -0.0740       -0.0400       0.0000       -0.0530       -0.0250       0.002         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810       White vs Hispanic       -0.0400       0.0000       -0.0530       -0.0250       0.002         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810       White vs Other       0.0000       0.9790       -0.0250       0.002         Some College vs Less HS       0.1270       0.0000       0.0110       0.1430       White vs Disability vs Disability       0.2650       0.0000       0.2490       0.2490         Ko Children       0.0120       0.0000       0.0200       0.0200       0.0210	45 to 54 vs 35 to 44	-0.0110	0.0180	-0.0210	-0.0020					0.0540
55 to 64 vs 45 to 54       -0.1060       0.0000       -0.1170       -0.0940       White vs Asian       0.0000       0.9760       -0.0150       0.0170         iducation       Hispanic vs Black       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0460       0.0670       0.0000       0.0000       0.0670       0.0000       0.0670       0.0010       0.0000       0.0000       0.0010       0.0050       0.000       0.0010       0.0050       0.0010       0.0050       0.0010       0.0050       0.0010       0.0050       0.0010       0.0050       0.0010       0.0050       0.0010       0.0050       0.0010       0.0010       0.0050       0.0010 <td< td=""><td>55 to 64 vs 35 to 44</td><td>-0.1170</td><td>0.0000</td><td>-0.1290</td><td>-0.1050</td><td></td><td></td><td></td><td></td><td>0.0270</td></td<>	55 to 64 vs 35 to 44	-0.1170	0.0000	-0.1290	-0.1050					0.0270
HS Graduate vs Bachelor's +       -0.1240       0.0000       -0.1370       -0.1110         Less HS vs Bachelor's +       -0.1830       0.0000       -0.2000       -0.1670         Some College vs Bachelor's +       -0.0560       0.0000       -0.0670       -0.0460         Less HS vs HS Graduate       -0.0590       0.0000       -0.0740       -0.0440         Some College vs HS Graduate       0.0680       0.0000       -0.0540       0.0810         Some College vs Less HS       0.1270       0.0000       0.0540       0.0810         Some College vs Less HS       0.1270       0.0000       0.0110       0.1430         # of Children       0.0270       0.0000       0.2490       0.2490         It       0.0150       0.0000       0.0200       0.0110	55 to 64 vs 45 to 54	-0.1060	0.0000	-0.1170	-0.0940					0.0160
Less HS vs Bachelor's +       -0.1830       0.0000       -0.2000       -0.1670       White vs Black       0.0270       0.0050       0.0080       0.0440         Some College vs Bachelor's +       -0.0590       0.0000       -0.0740       -0.0440       0.0110       -0.0530       -0.0	Education					Hispanic vs Black	0.0670	0.0000	0.0460	0.0890
Some College vs Bachelor's +       -0.0560       0.0000       -0.0670       -0.0400       0.0010       -0.0650       -0.0100         Less HS vs HS Graduate       -0.0590       0.0000       -0.0740       -0.0440       0.0000       -0.0530       -0.0250 </td <td>HS Graduate vs Bachelor's +</td> <td>-0.1240</td> <td>0.0000</td> <td>-0.1370</td> <td>-0.1110</td> <td>Other vs Black</td> <td>0.0270</td> <td>0.0670</td> <td>-0.0020</td> <td>0.0560</td>	HS Graduate vs Bachelor's +	-0.1240	0.0000	-0.1370	-0.1110	Other vs Black	0.0270	0.0670	-0.0020	0.0560
Less HS vs HS Graduate       -0.0590       0.0000       -0.0740       -0.0440         Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810         Some College vs Less HS       0.1270       0.0000       0.1110       0.1430         Jest of Children       0.0150       0.0000       0.0200       0.0110         Junction       0.0150       0.0000       0.0200       0.0110	Less HS vs Bachelor's +	-0.1830	0.0000	-0.2000	-0.1670	White vs Black	0.0270	0.0050	0.0080	0.0460
Some College vs HS Graduate       0.0680       0.0000       0.0540       0.0810         Some College vs Less HS       0.1270       0.0000       0.1110       0.1430         f of Children       0.0150       0.0000       0.0200       0.0110	Some College vs Bachelor's +	-0.0560	0.0000	-0.0670	-0.0460	Other vs Hispanic	-0.0400	0.0010	-0.0650	-0.016
Some College vs Less HS         0.1270         0.0000         0.1110         0.1430           # of Children         Disability Status         Disability vs Disability         0.2650         0.0000         0.2490         0.2800	Less HS vs HS Graduate	-0.0590	0.0000	-0.0740	-0.0440	White vs Hispanic	-0.0400	0.0000	-0.0530	-0.028
# of Children       0.0150       0.0000       0.0200       0.0110         1       0.0150       0.0000       0.0200       0.0110	Some College vs HS Graduate	0.0680	0.0000	0.0540	0.0810	White vs Other	0.0000	0.9790	-0.0250	0.0240
	Some College vs Less HS	0.1270	0.0000	0.1110	0.1430	Disability Status				
+1 -0.0150 0.0000 -0.0200 -0.0110 Source: U.S. Census Bureau; Analysis by Beacon Economics	# of Children					No Disability vs Disability	0.2650	0.0000	0.2490	0.2810
	+1	-0.0150	0.0000	-0.0200	-0.0110	Source: U.S. Census Bureau; Analysis by Beacon Economics				

Although the model estimates pertain to Los Angeles County, we extend the analysis to the Atlanta, Chicago, Dallas, Houston, and Phoenix metro areas in 2022. In general, the results are similar to Los Angeles County with some slight differences among the metro areas. Foreign-born individuals are less likely to participate in Houston, Dallas, and Atlanta, while nativity is not an important predictor of labor force participation in Phoenix or Chicago. Having a disability is a significant impediment to labor force participation across all metros. We also see significant differences among racial groups. In Atlanta and Chicago, Asians are less likely to participate in the labor force than whites, but there isn't a significant difference between whites and Asians in Dallas, Houston, or Phoenix.

### Table 12: Adult Labor Force Participation Rate by Metro Area (2022)

	Atlanta	Chicago	Dallas	Houston	Phoenix
Foreign Born	0.201**	-0.0914	-0.193**	-0.232***	-0.131
	[0.0714]	[0.0599]	[0.0653]	[0.0642]	[0.0762]
35 to 44	0.0741	0.150**	0.0737	0.155**	0.112
	[0.0593]	[0.0497]	[0.0517]	[0.0547]	[0.0666]
45 to 54	-0.0651	0.00941	0.0127	0.0191	0.0894
	[0.0589]	[0.0563]	[0.0462]	[0.0538]	[0.0625]
55 to 64	-0.945***	-0.825***	-0.801***	-0.672***	-0.872***
	[0.0492]	[0.0521]	[0.0522]	[0.0547]	[0.0667]
HS Graduate	-0.762***	-0.783***	-0.664***	-0.748***	-0.724***
	[0.0542]	[0.0453]	[0.0432]	[0.0494]	[0.0614]
Less HS	-1.261***	-1.202***	-0.990***	-0.955***	-1.122***
	[0.0883]	[0.0655]	[0.0551]	[0.0614]	[0.0759]
Some College	-0.454***	-0.359***	-0.246***	-0.341***	-0.407***
	[0.0490]	[0.0490]	[0.0462]	[0.0537]	[0.0555]
# Kids	0.0300	-0.125***	-0.120***	-0.132***	-0.0982*
	[0.0416]	[0.0329]	[0.0363]	[0.0321]	[0.0417]
Married	-0.112*	-0.0738	-0.121**	-0.156***	-0.260***
	[0.0502]	[0.0446]	[0.0422]	[0.0454]	[0.0492]
Married x # Kids	-0.175***	-0.0477	-0.0657	-0.0404	-0.0293
	[0.0412]	[0.0379]	[0.0430]	[0.0359]	[0.0478]

	Atlanta	Chicago	Dallas	Houston	Phoenix
Non-English	-0.0698	0.00375	0.00206	0.0189	-0.0442
	[0.0729]	[0.0607]	[0.0596]	[0.0590]	[0.0647]
Asian	-0.338***	-0.284***	-0.114	-0.0219	-0.0671
	[0.0917]	[0.0803]	[0.0711]	[0.0838]	[0.117]
Black	0.0583	-0.226***	0.111	0.130*	0.305**
	[0.0438]	[0.0558]	[0.0636]	[0.0602]	[0.117]
Hispanic	0.124	0.204***	0.219***	0.197**	0.0414
	[0.0812]	[0.0532]	[0.0564]	[0.0624]	[0.0495]
Other	-0.0726	-0.0249	0.0974	0.0684	0.0681
	[0.107]	[0.102]	[0.0945]	[0.120]	[0.0996]
Disability	-1.524***	-1.540***	-1.380***	-1.318***	-1.280***
	[0.0492]	[0.0401]	[0.0427]	[0.0535]	[0.0719]
Constant	2.577***	2.585***	2.480***	2.314***	2.517***
	[0.0529]	[0.0500]	[0.0506]	[0.0505]	[0.0700]
N	33230	42136	40317	31182	23047
χ2	3158.8	3186.0	2378.5	2320.4	1253.9

Standard errors in brackets

\* p<0.05, \*\* p<0.01, \*\*\*

p<0.001

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

### Understanding Earnings and Outcomes

To better understand earnings potential of different populations we estimate a set of regressions. We use the natural log of earnings for full-time year-round workers between the ages of 25 and 64 in the County of Los Angeles. College students are excluded. This exercise is more descriptive than causal, but it allows us to estimate the earnings differential across groups. For example, if we look at the raw earnings gap between males and females, we find that females earn around 10.2% less on average. However, if we control for other factors, then in 2022 we find the earnings gap between males and females increases to 16.3%, although as shown below the earnings differential between men and women has narrowed since 2012.



One interesting finding below is the difference in earnings for the self-employed. The earnings gap between self-employed and non-self-employed persons (e.g., government and private-sector workers) widened in 2022 but was previously not statistically significant in 2012 or 2017. The coefficient suggests that self-employed workers in Los Angeles County earned 9.9% less than their private and public-sector counterparts. We also estimated a set of separate models, interacting the effect of marriage on gender. Regardless of gender, married individuals tend to earn considerably more than non-married (i.e., single, divorced, or widowed) persons. The gap is particularly wide for married versus non-married men. It's possible that marriage itself is endogenous and that married men who have desirable traits for marriage and employment. Another explanation is that the employers discriminate in favor of married individuals, and married men in particular. Further research would need to be to explain this difference.

### Table 13: Los Angeles County Earnings Regression

	2012	2017	2022
Foreign Born	-0.229***	-0.180***	-0.147***
	[0.0118]	[0.0125]	[0.0107]
Not Married	-0.132***	-0.156***	-0.147***
	[0.00961]	[0.00934]	[0.00968]
Asian	-0.160***	-0.205***	-0.157***
	[0.0172]	[0.0195]	[0.0157]
Black	-0.234***	-0.299***	-0.279***
	[0.0212]	[0.0217]	[0.0248]
Hispanic	-0.235***	-0.309***	-0.271***
	[0.0118]	[0.0128]	[0.0151]
Other	-0.163***	-0.164***	-0.0644
	[0.0343]	[0.0322]	[0.0332]
Age	0.0796***	0.0716***	0.0598***
	[0.00364]	[0.00361]	[0.00353]
Age <sup>2</sup>	-0.000794***	-0.000691***	-0.000585***
	[0.0000409]	[0.0000402]	[0.0000399]

	2012	2017	2022
HS Graduate	-0.643***	-0.645***	-0.659***
	[0.0153]	[0.0137]	[0.0135]
Less HS	-0.896***	-0.845***	-0.842***
	[0.0182]	[0.0148]	[0.0165]
Some College	-0.407***	-0.408***	-0.442***
	[0.0126]	[0.00992]	[0.0126]
Female	-0.186***	-0.190***	-0.178***
	[0.00855]	[0.00766]	[0.00905]
Disability	-0.0849***	-0.0956***	-0.0809***
	[0.0247]	[0.0284]	[0.0243]
Self-Employed	-0.00461	-0.0334	-0.104**
	[0.0307]	[0.0333]	[0.0318]
Constant	9.603***	9.873***	10.31***
	[0.0766]	[0.0768]	[0.0762]
Observations	24196	27218	26977
R²	0.380	0.346	0.302
X <sup>2</sup>	12816.9	13511.7	9072.6

### Standard errors in brackets

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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

The estimates above might not have a simple interpretation because it's not intuitive to think in terms of logarithms and comparisons to reference categories. To make the results more digestible we compute the predicted (and exponentiated) earnings and then perform pairwise comparisons for the population while fixing everyone's education at a bachelor's degree or higher.

The average predicted difference in earnings between Asians and Blacks, both holding bachelor's degrees or higher and other factors constant, is roughly \$10,000 and statistically significant. However, the difference between Blacks and Hispanics is not statistically significant.

### Table 14: Pairwise Comparisons in Earnings for Bachelor's Degree (or Higher): Full-time year-round Workers in Los Angeles County

	Contrast	SE	[95% conf. interval]		
Black vs Asian	-9,997	2,201	-14,310	-5,684	
Hispanic vs Asian	-9,390	1,208	-11,757	-7,023	
Other vs Asian	8,486	3,072	2,465	14,507	
White vs Asian	14,849	1,498	11,913	17,784	
Hispanic vs Black	607	1,887	-3,091	4,305	
Other vs Black	18,483	3,485	11,652	25,313	
White vs Black	24,845	2,023	20,880	28,811	
Other vs Hispanic	17,876	3,150	11,701	24,051	
White vs Hispanic	24,238	1,380	21,533	26,944	
White vs Other	6,362	3,193	105	12,620	

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

In Table 3 reports the earnings regressions across our comparison metros using 2022 data. Interestingly, the gap between foreign-born and natives is widest in Los Angeles County and lowest in the Atlanta metro. The same is true for marital status. There are also significant racial disparities. The estimate for the earnings gap between whites and Asians in Los Angeles is statistically significant, but no significant difference is observed in Atlanta, Chicago, Dallas, or Phoenix.



### Table 15: Metro Earnings Regressions (2022)

	Atlanta	Chicago	Dallas	Houston	Phoenix
Foreign Born	-0.101***	-0.143***	-0.130***	-0.123***	-0.122***
	[0.0196]	[0.0153]	[0.0144]	[0.0145]	[0.0167]
Not Married	-0.102***	-0.136***	-0.161***	-0.123***	-0.112***
	[0.0120]	[0.0110]	[0.0114]	[0.0151]	[0.0137]
Asian	-0.0257	-0.0313	-0.0294	-0.0708**	-0.0371
	[0.0273]	[0.0238]	[0.0239]	[0.0257]	[0.0354]
Black	-0.206***	-0.219***	-0.211***	-0.231***	-0.191***
	[0.0159]	[0.0146]	[0.0178]	[0.0208]	[0.0303]
Hispanic	-0.161***	-0.157***	-0.156***	-0.212***	-0.169***
	[0.0214]	[0.0140]	[0.0148]	[0.0158]	[0.0181]
Other	-0.0129	-0.0559*	-0.0725**	-0.0297	-0.125***
	[0.0267]	[0.0281]	[0.0225]	[0.0330]	[0.0269]
Age	0.0642***	0.0624***	0.0605***	0.0639***	0.0631***
	[0.00446]	[0.00367]	[0.00422]	[0.00468]	[0.00568]
Age²	-0.000614***	-0.000608***	-0.000588***	-0.000620***	-0.000624***
	[0.0000511]	[0.0000412]	[0.0000478]	[0.0000546]	[0.0000635]
HS Graduate	-0.679***	-0.620***	-0.654***	-0.630***	-0.558***
	[0.0178]	[0.0166]	[0.0141]	[0.0167]	[0.0189]
Less HS	-0.794***	-0.790***	-0.861***	-0.848***	-0.666***
	[0.0271]	[0.0236]	[0.0204]	[0.0215]	[0.0234]
Some College	-0.465***	-0.474***	-0.469***	-0.460***	-0.388***
	[0.0150]	[0.0136]	[0.0152]	[0.0168]	[0.0161]
Female	-0.278***	-0.268***	-0.300***	-0.319***	-0.215***
	[0.0108]	[0.00795]	[0.00818]	[0.0119]	[0.0125]

	Atlanta	Chicago	Dallas	Houston	Phoenix
Disability	-0.115***	-0.146***	-0.136***	-0.148***	-0.0755**
	[0.0243]	[0.0227]	[0.0226]	[0.0243]	[0.0285]
Self-Employed	-0.163***	-0.0441	-0.0256	-0.0692	-0.0828*
	[0.0321]	[0.0274]	[0.0375]	[0.0430]	[0.0416]
Constant	10.05***	10.16***	10.21***	10.14***	10.03***
	[0.0935]	[0.0767]	[0.0903]	[0.0984]	[0.119]
Observations	19707	25057	24547	17541	13455
R <sup>2</sup>	0.282	0.284	0.315	0.315	0.244
X <sup>2</sup>	6078.1	6827.7	8269.0	6531.0	4038.9

Standard errors in brackets

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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

All the aforementioned earnings models are centered on averages, which may not be of particular interest, particularly in the context of earnings, which tend to be right-skewed. By estimating a set of quantile regressions (QR), we get a more complete picture of the conditional distribution of earnings. Quantiles and percentiles are interchangeable: the 90<sup>th</sup> percentile is the 90<sup>th</sup> quantile, and the 50<sup>th</sup> percentile corresponds to the median and is more robust to outliers as a measure of central tendency. The coefficients report the estimated difference in the natural log of earnings for a particular quantile between the reference group and the

comparison group. For example, the gap between Hispanics and whites is larger at higher incomes, all else being constant. In some cases, the differences in the estimates are similar across earnings quantiles, such as the marriage premium or differences in earnings between native and foreign-born persons. In other cases, such as self-employment, we see the earnings gap between self-employed persons and public and private sector workers is positive at higher ends of the distribution.

Put simply, the premium for self-employment is higher at the tail of the income distribution, after conditioning on other demographic controls. We leave the reader to interpret the remaining estimates.

### Table 16: Quantile Regression (QR) of Earnings for Los Angeles

	OLS	Q(0.10)	Q(0.25)	Q(0.50)	Q(0.75)	Q(0.90)
Foreign Born	-0.147***	-0.177***	-0.158***	-0.144***	-0.133***	-0.128***
	[0.0107]	[0.0210]	[0.0128]	[0.0118]	[0.0138]	[0.0173]
Not Married	-0.147***	-0.160***	-0.136***	-0.124***	-0.124***	-0.134***
	[0.00968]	[0.0184]	[0.0113]	[0.0105]	[0.0122]	[0.0160]
Asian	-0.157***	-0.139***	-0.146***	-0.129***	-0.170***	-0.192***
	[0.0157]	[0.0317]	[0.0198]	[0.0176]	[0.0192]	[0.0286]
Black	-0.279***	-0.227***	-0.207***	-0.262***	-0.327***	-0.304***
	[0.0248]	[0.0358]	[0.0317]	[0.0236]	[0.0324]	[0.0344]
Hispanic	-0.271***	-0.136***	-0.209***	-0.265***	-0.337***	-0.398***
	[0.0151]	[0.0266]	[0.0156]	[0.0144]	[0.0167]	[0.0250]
Other	-0.0644	-0.0573	-0.0439	-0.0722*	-0.0898*	-0.0217
	[0.0332]	[0.0671]	[0.0352]	[0.0349]	[0.0402]	[0.0462]
Age	0.0598***	0.0507***	0.0549***	0.0521***	0.0685***	0.0686***
	[0.00353]	[0.00672]	[0.00448]	[0.00381]	[0.00440]	[0.00549]
Age <sup>2</sup>	-0.000585***	-0.000530***	-0.000551***	-0.000500***	-0.000656***	-0.000650***
	[0.0000399]	[0.0000756]	[0.0000515]	[0.0000433]	[0.0000491]	[0.0000624]
HS Graduate	-0.659***	-0.514***	-0.600***	-0.659***	-0.674***	-0.736***
	[0.0135]	[0.0264]	[0.0152]	[0.0140]	[0.0170]	[0.0197]
Less HS	-0.842***	-0.644***	-0.751***	-0.844***	-0.940***	-0.965***
	[0.0165]	[0.0285]	[0.0185]	[0.0163]	[0.0194]	[0.0257]
Some College	-0.442***	-0.344***	-0.418***	-0.435***	-0.457***	-0.487***
	[0.0126]	[0.0228]	[0.0152]	[0.0143]	[0.0156]	[0.0217]
Female	-0.178***	-0.123***	-0.131***	-0.164***	-0.204***	-0.228***
	[0.00905]	[0.0173]	[0.0105]	[0.00975]	[0.0115]	[0.0149]

	OLS	Q(0.10)	Q(0.25)	Q(0.50)	Q(0.75)	Q(0.90)
Disability	-0.0809***	-0.129**	-0.0724*	-0.0735***	-0.0534	-0.0621*
	[0.0243]	[0.0437]	[0.0354]	[0.0213]	[0.0296]	[0.0254]
Self-Employed	-0.104**	-0.494***	-0.221***	-0.0621*	0.0861*	0.295***
	[0.0318]	[0.0703]	[0.0329]	[0.0300]	[0.0419]	[0.0502]
Constant	10.31***	9.745***	10.04***	10.46***	10.50***	10.89***
	[0.0762]	[0.145]	[0.0953]	[0.0814]	[0.0955]	[0.118]
N	26977	26977	26977	26977	26977	26977
Pseudo R <sup>2</sup>		0.0955	0.158	0.215	0.228	0.238

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

How does this fit together? As we've shown in preceding sections, women have much lower levels of labor force participation and the presence of children also has an impact on their ability to participate in the labor force, with a greater impact on married women. This is also a reason why women earn less. As Los Angeles continues to age, demand for health care will increase. 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.

Improving access to childcare is one policy that could benefit both women and the broader economy. One often-cited barrier to labor force participation is the cost of childcare, which has risen dramatically in the last couple of years. In Los Angeles County, the advertised wage for childcare job postings has increased by more than 15% over pre-pandemic levels. Many studies have shown that a reduction in the price of childcare leads to an increase in maternal employment, with a larger effect on lower-income families.<sup>4</sup> More often than not, families with young children are 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. And this choice has a larger impact on lower-income families of color. There are many benefits to improving access to childcare. Global studies have shown that having a working mother has economic, educational, and social benefits for children.<sup>5</sup> There is a large wealth of literature that consistently emphasizes the benefits associated with early education for children. Making childcare more accessible would benefit both women and the economy.

- 4 Morrissey, Taryn W. "Child care and parent labor force participation: a review of the research literature." Review of Economics of the Household 15, no. 1 (2017): 1-24.
- 5 McGinn, Kathleen L., Mayra Ruiz Castro, and Elizabeth Long Lingo. "Mums the word! Cross-national effects of maternal employment on gender inequalities at work and at home." (2015).

### **Income and Education**

Educational attainment seems to be highly correlated with Los Angeles County 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. Individuals 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 tended to be higher than in other comparable metro areas. However, median earnings for non-college graduates tend to be 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. High school graduate median earnings grew by an astounding 25.6% from 2017 to 2022.

### Table 17: Annual Earning Rates by Educational Attainment, 2022 (\$)

Educational Attainment	Los Angeles County	Atlanta (MSA)	Dallas – Fort Worth (MSA)	Houston (MSA)	Phoenix (MSA)
Less than High School Graduate	29,708	30,809	31,641	28,622	33,790
High School Graduate (includes Equivalency)	36,283	37,549	38,094	38,139	40,451
Some College or Associate Degree	44,512	45,463	47,523	45,751	48,252
Bachelor's Degree	69,000	68,731	71,309	66,873	66,198
Graduate or Professional Degree	92,256	85,485	89,769	90,799	80,256

### Source: American Community Survey. Analysis by Beacon Economics

This impressive wage growth for non-college graduates is partly driven by minimum wage ordinances enacted in certain Los Angeles County cities. Although this is good news for employees, there is still a need for balance between the educational requirements of jobs in the region and the educational attainment of its residents, especially as computer aptitude and advanced technology affect an increasing number of jobs.

To help further increase wages for residents with a high school diploma or less, workforce development programs must increase opportunities to earn certificates or participate in ap-

prenticeships in which mastery of skills specific to jobs in growing industries can be obtained without an associate degree. These programs should be linked to local hiring needs to enable participants to secure well-paying jobs. Upskilling will generate greater wage growth and workforce resilience than other measures.

It is reassuring that educational attainment is moving in the right direction in Los Angeles County. From 2017 to 2022, the share of the population aged 25 and older with a bachelor's or higher increased by 3.4 percentage points to 35.6%. The Los Angeles County labor market continues to demand employees with college degrees, creating a need for highly educated workers from the local area and beyond.

### Table 18: Educational Attainment Rates of Population Age 25 and Older, 2022

Educational Attainment	Los Angeles County	Atlanta – Sandy Springs – Roswell (MSA)	Dallas – Fort Worth – Arlington (MSA)	Houston- Pasadena- The Woodlands (MSA)	Phoenix – Mesa – Chandler (MSA)
Less than 9th Grade	11.8	3.6	6.2	8.5	4.9
9th to 10th Grade, No Diploma	7.6	4.9	6.0	6.3	5.7
High School Graduate (includes Equivalency)	20.5	23.3	21.6	22.8	23.1
Some College, No Degree	17.5	18.2	19.3	19.1	22.2
Associate Degree	6.9	8.2	7.5	7.2	9.3
Bachelor's Degree	22.7	25.4	25.0	22.6	22.0
Graduate or Professional Degree	12.9	16.4	14.4	13.4	12.9

Source: American Community Survey. Analysis by Beacon Economics

### **Occupations and Workforce Readiness**

The largest share of employed Los Angeles County residents work in Management, Business, Science, and Arts occupations. The share of L.A. County residents in these occupations grew by 4.3 percentage points to 41.3% from 2017 to 2022. This reflects the integral role that high-skilled labor plays in the Los Angeles County economy. Many of the occupations in this category require workers to perform cognitive non-routine tasks that cannot be easily automated. 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 occupation.

### Table 19: Los Angeles County Occupation Composition of Civilian Employed Population Age 16 and over

Occupation Type	2012	2017	2022
Management, Business, Science, and Arts	35.2	37.0	41.3
Sales and Office	24.9	23.5	20.1
Service	19.3	19.1	18.1
Production, Transportation, and Material Moving	12.9	12.7	12.9
Natural Resources, Construction, and Maintenance	7.7	7.7	7.6

Source: American Community Survey. Analysis by Beacon Economics

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 w Public Use Microdata age of \$20,979), customer service representatives (90,440 workers, with an average wage of \$40,059), 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, \$90,912), elementary and middle school teachers (average wage, \$64,427), and truck drivers (average wage, \$51,367).

### **Income Inequality and Poverty**

Based on the Gini coefficient, income inequality in Los Angeles increased from 2017 to 2022. This reversed a downward trend in income inequality prior to 2017.

Aside from increased income inequality, poverty is still problematic in Los Angeles County. Although improvements have been made, nearly 22% of residents without high school diplomas lived below the poverty line in 2022. This represents a six percentage point decrease from 2012. High school graduates have not fared as well, with only a two-percentage point decline since 2012.

### Table 20: Poverty by Educational Attainment, 2022 (Population Age 25 and Older)

Educational Attainment	Los Angeles County	Atlanta – Sandy Springs – Roswell (MSA)	Dallas – Fort Worth – Arlington (MSA)	Houston- Pasadena- The Woodlands (MSA)	Phoenix – Mesa – Chandler (MSA)
Less than High School Graduate	21.7%	20.0%	16.7%	23.3%	22.1%
High School Graduate (includes Equivalency)	15.1%	12.1%	12.3%	15.6%	12.8%
Some College or Associate Degree	11.2%	8.2%	7.5%	10.1%	8.1%
Bachelor's Degree or Higher	6.1%	4.2%	4.2%	4.7%	4.6%

### Source: American Community Survey. Analysis by Beacon Economics

One of the best long-term ways to alleviate poverty in L.A. County is via improved education and skill attainment. Only 6% of residents with a bachelor's degree or higher were living below the poverty line in 2022.

Continued private sector support for education, including on-site internships and job shadowing opportunities, will greatly benefit residents of Los Angeles County. Private sector involvement will help students move toward degrees that are valuable to firms and offer higher rates of return for students. Compared to other metropolitan areas, Los Angeles County has a higher rate of poverty for college graduates. One possible explanation for this is that some college graduates are earning degrees that do not offer a pathway to higher wages. Workforce development programs must focus on raising educational and skill attainment levels to help more residents reap the benefits of the prosperous Los Angeles economy.


#### Employment

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 fast-est-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.

#### Table 21: Los Angeles County Private-Sector Employment by Industry

Industry	Employment Q1-23	Growth Rate (Year-Over-Year)	Location Quotient Q1-23
Other Services.	156,353	7.8%	1.1
Leisure and Hospitality	531,795	7.1%	1.1
Education	114,116	6.7%	1.2
Health Care	760,963	1.8%	1.2
Prof, Sci, Tech, and Mgmt.	368,919	1.4%	0.9
Retail Trade	405,366	0.5%	0.9
Manufacturing	319,170	0.4%	0.8
Admin Support	276,266	-0.1%	1.0
NR/Construction	154,754	-0.7%	0.5
Fin. Svcs. and Real Estate	210,316	-1.2%	0.8
Wholesale Trade	198,156	-1.6%	1.1
Transport/Warehouse	211,904	-2.4%	1.0
Information	209,135	-7.8%	2.3
Total Private	3,917,212	1.2%	N/A

Source: BLS QCEW. Analysis by Beacon Economics

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 L.A. County earns 13.9% less than the average wholesale trade worker in the United States. Overall, relative wages in L.A. County tend to be positive, meaning the average L.A. County worker in most industries earns more than the average American worker in the same industry.

#### Table 22: Los Angeles County Private-Sector Wages by Industry

Industry	Average Wage Q1-23	Growth Rate (Year-Over-Year)	Relative Wage Q1-23
Information	154,442	6.1%	4.7%
Fin. Svcs. and Real Estate	133,998	-2.3%	10.6%
Prof, Sci, Tech, and Mgmt.	133,071	3.8%	4.6%
Manufacturing	94,066	12.1%	12.7%
Wholesale Trade	86,552	8.1%	-13.9%
NR/Construction	82,378	8.0%	6.6%
Transport/Warehouse	80,415	6.2%	15.7%
Education	72,828	7.3%	17.0%
Health Care	56,653	7.4%	-12.2%
Admin Support	56,433	5.8%	-1.2%
Other Svcs.	56,061	12.1%	3.3%
Leisure and Hospitality	55,909	7.7%	70.6%
Retail Trade	50,303	4.5%	19.2%
Total Private	79,760	5.1%	8.2%

Source: BLS QCEW. Analysis by Beacon Economics

## **Spotlight: Native American Jobs First**

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 (CJF) classifies California Native American Tribes as disinvested communities.

This section explores the current economic state of American Indians and Alaska Natives in Los Angeles County using data on American Indians and Alaska Natives (Al/AN) from the U.S. Census Bureau Public Use Micro Sample (PUMS). This population includes people who have origins in any of the original peoples of North, South, and Central America, who maintain tribal affiliation or community attachment. 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.



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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.

#### Table 23: 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
High School Graduate (Includes 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

Median earnings for American Indians and Alaska Natives were very close to the countywide median for non-college graduates. The discrepancy between American Indians and Alaska Natives and the rest of Los Angeles County is most pronounced among college graduates. 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 24: 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

It is essential to figure out what is driving this difference between an AI/AN college graduate and the rest of the college graduate population. One factor could be that AI/AN workers do not have the same job opportunities as other workers due to lower-quality social networks.

Exploring data on worker occupation reveals that, in Los Angeles County, American Indians, and Alaska Natives 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 American Indians and Alaska Natives earn an average wage of \$84,671. Of all American Indians and Alaska Natives 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, American Indians and Alaska Natives 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 Al/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. And again, American Indians and Alaska Natives earn less on average, coming in at over \$1,000 less annually in this case.

Not only do AI/AN individuals tend to have lower education and earnings, they also suffer from higher poverty rates. 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.

The U.S. Census Bureau PUMS data reveals that there are serious barriers to achieving equity for American Indians and Alaska Natives. Despite similar educational attainment and employment in similar occupations, American Indians and Alaska Natives still earn less, on average. This results in less economic mobility, a greater incidence of poverty, and a lower quality of life.

# Service Planning Area SWOT

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 level of Los Angeles County SPAs and in some cases at more granular levels such as census tracts. 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.

SWOT analysis was guided by economic and demographic data, and input from key stakeholders. Ultimately, the SWOT framework delivers insights into the current economic conditions across the diverse Los Angeles County economy which encompasses over 9.7 million people in 88 cities and nine SPAs. The major unit of subregional analysis will be Los Angeles' nine SPAs, created primarily for public health planning purposes.

#### Figure 8: Los Angeles Service Planning Areas

SPA 1 - Antelope Valley	SPA 4 - Metro	SPA 6 - SouthEast	SPA 7 - East
SPA 2 - San Fernando	SPA 5 - West	SPA 6 - SouthWest	SPA 8 - South Bay
SPA 3 - San Gabriel			



Los Angeles County; Analysis by Beacon Economics.

The map above shows that some L.A. County SPAs cover large areas containing diverse populations, as illustrated in the chart below. The Antelope Valley accounts for a large part of the county in terms of land, but is sparsely populated with only 253 people per square mile.



#### Figure 9: Total Population in Thousands by SPA, 2022

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

The South-West (SPA 6A) and South-East (SPA 6B) SPAs have small but dense populations. The South-West has 12,478 people per square mile, and the South-East SPA has 14,384 people per square mile, making it the county's most densely populated SPA, just ahead of the Metro SPA with 13,070 people per square mile.

Subregional data reveals that there are some clusters of Black and Hispanic populations, especially in the South-West, South-East, East, and Antelope Valley SPAs.



Figure 10: Percent of Population that is Black/Hispanic by SPA, 2022. Dashed Line Denotes Los Angeles County

This suggests that there may be some underlying factors, both historical and contemporary, that have led to racial segregation. Delving deeper into subregional demographic and economic data will bring to light some of the barriers that continue to cause inequality across Los Angeles.

We analyze these SPAs from an equity perspective, and apply two lenses of analysis to the SPA SWOT. First, we analyze SPAs based on their populations, and look at what types of communities live within each, and what challenges they face. Second, we look at the businesses and industries that are in each SPA, and how they differ across SPAs.

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

#### **Equity SWOT Analysis for SPA Communities**

The SWOT analysis begins by comparing the various SPAs in terms of income, education, housing, unemployment, labor force participation, and many other factors. These descriptive statistics help identify strengths, weaknesses, opportunities, and threats at the SPA level. In particular, the set of data that is examined in this section provides insights into household labor supply across various communities with a focus on strengths and barriers to inclusive economic development.

#### INCOME

The median (50<sup>th</sup> percentile) household income is lowest in the South-West SPA 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 25<sup>th</sup> percentile makes slightly over \$40,000 per year, the median household has an income in the \$75,000 to \$85,0000 bracket, and the 75<sup>th</sup> percentile jumps up to the \$130,000 to \$150,000 bracket.

### Table 25: 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	\$113,000
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



Over the past 10 years, real income per capita has grown across all SPAs, although the growth has been more robust in some than in others.



Figure 11: Real Income Per Capita (\$ 2022) by SPA

Source: U.S. Census Bureau and Bureau of Labor Statistics. Analysis by Beacon Economics

#### **Disadvantaged Households**

If a household's income is below 80% of the 2022 statewide median of \$88,200, they are considered "disadvantaged" households. In California, households making less than \$70,560 are classified as disadvantaged.

The Metro, South-East, and South-West SPAs tend to have the lowest incomes across the entire distribution, with 59% of households in both the South-East and South-West SPAs being disadvantaged.

The South-East SPA, which has 111,191 disadvantaged households, accounts for 7.2% of the disadvantaged households in the county. The average income for a disadvantaged household in the South-East SPA is \$33,656. 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 South-East SPA has a large share of people under 18 who are part of a disadvantaged household (56.3%). The only SPA with a higher rate is the South-West where 58.4% of people younger than 18 live in disadvantaged households. 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 is in a league of its own with only 15.1% of people under 18 living in a disadvantaged household.

This discrepancy between the South-West and South-East SPAs and all the other SPAs highlights some of the underlying inequities during residents' youth that can have negative ramifications for future economic outcomes. This is a major weakness in both the South-West and South-East SPAs that contributes to stagnant economic mobility (discussed below in the Economic Mobility section).

In the South-East SPA, 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%.

Other SPAs also have high levels of disadvantaged households. Over 50% of households in the Metro SPA are disadvantaged, ranking it third behind the South-East and South-West. Nearly 20% of the disadvantaged households in the county reside in the San Fernando SPA.

		Disadvantaged			Non-Disadvantaged		antaged
	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

#### Table 26: Disadvantaged Communities Household Statistics, 2022

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

A demographic consistent with disadvantaged households is persons who are not in the labor force. Although there are various reasons for not participating in the labor force (disability, retirement, and so on), there is concern in Los Angeles that some people of prime working age are not participating. In the South-West and South-East SPAs over 60% of those not in the labor force are part of a disadvantaged household. The Metro SPA surpasses both with 63% of persons not in the labor force being in disadvantaged households. About 50% of persons not in the labor force are part of disadvantaged households in San Fernando and San Gabriel. Of course, some people who are not participating in the labor force might have valid reasons and challenges that cannot be overcome. However, this data demonstrates that there is a clear opportunity to raise incomes in disadvantaged households by helping individuals overcome the barriers that keep them from working. This report finds that 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.

#### **INCOME INEQUALITY AND POVERTY**

The table below shows the great variety in the Gini coefficients and poverty levels for each SPA. The Gini coefficient is a measure of income inequality, where 0 is a perfectly equal society where everyone has the same amount of money, and 1 is a perfectly unequal society where one person has all the money.

Most of the SPAs have relatively low Gini coefficients compared to the U.S.'s overall Gini coefficient of 0.49 and the Gini coefficient in L.A. County which is 0.50. Still, the Metro SPA has the highest Gini coefficient at 0.54, followed by the West at 0.53. Interestingly, the Metro SPA has a much higher poverty rate (16.6%) than the West (9.5%). This suggests some households in the West SPA have extremely high incomes and many have moderately high incomes, but that not many are disadvantaged compared to the rest of the county.

The Metro SPA has many high-income households, but also many that are disadvantaged. This can create issues as some lower-income households can be priced out of certain neighbor-hoods due to the higher rents resulting from tighter housing markets and a more willingness to pay by the high-income households (threat).

There are also some potential benefits from greater interaction between high-income and low-income households. As mentioned in the Economic Mobility section, discussed below, research shows that greater interaction between students from low-income households and students from high-income households leads to greater economic mobility for the former.

#### Table 27: 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

People living in poverty are those with incomes below the Federal Poverty Level. In this measure, the size of the household is taken into account, so the exact amount varies based on how many people are in each household. Households living in poverty have much lower incomes than disadvantaged households. Income inequality and poverty continue to undermine the economic conditions of some SPAs.

The South-East and South-West SPAs have a high level of poverty, with both around 22%. Interestingly though, the South-West SPA has a much higher Gini coefficient than the South-East SPA. This suggests that income inequality is a growing threat in the South-West SPA. Recently, there has been growing concern that gentrification will affect South L.A. as high-income households are priced out of other communities. Communities like Windsor Hills have seen home prices increase at a fast pace, and there are fears that residents will be displaced if housing costs continue to rise.<sup>6</sup>

#### LABOR FORCE PARTICIPATION AND UNEMPLOYMENT

As discussed, increasing labor force participation is a clear opportunity in Los Angeles County. It is of paramount importance to identify factors – especially factors that can be overcome – that are keeping people out of the labor force. Some labor supply decisions by individuals and their households are impacted by their age which is related to key stages of life such as enrolling in college, having children, or retirement. The table below shows the current age distribution in 2022 and the change from 2012. In general, the share of young people has declined across all SPAs. Having a labor force that is too young or too old can present problems.

#### Table 28: Age Distribution Across Los Angeles County SPAs

	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
Less than 18	25.1	21.8	15.1	20.1	20.5	21.4	21.6	26.7	14.7
18 to 24	9.6	10.1	8.3	8.3	8.4	8.4	13.1	10.2	10.7
25 to 54	39.7	41.1	50.5	43.2	40.6	42.1	40.4	41.8	45.4
55 to 64	12.5	12.3	11.1	12.5	13.3	12.6	11.4	11.3	11.6
65+	13.2	14.7	15.0	15.7	17.2	15.5	13.4	10.1	17.6

				Ten-year cha	ange percentage poi	int change			
Less than 18	-3.91	-4.20	-3.82	-3.76	-2.06	-2.87	-2.40	-6.28	-0.67
18 to 24	-2.28	-1.65	-2.24	-1.20	-2.35	-1.32	-0.56	-1.64	-0.53
25 to 54	-0.60	0.25	1.41	-0.36	-1.04	-1.20	-1.30	1.25	-0.90
55 to 64	2.70	1.98	0.46	1.54	1.05	1.96	0.67	3.61	-0.78
65+	4.09	3.62	4.20	3.78	4.41	3.44	3.60	3.06	2.88

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

Broadly speaking, the average age of the Los Angeles County labor force has increased over the past ten years. All SPAs had an older workforce, on average, in 2022 compared to 2012. The South-East SPA led L.A. County with the average age of the labor force growing by 5.2% to 39.6. Antelope Valley, San Fernando, South Bay, and San Gabriel all saw the average age of their labor force grow by more than 3%, and all these SPAs have an average labor-force age of between 41 and 43.

## This result is underpinned by the overall aging of the L.A. County population. It is worth noting that some research has linked the aging population to lower labor force participation, lower worker productivity, and ultimately, lower economic growth.<sup>7</sup> Therefore, this is a threat to all SPAs.

<sup>7</sup> See for example, Maestas, Nicole, Kathleen J. Mullen, and David Powell, The Effect of Population Aging on Economic Growth, the Labor Force and Productivity. Santa Monica, CA: RAND Corporation, 2016. <a href="https://www.rand.org/pubs/working\_papers/WR1063-1.html">https://www.rand.org/pubs/working\_papers/WR1063-1.html</a>.

#### **Antelope Valley** San Fernando San Gabriel South Bay South-West South-East East Metro 40.57 39.45 41.00 41.29 40.94 37.61 2012 40.10 39.88 39.58 40.96 39.13 38.29 2013 41.26 39.89 41.00 41.66 2014 41.40 40.26 39.56 41.12 41.77 40.96 38.99 38.17 2015 41.74 40.52 39.68 41.31 42.04 41.32 39.53 38.64 40.12 41.80 41.60 41.23 40.38 38.76 2016 41.71 39.46 40.02 39.71 38.70 2017 41.72 40.36 41.80 41.87 41.80 2018 42.03 40.47 40.18 41.89 41.88 41.77 39.41 38.55

41.85

41.71

42.51

42.11

2.7%

42.57

42.44

42.48

42.80

3.7%

41.88

41.98

42.01

42.17

3.0%

#### Table 29: Average Age of Labor Force by SPA, 2012-2022

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

40.96

42.04

41.87

41.90

3.3%

2019 2020

2021

2022

8

**10-Year Growth** 

Population aging is influenced by many factors including fertility decisions, migration choices, and health care advancements.

40.60

40.60

41.51

41.40

3.3%

40.03

40.18

40.46

40.60

2.9%

One major challenge for the labor force in L.A. County is the increasing cost of living which is influencing people's fertility decisions. The high cost of raising a child affects the labor force in two ways: by decreasing the flow of new younger participants, and by influencing the choice of labor force participation of parents.

Although women's labor force participation has made great strides since the 1970s, in most areas of the United States men's labor force participation tends to be higher for the prime working age (25 to 54). This is true across all SPAs in Los Angeles County as of 2022. A major reason for this trend is that in households with children, it is often women who stay at home to raise them. This can be the best decision for many families, but the tradeoff is that a source of income for that household is lost. There is also a negative impact on society since this impacts the available labor force.

39.87

39.65

40.56

40.62

1.9%

West

41.84

42.45

42.49

41.87

42.07

42.32

42.35

42.11

41.89

43.16

42.32

1.2%

39.17

39.42

40.00

39.56

5.2%

One major weakness in Los Angeles County is that childcare access and costs often keep some prime-age workers from participating in the labor force. According to the Department of Labor,<sup>8</sup> L.A. 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. For many disadvantaged households these costs are too high.

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According to the table below, the highest labor force participation for women aged 25 to 54 occurs in the West SPA. One possible explanation for this is that women living in the West SPA have high earnings potential, so it makes sense for them to pay the childcare costs and continue to work. For many disadvantaged households with children, it makes more sense for a member of the household to forgo participating in the labor market because the income earned is less than the cost of childcare, and other costs associated with working.

#### Table 30: 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

The South-East and South-West SPAs have some of the lowest labor force participation rates for women (only Antelope Valley is lower). Childcare access and cost are obstacles that can be addressed so that women living in lower-income households can join the labor force. The slack in labor force participation by women is at the intersection of a weakness and an opportunity. This issue is currently negatively impacting lower-income households, but it is an issue that can be resolved. One solution is to subsidize workers so that they can pay for childcare. This could be done through grants or other measures.

Many childcare providers are paid directly by the state through reimbursement, although rates tend to be low. This is a threat to the L.A. County economy because the low reimbursement rates and resulting low wages are forcing a contraction in the childcare workforce. Interestingly, according to one childcare worker, there is a link between low reimbursement rates and historical racism that excluded childcare workers from federal labor protections.<sup>9</sup> Addressing this issue would allow L.A. County to develop a more inclusive workforce.

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.

Relatively high prime-age unemployment rates in the Antelope Valley, Metro, South-West, and South-East SPAs are cause for concern. For these SPAs, unemployment is a threat since unemployment leads to lower incomes and loss of skills which can affect future employment outcomes.

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	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
				Overall	Unemployment R	ate			
2012	11.3	11.0	13.3	11.0	10.6	10.3	15.3	15.2	10.3
2013	11.9	8.9	9.8	9.9	9.6	11.0	14.4	14.3	7.7
2014	10.9	8.5	8.1	8.6	8.0	9.5	11.3	11.0	7.7
2015	8.4	7.4	7.0	6.8	6.7	6.8	9.9	9.1	5.8
2016	7.3	6.6	6.4	6.3	6.0	5.9	8.1	8.3	5.9
2017	6.6	5.3	6.5	5.6	5.1	5.7	8.2	8.1	5.4
2018	6.0	5.2	5.9	5.8	5.2	4.8	6.9	7.9	5.1
2019	6.1	5.3	5.6	4.8	4.5	4.2	5.7	7.7	4.0
2020	8.5	7.3	10.7	9.4	7.9	9.1	10.4	9.8	9.5
2021	8.3	7.9	11.2	9.7	8.0	8.4	12.4	9.6	9.0
2022	7.8	4.9	6.6	5.9	4.3	4.9	7.9	7.9	5.6
				Prime Age (age	s 25-54) Unemploy	/ment Rate			
2012	10.3	9.0	11.6	9.3	9.1	8.4	13.1	12.4	9.8
2013	10.3	7.7	8.3	8.3	7.9	9.1	12.6	11.4	7.0
2014	10.0	6.8	6.7	7.0	6.6	8.0	9.5	9.2	7.3
2015	7.2	6.7	5.8	6.1	5.4	6.0	8.0	6.7	4.9
2016	7.1	5.5	5.5	5.5	4.7	4.8	7.3	6.9	5.2
2017	6.2	4.5	6.0	5.0	4.1	5.0	5.9	6.7	4.8
2018	5.1	4.1	5.7	4.8	4.3	4.3	5.7	6.4	4.4
2019	5.4	4.3	5.1	3.8	3.7	3.7	4.2	6.0	3.4
2020	7.4	6.3	9.8	8.9	6.5	8.9	9.1	7.1	8.0
2021	7.6	7.2	10.5	9.1	7.1	7.7	12.2	8.1	7.3
2022	7.0	4.1	6.5	5.1	3.9	4.6	6.7	6.5	5.0

#### Table 31: Unemployment Rate Across SPAs, 2012-2022

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

The relatively high prime-age unemployment rates in the Antelope Valley, Metro, South-West, and South-East SPAs are likely due to a skills gap between workers and employers. A major driver of a skills gap is the lack of educational attainment by workers.

#### **EDUCATIONAL ATTAINMENT**

The table below illustrates the share of residents in different educational brackets, and how these shares have changed from 2012 to 2022. The South-East has the lowest share of college graduates across SPAs and has increased by about 3.5 percentage points. Over 21% of residents 25 and older in the South-West SPA have a college degree, which is nearly six percentage points higher than in 2012. The trends represent an opportunity for residents of these two SPAs since educational attainment is essential for increasing skills and improving labor market outcomes. However, recent research has stressed the importance of addressing not just the skills gap, but also the opportunity gap which continues to affect workers with a low-income background<sup>10</sup>.

Most of the other SPAs also substantially improved their share of college graduates, so the opportunity for a better-educated workforce is widespread throughout the county. The Antelope Valley SPA is the exception with a disappointing 10-year change of less than two percentage points. Low educational attainment change in the Antelope Valley is a threat since education improves skills and worker resiliency.

#### Table 32: Educational Attainment for Residents Ages 25 and Older by SPA, 2022

	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
Less Than High School	18.86	26.68	19.66	17.03	17.65	15.41	30.08	40.22	4.89
High School Graduate	28.16	25.50	16.43	20.52	22.76	19.12	24.18	24.05	8.57
Some College	32.45	25.04	19.90	25.66	23.88	27.48	24.58	24.61	19.17
Bachelor's Degree	13.34	15.72	28.67	24.32	21.99	23.90	14.65	7.99	36.90
Grad./Prof. Degree	7.19	7.06	15.34	12.47	13.71	14.08	6.52	3.13	30.47
				Ten-Year perce	ntage point chan	ge			
Less Than High School	-2.72	-5.04	-6.56	-2.93	-2.58	-2.91	2.02	-4.75	0.04
				2.55	2.50	-2.91	-2.92	-4.75	-0.04
High School Graduate	3.05	2.58	-1.45	-1.04	1.80	-0.40	1.06	-4.75	-0.04
High School Graduate Some College	3.05 -2.06	2.58 -1.84							
Ū.			-1.45	-1.04	1.80	-0.40	1.06	-1.55	-1.67

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

10 https://www.brookings.edu/articles/the-labor-market-doesnt-have-a-skills-gap-it-has-an-opportunity-gap/

The next table provides information about the relationship between educational attainment, earnings, and unemployment rates for the various SPAs. As expected, higher educational attainment in general leads to higher earnings and lower unemployment rates. In all SPAs, higher educational attainment leads to higher earnings, which is a strength. In some cases, unemployment increases as education increases. The South Bay SPA has lower unemployment rates for people without a high school diploma than for people with some college. This type of result creates threats in some SPAs since some people are improving their education status but finding it no easier to get a job. The West SPA has a significant increase in unemployment for those with only some college or an associate degree. This is a weakness in the West SPA since it reflects a lack of job opportunities for middle-skill workers.

#### Table 33: Earnings and Unemployment by Educational Attainment, 2022

	Less than High School	High School Graduate	Some College	Bachelor's Degree	Grad./Prof. Degree High
		A	verage Earnings (25 and older	r)	
Antelope Valley	\$46,140	\$52,897	\$58,983	\$83,538	\$116,529
East	\$33,659	\$43,211	\$55,255	\$72,152	\$89,424
Metro	\$30,507	\$40,302	\$58,695	\$94,299	\$118,732
San Fernando	\$35,892	\$44,238	\$62,824	\$86,191	\$108,812
San Gabriel	\$34,871	\$45,200	\$58,108	\$81,551	\$120,721
South Bay	\$37,100	\$48,256	\$57,682	\$98,029	\$130,104
South-West	\$32,710	\$39,173	\$49,900	\$84,286	\$93,373
South-East	\$31,913	\$37,896	\$43,149	\$59,518	\$72,635
West	\$36,634	\$58,650	\$82,348	\$134,261	\$174,105
		Une	employment Rate (25 and old	er)	
Antelope Valley	8.3	7.2	6.8	4.5	2.6
East	4.6	4.2	4.3	3.1	1.0
Metro	6.2	7.1	8.1	5.8	3.9
San Fernando	6.3	6.3	4.8	5.1	3.9
San Gabriel	4.5	4.9	4.5	2.8	2.2
South Bay	4.4	5.0	5.2	4.0	3.2
South-West	5.9	7.2	6.5	6.1	4.4
South-East	6.5	5.0	8.0	6.7	2.9
West	4.1	4.8	10.2	4.5	2.7

These unemployment trends bring to light many strengths and weaknesses in the workforce across SPAs. Within SPAs, some groups fare better than others. To better understand some of the labor force participation and unemployment data discussed in this section it is useful to examine the types of occupational profiles of residents in each SPA.

#### **OCCUPATIONS**

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.

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. This represents a threat to various SPAs and those working as cashiers. The same holds true for retail salespeople, another common occupation.



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	
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, And Judges, Magistrates, And Other Judicial Workers			9						2
Maids And Housekeeping Cleaners			8				3		
Other Managers	2	5	1	2	2	1	10		1
Personal Care Aides	7	6	2	1	10	5	7	7	
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						

## Table 34: Top Ten Most Common Occupations in Each SPA, 2022 (Numbered by Rank)

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.

Another threat to this occupation is that it contributes negatively to the environment. However, trucks that run on clean energy are becoming more common so the threat may reduce over time.

Besides the license, there is no further education required for truck driving, so this occupation provides an opportunity for workers who do not have high educational attainment and who might face significant barriers to achieving it.

Other manager is an occupation that makes the top 10 for all SPAs except the South-East. This occupation provides high salaries, but often requires high education, skills, and significant experience. The prevalence of this occupation is an opportunity for the county because it offers a clear and resilient career pathway for workers. The only downside is that not all workers have the skills necessary to stay on that pathway.

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, 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.

An interview that Beacon Economics conducted with a member of the Los Angeles County department that provides social services revealed that one common occupation target for training programs is a certified nursing assistant (or CNA). This occupation is an improvement for many people but does not offer much career growth without further training, which can often be rigorous.

An interview with a registered nurse (RN) shed light on the process of transitioning from CNA to RN. A CNA cannot simply get a promotion to RN. They must get a nursing degree and pass the National Council Licensure Examination (NCLEX). Some hospitals hire registered nurses with an associate degree in nursing and a passing score on the NCLEX, but many hospitals have moved away from this practice because they can gain special status if all their registered nurses have bachelor's degrees.

The upshot here is that training someone who has a low income for an occupation with a higher income is not enough to set them on a pathway out of disadvantaged status. More support must be provided throughout a person's career development so they can sustain their economic mobility.

This presents an opportunity for Los Angeles County and partners to make more effort to track the development of workers and aid in helping workers continue to progress along their career paths.



#### HOUSING

Housing scarcity and the consequential rise in housing costs presents significant challenges for Los Angeles County residents. Since 2012, home sales were stable across most SPAs until the pandemic recession when home sales spiked and later declined.

#### Table 35: Total Home Sales by SPA, 2012-2023

Year	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-East	South-West	West
2012	4,967	6,373	5,017	16,475	11,444	9,444	3,172	2,529	5,468
2013	5,087	6,502	5,661	17,719	12,715	10,387	2,983	2,467	6,210
2014	4,563	5,571	5,085	15,723	11,350	9,175	2,471	2,086	5,800
2015	4,958	5,904	5,380	17,245	11,835	9,993	2,319	2,050	6,137
2016	5,061	5,867	5,318	17,053	11,758	9,968	2,415	2,144	5,785
2017	5,233	6,079	5,723	17,661	11,923	10,261	2,457	2,215	5,765
2018	4,937	5,875	5,219	16,663	11,166	9,402	2,508	2,114	5,371
2019	4,939	5,547	4,678	15,925	9,941	8,868	2,276	2,017	4,961
2020	4,569	4,641	4,065	14,701	8,794	8,017	1,611	1,652	4,587
2021	5,652	6,264	6,345	20,219	12,373	11,161	2,077	2,059	7,580
2022	4,957	5,162	5,238	15,993	10,092	9,011	1,884	1,819	5,908
2023	3,378	3,366	3,022	10,118	6,855	6,046	1,302	1,307	3,841

#### Source: CoreLogic. Analysis by Beacon Economics

The median home price continues to increase, as illustrated in the chart below. 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 (see New Home Listings Across SPAs below). Exacerbating the problem is the high housing demand due to the amenities that these SPAs provide, such as restaurants, beaches (in the case of the West SPA), and proximity to central business districts.

Other SPAs also have excess demand for housing which has driven home prices up (growth rates in home prices are captured by the Indexed Sales Price figure below). Overall, the South-West SPA 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. As discussed above, this set of economic conditions has led to an influx of higher-income households to the South-West SPA since they are priced out of other SPAs. Low housing affordability is a major weakness for the Los Angeles County economy that could lead to a misallocation of workers and reduced economic growth.

#### Figure 12: Median Sale Price of Homes by SPA, 2003-2023



\$2,000,000 -

Source: CoreLogic. Analysis by Beacon Economics



#### Figure 13: Indexed Sales Price of Homes Across SPA

Source: CoreLogic. Analysis by Beacon Economics



#### Figure 14: New Home Listings Across SPAs

#### Source: Redfin. Analysis by Beacon Economics

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.

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<sup>11</sup>. Those who move are also more likely to enjoy higher incomes<sup>12</sup> and better health outcomes.<sup>13</sup>

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 L.A. 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.<sup>14</sup>



- 11 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.
- 12 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, <a href="https://doi.org/10.1093/qje/qjy007">https://doi.org/10.1093/qje/qjy007</a>
- 13 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.
- 14 Jia, Ning, Raven Molloy, Christopher Smith, and Abigail Wozniak. 2023. "The Economics of Internal Migration: Advances and Policy Questions." Journal of Economic Literature, 61 (1): 144-80.

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, because they can afford the cost. 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. This is a weakness in Los Angeles County.

#### Table 36: 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	6.61	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

The table below demonstrates that renters tend to spend a higher percentage of their income on housing than owners. In all SPAs, the median renter household spends over 30% of their income on rent. In contrast, median homeowners in all SPAs spend 25% or less of their income on housing.

#### Table 37: Household Costs as a Percentage of Household Income, 2022

SPA	Mean	25th percentile	50th percentile	75th percentile	Standard deviation
		Gross Re	nt as a Percentage of Househol	d Income	
Antelope Valley	44.7	21.0	33.0	64.0	29.8
East	41.7	22.0	34.0	53.0	27.0
Metro	42.8	21.0	33.0	58.0	28.6
San Fernando	46.4	24.0	36.0	64.0	29.6
San Gabriel	43.0	22.0	33.0	58.0	28.3
South Bay	41.7	22.0	33.0	54.0	27.1
South-West	46.8	23.0	37.0	65.0	30.0
South-East	48.0	25.0	39.0	67.0	29.6
West	41.3	20.0	31.0	53.0	29.1
		Owner co	sts as a Percentage of Househo	ld Income	
Antelope Valley	30.5	14.0	23.0	37.0	24.0
East	27.9	11.0	20.0	34.0	24.5
Metro	31.4	12.0	22.0	40.0	27.3
San Fernando	32.7	14.0	24.0	42.0	27.1
San Gabriel	29.4	12.0	21.0	37.0	26.1
South Bay	28.1	11.0	20.0	34.0	25.1
South-West	34.9	15.0	25.0	46.0	28.7
South-East	32.6	13.0	24.0	42.0	27.4
West	30.1	11.0	20.0	38.0	27.6

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 shocking number of cost-burdened households. In Metro, for instance, 49% of households are cost burdened. The South-West and South-East SPAs both surpass 50%, although they have seen the greatest per-

centage point decline since 2012. This is partly due to improving household incomes, but also to housing turnover as some low-income households move out of the county and are replaced by higher-income households. This can either be an opportunity or a threat depending on which factor is the main driver of the trend.

#### Table 38: Percentage of Households That are Cost Burdened by SPA

Year	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-West	South-East	West
2012	44.3	45.8	54.0	51.7	43.2	45.6	60.5	59.8	43.2
2013	39.6	44.9	50.7	49.6	43.0	43.5	61.4	57.2	42.0
2014	40.9	45.1	50.7	47.8	42.9	44.2	58.6	57.6	43.5
2015	38.9	44.7	49.3	47.4	40.3	44.1	56.5	53.2	42.2
2016	42.6	42.9	49.7	48.4	40.4	41.2	55.6	55.7	41.4
2017	39.3	42.1	47.0	48.0	38.6	42.3	54.4	54.5	39.5
2018	34.9	41.3	48.4	48.5	40.9	41.3	55.3	51.2	39.8
2019	39.2	41.9	46.5	46.2	37.9	41.3	49.8	51.3	39.8
2020	40.5	35.9	49.3	47.0	36.5	40.2	49.6	47.0	41.9
2021	39.1	40.2	49.3	47.6	39.8	42.2	53.5	47.1	46.5
2022	38.8	40.4	49.0	47.1	40.4	41.3	51.7	50.3	41.4

#### **Digging Deeper: Housing and Household Dynamics**

#### FAMILIES AND HOUSEHOLD COMPOSITION

As housing, childcare, and other costs continue to rise, some of the households most at risk are those with children. These concerns over cost are a factor affecting where these families decide to live and whether they decide to have children or not.

#### Table 39: Percent of Households with Children by Tenure in Each SPA as Share of County, 2022

#### Table 40: Percent of Households with Children by Tenure in Each SPA as Share of County, 2012

SPA	<2 Years	2-4 Years	5-9 Years	10+ Years	Total	SPA	<2 Years	2-4 Years	5-9 Years	10+ Years	Total
Antelope Valley	2.9	5.1	4.0	3.8	3.9	Antelope Valley	3.7	5.4	4.4	3.7	4.2
East	5.1	8.9	9.7	9.3	8.5	East	7.9	9.2	9.2	10.6	9.5
Metro	23.2	14.8	13.5	14.7	16.2	Metro	18.6	16.0	14.4	13.6	15.4
San Fernando	19.5	19.7	19.7	18.1	19.0	San Fernando	18.0	19.0	19.0	17.9	18.3
San Gabriel	12.1	14.1	16.0	15.8	14.8	San Gabriel	13.3	13.9	15.5	16.1	14.9
South Bay	15.3	17.4	16.7	15.8	16.2	South Bay	16.4	15.7	17.6	16.6	16.5
South-East	3.1	5.5	6.5	6.0	5.4	South-East	5.2	5.5	6.2	6.2	5.8
South-West	3.4	4.2	4.8	5.5	4.7	South-West	4.4	5.1	4.6	5.3	4.9
West	15.3	10.3	9.1	10.9	11.4	West	12.2	10.1	9.1	10.1	10.4

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

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

Households with children that moved recently appear to prefer the Metro and West SPAs, among the more expensive areas of the county. Although the total number of households with children in the county has remained steady since 2012 at approximately 2,435,000, there have been significant internal changes. The West SPA has gained 23,000 households with children, the Metro SPA 21,000, and San Fernando SPA 16,000, while the East SPA has lost 25,000 such households, the South-East SPA 10,500, and South Bay 9,000. While this does not directly imply relocation (a significant portion of those changes are likely caused by households remaining in place and either having new children or their adult children moving out) this statistic does reflect a potential lack of available housing preventing new families from moving to these areas. New families may be choosing to live further afield, in areas like the Inland Empire, because of affordability and availability.

#### Table 41: Number of Households by Composition, 2022

SPA	With Both	With Kids	With Seniors	With Neither	Total
Antelope Valley	20,116	75,278	23,672	29,338	148,404
Total	494,613	1,941,228	552,649	653,445	3,641,935

SPA	With Both	With Kids	With Seniors	With Neither	Total
East	51,274	155,113	66,439	76,780	349,606
Metro	60,638	334,593	56,682	77,778	529,691
San Fernando	96,529	366,084	115,276	134,703	712,592
San Gabriel	85,065	275,022	111,472	114,727	586,286
South Bay	79,956	313,675	83,453	105,294	582,378
South-East	26,619	104,665	26,899	37,189	195,372
South-West	25,851	88,406	21,558	25,692	161,507
West	48,565	228,392	47,198	51,944	376,099
Total	494,613	1,941,228	552,649	653,445	3,641,935

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

## Table 42: Change in Number of Households by Composition, 2012-2022

SPA	With Both	With Kids	With Seniors	With Neither	Total
Antelope Valley	5,634	(11,837)	7,599	794	2,190
East	8,808	(33,676)	16,936	9,113	1,181
Metro	9,664	11,057	17,819	9,348	47,888
San Fernando	21,750	(5,339)	34,432	10,332	61,175
San Gabriel	15,926	(19,112)	28,623	(1,643)	23,794
South Bay	15,745	(24,659)	18,260	6,155	15,501
Total	102,031	(101,339)	149,381	47,218	197,291

SPA	With Both	With Kids	With Seniors	With Neither	Total
South-East	8,690	(19,222)	10,045	10,944	10,457
South-West	6,289	(11,980)	8,627	4,632	7,568
West	9,525	13,429	7,040	(2,457)	27,537
Total	102,031	(101,339)	149,381	47,218	197,291

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

# Table 43: Percent Change in Number of Households by Composition, 2012-2022

SPA	With Both	With Kids	With Seniors	With Neither	Total
Antelope Valley	38.9	(13.6)	47.3	2.8	1.5
East	20.7	(17.8)	34.2	13.5	0.3
Metro	19.0	3.4	45.9	13.7	9.9
San Fernando	29.1	(1.4)	42.6	8.3	9.4
San Gabriel	23.0	(6.5)	34.5	(1.4)	4.2
South Bay	24.5	(7.3)	28.0	6.2	2.7
South-East	48.5	(15.5)	59.6	41.7	5.7
South-West	32.1	(11.9)	66.7	22.0	4.9
West	24.4	6.2	17.5	(4.5)	7.9
Total	26.0	(5.0)	37.0	7.8	5.7

Table 44: Population Living in Households by Composition, 2022					SPA	With Both	With Kids	With Seniors	With Neither	Total	
			With	With		San Gabriel	226,856	758,438	296,753	316,658	1,598,705
SPA	With Both	With Kids	Seniors	Neither	Total	South Bay	172,510	761,379	213,172	281,175	1,428,236
Antelope	F 4 402	227.255	66.201	70 510	427 557	South-East	95,400	377,935	86,029	116,070	675,434
Valley	54,483	237,255	66,301	79,518	437,557	South-West	63,452	222,828	61,308	69,952	417,540
East	149,688	514,458	190,324	233,922	1,088,392	West	69,462	403,822	111,414	118,633	703,331
Metro	117,080	580,424	145,353	196,132	1,038,989	Total	1,180,358	4,788,858	1,480,942	1,779,389	9,229,547
San Fernando	231,427	932,319	310,288	367,329	1,841,363					1,779,509	9,229,347
Total	1,180,358	4,788,858	1,480,942	1,779,389	9,229,547	Source: U.S. Censu	s Bureau. Analysis	by Beacon Econo	omics		

There has been significant growth in the number of households with at least one senior (65+), a change seen in households both with and without children across all SPAs. Furthermore, the decline in the number of households with children but no seniors – what could be termed a traditional "nuclear family" – has declined, with all but two SPAs (West and Metro) reporting declines in this type of household. The growing prevalence of multigenerational families may be a response to rising costs of rent, elder care, and childcare, as well as a factor of culture and changing preferences.

## Table 45: Change in Population Living in Households by Composition, 2012-2022

SPA	With Both	With Kids	With Seniors	With Neither	Total
Antelope Valley	14,664	(32,731)	25,193	6,727	13,853
East	28,817	(147,888)	53,548	38,160	(27,363)
Metro	31,792	(96,111)	44,140	23,007	2,828
San Fernan- do	58,329	(98,672)	108,600	34,883	103,140
San Gabriel	55,459	(125,388)	78,486	(1,556)	7,001
South Bay	39,963	(104,913)	48,675	31,729	15,454
South-East	40,049	(80,466)	39,109	36,971	35,663
South-West	30,286	(25,300)	27,389	12,042	44,417
West	14,634	14,586	19,166	(5,794)	42,592
Total	313,993	(696,883)	444,306	176,169	237,585

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

While most L.A. County residents still live in nuclear family units (with children but without seniors), the number has declined by nearly 700,000 people over ten years. The fastest growing compositional unit has been households with seniors, another factor of an ageing population.

#### Table 46: Change in Households by Composition, 2012-2022

MSA	With Both	With Kids	With Seniors	With Neither	Total
Atlanta	111,790	(14,323)	139,146	83,936	320,549
Chicago	153,047	(81,895)	160,111	11,249	242,512
Dallas	106,838	134,247	130,680	108,549	480,314
Houston	111,282	119,166	143,782	82,183	456,413
Phoenix	74,284	(87,036)	103,357	43,544	134,149
L.A. County	102,031	(101,339)	149,381	47,218	197,291

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

The trend of more households with seniors is seen across the comparison metros as well. Every metro has added households with seniors, as well as had significant growth in the number of households with both seniors and children. Atlanta and Chicago have also seen decreases in the number of "nuclear family" households, while the two Texas metros have added households of all compositions at very high rates.

#### Population Growth, Decline, and Overcrowding

While most residents live in single-family homes (with the exception of the Metro and West SPAs), 70% of population growth in the past 10 years has been in multifamily dwellings, with more than half in large (20+ unit) complexes. If the San Fernando SPA is excluded, the rest of the county lost population inhabiting single-family dwellings. Overall, though, the county's sluggish growth reflects a lack of supply, especially of multifamily housing.

#### Table 47: Population by Housing Unit Type, 2022

#### Table 48: Change in Population by Housing Unit Type, 2012-2022

SPA	Single Family	Small Multi	Large Multi	Total	-				
Antelope	367,057	25,839	19,987	412,883	SPA	Single Family	Small Multi	Large Multi	Total
Valley	567,657	23,005	19,507	112,000	Antelope Valley	9,666	(8,837)	8,436	9,265
East	843,049	174,740	60,519	1,078,308	East	(19,985)	12,234	(19,672)	(27,423)
Metro	349,436	341,125	345,206	1,035,767	Metro	(10,341)	(19,357)	30,000	302
San Fernando	1,116,795	300,022	391,504	1,808,321	San Fernando	64,671	7,354	21,925	93,950
San Gabriel	1,213,947	217,862	135,272	1,567,081	San Gabriel	(22,440)	5,301	23,818	6,679
South Bay	867,023	369,236	161,965	1,398,224	South Bay	10,651	(9,271)	3,701	5,081
South-East	462,313	146,995	43,077	652,385	South-East	(1,202)	23,678	3,377	25,853
South-West	229,422	145,207	41,321	415,950	South-West	22,240	16,334	6,575	45,149
West	343,566	187,446	168,603	699,615	West	8,363	2,557	33,890	44,810
Total	5,792,608	1,908,472	1,367,454	9,068,534	Total	61,623	29,993	112,050	203,666

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

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

One factor demonstrating housing affordability issues is the prevalence of overcrowding, defined as more than one person per room in a housing unit. Overcrowding happens when families grow but are unable to move to larger units, or when multiple families or unrelated individuals decide to live together to cut costs. Overcrowding exists throughout the county, although it is least prevalent in the West and Antelope Valley SPAs.
# Table 49: Population Living in Overcrowded Households, 2022

SPA	Single Family	Small Multi	Large Multi	Total
Antelope Valley	39,613	5,821	4,591	50,025
East	180,891	69,373	12,558	262,822
Metro	68,245	85,906	104,446	258,597
San Fernando	134,251	88,475	112,886	335,612
San Gabriel	183,133	53,255	27,806	264,194
South Bay	107,604	114,677	37,785	260,066
South-East	160,486	54,574	14,268	229,328
South-West	62,579	54,375	11,237	128,191
West	8,423	17,976	14,240	40,639
Total	945,225	544,432	339,817	1,829,474

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

# Table 50: Change in Population Living in Overcrowded Households, 2012-2022

SPA	Single Family	Small Multi	Large Multi	Total
Antelope Valley	(3,060)	(5,785)	3,280	(5,565)
East	(34,207)	3,156	(14,794)	(45,845)
Metro	(10,919)	(24,926)	(4,042)	(39,887)
San Fernando	9,163	6,736	(6,390)	9,509
San Gabriel	(18,469)	(10,929)	146	(29,252)
South Bay	(24,232)	11,570	4,302	(8,360)
South-East	(18,196)	(6,427)	685	(23,938)
South-West	11,185	13,125	68	24,378
West	(1,693)	(1,365)	2,783	(275)
Total	(90,428)	(14,845)	(13,962)	(119,235)

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



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However, in the past ten years, there has been a noticeable decline (approximately 6% since 2012) in those living in overcrowded conditions. For children, the decline has been even more dramatic at 21%. Some of the decline is a result of children ageing into adulthood. Nevertheless, most SPAs saw decreases in overcrowding, with the notable exception of the South-West, which was also the only SPA to see an increase in the number of children living in overcrowded conditions.

# Table 51: Change in Population of Children Living in Overcrowded Households, 2012-2022

SPA	Single Family	Small Multi	Large Multi	Total
Antelope Valley	(4,834)	(4,594)	1,368	(8,060)
East	(26,402)	(3,941)	(8,453)	(38,796)
Metro	(4,877)	(19,124)	(4,378)	(28,379)
San Fernando	(5,500)	(2,100)	(9,853)	(17,453)
San Gabriel	(15,668)	(6,237)	(3,494)	(25,399)
South Bay	(14,535)	(3,045)	1,178	(16,402)
South-East	(20,261)	(6,182)	(184)	(26,627)
South-West	(1,722)	6,359	(1,093)	3,544
West	444	(1,611)	(1,339)	(2,506)
Total	(93,355)	(40,475)	(26,248)	(160,078)

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

#### This broadly positive development is also reflected in the changes in average household size over the past ten years.

In all SPAs, average household sizes are largest in single-family structures and smallest in large (20+ unit) multifamily structures. The largest households on average are found in the South-East SPA, where there are approximately 3.5 people per household, higher for single-family structures and lower for multifamily structures. Most SPAs and its structures experienced a decline in household size, with the exception of the Antelope Valley SPA, where there was a significant increase in average household size in large multifamily and single-family structures, and in the South-West SPA, which also saw an increase in overcrowding. The decline in household size reflects a decrease in the number of families with children previously described.

### Table 52: Average Household Size, 2022

# Table 53: Change in Average Household Size, 2012-2022

SPA	Single Family	Small Multi	Large Multi	Total	SPA	Single Family	Small Multi	Large Multi	
Antelope Valley	3.12	2.14	2.01	2.96	Antelope Valley	0.05	(0.11)	0.28	
last	3.31	2.91	2.01	3.12	East	(0.11)	0.01	(0.29)	
Metro	2.50	1.95	1.62	1.96	Metro	(0.31)	(0.12)	(0.14)	
San Fernando	2.88	2.29	2.15	2.58	San Fernando	(0.04)	(0.15)	(0.14)	
San Gabriel	2.94	2.31	2.00	2.73	San Gabriel	(0.09)	(0.17)	0.06	
South Bay	2.78	2.24	1.76	2.45	South Bay	(0.03)	(0.01)	(0.11)	
South-East	3.74	3.16	2.32	3.46	South-East	0.03	0.06	(0.20)	
South-West	2.93	2.35	1.97	2.58	South-West	0.22	0.14	0.10	
West	2.32	1.68	1.48	1.88	West	0.05	(0.01)	(0.04)	
Total	2.93	2.23	1.83	2.53	Total	(0.05)	(0.05)	(0.11)	

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

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

This change has been fueled by an increase in the number of small (one- or two-person) households. Throughout Los Angeles County, between 2012-2022, there was an increase of approximately 55,000 single-family households, of which 47,500 (or about 84%) were single-person or two-person households. This is matched by a 17,000 decrease in the number of six-or-more-person households. The trend is even more dramatic for multifamily structure households. The county added approximately 30,000 occupied small (less than 20 unit) multifamily households and 90,000 occupied large (20+ unit) multifamily households, but the number of one- or two-person households has increased by 39,500 and 94,000, respectively, meaning that the number of three-or-more-person households has actually decreased over the past decade. Thus, the decrease in household size – and by extension, county population – is not simply caused by compositional changes in housing structure, but also by people choosing to live in smaller households.

# Table 54: Units Added Since 2010 by Type

Unit Type	Antelope Valley	East	Metro	San Fernando	San Gabriel	South Bay	South-East	South-West	West	Total
Single Family	5,329	5,868	5,289	21,227	11,454	9,454	3,070	1,395	8,155	71,241
Small Multifamily	804	1,805	4,682	5,602	3,334	2,593	2,891	1,896	5,312	28,919
Large Multifamily	831	1,737	41,212	21,931	8,549	7,432	3,049	3,638	15,888	104,267
Percent of Total Units	5.0	2.7	9.7	7.0	4.1	3.4	4.8	4.3	7.9	5.7

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

While Los Angeles County had added around 200,000 housing units since 2010, they have not been distributed evenly among SPAs. Nearly a quarter of all new housing units, and 40% of large multifamily units, were built in the Metro SPA.

Similarly, there was a high rate of new construction in the West SPA, potentially spurring population growth, especially among families with children, in those two SPAs. Meanwhile, areas with high rates of overcrowding, such as the East, South-East, and South-West SPAs, have seen some of the lowest rates of new construction, further exacerbating overcrowding.

### Table 55: Units Added Since 2010 by Type

Unit Type	Atlanta	Chicago	Dallas	Houston	Phoenix	L.A. County
Single Family	295,801	116,487	421,627	440,758	233,709	71,241
Small Multifamily	44,419	41,142	71,055	65,535	34,450	28,919
Large Multifamily	92,293	80,830	185,707	128,481	65,840	104,267
Percent of Total Units	16.2	5.9	22.4	22.7	16.7	5.7

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

Compared to other metros, L.A. County has added the fewest units since 2010, both in absolute terms and as a percentage of total units. L.A. County most closely resembles the Chicago metro, 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 L.A. County lacks comparable undeveloped land, it construction opportunities are more limited. Los Angeles's lack of housing construction has aggravated many of the local affordability and overcrowding issues. This makes it difficult for people to live near their workplace, meaning many people are persuaded to live further away from their workplace and commute.



# Economic Mobility

Beyond the physical mobility described in the previous section, an important issue for the county's development is its *economic* mobility. Los Angeles County has a special place in America's rags-to-riches narrative as an anchor of westward expansion and the home of Hollywood. As a place of economic mobility, it is slightly above average when compared to the other 3,209 counties in the U.S., ranking in the 59<sup>th</sup> percentile. In a more apt comparison, L.A. County ranks zof the nation's 50 largest commuting zones.

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 L.A. 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. 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).

Economic mobility outcomes are not evenly distributed across the county as the figure across shows. In this map, L.A. County is broken up into Census Districts, each containing roughly 4,000 people. The dark blue areas show neighborhoods where children have the greatest economic mobility and grow up to earn the highest wages. The dark orange neighborhoods have the least economic mobility.



# 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.





There are clear differences by SPA, which are outlined above. The South-West and South-East SPAs have the lowest economic mobility by this measure, whereas the West has the most. A 35-year-old born in the South-West SPA made around \$28,300 per year in 2015, while those born in the West SPA made closer to \$48,000 per year.

## Table 56: 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 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 L.A. 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. 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.



# Figure 16: Economic Mobility and Per Capita Income of People in Census Tract

#### **Economic Mobility**







This nuanced difference has important public policy implications. If the goal of a policy is to alleviate poverty in the poorest neighborhoods, a certain set of neighborhoods should be targeted. However, if the goal of a policy is to improve economic mobility – for example, programs that focus on improving opportunity or children's outcomes, such as Head Start – a different set of neighborhoods should be targeted. To illustrate this, consider the Opportunity Zones program in Los Angeles. The program offers preferential treatment to "low opportunity" areas, and selected neighborhoods based on socioeconomic indicators. Children who grow

up in these selected neighborhoods earn \$31,000 on average in their mid-thirties. However, if the neighborhood selection was optimized to select low economic mobility areas based on the data in this report, a different set of neighborhoods would be selected. In these neighborhoods, with the lowest economic mobility, the average child would grow up to earn only \$26,000 in their mid-thirties. This provides a useful example of how targeting public dollars most effectively depends on using the right set of metrics.

#### **GENDER DIFFERENCES IN L.A. ECONOMIC MOBILITY**

Research finds that boys have greater variation in economic mobility than girls in the United States, and this is also true in L.A. County. However, boys from low-income families typically have lower rates of economic mobility than girls. The maps below compare these two groups, showing average household incomes for men and women born to parents in the lowest

# Figure 17: Female Vs Male Economic Mobility

#### Female Economic Mobility

income quartile. The map for girls has more dark blue areas, illustrating that women from poor families have a better chance of moving to a higher income household than men from poor families.

#### Male Economic Mobility



There are several possible explanations for this. Women from poor families have a higher graduation rate for both high school and college than men from poor families. Marriage may also play a role. According to 2015 data, the average income of a woman's spouse in L.A. was \$47,000 but only \$30,000 for a man's. Another major factor is that males are seven times more likely to be incarcerated than females, and this is especially true for males in low-income neighborhoods.

#### RACIAL DIFFERENCES IN L.A. ECONOMIC MOBILITY

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 inter-related and complex socioeconomic factors that determine an area's economic mobility – education, crime, employment opportunities, etc. (these are discussed further in the next section). 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 poor families in Culver City, we see 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.

#### Economic Mobility of Asian Angelenos



#### Economic Mobility of Hispanic Angelenos



#### Economic Mobility of Black Angelenos



Economic Mobility of White Angelenos



The racial segregation in the South SPA is also apparent in Figures X. So few white families live in Central L.A. there are insufficient samples for them in the maps. The opposite is true for Black families, as most of them live in Central Los Angeles. Economic mobility research implies that this geographic disconnect matters. A recent study showed that children with rich friends are much more likely to become rich themselves.

Economists use the term "economic connectedness" to describe the share of high (above-median) income friends among people with low (below-median) incomes. A study using Facebook data from 20 million people measured the level of economic connectedness of each zip code in America. Using this data, we can zoom into the zip codes of L.A. County. Dark blue areas represent the most economically connected areas, meaning people who live here have the greatest share of high-income friends. Dark red represents the least economically connected areas. As can be seen, Central L.A. is the least economically connected area.

This spatial segregation has important policy implications, suggesting that restructuring space and urban planning to encourage economic connectedness will help boost economic mobility. For example, city officials could encourage programs to build low-income housing in high-income areas. Economic connectedness also shows the usefulness of busing programs that bring schoolchildren of different socioeconomic backgrounds together. While these programs may help to introduce groups, social norms still often lead groups to seek their own cliques. To overcome this "friending bias" and make these programs as effective as possible, researchers suggest a few policy options. One is to break high school campuses into smaller groups or cohorts, so that children of particular races don't just socialize with each other and are instead encouraged to socialize within their assigned group. Another option is to create programs for cross socioeconomic interaction. For example, a gym program in Boston recruits personal trainers from low-income areas and assigns them to more affluent clients.

# Figure 18: Degree of Economic Connectedness

0 = Less Connected. 1 = More Connected



#### EXPLANATORY FACTORS OF ECONOMIC MOBILITY

What are the primary factors driving economic mobility? Economists have studied this question for decades. Social scientists have shown that the location you grow up in affects social mobility<sup>15</sup> due to conditions such as social networks, infrastructure, and the services it offers. And just as it is hard to identify which ingredient is the key to creating a delicious soup, it is hard to specify the exact driver of economic mobility in any given neighborhood. Different ingredients combine to form a social broth that is conducive to economic advancement. Thus, it is the confluence of numerous factors that lead to, or stifle, economic mobility.

Still, for policy-making purposes, it is useful to separate these ingredients so that specific policy interventions to improve economic mobility can be addressed. Five factors that equate most closely with economic mobility are:<sup>16</sup>

#### 1. Income Inequality:

There is a strong negative relationship between economic mobility and income inequality. In economies where income is less evenly distributed and high-income families have a greater share of the wealth, economic mobility is conspicuously low. While Los Angeles has high income inequality compared to the rest of the United States, it is relatively low compared to other large metropolitan cities.

#### 2. School Quality:

Researchers find income-adjusted test scores, mean public school expenditure per student, and dropout rates correlate closely with upward mobility. Some economists believe that differences in relative mobility emerge when children are very young, and school quality helps explain why this may be the case.

#### 3. Family Structure:

Single-parent households is one of the variables that has the strongest relationship to mobility. In other words, communities with more single-parent households have less economic mobility. This relationship holds mathematically when compared to individual families, as well as communities as a whole, suggesting that the stability of the social environment affects children's outcomes in addition to their nuclear family.

#### 4. Racial Segregation:

While the correlation between race and mobility is clear, what causes this connection is not. Predominately Black areas tend to have disproportionately lower economic mobility. The locations where this is most severe are the same locations that, historically, had the most institutional and systemically racist laws, such as Jim Crow. High levels of segregation result in less economic connectedness, where (mostly) Black populations do not have access to high income populations. This corresponds to a lack of access to well paid jobs, good schools, and other resources that facilitate upward mobility.

5. **Social Capital:** The strength of social networks and engagement in community organizations in local areas, or Social Capital, is directly related to mobility. Variables used to study this are participation in community organizations, voter turnout, religiosity, and crime rates.

Surprisingly, econometric models find no obvious empirical relationship between mobility and local labor market conditions or rates of migration, and only minimal relationships between mobility and local tax policies.

The five factors that correlate most closely with economic mobility point to the benefits of a strong integrated social fabric. And these factors require a wide range of government services to support them, including the departments of education, justice, and social services. No single department can be solely responsible for increasing economic mobility.

- 15 Qian, H. (2020). Entrepreneurship and the Economic Geography of Intergenerational Mobility in U.S. Cities. In: Chen, Z., Bowen, W., Whittington, D. (eds) Development Studies in Regional Science. New Frontiers in Regional Science: Asian Perspectives, vol 42. Springer, Singapore. https://doi.org/10.1007/978-981-15-1435-7\_18
- 16 Raj Chetty, Nathaniel Hendren, Patrick Kline, Emmanuel Saez, Where is the land of Opportunity? The Geography of Intergenerational Mobility in the United States, The Quarterly Journal of Economics, Volume 129, Issue 4, November 2014, Pages 1553-1623, https://doi.org/10.1093/qje/qju022

# Equity SWOT Analysis for Service Planning Area's Industries

In this section, we examine the industries and occupations located in each Service Planning Area. While the previous section focused on the populations living in each SPA, this analysis focuses on the businesses and jobs found in each SPA. The location of firms and employment opportunities has profound implications for equity and access to resources in Los Angeles County.

For each SPA, this section will:

- 1. Provide employment and wage data for the major industries based on a two-digit NAICS code.
- 2. Use a more refined four-digit NAICS code to identify the top 15 industries in terms of employment and classify those using a SWOT analysis based on the location quotient (LQ).
  - a) The location quotient quantifies how concentrated an industry is in a region relative to the nation. A location quotient of 1 or higher means the industry is more concentrated in the region than in the nation.
  - b) Strong industries are those with an LQ greater than 1 and a positive growth rate of the LQ over the past five years.
  - c) Weak industries have an LQ of less than 1 and with a negative growth rate over the past five years.
  - d) Industries are considered an opportunity if the LQ is currently less than 1, but the fiveyear growth rate of the LQ was positive.
  - e) An industry under threat has an LQ greater than 1, but that LQ declined over the past five years.

- 3. Report the industries paying the highest wages. Employment growth rates are reported to determine if the high-paying industries are growing or contracting.
- 4. Report the highest-paying occupations and their corresponding employment growth rates.

This section will report these metrics for all nine SPAs. First, however, there are some key findings to highlight.

The education and hospitals (local government) subsector is under threat in some SPAs such as the Antelope Valley and South-East, and a strength in other SPAs such as San Gabriel and South-West. Given the importance of this subsector for the social and economic well-being of a community, policymakers need to address the underlying issues that may be causing this subsector to be a weak in some areas of Los Angeles County.

The motion picture and video industry continues to play a large role in the Los Angeles County economy as is it a major employer and strength in SPAs such as Metro, San Fernando, San Gabriel, and the South-East. Given recent labor disputes in this industry, the policy must focus on making sure that the industry continues to grow in the County and that equity remains a priority within the City.

Most of the 15 top-paying occupations in the South-East and South-West do not require a college education. This is a stark contrast to other SPAs like West and the South Bay where all the 15 top-paying occupations typically require a college degree. The discrepancy in the spatial distribution of occupations is important for policy considerations, since this may create barriers for greater equity and sustainability.

Overall, there is a great deal of differences in subsectors located within each SPA. Policymakers should focus on promoting sectors that are an opportunity since these are sectors that are more likely to expand and employ a greater number of workers.

# Antelope Valley

Major industries in the Antelope Valley, in terms of employment, include Manufacturing, Retail Trade, Health Care and Social Assistance, and Government.

# Antelope Valley

Major Industry Employment in Antelope Valley	Jobs	Average Wage (\$)	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	462	68,099	5.8	181.8	5.4	57.6
Mining, Quarrying, and Oil and Gas Extraction	97	122,900	1.9	240.6	10.0	-25.3
Utilities	148	205,613	-14.7	-35.9	4.8	61.9
Construction	5,337	92,602	2.2	27.6	6.1	43.2
Manufacturing	12,553	96,515	3.4	29.9	1.8	41.1
Wholesale Trade	659	98,675	10.8	-31.1	2.8	38.0
Retail Trade	12,273	57,875	1.8	8.7	2.7	50.4
Transportation and Warehousing	2,905	73,103	7.6	54.8	7.1	35.3
Information	276	180,963	-21.5	-48.9	-10.0	79.6
Finance and Insurance	1,021	154,238	1.5	-45.2	-1.7	39.7
Real Estate and Rental and Leasing	529	109,479	4.6	-17.3	2.5	51.1
Professional, Scientific, and Technical Services	1,686	133,443	8.9	-36.8	-0.9	43.9
Management of Companies and Enterprises	667	171,697	11.5	111.1	2.3	38.4
Administrative and Support and Waste Management and Remediation Services	3,792	62,055	8.1	70.8	1.0	37.7
Educational Services	2,483	59,502	-2.9	25.9	1.1	62.3
Health Care and Social Assistance	20,558	82,757	3.1	71.7	4.1	43.5
Arts, Entertainment, and Recreation	276	83,139	22.3	-27.0	5.1	19.0
Accommodation and Food Services	9,767	37,663	16.3	12.7	8.4	63.2
Other Services (except Public Administration)	7,050	43,209	6.0	-41.0	2.7	95.6
Government	23,832	122,942	-1.7	-5.6	3.0	43.2
Total Employment	106,376	85,387	3.3	9.6	1.9	45.1

# Table 57: Major Industry Employment in the Antelope Valley

Source: Lightcast. Analysis by Beacon Economics

At a more granular industry level Education and Hospitals (local government) is the largest sector in the Antelope Valley. This industry is currently classified as a threat since its concentration in the region has been decreasing. Other threats are found in local government jobs, and Health Care and Social Service-related jobs in sectors like outpatient care centers.

Table 58: Industry SWOT Analysis for Antelope Valley

As the Antelope Valley population grows, 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. Both sectors are opportunities for the Antelope Valley.

Top 15 Largest Industries: Antelope Valley	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Education and Hospitals (Local Government)	9,366	2.263	-8.6	Threats
Local Government, Excluding Education and Hospitals	8,995	2.849	-1.9	Threats
Restaurants and Other Eating Places	8,740	0.989	20.9	Opportunities
Individual and Family Services	5,363	2.289	-8.0	Threats
Outpatient Care Centers	5,216	6.087	-12.4	Threats
Federal Government, Civilian	2,339	1.479	-2.8	Threats
General Medical and Surgical Hospitals	2,067	0.525	8.8	Opportunities
Grocery Stores	1,893	0.819	1.1	Opportunities
Private Households	1,709	9.662	30.6	Strengths
Health and Personal Care Retailers	1,658	3.958	7.7	Strengths
Fruit and Vegetable Preserving and Specialty Food Manufacturing	1,603	10.819	75.3	Strengths
Department Stores	1,602	4.777	35.7	Strengths
Federal Government, Military	1,572	1.667	3.4	Strengths
Offices of Physicians	1,524	0.650	-2.2	Weaknesses
Building Equipment Contractors	1,369	0.690	-0.4	Weaknesses

Source: Lightcast. Analysis by Beacon Economics

The highest-paying industries in the Antelope Valley are local and federal government. Employment in both sectors has declined over the past year. This is a threat to the Antelope Valley economy. Outpatient care centers pay high wages and have seen major growth since 2017, although there was a decline in employment from 2022 to 2023. This sector was a strength in the economy, but it has become a threat due to signs of decline in the sector.

Table 59: Top 15 Highest-Paying Industries in the Antelope Valley, 2023

# East

Major industries in the East SPA include Manufacturing, Retail Trade, Wholesale Trade, Health Care and Social Assistance, and Government.

# East

Top 15 Highest-Paying Occupations*: Antelope Valley	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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.				

Source: Lightcast. Analysis by Beacon Economics

# East

Major industries in the East SPA include Manufacturing, Retail Trade, Wholesale Trade, Health

Table 61: Major Industry Em	ployment in the East
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Major Industry Employment in East	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	286	73,130	-6.0	24.1	5.5	70.1
Mining, Quarrying, and Oil and Gas Extraction	76	139,984	-16.0	-37.0	18.3	-39.0
Utilities	956	184,867	2.2	-44.3	4.4	37.6
Construction	14,824	94,485	1.8	30.8	5.6	39.1
Manufacturing	54,673	89,744	3.2	-18.9	4.0	44.7
Wholesale Trade	55,644	94,981	1.8	12.6	6.1	40.8
Retail Trade	56,333	56,188	1.2	2.4	4.4	48.3
Transportation and Warehousing	27,991	77,977	4.2	41.2	6.8	29.8
Information	1,525	156,861	20.2	-32.3	-8.6	45.6
Finance and Insurance	6,945	161,338	-0.4	-21.5	2.5	52.8
Real Estate and Rental and Leasing	4,990	102,685	5.8	6.0	3.5	46.3
Professional, Scientific, and Technical Services	8,572	138,539	5.4	-32.2	-1.3	33.1
Management of Companies and Enterprises	7,146	172,915	-1.3	-0.9	2.6	47.3
Administrative and Support and Waste Management and Remediation Services	37,910	62,951	6.9	4.3	4.8	48.4
Educational Services	9,954	65,357	5.4	27.4	1.1	36.4
Health Care and Social Assistance	75,054	64,250	3.2	47.9	3.5	13.2
Arts, Entertainment, and Recreation	5,868	98,758	22.9	-25.4	-4.5	76.6
Accommodation and Food Services	46,712	36,772	17.0	51.1	8.0	61.0
Other Services (except Public Administration)	15,857	44,643	6.2	-27.3	2.7	70.6
Government	42,937	123,791	-0.2	0.8	3.5	42.3
Total Employment	474,271	79,337	4.3	7.9	3.1	35.3

Source: Lightcast. Analysis by Beacon Economics

The East SPA has many strengths, especially in the industries that employ the most people. The Employment Services industry has seen a big decline in its location quotient and has reached an LQ of 1, meaning it is just as concentrated in the East SPA as in the rest of the U.S.A. This means that this industry is on the cusp of becoming a weakness for the East SPA. General Medical and Surgical Hospitals, and Warehousing and Storage are the only weaknesses in the top 15 industries. This is cause for concern since those two industries combined account for nearly 18,000 jobs.

# Table 62: Industry SWOT Analysis for East

Top 15 Largest Industries: East	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Restaurants and Other Eating Places	42,587	1.058	19.8	Strengths
Individual and Family Services	30,398	2.850	6.9	Strengths
Local Government, Excluding Education and Hospitals	18,121	3.419	3.9	Strengths
Education and Hospitals (Local Government)	15,512	1.976	2.3	Strengths
Employment Services	14,680	1.000	-6.7	Threats
Grocery and Related Product Merchant Wholesalers	12,954	4.298	4.5	Strengths
Grocery Stores	12,189	1.159	-0.8	Threats
General Medical and Surgical Hospitals	11,022	0.615	-3.9	Weaknesses
Services to Buildings and Dwellings	8,678	1.038	0.1	Strengths
Offices of Physicians	7,540	0.706	9.9	Opportunities
Management of Companies and Enterprises	7,146	0.751	7.6	Opportunities
Warehouse Clubs, Supercenters, and Other General Merchandise Retailers	7,101	1.555	3.3	Strengths
Cut and Sew Apparel Manufacturing	6,887	25.135	1.6	Strengths
Warehousing and Storage	6,848	0.945	-37.7	Weaknesses
Clothing and Clothing Accessories Retailers	6,148	4.103	8.8	Strengths

Source: Lightcast. Analysis by Beacon Economics

The two top-paying industries in the East have been in decline over the past 10 years signaling a threat to the East SPA. The Education and Hospitals industry is an opportunity for the East SPA since it 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.

# Metro

The major industries in the Metro SPA include Health Care and Social Assistance, Accommodation and Food Services, Retail Trade, Educational Services, Administrative and Support and Waste Management and Remediation Services, and Information.

# Metro

# Table 64: Top 15 Highest-Paying Occupations in East, 2023

Top 15 Highest-Paying Occupations*: East	Jobs	Hourly Wage	1-Yr. % Change in jobs	10-Yr. % Change in Jobs
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.				

Source: Lightcast. Analysis by Beacon Economics

Metro

The major industries in the Metro SPA include Health Care and Social Assistance, Accommodation and Food Services, Retail Trade, Educational Services, Administrative and Support and Waste Management and Remediation Services, and Information.

Major Industry Employment in Metro	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	631	68,719	7.1	45.9	3.5	79.6
Mining, Quarrying, and Oil and Gas Extraction	62	136,597	0.5	-71.2	7.1	-33.8
Utilities	2,057	195,140	1.5	385.0	4.5	23.3
Construction	13,700	98,659	2.3	68.5	6.4	39.6
Manufacturing	21,113	89,842	5.2	-20.7	3.3	46.1
Wholesale Trade	27,120	92,665	1.4	-20.8	6.5	46.6
Retail Trade	45,017	55,797	3.1	0.4	3.9	53.2
Transportation and Warehousing	12,114	79,472	4.9	22.0	6.2	31.4
Information	39,616	158,922	13.5	4.4	-11.2	31.9
Finance and Insurance	31,144	193,563	-0.4	-2.1	3.6	51.2
Real Estate and Rental and Leasing	16,191	105,239	4.1	21.3	3.3	47.5
Professional, Scientific, and Technical Services	73,124	138,392	5.7	26.1	1.9	36.8
Management of Companies and Enterprises	8,797	177,412	1.1	-6.5	2.7	48.0
Administrative and Support and Waste Management and Remediation Services	40,853	68,398	7.1	8.4	3.0	52.5
Educational Services	40,711	71,840	6.8	94.0	2.5	34.9
Health Care and Social Assistance	107,779	73,751	3.0	40.2	3.4	20.7
Arts, Entertainment, and Recreation	23,415	173,847	24.4	50.2	3.4	33.6
Accommodation and Food Services	65,856	38,840	15.3	7.4	7.8	57.1
Other Services (except Public Administration)	30,274	45,113	6.2	-30.0	4.4	90.2
Government	66,010	123,268	1.5	-19.1	3.2	40.4
Total Employment	665,631	97,961	6.0	8.2	1.8	40.8

# Table 65: Major Industry Employment in Metro, 2023

Source: Lightcast; Analysis by Beacon Economics

The top industry in the Metro SPA – 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. This industry is a weakness for the Metro SPA.

Individual and Family Services, and Education and Hospitals are two industries that have become more concentrated over the past five years. These industries employ over 60,000

# Table 66: Industry SWOT Analysis for Metro

people in the Metro SPA and will likely employ more in the future as these industries become more concentrated.

The General Medical and Surgical Hospitals industry saw a slight decrease in its LQ from 2018 to 2023, so it is considered a mild threat to the Metro SPA. A more serious threat is the Depository Credit Intermediation industry which had a 2.1% decline in its location quotient.

Top 15 Largest Industries: Metro	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Restaurants and Other Eating Places	49,854	0.902	-14.5	Weaknesses
Individual and Family Services	31,653	2.160	1.1	Strengths
Education and Hospitals (Local Government)	29,225	2.829	6.4	Strengths
General Medical and Surgical Hospitals	28,650	1.163	-0.1	Threats
Motion Picture and Video Industries	28,236	12.917	7.7	Strengths
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	23,720	4.054	3.5	Strengths
Local Government, Excluding Education and Hospitals	22,844	4.358	19.2	Strengths
Employment Services	17,385	0.863	6.5	Opportunities
Elementary and Secondary Schools	15,171	3.239	25.3	Strengths
Legal Services	14,358	2.338	10.5	Strengths
Colleges, Universities, and Professional Schools	13,291	2.068	26.4	Strengths
Depository Credit Intermediation	10,453	1.134	-2.1	Threats
Management, Scientific, and Technical Consulting Services	10,325	1.095	12.7	Strengths
Offices of Physicians	9,456	0.645	-18.9	Weaknesses
Clothing and Clothing Accessories Retailers	9,244	7.074	27.4	Strengths

Source: Lightcast. Analysis by Beacon Economics

# San Fernando

The San Fernando SPA has many large industries, including Health Care and Social Assistance, Government, Information, and Retail Trade.

# San Fernando

Top 15 Highest-Paying Occupations*: Metro	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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.				

# Table 68: Top 15 Highest-Paying Occupations in Metro, 2023

Source: Lightcast. Analysis by Beacon Economics

# San Fernando

ment, Information, and Retail Trade.

The San Fernando SPA has many large industries, including Health Care and Social Assistance, Govern-

Major Industry Employment in San Fernando	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	857	69,663	11.9	54.8	3.1	45.5
Mining, Quarrying, and Oil and Gas Extraction	183	143,393	15.0	-8.3	13.0	-16.5
Utilities	1,300	192,628	15.1	55.8	1.0	46.8
Construction	55,360	94,127	1.5	55.6	5.0	40.4
Manufacturing	71,711	106,811	3.4	-13.3	4.1	37.4
Wholesale Trade	24,789	98,813	1.4	-10.5	6.1	34.5
Retail Trade	91,240	58,333	1.6	2.9	3.2	46.9
Transportation and Warehousing	17,398	84,783	4.7	78.9	7.6	39.0
Information	111,512	161,845	13.3	37.5	-14.3	34.4
Finance and Insurance	34,424	157,754	-1.6	-17.2	2.2	45.4
Real Estate and Rental and Leasing	19,431	100,569	5.6	8.3	4.5	48.3
Professional, Scientific, and Technical Services	60,848	146,276	5.3	9.3	-3.6	43.0
Management of Companies and Enterprises	12,921	171,446	-3.0	59.0	3.3	44.1
Administrative and Support and Waste Management and Remediation Services	60,790	62,869	6.7	13.7	1.3	48.1
Educational Services	18,938	66,672	4.8	-20.5	2.4	35.8
Health Care and Social Assistance	201,578	66,280	3.2	61.	3.9	21.7
Arts, Entertainment, and Recreation	17,763	176,265	23.2	2.5	-4.7	30.1
Accommodation and Food Services	72,711	37,142	16.2	16.0	7.7	60.0
Other Services (except Public Administration)	75,799	46,475	9.8	-7.2	5.6	87.4
Government	154,000	123,082	2.5	20.6	3.2	42.9
Total Employment	1,103,636	95,840	5.5	16.8	-0.3	40.1

# Table 69: Major Industry Employment in San Fernando, 2023

Source: Lightcast. Analysis by Beacon Economics

The San Fernando SPA has strengths in the Motion Picture and Video industry. The LQ for this industry is a huge, 21, and grew at nearly 35% over five years. The Education and Hospitals industry is also a strength in this SPA.

Many threats and weaknesses are undermining the San Fernando economy. The decline of the Individual and Family Services industry is a threat in San Fernando since the LQ had negative growth from 2018 to 2023. This industry is a major employer in San Fernando, so this is cause for concern.

### Table 70: Industry SWOT Analysis for San Fernando

Top 15 Largest Industries: San Fernando	Jobs	LQ	5-Yr. % Change	SWOT Classification
Motion Picture and Video Industries	76,162	20.965	34.8	Strengths
Individual and Family Services	74,963	3.078	-1.4	Threats
Education and Hospitals (Local Government)	69,525	3.222	9.5	Strengths
Restaurants and Other Eating Places	63,626	0.692	-2.6	Weaknesses
Local Government, Excluding Education and Hospitals	57,887	5.204	11.4	Strengths
General Medical and Surgical Hospitals	25,905	0.633	-1.1	Weaknesses
Outpatient Care Centers	25,052	2.813	-2.0	Threats
Private Households	23,904	13.005	35.5	Strengths
Employment Services	22,423	0.669	7.7	Opportunities
Building Equipment Contractors	16,920	0.821	-1.0	Weaknesses
Home Health Care Services	16,824	1.264	34.1	Strengths
Grocery Stores	16,470	0.686	-0.2	Weaknesses
Investigation and Security Services	16,212	1.932	14.0	Strengths
Agencies, Brokerages, and Other Insurance Related Activities	14,926	1.329	-13.5	Threats
Management of Companies and Enterprises	12,921	0.595	16.8	Opportunities

#### Source: Lightcast. Analysis by Beacon Economics

Most of the high-paying jobs in the San Fernando SPA are performing well in terms of growth. The 10-year growth of the top-paying industry – Independent Artists, Writers, and Performers – was -3.0%. Management of Companies and Enterprises contracted by 3.0% over the last year, but this follows a 10-year growth rate of 59%. Radio and Television Broadcasting have followed a similar pattern.
### San Gabriel

The top industries in the San Gabriel SPA are Health Care and Social Assistance Government, Retail Trade, and Accommodation and Food Services.

# San Gabriel

Top 15 Highest-Paying Occupations*: San Fernando	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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
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.				

# Table 72: Top 15 Highest-Paying Occupations in San Fernando, 2023

# San Gabriel

The top industries in the San Gabriel SPA are Health Care and Social Assistance Government, Retail Trade, and Accommodation and Food Services.

Major Industry Employment in San Gabriel	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	891	68,941	2.4	-35.8	3.8	75.1
Mining, Quarrying, and Oil and Gas Extraction	232	131,319	5.9	2.9	10.6	-28.4
Utilities	5,333	185,744	2.9	-8.5	2.7	38.2
Construction	27,894	94,764	-0.4	29.8	5.2	41.7
Manufacturing	52,254	99,537	1.5	-15.6	4.7	43.5
Wholesale Trade	47,506	96,598	-0.4	3.1	6.2	33.0
Retail Trade	75,431	58,071	0.6	0.0	3.4	48.8
Transportation and Warehousing	22,199	73,507	2.1	75.4	5.8	31.2
Information	3,175	186,523	8.2	-26.8	-11.7	57.7
Finance and Insurance	25,962	166,372	-4.1	-12.9	4.4	46.2
Real Estate and Rental and Leasing	8,219	106,353	5.2	26.5	3.8	46.3
Professional, Scientific, and Technical Services	27,516	146,812	3.4	-19.4	-2.2	36.8
Management of Companies and Enterprises	10,502	182,951	-3.5	-6.5	3.6	46.9
Administrative and Support and Waste Management and Remediation Services	43,037	61,567	5.9	13.3	1.6	45.6
Educational Services	37,960	82,465	4.7	21.2	4.7	60.7
Health Care and Social Assistance	146,876	65,424	3.5	44.3	3.8	16.9
Arts, Entertainment, and Recreation	5,176	141,847	23.2	-13.8	-5.1	57.1
Accommodation and Food Services	69,735	37,126	16.9	18.9	8.0	60.8
Other Services (except Public Administration)	40,098	41,750	9.0	-14.7	4.8	90.5
Government	93,038	121,402	0.9	2.7	3.4	42.2
Total Employment	743,067	84,734	3.6	8.5	2.3	36.0

# Table 73: Major Industry Employment in San Gabriel, 2023

The Individual and Family Services industry is currently a threat in San Gabriel since the LQ fell by 5% over the past five years. The Colleges, Universities, and Professional Schools is also a threat as the LQ decreased by 1.2% from 2018 to 2023.

There are many opportunities in San Gabriel with the most noteworthy being the General Medical and Surgical Hospitals industry.

## Table 74: Industry SWOT Analysis for San Gabriel

Top 15 Largest Industries: San Gabriel	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Restaurants and Other Eating Places	63,847	1.022	0.1	Strengths
Individual and Family Services	48,354	2.921	-5.0	Threats
Education and Hospitals (Local Government)	39,502	2.658	43.2	Strengths
Local Government, Excluding Education and Hospitals	36,195	3.489	18.5	Strengths
Colleges, Universities, and Professional Schools	25,191	3.470	-1.2	Threats
General Medical and Surgical Hospitals	20,605	0.740	8.8	Opportunities
Grocery Stores	16,125	0.988	5.4	Opportunities
Employment Services	15,924	0.699	-10.3	Weaknesses
Private Households	13,884	11.112	39.2	Strengths
Offices of Physicians	12,717	0.768	-1.4	Weaknesses
Nursing Care Facilities (Skilled Nursing Facilities)	12,111	1.527	19.4	Strengths
Services to Buildings and Dwellings	10,979	0.846	16.0	Opportunities
Management of Companies and Enterprises	10,502	0.711	8.3	Opportunities
Professional and Commercial Equipment and Supplies Merchant Wholesalers	9,805	2.276	-14.4	Threats
Elementary and Secondary Schools	9,754	1.844	-15.0	Threats

# South Bay

The major industries in the South Bay include Government, Health Care and Social Assistance, Manufacturing, Accommodation and Food Services, and Retail Trade.

# South Bay

Top 15 Highest-Paying Occupations*: San Gabriel	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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
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.				

# Table 76: Top 15 Highest-Paying Occupations in San Gabriel, 2023

# South Bay

The major industries in the South Bay include Government, Health Care and Social Assistance, Manu-

Major Industry Employment in South Bay	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	1,042	68,371	4.9	194.4	2.6	54.0
Mining, Quarrying, and Oil and Gas Extraction	873	121,556	0.7	-1.5	11.9	-42.8
Utilities	801	184,883	1.4	-57.2	3.8	41.2
Construction	21,938	93,726	1.1	23.0	5.1	42.0
Manufacturing	78,419	134,168	2.9	-1.5	4.0	42.5
Wholesale Trade	27,098	96,471	1.2	-5.9	5.1	33.3
Retail Trade	65,301	57,087	1.1	3.1	3.3	49.3
Transportation and Warehousing	59,981	104,707	5.3	41.7	4.6	36.4
Information	8,107	183,486	15.8	10.1	-14.8	61.9
Finance and Insurance	15,279	167,213	-0.9	-2.0	2.9	48.8
Real Estate and Rental and Leasing	12,737	105,171	6.4	25.0	3.8	53.6
Professional, Scientific, and Technical Services	44,693	138,995	5.7	12.0	-1.7	30.5
Management of Companies and Enterprises	11,471	171,206	-1.2	-2.2	3.2	47.5
Administrative and Support and Waste Management and Remediation Services	51,627	66,710	7.0	19.2	-0.9	42.9
Educational Services	15,010	42,454	1.8	-24.8	3.5	1.5
Health Care and Social Assistance	106,616	61,531	4.1	35.5	3.4	10.1
Arts, Entertainment, and Recreation	9,761	121,515	25.2	27.1	-1.3	65.2
Accommodation and Food Services	72,410	38,695	16.7	30.7	8.6	59.2
Other Services (except Public Administration)	40,928	46,685	8.1	-22.0	3.7	53.0
Government	141,358	124,410	2.3	19.3	7.6	50.4
Total Employment	785,487	93,213	4.9	12.7	3.0	39.9

# Table 78: Major Industry Employment in South Bay, 2023

The South Bay has many strengths and opportunities. One strength not common in other SPAs is the Aerospace Product and Parts manufacturing industry. Some of the opportunities like Restaurants and Other Eating Places, and Grocery Stores are not resilient jobs and don't offer a promising career pathway.

The South Bay's weaknesses are in the primarily management-related industries at the lower end of the list with fewer jobs overall. Freight Transportation Arrangement is a threat due to a falling LQ.

#### Table 79: Industry SWOT Analysis for South Bay

Top 15 Largest Industries: South Bay	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Education and Hospitals (State Government)	60,221	38.161	9.2	Strengths
Restaurants and Other Eating Places	59,812	0.909	9.4	Opportunities
Individual and Family Services	47,014	2.696	2.3	Strengths
Education and Hospitals (Local Government)	41,503	4.206	13.6	Strengths
Aerospace Product and Parts Manufacturing	25,375	8.176	23.3	Strengths
Local Government, Excluding Education and Hospitals	25,207	2.558	-6.5	Threats
Employment Services	20,265	0.845	7.2	Opportunities
Grocery Stores	14,658	0.853	6.8	Opportunities
Private Households	14,591	11.085	36.1	Strengths
General Medical and Surgical Hospitals	13,768	0.470	2.1	Opportunities
Support Activities for Water Transportation	13,740	22.716	8.0	Strengths
Management of Companies and Enterprises	11,471	0.737	-23.7	Weaknesses
Freight Transportation Arrangement	11,416	6.790	-0.9	Threats
Management, Scientific, and Technical Consulting Services	11,213	1.000	-2.6	Weaknesses
Offices of Physicians	9,581	0.549	-5.7	Weaknesses

#### Source: Lightcast. Analysis by Beacon Economics

Most of the highest-paying jobs have experienced growth in recent years. Computer and Peripheral Equipment manufacturing is a booming industry in the South Bay. Aerospace Product and Parts manufacturing employs over 25,000 people and shows no signs of slowing down as employment grew 9.6% last year.

Navigational, Measuring, Electromedical, and Control Instruments manufacturing has been contracting for some time now, so it would be inadvisable to guide workers toward this industry. Local Government is the largest industry with a contraction in jobs of 7.7% over the past 10 years.

## South East

The top employing industries in the South-East SPA include Health Care and Social Assistance, Government, Manufacturing, Retail Trade, and Transportation and Warehousing.

# South East

Top 15 Highest-Paying Occupations*: South Bay	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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.				

# Table 81: Top 15 Highest-Paying Occupations in South Bay, 2023

# South-East

The top employing industries in the South-East SPA include Health Care and Social Assistance, Govern-

Major Industry Employment in South-East	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	84	75,962	9.0	62.6	9.4	65.0
Mining, Quarrying, and Oil and Gas Extraction	41	134,730	-0.3	-17.7	12.6	-40.2
Utilities	352	181,584	0.2	-64.8	3.4	36.6
Construction	3,664	90,526	-1.2	54.0	9.1	36.7
Manufacturing	18,431	92,102	2.9	-16.9	4.2	39.3
Wholesale Trade	8,677	95,035	0.1	-17.6	6.0	38.6
Retail Trade	14,030	57,323	1.4	5.4	2.5	48.4
Transportation and Warehousing	11,876	84,384	4.5	23.9	2.8	42.1
Information	6,750	146,534	11.2	2,758.0	-16.6	30.2
Finance and Insurance	641	162,469	-0.7	-28.3	-1.8	51.0
Real Estate and Rental and Leasing	742	99,449	6.9	13.8	1.6	41.6
Professional, Scientific, and Technical Services	1,589	135,187	5.0	8.3	1.2	27.2
Management of Companies and Enterprises	2,416	172,540	2.8	31.4	2.7	46.8
Administrative and Support and Waste Management and Remediation Services	9,102	69,774	7.0	31.5	0.4	41.4
Educational Services	2,075	54,863	2.8	-0.6	1.6	32.5
Health Care and Social Assistance	22,992	68,490	3.0	93.6	3.8	35.5
Arts, Entertainment, and Recreation	732	208,202	1.1	279.1	-2.0	142.2
Accommodation and Food Services	7,899	40,283	16.7	29.1	7.6	60.3
Other Services (except Public Administration)	9,730	50,208	6.2	-13.0	4.0	55.8
Government	19,444	116,876	2.1	19.1	3.6	38.7
Total Employment	141,273	85,588	4.0	15.0	1.4	42.2

# Table 82: Major Industry Employment in South-East, 2023

The LQ in the Motion Picture and Video industry has skyrocketed in the South-East SPA, growing by 1,280% since 2018. This makes this industry a great strength in the South-East, allowing this SPA to benefit from one the biggest industries in the county.

Another strength is General Freight Trucking. As discussed earlier, this industry provides opportunities for low-educated individuals to significantly increase earnings and enhance pros-

#### Table 83: Industry SWOT Analysis for South-East

pects for self-employment. One issue is that the cost of obtaining a license can be prohibitive for those who might benefit most from this strength.

Most threats to this SPA are in Government-related industries. Weaknesses in Grocery Stores are concerning since some neighborhoods in this SPA are notorious food deserts.<sup>1</sup>

Top 15 Largest Industries: South-East	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Education and Hospitals (Local Government)	10,502	2.322	-11.8	Threats
Individual and Family Services	8,248	2.588	8.0	Strengths
Motion Picture and Video Industries	6,549	13.776	1,280.7	Strengths
Restaurants and Other Eating Places	5,573	0.463	26.3	Opportunities
Local Government, Excluding Education and Hospitals	4,593	1.795	-11.6	Threats
General Medical and Surgical Hospitals	4,192	0.782	38.2	Opportunities
Cut and Sew Apparel Manufacturing	3,846	46.974	48.1	Strengths
Automotive Repair and Maintenance	2,924	2.642	30.9	Strengths
Grocery Stores	2,893	0.921	-1.4	Weaknesses
Federal Government, Civilian	2,652	1.978	-9.8	Threats
General Freight Trucking	2,464	1.960	57.6	Strengths
Management of Companies and Enterprises	2,416	0.849	-11.3	Weaknesses
Employment Services	2,379	0.543	-6.6	Weaknesses
Religious Organizations	2,245	10.327	-6.6	Threats
Warehousing and Storage	2,144	0.990	-34.3	Weaknesses

#### Source: Lightcast. Analysis by Beacon Economics

Management and Local Government jobs pay the highest wages in this SPA and have both grown over the past 10 years. The exorbitant growth of the motion picture industry has already been mentioned, but it is worth noting that these are also well-paying jobs.

On a less positive note, from 2013 to 2023 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.

### South West

The top industries in the South-West SPA include Government, Health Care and Social Assistance, Retail Trade, and Accommodation and Food Services.

# South West

Table 85: Top 15 Highest-Paying Occupations in South-East, 2023	Table 85: Top	15 Highest-Paying	Occupations in So	uth-East, 2023
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Top 15 Highest-Paying Occupations*: South-East	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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
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.				

# South-West

The top industries in the South-West SPA include Government, Health Care and Social Assis-

Major Industry Employment in South-West	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	96	69,630	-22.3	-13.7	4.1	81.6
Mining, Quarrying, and Oil and Gas Extraction	7	137,368	-2.6	-85.8	12.3	-25.6
Utilities	210	214,509	-40.6	217.6	4.2	0.3
Construction	1,369	96,251	2.6	62.7	7.5	32.5
Manufacturing	3,558	91,473	3.0	-46.4	4.4	36.9
Wholesale Trade	2,499	97,607	1.2	-22.8	4.9	39.5
Retail Trade	9,452	56,347	2.6	38.2	1.1	44.9
Transportation and Warehousing	1,430	80,199	4.0	20.0	3.4	28.5
Information	581	180,436	12.8	7.5	3.0	64.8
Finance and Insurance	1,166	148,322	-1.8	-15.5	3.2	37.2
Real Estate and Rental and Leasing	803	111,808	4.9	-4.9	1.3	46.2
Professional, Scientific, and Technical Services	1,923	129,094	5.2	26.1	-0.7	40.3
Management of Companies and Enterprises	1,842	169,951	13.0	18.4	2.9	24.1
Administrative and Support and Waste Management and Remediation Services	5,703	89,649	6.7	82.9	-7.2	84.5
Educational Services	2,571	71,029	3.9	-36.5	4.6	42.9
Health Care and Social Assistance	19,325	49,564	2.3	76.3	5.9	29.8
Arts, Entertainment, and Recreation	3,492	166,349	16.5	279.4	-6.5	39.7
Accommodation and Food Services	6,203	39,336	14.4	17.7	6.0	65.5
Other Services (except Public Administration)	6,963	45,981	8.0	-56.5	4.7	76.0
Government	30,647	127,611	3.8	4.9	2.8	45.5
Total Employment	99,845	90,527	4.7	4.7	2.1	48.9

# Table 86: Major Industry Employment in South-West, 2023

The South-West SPA is lacking many opportunities, with only management of companies and enterprises showing signs of improvement.

There are many strengths in Local Government including Education and Hospitals. Grocery Stores are a strength in the South-West as the LQ grew by 17.9% over the past five years. This is encouraging news since some neighborhoods in the SPA have a reputation as food deserts.

#### Table 87: Industry SWOT Analysis for South-West

Top 15 Largest Industries: South-West	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Local Government, Excluding Education and Hospitals	15,553	7.549	9.9	Strengths
Education and Hospitals (Local Government)	12,355	3.341	9.3	Strengths
Individual and Family Services	9,379	4.275	-8.6	Threats
Restaurants and Other Eating Places	4,086	0.493	-4.9	Weaknesses
Employment Services	3,779	1.252	284.8	Strengths
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	2,615	5.562	49.9	Strengths
Grocery Stores	2,221	1.027	17.9	Strengths
Religious Organizations	2,028	13.555	-15.9	Threats
Management of Companies and Enterprises	1,842	0.941	22.1	Opportunities
Federal Government, Civilian	1,507	1.620	-2.8	Threats
Private Households	1,467	8.859	19.3	Strengths
Offices of Other Health Practitioners	1,460	1.721	-2.1	Threats
Colleges, Universities, and Professional Schools	1,335	1.387	-24.0	Threats
Performing Arts Companies	1,281	13.378	78.3	Strengths
Outpatient Care Centers	1,114	1.389	41.3	Strengths

Source: Lightcast. Analysis by Beacon Economics

All the top-paying industries had positive employment growth from 2022 to 2023, except the Federal Government.

From 2013 to 2023, most job reductions in this high-paying subset came from Education-related sources such as colleges, universities, and professional schools.

# West

The top industries in the West SPA include Professional, Scientific, and Technical Services, Information, Accommodation and Food Services, and Health Care and Social Assistance.

# West

Top 15 Highest-Paying Occupations*: South-West	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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
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.				

# Table 89: Top 15 Highest-Paying Occupations in South-West, 2023

### West

The top industries in the West SPA include Professional, Scientific, and Technical Services, In-

Major Industry Employment in West	Jobs	Average Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs	1-Yr. % Change Wage	10-Yr. % Change Wage
Agriculture, Forestry, Fishing and Hunting	467	69,851	4.5	-80.2	3.9	88.3
Mining, Quarrying, and Oil and Gas Extraction	74	128,714	-0.7	-97.1	4.4	-30.1
Utilities	670	196,485	0.1	16.7	3.7	40.5
Construction	9,615	101,095	4.5	-5.6	5.9	40.3
Manufacturing	8,787	99,893	3.2	-8.4	5.0	51.3
Wholesale Trade	7,797	94,227	2.6	-28.0	5.6	40.4
Retail Trade	36,715	57,033	1.8	-7.3	3.8	45.8
Transportation and Warehousing	54,903	102,802	5.0	65.2	4.9	50.4
Information	61,259	172,758	13.6	0.8	-9.6	41.5
Finance and Insurance	19,180	250,644	-1.7	11.3	1.7	56.0
Real Estate and Rental and Leasing	27,254	95,381	6.0	41.4	5.7	45.8
Professional, Scientific, and Technical Services	90,767	145,145	5.4	42.3	-0.3	37.3
Management of Companies and Enterprises	5,645	174,814	-0.9	13.0	1.7	49.3
Administrative and Support and Waste Management and Remediation Services	30,914	71,675	6.7	19.7	-2.7	47.2
Educational Services	21,111	78,758	6.7	-8.4	3.7	44.9
Health Care and Social Assistance	63,261	68,338	3.1	48.7	2.7	16.8
Arts, Entertainment, and Recreation	25,460	176,572	25.1	55.7	-4.4	16.1
Accommodation and Food Services	69,823	39,533	16.3	25.5	9.1	56.4
Other Services (except Public Administration)	23,043	33,209	6.5	-6.5	3.6	50.2
Government	31,912	117,706	1.5	-31.4	3.5	40.9
Total Employment	588,677	106,392	7.1	15.3	-0.1	40.2

# Table 90: Major Industry Employment in West, 2023

The West SPA mostly exhibits strengths. Threats to Restaurants and Other Eating Places might be partly due to disruption caused by the pandemic. A more concerning threat is the 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.

### Table 91: Industry SWOT Analysis for West

Top 15 Largest Industries: West	Jobs	LQ	5-Yr. % Change in LQ	SWOT Classification
Restaurants and Other Eating Places	51,171	1.054	-1.8	Threats
Motion Picture and Video Industries	29,698	15.478	0.2	Strengths
Legal Services	23,287	4.320	7.4	Strengths
Scheduled Air Transportation	23,001	11.034	22.2	Strengths
Individual and Family Services	21,009	1.633	28.1	Strengths
Management, Scientific, and Technical Consulting Services	18,465	2.231	-9.1	Threats
Education and Hospitals (Local Government)	18,102	3.671	20.2	Strengths
Private Households	13,374	13.776	30.2	Strengths
Colleges, Universities, and Professional Schools	13,240	2.347	4.5	Strengths
Employment Services	12,753	0.721	-18.5	Weaknesses
Traveler Accommodation	12,026	1.561	1.0	Strengths
Advertising, Public Relations, and Related Services	12,018	5.333	11.4	Strengths
Activities Related to Real Estate	11,426	3.136	6.4	Strengths
Offices of Physicians	10,467	0.813	-0.8	Weaknesses
Couriers and Express Delivery Services	9,869	2.335	80.4	Strengths

Source: Lightcast. Analysis by Beacon Economics

There are many high-paying industries in the West SPA and many of them are experiencing robust employment growth. However, the largest decline in employment from 2013 to 2023 was in the Education and Hospitals industry which had a growth rate of -26%. The Sound Recording industry contracted by over 6% since 2014 but rebounded recently, growing 11% from 2022 to 2023.

Sustainability SWOT Analysis ofService Planning Areas

# Table 93: Top 15 Highest-Paying Occupations in West, 2023

Top 15 Highest-Paying Occupations*: West	Jobs	Hourly Wage	1-Yr. % Change Jobs	10-Yr. % Change Jobs
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.				

# Sustainability SWOT Analysis of Service Planning Areas

This section analyzes the strengths, weaknesses, opportunities, and threats of each SPA based on environmental and sustainability factors. Every SPA faces threats from climate change. Because of Los Angeles' varied topology, each SPA faces different environmental threats. More rural SPAs around the northern and eastern edge of the county face significant natural threats such as wildfires, whereas SPAs closer to the center of L.A. face man made environmental threats such as air and water pollution.

#### Figure 19: Wildfire Annualized Frequency Across Census Tracts, 2023

#### WILDFIRE RISK

In 2020, emissions from California wildfires reached 127.7 million metric tons of CO2 equivalent (MMTCO2e),<sup>2</sup> surpassing all economic sectors except transportation. The economic impact of wildfires in 2020 amounted to over \$19 billion in losses.<sup>3</sup>

The San Fernando SPA is the most susceptible to wildfire risk based on annualized frequency, while the South-West and South-East SPAs have the lowest frequencies of wildfires. Communities with high fire frequency (San Fernando, San Gabriel, Antelope Valley, and West), as indicated by Wildfire Annualized Frequency, have relatively higher median incomes, averaging \$90,904.

The spatial units in the maps in this section are United States Census Tracts. We use this level of geography to illustrate spatial heterogeneity and dispersion with more granularity than SPAs-level maps would depict.



Source: Federal Emergency Management Agency. Analysis by Beacon Economics

- 2 California Air Resources Board.
- 3 As forests go up in smoke, so will California's climate plan. Los Angeles Times. August 29, 2022. Retrieved from: <u>https://www.latimes.com/environment/story/2022-08-29/forests-wildfires-california-climate-plan</u>.

#### **URBAN HEAT ISLAND INDEX**

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An Urban Heat Island (UHI) is an urban area that is significantly warmer than its rural surroundings. This phenomenon poses challenges to the economy, the environment, and urban infrastructures. The increased energy bills resulting from higher cooling demands can place a financial burden on individuals and communities. Businesses may also face higher operational costs due to increased energy consumption. The UHI effect contributes to higher emissions of greenhouse gases as more energy is used for cooling. Extreme heat events, coupled with the UHI effect, can strain urban infrastructure, including roads, bridges, and public transport.

There are approximately three million people in Los Angeles living in a census tract with more





Urban factors, such as land use patterns, building materials, and vegetation, can influence 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.

The Antelope Valley SPA is rural and thus does not have a man-made heat affect. It experiences very high temperatures naturally because of the fact it is an inland desert.

#### Table 94: Urban Heat Island effect (°F) Across Services Planning Areas, 2023

Services Planning Area	Average UHI effect (°F)
SPA 7 – East	8.27
SPA 4 – Metro	8.25
SPA 8 – South Bay	8.15
SPA 5 – West	7.97
SPA 2 – San Fernando	7.96
SPA 6 – South-East	7.95
SPA 3 – San Gabriel	7.95
SPA 6 – South-West	7.86

Source: Climate Central. 2020 Census. Analysis by Beacon Economics

#### Figure 20: Urban Heat Island Index Across Services Planning Areas, 2021



Source: Climate Central. 2020 Census. Analysis by Beacon Economics

#### DIESEL PARTICULATE MATTER

Diesel particulate matter (diesel PM) is a complex mixture of compounds, including sulfates, nitrates, metals, and carbon particles. It contains known carcinogens such as benzene and formaldehyde. Diesel engine exhaust has been classified as carcinogenic to humans by the International Agency for Research on Cancer, primarily due to the association between exposure and an elevated risk of lung cancer. In urban areas, diesel PM remains a major component of particulate air pollution, especially in the context of traffic-related emissions. The concentration of diesel PM contributes significantly to overall air pollution in urban areas.

Its no surprise the Metro SPA has the highest diesel PM emissions with a value of 0.40 (tons/year).

### Table 95: Diesel Particulate Matter Emissions from On-Road and Non-Road Sources (tons/year) Across Services Planning Areas, 2010-2016

Services Planning Area	2016 Annual Average Diesel PM Emission (tons/year)
SPA 7 – East	0.32
SPA 6 – South-West	0.35
SPA 6 – South-East	0.32
SPA 3 – San Gabriel	0.24
SPA 4 – Metro	0.40
SPA 5 – West	0.28
SPA 2 – San Fernando	0.20
SPA 1 – Antelope Valley	0.06
SPA 8 – South Bay	0.33

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

Metro has the highest diesel emission, it also has the 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.

Figure 21: Diesel Particulate Matter Emissions from On-Road and Non-Road Sources (tons/year) Across Census Tracts, 2016

Figure 22: Change in Diesel Particulate Matter Emissions from On-Road and Non-Road Sources (tons/ year) Across Census Tracts, 2012-2016



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

0.52 - -0.22

0.13

0.80 - 5.9

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.

#### COMMUNITY HEALTH AND WELL-BEING

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. <sup>5,6</sup> 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, South-East, South-West, East, and Metro, have remained unchanged from 2012 to 2021. It is worth noting the South-East and South-West SPAs are at the 96<sup>th</sup> and 86<sup>th</sup> percentile respectively, when compared to the rest of the State, meaning these regions have some of the worst CalEnviroScreen scores of anywhere in the California.

#### Table 96: CalEnviroScreen 4.0 Component Score by Planning Areas, 2021

Services Planning Areas	CalEnviroScreen 4.0 Component Score	Average Component Score Percentile (Within California)
SPA 6 – South-East	62.5	95.5
SPA 6 – South-West	50.1	86.3
SPA 7 – East	43.9	76.1
SPA 4 – Metro	41.8	73.7
SPA 3 – San Gabriel	34.7	59.0
SPA 2 – San Fernando	34.1	60.7
SPA 8 – South Bay	33.2	59.5
SPA 1 – Antelope Valley	27.8	51.9
SPA 5 – West	20.4	38.1

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

5 With a maximum score of 10 for each group, the highest possible CalEnviroScreen Score is 100.

6 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.

#### AIR QUALITY - PM2.5, OZONE

Particulate matter pollution, and especially fine particle (PM2.5) pollution, is associated with various health issues. Extensive research has established a causal link between compromised air quality and adverse effects on cognitive abilities and developmental outcomes. For example, higher indoor PM2.5 levels were closely associated with decreased performance in Stroop response time (a measure of cognitive quickness), interference time, and lower ADHD throughput.<sup>7</sup>

Wildfires contribute to elevated levels of PM2.5, with smoke particles mostly falling within the PM2.5 size range. During notable wildfires, such as the 2020 Bobcat wildfire in Los Angeles County, PM2.5 concentrations exceeded air quality standards.

South-East has the highest three-year average PM2.5 concentration. San Gabriel has both a high average PM2.5 concentration (12.0  $\mu$ g/m3) and high PM2.5 concentration growth.

In general, most SPAs have seen an improvement in PM2.5 pollution from 2012. The exceptions are San Fernando, Antelope Valley, and South Bay, but these areas that have relatively low pollution levels.

Communities with high PM2.5 concentration (South-West, San Gabriel, East, and West) have relatively higher median incomes, averaging \$77,063. In contrast, communities with low PM2.5 concentration show lower median incomes, with an average of \$71,488.

#### Table 97: Changes in Three-Year Average PM2.5 Concentration(µg/m3) Across Services Planning Areas, 2009-2017

Services Planning Areas	2015-17 Average PM2.5 Concentration (µg/m3)	2009 to 2017 Percent Change (%)	2012 to 2017 Percent Change (%)
SPA 1 – Antelope Valley	7.3	3.5	18.5
SPA 3 – San Gabriel	12.0	-7.0	4.9
SPA 2 – San Fernando	11.3	4.7	3.7
SPA 8 – South Bay	11.7	0.1	1.5
SPA 7 – East	12.0	-4.0	0.6
SPA 6 – South-East	12.1	-3.5	-1.0
SPA 4 – Metro	11.6	-5.7	-3.0
SPA 6 – South-West	12.0	-5.0	-4.1
SPA 5 – West	12.1	-3.3	-4.2

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

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#### Figure 23: Change in Three-Year Average PM2.5 Concentration (µg/m3) Across Census Tracts, 2012-2017



Ozone is a key component of smog. It is formed in the atmosphere by complex reactions with chemicals directly emitted by motor vehicles and other combustion sources. Even at low levels, ozone can lead to health issues.

The standard for ground-level ozone was set by the United States Environmental Protection Agency (EPA) in 2008. The 2008 ozone standard set the eight-hour average concentration limit at 0.075 parts per million (ppm).

Elevated levels of ozone concentration are particularly notable in northern Los Angeles County, especially in the northwest region where San Fernando and Antelope Valley are located.

Source: California Office of Environmental Health Hazard Assessment. Analysis by Beacon Economics
Table 98: Changes in Three-Year Average Ozone Concentration (ppm) Across Services Planning Areas, 2011-2019

Services Planning Areas	2017-19 Three-Year Average Ozone Concentration (ppm)	2011-19 Percent Change (%)
SPA 2 – San Fernando	0.062	9.6
SPA 3 – San Gabriel	0.057	8.8
SPA 7 – East	0.047	3.6
SPA 4 – Metro	0.049	2.9
SPA 5 – West	0.047	1.8
SPA 1 – Antelope Valley	0.063	1.0
SPA 6 – South-East	0.044	-1.3
SPA 6 – South-West	0.045	-2.6

Figure 24: Three-Year Average Ozone Concentration (ppm) Across Census Tracts, 2017-2019

Figure 25: Change in Three-Year Average Ozone Concentration (ppm) Across Census Tracts, 2011-2019



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

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

#### TRAFFIC DENSITY AND IMPACTS

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.

The impact of traffic pollution can be measured by calculating the amount of traffic volume within a given census tract.<sup>8</sup> South-West has the highest traffic impact score of 1,755.5 vehicle km/h per km of road. There is notable variation in traffic impacts across different SPAs, ranging from lower values such as 670.3 in Antelope Valley to higher values such as 1,755.5 in South-West. San Fernando and Metro exhibit consistent positive changes from 2004 to 2017, suggesting an increase in traffic density, while South-East, and South-West show a continuous improvement from 2013 to 2017.

#### Table 99: Changes in Traffic Impact<sup>®</sup> Across Services Planning Areas, 2004-2017

Services Planning Areas	2017 Annual Traffic Impact (vehicle-km/h per km of road)	2004-17 Percent Change (%)	2013-17 Percent Change (%)
SPA 1 – Antelope 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.

Communities with high traffic density (San Fernando, South-West, San Gabriel, and South-East) have relatively low median incomes, averaging \$60,942. In contrast, communities with low traffic density show higher median incomes, with an average of \$73,037.

8 CalEnviroScreen 4.0 defines sum of traffic volumes adjusted by road segment length (vehiclekilometers per hour) divided by total road length (kilometers) within 150 meters of the census tract.

9 CalEnviroScreen 4.0 defines traffic impacts as density of vehicle kilometers traveled per hour for each kilometer of road.





Figure 26: Changes in Traffic Density Across Census Tracts, 2013-2017



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

#### CARDIOVASCULAR HEALTH

Cardiovascular disease (CVD) encompasses conditions involving blocked or narrowed blood vessels, often leading to heart attacks or other heart-related problems. It is the leading cause of death in both California and the United States. 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.

All SPAs had increased CVD rates from 2011 to 2017, with percentage changes ranging from 52.7 percent to 99.3 percent (the average growth rate in Los Angeles County was 70 percent). South-East had the highest percentage change in CVD rates from 2011-17, with a growth rate of 99.3%. It also had the highest cardiovascular ER visit rate of 22.0% between 2015 and 2017.

Cardiovascular diseases are the most prevalent causes of disability and death in working class people, often cutting short their working lives.<sup>10</sup> For example, a construction worker doing heavy physical work loses their job if they suffer an extensive stroke resulting in hemiplegia, rendering one side of the body paralyzed and useless. A mover doing heavy lifting cannot work if they suffer a heart attack causing permanent weakness of the heart, resulting in chronic congestive heart failure.

The third case study in this report offers a program to help address this issue. In short, the idea is to install blood pressure kiosks with electric sphygmomanometers, and straightforward instructions, directly into communities. Installing more of these kiosks at easily and frequently accessed locations such as pharmacies and grocery stores in neighborhoods with low health-care access could help many people detect hypertension at no financial cost and with minimal time and travel costs. This kind of screening program can help many low-income, underserved Angelenos avoid disability and death.

#### 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.

10 GRD 2017 DALYS and Hale Collaborators. Global, regional, and national disability – adjusted life-years for 359 diseases for 195 countries: a systematic analysis for the Global Burden of Disease Study 2017 Lancet 2018: 392: 1859-922.

Figure 28: Cardiovascular Disease, Age-Adjusted Rate of ER Visits per 10,000 Across Census Tracts, 2015-2017

Figure 29: Change in Cardiovascular Disease, Age-Adjusted Rate of ER Visits per 10,000 Across Census Tracts, 2011-2017



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

No data

Communities with high cardiovascular ER visits rate per 10,000 (Antelope Valley, South-West, East, and South-East) have relatively low median incomes, averaging \$58,159. In contrast, communities with low cardiovascular ER visits rate per 10,000 show higher median incomes, with an average of \$82,674.

#### ASTHMA PREVALENCE

Asthma is a serious health condition characterized by recurring symptoms such as breathlessness, coughing, and chest tightness. In California, more than three million individuals currently live with asthma, and nearly six million have experienced it at some point in their lives. Children, the elderly, and those with low incomes suffer disproportionately from asthma.<sup>11</sup> It has also been estimated that PM2.5 is responsible for around 16 million incident cases of childhood asthma every year in the United States. <sup>12</sup> 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 region that had fewer ER visits from 2011 (-1.0% and -2.3%).

# Table 100: 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.

11 UCLA Center for Health Policy Research. *Income disparities in Asthma Burden and Care in California*. 2009.

12 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 Figure 30: Asthma, Age-Adjusted Rate of ER Visits per 10,000 Across Census Tracts, 2015-2017



Asthma, Age-Adjusted Rate of ER Visits Per 10,000

	4.28 - 29.4
	29.4 - 42.4
	42.4 - 56.5
-	56.5 - 74.9
-	74.9 - 158.0
	No Data





#### .CLEAN WATER - DRINKING WATER QUALITY

Access to potable water is essential for public health. Contaminants in drinking water can pose serious health risks, particularly in low-income and rural community.

Much of California relies on groundwater as a primary source of drinking water. Contamination of groundwater, especially in agricultural areas, can occur due to factors such as nitrates leaching from fertilizers or animal waste.

Low-income and rural communities, particularly those served by small community water systems, can be disproportionately exposed to contaminated drinking water.<sup>13</sup>

The CalEnviroScreen calculates a water quality indicator based on the concentration of 10 contaminants and 2 types of water quality violations. The indicator score is calculated using average contaminant concentrations over one compliance cycle (2011-2019). A higher score means worse water quality. The Metro SPA had the highest level of drinking water contaminants in 2019, with a value of 736.2, followed closely by San Gabriel (696.3) and San Fernando (696.5).

13 VanDerslice, J. (2011). Drinking Water Infrastructure and Environmental Disparities: Evidence and Methodological Considerations. American Journal of Public Health (AJPH). Published Online: November 28, 2011. Assessed December 5<sup>th</sup>, 2023.

#### Table 101: Drinking Water Contaminants Across Services Planning Areas, 2011-2019

#### Figure 31: Drinking Water Contaminants Across Census Tracts, 2011-2019

#### Services Planning Areas 2011-2019 Average Drinking Water Contaminants

SPA 8 – South Bay	350.7
SPA 4 – Metro	736.2
SPA 6 – South-West	753.4
SPA 6 – South-East	638.5
SPA 2 – San Fernando	696.5
SPA 7 – East	526.8
SPA 3 – San Gabriel	696.3
SPA 1 – Antelope Valley	420.6
SPA 5 – West	492.2



Drinking Water Contaminants by Censu

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

Communities with high drinking water contamination (Metro, South-West, South Bay, and San Fernando) have relatively low median incomes, averaging \$66,670. In contrast, communities with low drinking water contamination shows higher median incomes, with an average of \$79,892.



#### **Disadvantaged Communities**<sup>14</sup>

The CalEnviroScreen 4.0<sup>15</sup> uses environmental health and socioeconomic indicators to identify vulnerable communities with major disparities. This tool uses twelve pollution burden metrics and eight population characteristic metrics to rank communities in California by degree of vulnerability to environmental injustice. The highest-ranking groups are designated as Senate Bill 535 Disadvantaged Communities. Disadvantage Communities were also discussed in the Income sub-section of the Equity SWOT Analysis for Service Planning Area Households.

The map on this page displays the locations of communities designated as disadvantaged and/ or low-income. These designations are made by both the State of California and the Justice40 initiative.

This map helps us understand which communities face both serious environmental issues, as well as severe economic hardships (those colored red).

# Figure 32: Disadvantaged Communities in Los Angeles County



Source: California Energy Commission. California and Justice40 Disadvantaged or Low-Income Communities. Analysis by Beacon Economics.

14 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.

15 California Office of Environmental Health Hazard Assessment. CalEnviroScreen 4.0

#### Table 102: Disadvantaged Population Across Services Planning Areas, 2021

Services Planning Areas	CalEnviroScreen 4.0 Top 25%	Percent of SPA Population in top 25%	Population At or Below 80% of Median Income (2021)	Percent of SPA Population below 80% of Median Income
SPA 6 – South-East	399,099	71.4%	254,355	45.5%
SPA 6 – South-West	312,999	64.0%	189,855	38.8%
SPA 7 – East	601,666	45.5%	293,102	22.2%
SPA 4 – Metro	457,082	38.4%	370,529	31.1%
SPA 8 – South Bay	482,249	30.7%	230,865	14.7%
SPA 2 – San Fernando	653,095	29.0%	302,188	13.4%
SPA 3 – San Gabriel	370,279	20.4%	125,374	6.9%
SPA 1 – Antelope Valley	58,464	14.7%	77,941	19.6%
SPA 5 – West	12,409	1.8%	13,594	2.0%

Source: CalEnviroScreen 4.0, Department of Housing and Community Development. Analysis by Beacon Economics.

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) disadvantage categories. Notably, East and Metro both have a 45.5% environmental disadvantage, while South Bay and 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.

Addressing these challenges requires a comprehensive approach, involving improvements to infrastructure, affordable housing initiatives, stricter environmental regulations, and increased access to health care services. Advocacy for policies that promote social and environmental justice is crucial to creating healthier and more equitable living conditions for all communities.

#### Sustainability SWOT Analysis for Green Jobs and Industry

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 20<sup>th</sup> century: well-paying, stable careers, with most not requiring a college education, 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.



#### **GREEN JOB DEFINITIONS**

Green jobs come in many forms. The Occupational Information Network (O\*Net) is a comprehensive online database and resource developed by the U.S. Department of Labor to classify occupations. O\*Net classifies three types of green jobs.

First, are **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.

Second, **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.

Third, **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 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.

#### THE GREEN ECONOMY IN LOS ANGELES

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. 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.

# Case Studies

#### THE GREEN ECONOMY IN LOS ANGELES (CONTINUED)

**Education:** Green economy workers in Los Angeles County have a wide array of educational attainment, although this is more stratified by 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 L.A. 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.

**SPAs**: Finally, 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 county-wide 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%).

#### **GREEN ECONOMY SKILLS DEMAND**

While many "jobs of the future" require higher education, often in technical fields, the green economy has a diverse array of necessary skills. 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-thejob 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, Mathemat- ics, Production and Processing	Mathematics, Customer service, Engineering and Technology, Design	Mathematics, Engineering and Technology, Mechani- cal and tools, Computers and electronics, Physics
Skill	Speaking, Monitoring, Operations Monitoring, Oper- ation and Control	Reading Comprehension, Complex Problem Solving, Judgement and Decision Making	Reading Comprehension, Writing, Judgement and Decision Making, Monitoring, Systems Analysis

As with jobs in many technical fields, additional training may be required for continued growth in green economy employment. However, unlike fields such as technology or financial services, many jobs in the green economy would not require a four-year college degree. Technical education and specialization, offered at many community colleges and on the job, can help prepare future green economy workers.



# Case Study 1: Best Practices for Employment and Job Training Programs

Welfare-to-work programs are designed to help individuals on welfare or other forms of public assistance find employment and become self-sufficient. This report discusses some of the best practices for implementing employment and job training programs, such as:

- Demand-driven training
- Individualized training plans
- Provision of supportive services
- Post-training support services

#### **DEMAND-DRIVEN TRAINING**

One critical factor for the success of job training programs is aligning the program's training curriculum with labor market demand and industry needs. Holzer recommends that programs seek collaboration with representatives from employers or industry associations.<sup>16</sup> The employment and training programs should treat employers' job-filling needs as seriously as the workers' training for this to work efficiently.<sup>17</sup> Therefore, a successful program must first assess the state of the labor market for its members and identify which sectors are currently demanding the types of workers that the program serves. Once these sectors are identified, then training can be tailored to help workers gain the necessary skills to enter these sectors.

Studies have demonstrated that focusing on demand-driven training leads to better results compared to traditional training programs that focus only on skill development. One successful program is Year Up, which actively partners with employers. Fein et al. report that Year Up participants see increased earnings.<sup>18</sup> The impact on employment is not significant, but the higher earnings demonstrate that this is a step in the right direction. A recent study by Katz et al. also finds evidence that training programs can be successful if they train workers for sectors that have robust labor demand.<sup>19</sup> Other important success factors include upfront screening, occupational and soft skills training, and wraparound services. Aligning the training program with labor market demand requires individualization of training plans.

- 16 Holzer, H., 2022. Do sectoral training programs work? What the evidence on Project Quest and Year Up really shows, Brookings Institution. United States of America.
- 17 Schaberg, Kelsey. 2020. Meeting the Needs of Job Seekers and Employers A Synthesis of Findings on Sector Strategies.
- 18 Fein, David, et al. 2021. *Still Bridging the Opportunity Divide for Low-Income Youth: Year Up's Longer-Term Impacts*. OPRE Report
- 19 Katz, Lawrence, et al. 2022. Why Do Sectoral Employment Programs Work? Lessons from WorkAdvance. Journal of Labor Economics.

#### INDIVIDUALIZED TRAINING PLANS

Individualized training plans, career counseling, and guidance play a critical role in the success of welfare-to-work programs. Through personalized counseling, individuals can receive guidance that addresses their specific barriers and needs, enhancing their prospects for sustainable employment. By tailoring guidance to participants' skills and interests, individuals can identify relevant training opportunities that align with their goals, leading to better outcomes in terms of employment and wage growth. According to Weigensberg et al.,<sup>20</sup> this personalized approach requires a thorough and extensive intake assessment.

Failing to recognize the unique needs, skills, motivations, and barriers faced by program participants can be a major mistake. Implementing a one-size-fits-all approach ignores individual circumstances and may not effectively address participants' specific needs, limiting their chances of success. Of course, it will also be necessary to provide participants with the proper supportive services or to guide them to the proper resources that can provide those services.

#### SUPPORTIVE SERVICES

Successful employment and job training programs offer supportive services alongside training to address barriers that may hinder participants' success. These services may include childcare assistance, transportation support, and access to health care. Wraparound support ensures participants can focus on their training without being discouraged or hindered by external challenges. Besides helping participants meet their basic needs, providing services that help participants overcome social challenges such as time management and professionalism is desirable. This can be done through counseling and mentorship.

Broadly speaking, many job training programs exhibit a high level of attrition from participants. This is a key reason why many job training programs are deemed unsuccessful. Hess et al. claim that the lack of supportive services is one of the greatest contributors to an individual's decision to drop out of a job training program.<sup>21</sup> Supportive services are offered sporadically, and some services are more readily available than others (Hess et al., 2016).<sup>22</sup> Data from 259 programs, on participant demographics, services received, and outcomes, shows that childcare assistance is not offered to many participants even though 69% of low-income parents in education and training programs have children younger than six years old.

- 20 Weigensberg, E., Schlecht, C., Laken, F., George, R., Stagner, M., Ballard, P., & DeCoursey, J. (2012). *Inside the Black Box: What Makes Workforce Development Programs Successful?* Chicago: Chapin Hall at the University of Chicago
- 21 Holzer, H., 2022. Do sectoral training programs work? What the evidence on Project Quest and Year Up really shows, Brookings Institution. United States of America.
- Hess, C., Mayayeva, Y., Reichlin, L., Thakur, M. (2016). Supportive Services in Job training and Education: A Research Review. Institute for Women's Policy Research



#### **POST-TRAINING SUPPORT SERVICES**

Post-training assistance should provide robust job placement support to participants upon completion of the training program. This includes assistance with job searches, résumé writing, interview preparation, and networking opportunities. Many people lack these skills and may struggle to find a job that aligns with their new skills. The program should provide support services so that participants can find gainful employment. This will reduce recidivism, helping the program become more cost-effective over time. As noted above, partnerships with employers are essential for job training programs. Job training programs should use these partnerships with both current and past participants. In particular, job training programs should maintain strong partnerships with employers and connect participants with relevant job openings.

Failing to provide sufficient post-program training support can undermine participants' longterm success. Without ongoing assistance, participants may face challenges in job retention, career advancement, and maintaining economic stability. Continued support and guidance are essential for sustained self-sufficiency. Focusing solely on immediate job placement without considering long-term career growth and advancement can limit the program's impact. Providing opportunities for ongoing skill development, career counseling, and advancement support is crucial if participants are to achieve sustained economic independence.

#### CONCLUSION

The efficacy of job training programs comes under constant scrutiny with many detractors claiming that they do not improve the economic well-being of participants. The above is evidence that job training programs can be effective under certain circumstances. Implementing best practices is crucial for enhancing the effectiveness of job training programs and improving participant outcomes. By aligning training programs with labor market demand and industry needs, participants have a greater likelihood of securing employment. Personalized training plans and career counseling effectively address individual-specific barriers and needs which will enhance employment prospects. Additionally, providing supportive services helps participants overcome challenges that may hinder success, while post-training support enables sustainable employment and career advancement.



## **Case Study 2: Low-Fare Public Transport**

A long-identified aspect of economic mobility is physical mobility – the ability of workers to not just find but also access well-paying jobs. For low-income households, the cost and availability of transport often provides an obstacle to jobs, shopping, leisure, and opportunities. Improving transit accessibility and affordability can be the key to upward mobility.

Access to transport helps workers overcome spatial mismatch, a situation that most often arises when low-income workers live far away from suitable job centers. This trend has long

been identified as a cause of urban poverty, especially in the Los Angeles region. The McCone Commission identified poor transport connections and limited access to gainful employment as leading causes of the 1965 Watts riots.<sup>23</sup> In the wake of the mid-90s welfare reform, which placed work requirements on recipients,<sup>24</sup> access to public transport empowered L.A. welfare recipients without cars to find jobs – an effect comparable to owning a car. Today, L.A. County Census tracts with lower rates of car ownership correlate with lower rates of employment and labor force participation.

- O'Regan, K. M., & Quigly, J. M. (1999). Access and economic opportunity. In J. A. Gomez-Ibanez, W. B. Tye, & C. Winston (Eds.), *Essays in transportation, economics and policy: A handbook in honor of John R. Meyer* (pp. 437–467). Brookings Institution.
- 24 Kawabata, M. (2002). Job Access and Work Among Autoless Adults in Welfare in Los Angeles. UCL.A.: The Ralph and Goldy Lewis Center for Regional Policy Studies. Retrieved from https://escholarship.org/uc/ item/6bq3457v

#### **KANSAS CITY, MISSOURI METRO**

In March 2020, the Kansas City Area Transportation Authority (KCARTA) announced ZeroFare, a program which eliminated fares for its bus services, becoming the first major transport authority in the country to permanently eliminate fares for regular service mass transit. At the start of the COVID-19 pandemic, the effects of such a policy were not immediately clear. Nevertheless, three and a half years into the program, the system stands out among U.S. public transit systems. While many systems struggle to regain pre-pandemic ridership, in months through October 2023, Kansas City has matched or exceeded 2019 ridership. With the elimination of fares as a source of funding, other sources, such as sales tax measures, become more important. Kansas City voters last approved such a measure – for 3/8<sup>th</sup> cent on the dollar – in 2008 for a 15-year extension of a 2004 tax. In November 2023, a 10-year extension of that tax was once again approved by 73% of voters, demonstrating overwhelming support for the transit system.

25 Makinen, R. (2021). ZeroFare: A bridge to economic opportunity. In G. Grant, M. Alverson, & J. A. Tenenbaum (Eds.), State of Black Kansas City 2021: Charting the path forward: Is equity enough? (pp. 86–88). Urban League of Greater Kansas City. https://www.ulkc.org/2021-Black-kc-1-1



#### KING COUNTY METRO, WA

King County, the most populous county in Washington State, operates a bus transit system in Seattle and its suburbs. With a daily ridership of approximately a quarter of a million, it contributes significantly to the 15% of King County workers who commute using public transport. The typical fare is \$2.75, although King County Metro operates a subsidized program called LIFT for people who earn below 200% of the Federal Poverty Level, and charges them \$1.50 per ride. However, in 2019 and late 2020, researchers<sup>26</sup> performed an experiment in which randomly selected people who had intended to sign up for LIFT received "passport" cards that allowed them an unlimited amount of free rides up to a certain date, ranging from four to 24 weeks (depending on when the enrollee received their card) with most receiving between 15-20 weeks of free rides, before reverting to a regular LIFT card. Riders that received passport cards took approximately 0.5 more trips daily than those using the regular LIFT card. The control group only took 0.17 trips a day on average, meaning that the free-fare riders took nearly four times as many trips as reduced-fare riders. This differential was consistent throughout the entire free-fare period, not just an initial-period effect. However, following the expiration of the free-fare period, riders exhibited behavior no different from the control group.

#### LOS ANGELES METRO

The Los Angeles County Metropolitan Transportation Authority (LACMTA), or Metro, operates heavy rail, light rail, buses, and bus rapid transit in the County of Los Angeles, with most riders using city buses. In October 2023, there were 26.5 million total boardings across the system, with nearly 21 million (78.9% of total) of those being buses. While this is still approximately 20% below ridership in 2019, it is around three million more boardings than the previous year. L.A.'s dependence on buses – compared to New York (30.4% of trip on buses) or Chicago (57.5% on buses) – is unsurprising given its large geographic area (L.A. County is more than 13 times the size of New York City) and the relatively underdeveloped rail system (only 109 miles of rail, compared to nearly 1,500 miles of bus routes and 12,000 bus stops).

Areas in the county with the highest usage of the Metro are Westlake/Pico-Union, Downtown Los Angeles, Koreatown and Hollywood, the Vermont Avenue corridor and South Central, Downtown Long Beach, East L.A., and Panorama City and Van Nuys.<sup>27</sup> Survey data reveals that L.A. Metro riders are mostly Hispanic (nearly 60%), with 14% Black and 12% white. Ridership is heavily concentrated among lower-income households, with more than 80% of riders coming from households with incomes less than \$50,000. Furthermore, almost 75% of riders do not have access to a car,<sup>28</sup> meaning public transport is crucial to their mobility.

- Brough, R., Freedman, M., & Phillips, D. C. (2022). Experimental evidence on the effects of means-tested public transport subsidies on travel behavior. *Regional Science and Urban Economics*, *96*(103803), 103803. https://doi.org/10.1016/j.regsciurbeco.2022.103803
- 27 Lopez, J. (2017). Access to public transit neighborhood data for social change. Myneighborhooddata.org. https://la.myneighborhooddata.org/2019/02/access-to-public-transit/
- 28 Jager, R. (2022, October 27). Metro's Customer Experience Survey Identifies Reliability, frequency, safety, cleanliness, and homelessness as Top Improvement Areas. The Annual Survey Informs CX Action Plan to Address Customer Experience Pain-Points. L.A. Metro; Los Angeles County Metropolitan Transportation Authority. https://www.metro.net/about/metros-customer-experience-survey-identifies-reliability-frequency-safety-cleanliness-and-homelessness-as-top-improvement-areas-the-annual-survey-informs-cx-action-plan-to-address-custom/

#### **REDUCED FARE PROGRAMS IN LOS ANGELES**

Metro operates a reduced fare program for low-income L.A. County residents known as Low-Income Fare Is Easy (LIFE). LIFE provides eligible residents (based on annual household income limits, currently \$44,150 for an individual, \$50,450 for a two-person household and \$63,050 for a four-person household) with either 20 free regional rides per month or a 24% discount on all rides. LIFE program enrollment is online, in-person at administrative partners, or at pop-up events. Recently, LIFE surpassed 250,000 enrollments.<sup>29</sup> For context, average weekday boardings in October 2023 were 956,000 – and while not all LIFE enrollees use public transport, or use it sparingly, reduced-fare riders represent a significant portion of Metro riders. However, according to survey data, which shows that over 80% of riders are from households with incomes below \$50,000 and therefore plausibly eligible for LIFE, uptake of the program has been sluggish.

One thing that could be hampering greater uptake of the LIFE program is that it does not offer a sufficient subsidy to low-income riders. Given the average transit commuter makes 42 trips a month, 20 free rides are generally not enough for a daily commute for full-time employees. More glaringly, a 24% discount doesn't make public transport much cheaper. When compared to monthly total fare capping for those above the income eligibility threshold, the share of income spent on fares is higher at nearly all LIFE-eligible incomes.<sup>30</sup> In fact, by using this implicit affordability threshold for fare expenditure, L.A. Metro's LIFE program leaves the highest percentage of its service area population with unaffordable fares, at 19%, and nearly twice as high as the next highest system (San Francisco's Bay Area Rapid Transit (BART) system at 10%). Deeper discounts and more generous programs may be required to ensure public transport is affordable for low-income county residents.

#### **POLICY IMPLICATIONS**

The experimental programs in Kansas City and King County show that eliminating fares has far more impact than reducing fares, even when means-tested and targeted at low-income groups.

While widespread elimination of fares on Los Angeles Metro is beyond the capabilities of California Jobs First, a pilot program providing targeted riders with unlimited, fare-free cards could have a significant impact on economic outcomes for recipients. By eliminating not just the direct cost of fares on trips already taken, but also frictions associated with taking more trips on public transport, riders will be more able to pursue opportunities, whether for employment, education, or job training.

Of course, longer-term changes to fare costs, card loading, as well as system density and reliability, would help solidify and broaden this impact. But even temporary measures can assist beneficiaries of the program. Programs to improve uptake of LIFE, given there are many eligible but unenrolled riders, and better incentives for non-riders to use public transport, appear critical to improving the mobility of underserved Los Angeles County residents, most especially those without access to a personal vehicle.

- 29 Metro, L. A. (2023, August 11). *Metro's Low-income Fare is Easy (LIFE) program just hit one quarter-million enrollments*. The Source. https://thesource.metro.net/2023/08/11/metros-low-income-fare-is-easy-life-program-just-hit-one-quarter-million-enrollments/
- 30 Darling, W., Carpenter, E., Johnson-Praino, T., Brakewood, C., & Voulgaris, C. T. (2021). Comparison of reduced-fare programs for low-income transit riders. *Transportation Research Record*, 2675(7), 335–349. https://doi.org/10.1177/03611981211017900

# Policy Recommendations Summary



#### **POLICY CONSIDERATIONS**

Early detection is key to controlling hypertension and thus preventing heart attack, stroke, and renal failure.<sup>35</sup> In poor communities, there are few family physicians and trained nurses available to provide screening blood pressure measures for the general public. One policy consideration is to provide free blood pressure monitoring stations in underserved communities. Free electronic sphygmomanometers could be distributed to businesses such as pharmacies, grocery stores, fitness centers, laundromats, or hair salons to permit individuals to measure their blood pressure themselves. A touch screen would provide simple instructions. An individual whose systolic blood pressure is greater than 140 would be advised to schedule an appointment with a doctor to confirm the diagnosis and to initiate antihypertensive treatment if needed. A list of local physicians or medical clinics willing to see new patients could be provided. In addition, a link describing the serious adverse effects of untreated sustained hypertension could be made available. These blood pressure stations would allow individuals to measure their blood pressures at their own convenience and at no cost.

Screening for hypertension among the general public has been made available over the years in some pharmacies and sporadically at health fairs. The American Health Association is placing four blood pressure kiosks in underserved communities in Los Angeles.<sup>36</sup> Making public screening locations widely available would enable people to measure their blood pressures more frequently at convenient locations.

The screening program described in this proposal would provide inexpensive, widespread detection of hypertension among underserved communities. The working lives of Angelenos would be extended by this public health measure, resulting in improved health and prosperity. The availability of simple blood pressure stations would make Angelenos more aware of the importance of detecting and treating hypertension and help them avoid disability and death due to devastating heart attacks, strokes, and renal failure.

- 35 Victor R.G., Libby P. Systemic Hypertension: Management. In Braunwald's <u>Heart Disease</u>. 2015. Pg 963-964.
- 36 https://newsroom.heart.org/local-news/new-blood-pressure-kiosks-aim-to-improve-blood-pressure-awareness-and-control-in-under-resourced-southland-communities

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# **Policy Recommendations Summary**

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This report mentioned several relevant policy issues in the SWOT analysis. The following section compiles these policy discussions into once place and expands on them. Additionally, a couple of new policy recommendations are introduce as well for consideration.

Because there is a degree of uncertainty in terms of the exact approach that California Jobs First will take with its programs, we propose a variety of policy recommendations across several different issues. Some of the policies are specific interventions, while others are high-level policy principals to keep in mind. We hope that providing ideas across a diverse array of issues, and with varying levels of specificity, will give California Jobs First a foundational set of ideas to build upon. Many of these ideas were discussed with subject matter experts and practitioners, with whom Beacon Economics held interviews. We provide policy considerations on 'green jobs', economic mobility, housing policy, transportation, health, childcare, and labor policy. To begin, however, it is useful to remind readers to consider the local conditions of a community, long-term implications, and tactical implementation of any policy or program.

#### Implementation

Before exploring specific policies, we've included the following section to highlight the importance of carefully considering the operationalization of a policy or program. Development efforts with smart, well-intended policy goals, can fail because their on-the-ground implementation is not well executed.

In the context of Los Angeles County, it is important to keep in mind the following considerations.

**Language:** Some of the lowest income areas are immigrant neighborhoods, where many individuals do not speak English or Spanish. Accordingly, make sure any communication is translated into all relevant languages.

**Longevity:** Remember to plan for the long term of a program and develop it in such a way that it will be sustainable over time. If the government is going to distribute solar panels, for example, consider the fact that they need to be maintained, and plan for how they will be repaired and sustained.

**Community Context:** Consider the social conditions in the target community. Are there safety concerns that would render a new outside park unusable? Do not plan to build walking trails if people do not feel safe walking alone. Does the community have easy access to the internet? If not, make sure not to require residents to apply for grants online and offer other application methods.

These are certainly not the only practical implementation considerations, but hopefully serve as a reminder to consider these types of community-specific issues when thinking though a program or policy.

The **Partnership Database** that Beacon Economics provided can help CA Jobs First identify community-based organizations in each area of the County. It can be filtered by issue, geography, and other topics to narrow down the selection of potential partner organizations.

#### **Green Jobs**

The green economy has been an engine of economic growth and employment in Los Angeles County. More than one in four jobs in the County are classified by O\*Net as green jobs, and over the past decade employment in the green economy has risen by 375,000 positions. Other sources have a more limited definition of green jobs and assess the size of the green economy to be far smaller. However, these classifications are not useful for jobseekers, and many workers may be entirely unaware of the size of the green economy. Establishing a more cohesive pipeline for workers to find employment and skills training relevant to the green economy is a win-win for businesses and potential employees. Alleviating labor shortages – which may become more common in Los Angeles County if population stagnation continues – is key to enabling these green businesses to grow, and providing a clear path for workers to pursue green careers should be a primary goal of any type of green jobs-focused program.

Major public investments in the green economy have occurred both nationally and in California. However, without a sufficiently trained workforce, growth in the sector will be throttled. Therefore, Los Angeles County needs a comprehensive strategy for green workforce development. Namely, the County needs:

- First, standards for the identification and measurement of green jobs
- Second, public-private partnerships with green businesses and unions to help form employment pipelines
- And last, training and education programs

Projects that advance these goals can range from an online "green jobs portal," to job training stipends and night/weekend classes at community colleges and satellite locations, to sustained guidance and tracking through green economy "ambassadors." Many people may consider it risky to pursue a new career, and many may not believe they have the resources or knowledge to succeed in a career change. By providing a cohesive, rather than disparate, system of instruction and support, the County can enable people to pursue new careers and provide a sizable pool of skilled workers for the green economy to grow.

#### Transportation

A key contributor to economic mobility is physical mobility – the ability of people to get around the County, to places of work, education, job training, healthcare, and other necessary locations. While Los Angeles is known for its car culture, a significant portion of the population does not have access to a vehicle; approximately 8.7% of households in the County (approximately 300,000 households) do not have any vehicles, and more than one-third have only one vehicle.<sup>37</sup> Furthermore, approximately 13% of renter households are carless.

Bridging the transportation gap is crucial for carless and car-limited households to access jobs, education, and resources. While service improvement and expansion of the Metro is a long-term process and goal, there is evidence that **eliminating fares** can significantly expand riders' ability to access work, job training, services such as healthcare, and activities such as grocery shopping.

As demonstrated by the ZeroFare program in Kansas City and randomized experiments in King County, WA, eliminating fares eliminates frictions associated with transit trips for low-income individuals.

While Metro does have a reduced-fare program, it does not eliminate fares altogether, and the cost of rides can still add up to a significant portion of earnings for the lowest-income house-holds. Thus, promoting a fare-free trial program – giving eligible, targeted households unlimited transit ride cards – can help these residents not only save money, but pursue opportunities they would have otherwise foregone, enabling economic mobility. In the long term, of course, the County should continue to grow its transit system and work to lower its costs for low-income riders, but free-fare cards can effect significant economic mobility among recipients.





#### **Economic Mobility and Inequality**

A primary goal of improving the economic situation of Angelenos is manifested by improving economic mobility. Focusing on economic mobility, however, requires a different approach than simply identifying areas where Angelenos are presently struggling. Measures that contribute to economic mobility – cross-socio-economic connectedness, access to quality education, training opportunities, and networks that contribute to social capital – are varied in their distribution and can be promoted through policies.

Policies that encourage cross-socio-economic connectedness – that is, bringing together people from varied wealth, racial, ethnic, and cultural backgrounds – helps drive economic mobility.

This is especially crucial during a person's school years. Forming socio-economically diverse friend groups does not just benefit students by exposing them to more viewpoints and back-grounds, it empowers them to seek and find more opportunities that boost their economic mobility later in life.

Some policy options – such as encouraging mixed-income neighborhoods through the construction of affordable housing in high-income areas – are long-term in nature and beyond the capabilities of most non-policymaking bodies, such as California Jobs First. However, promoting school programs that encourage students to connect with people from other socio-economic backgrounds has been shown to be effective at reducing the "friending bias" that stymies future economic mobility. These programs can range from internal school policies – such as those that automatically assign students into smaller groups or cohorts to encourage connections between otherwise unconnected students – to classes that cut across divides, such as athletics, arts, and music, to extracurricular activities and opportunities for student leaders.<sup>38</sup> At times when budgets may be strained and these sorts of activities fall victim to cuts, external sources of funding and mentorship can help ensure that students are still able to access such opportunities.

Similarly important to creating these sorts of cross-socio-economic friendships among students from low-income families has been advanced courses - namely, reducing the barriers low-income students face in accessing them<sup>39</sup>.

Often, advanced classes, such as AP and IB programs, are markedly less diverse in terms of students' backgrounds, both racial/ethnic and economic, even in diverse schools and school districts. Part of this divergence occurs at schools when disadvantaged students aren't recognized as being suitable for such classes, or students themselves do not believe in their ability to succeed, both caused by a litany of biases<sup>40</sup>. However, support systems outside of school can also play a role.

Helping parents become more involved with their children's educational decisions, and importantly, fostering a positive "can-do" culture can be achieved through outside programs. Helping students and their parents understand the benefits of AP and other advanced coursework, how to enroll and what to expect, and providing resources to reduce or eliminate the costs of taking such courses, can go a long way towards getting these students into classrooms where they have more opportunities to make friends across racial and income lines.

38 Vu, V. K., & Harstad, N. (2023). Economic Connectedness: How US High Schools Can Enable Economic Mobility. *M-RCBG Associate Working Paper Series*.

39 Ibid.

40 Patrick, K., Davis, J. C., & Socol, A. R. (2022). Shut Out: Why Black and Latino Students Are Under-Enrolled in AP STEM Courses. Education Trust.





#### **Housing Policy**

While not the explicit focus of California Jobs First, it is impossible to discuss equity and sustainability in Los Angeles County without discussing housing and housing policy. Los Angeles has painfully high housing costs. As of November 2023, the County has the 4<sup>th</sup> worst home price-to-income ratio amongst over 100 qualifying United States metropolitan regions. Nearly every issue important to voters in Los Angeles, from homelessness to crime to education, at some level ties back to the underlying challenges associated with high housing costs.

Understanding the challenging issues of equity in housing and sustainability relies on two related points:

- Los Angeles County land use policies have generally imposed burdens or limitations on housing construction, contributing to housing shortages, high prices, and diminishing sustainability and housing equity.<sup>41</sup>
- To increase equity and sustainability in housing, local land use policies need to better enable denser, more affordable development patterns across all regions within the County, and not just in areas with cheaper land costs.

41 https://scag.ca.gov/sites/main/files/file-attachments/062419abundanthousingla.pdf?1605642187#:~:text=In%20addition%2C%20721%2C000%20households%20in,of%20today's%20 low%2Dincome%20renters.

#### **SUSTAINABILITY**

An underrated narrative in broader climate and environmental sustainability discussion is land use policy. Denser development patterns are typically more environmentally sustainable than less dense development patterns. Much of this comes down to simple travel emissions; a typical person living in a less-dense suburb will own more cars and drive more miles each year than someone living in a denser urban area.

The existence of much of the Inland Empire reflects the failure of existing land use policies in Los Angeles County as hundreds of thousands of workers drive great distances from the Inland Empire into Los Angeles County on an average weekday.<sup>42</sup> Beacon Economics believes that many of those workers would choose to live in Los Angeles County, rather than endure long (and carbon emitting) commutes, if increased housing abundance allowed for more diverse construction and lower regional housing costs.

Housing policies that focus on increased environmental sustainability should generally concentrate on promoting dense growth patterns with more affordable housing.

# Figure 33: 2019 Estimated Annual Co2 Emissions per Household

#### High-Density Area Typically Have Substantially Lower Carbon Footprints, Even After Adjusting for Household Compositions



Source: Popovich, Rojanasakul, Plumer. UC Berkeley, New York Times. The Climate Impact of Your Neighborhood, Mapped. (https://www.nytimes.com/interactive/2022/12/13/climate/climate-foot-print-map-neighborhood.html). Analysis by Beacon Economics.

Additionally, solutions regarding housing sustainability should consider economic sustainability. In general, denser development patterns are more fiscally sustainable for local governments. For example, a famous study conducted by the Canadian Halifax Regional Municipality found that public servicing costs for households, including road, water, sewage, policing, and firefighting, amounted to over \$5,200 per household annually in low-density areas. In contrast, households in high-density areas cost local governments under \$1,500 annually.<sup>43</sup> Likewise, studies of economic productivity within Los Angeles County also find that denser, mixed-use development patterns are more productive and more economically sustainable in terms of

Figure 34: Average New Housing Unit Size, Square Feet

government revenues collected versus government costs.<sup>44</sup> Promoting sound regional fiscal practices should include an emphasis on more productive land uses – generally denser, mixed-use spaces replacing existing single-family or commercial-only regions.

A final general component of sustainable housing are the physical characteristics of new housing units. While the average number of people living in households has decreased over time, the average size of new housing units has more than doubled over the past century.

#### 3,000 -2,500 -2,000 -1,500 -1,000 -500 -0 1920 1930 1940 1950 1960 1970 1980 1990 2014 2000 2010

Source: 24/7 Wall Street (https://247wallst.com/special-report/2016/05/25/the-size-of-a-home-the-year-you-were-born/). Analysis by Beacon Economics.

43 https://lede-admin.usa.streetsblog.org/wp-content/uploads/sites/46/2015/03/Halifax-data.pdf

44 https://www.urbanthree.com/case-study/el-monte-ca/

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The increase in size among new housing units means their construction consumes more building materials and has a higher environmental footprint during construction than if new buildings were smaller. While some of the shift in housing unit size can be explained by changing consumer preferences, much of it can be explained by a national boom in local housing regulations. Many of these regulations, such as Minimum Lot Sizes, Setback Requirements, and Floor Area Ratios, are now known to incentivize the construction of larger, more expensive, and less sustainable multifamily and single-family units.

Take, for example, the case of minimum lot sizes in the City of Los Angeles. For decades, freestanding single-family units could be built on less than 1,000 square feet of property.<sup>45</sup> In 1946, however, this changed – with its first zoning code, Los Angeles adopted a minimum lot size of 5,000 square feet, which generally still exists to this day in R1 (One-Family Residential) zoned areas.<sup>46</sup> Because construction now requires more physical land, developers are incentivized to maximize space and recoup higher land costs with larger and less sustainable construction. This is just one illustration of many land use policies that mandate or encourage detrimental and more expensive environmental build practices.

#### EQUITY

Housing equity is a complicated topic that can be boiled down into two key elements – affordability and opportunity.

First, housing should be more affordable so that ownership and renter costs decline, potentially providing more wealth-building opportunities to a greater number of Angelenos. This can be achieved in many ways, including through increased housing supply, decreased per unit construction costs, and improved affordable housing development incentives.

Second, the location of housing matters; housing units in high-resource neighborhoods often provide more opportunities for residents to gain means through better schooling and better professional opportunities. It is therefore important that housing policy focus not just on increasing housing affordability, but also on increasing housing affordability in higher-resource neighborhoods within the County.

45 https://lachamber.com/clientuploads/LUCH\_committee/08.28.14\_Re.code%20LA.pdf

46 https://planning.lacity.org/odocument/eadcb225-a16b-4ce6-bc94-c915408c2b04/Zoning\_Code\_Summary.pdf

#### Health

While improving community health is a long-term goal, key actionable steps can pave the way to improving health and reducing the prevalence of illness and debilitating conditions. One of the most common conditions is hypertension, which can become debilitating or even deadly if left unaddressed. It can leave people unable to complete demanding physical tasks, which is especially harmful to employees who do manual work.

Early detection is key to successful treatment. Most hypertension is detected during regular medical checkups. However, many people with hypertension may not have access to a doctor regularly due to time, financial, or transportation constraints.

One actionable step follows the lead of the American Health Association, which has installed blood pressure kiosks with electric sphygmomanometers and straightforward instructions directly into communities. Installing more of these kiosks at easily and frequently accessed locations such as pharmacies and grocery stores in neighborhoods with low healthcare access could help many people detect hypertension at no financial cost and with minimal time and travel costs. This kind of screening program can help many low-income, underserved Angelenos avoid disability and death.

#### Childcare

One of the biggest challenges facing working families in both the United States and Los Angeles County is childcare – both availability and affordability. According to the U.S. Department of Labor,<sup>47</sup> average childcare costs for pre-school-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. Spots in childcare centers are limited, and childcare providers often receive very low rates of reimbursement from the state. These factors result in many households having one parent, often women, forego employment to take care of children.

Misaligned incentives do not properly encourage families to apply for CalWORKS, the main public service that offers childcare benefits. A 2017 analysis by the California Budget and Policy Center found that only one in nine children who are eligible for subsidized childcare actually receives the assistance.

Many of CalWORKS eligibility requirements are based on federal TANF policy frameworks. Fullscale reform of the childcare system will require significant funds and time, but families who need relief now would benefit from childcare vouchers or other sources of support. Because a lack of childcare proves an obstacle to people not only seeking employment, but also seeking job training or education, it is a significant barrier to economic mobility. Even temporary childcare assistance, such as part of a job training program, would empower working parents to pursue skills training. A key issue with many training programs is the lack of such assistance, which becomes a major contributor to participants dropping out before completing a program.<sup>48</sup>

In addition to providing financial assistance, further research should be conducted to measure the supply of childcare facilities based in the communities that need them the most.

The benefits of a well-designed and well-executed childcare assistance program could, in effect, 'pay back' the cost of the investment, by creating a more educated, more skilled, and more productive workforce.

#### **Labor Policy**

The labor needs of Los Angeles County's industries are as diverse as the industries themselves. One major trend that is evident throughout the County is the increasing demand for workers at establishments such as retail stores and restaurants, which are also among the largest employers in the County. However, at current wages, these types of jobs do not offer significant opportunities for economic mobility. These jobs are most in demand in the more suburban SPAs, places such as the Antelope Valley, East, and San Gabriel SPAs, while they are on the decline in the Metro SPA, which has been hard-hit by remote work reducing office attendance.

Other industries that have high demand for labor but do present opportunities to raise workers' incomes are in healthcare and other social services. In every SPA, the number of jobs in Healthcare and Social Assistance has grown by 35% or more over the past decade; in the South-East SPA, employment in this industry has grown by a whopping 93.6% since 2013. Many of these jobs, especially those that pay near or above the median county wage, require some technical training or certification. Many community colleges have partnered with healthcare providers to establish talent pipelines in the County, but stronger connections to other potential employers would help more Angelenos pursue an education and find new employment. Other support – such as scholarships or stipends that help parents and other participants focus on their education or job training – would be crucial to enabling people who may currently be unable to forego full-time employment to attend courses or job training. Although there is potential for people to increase their earnings through programs such as certified nursing assistants (CNAs), further career growth via promotion is limited without additional, often

rigorous, education. There is potential for long-term job training or counselling programs that continue to support participants beyond the initial training period; these can effectively track and assist workers as they progress through their careers.

Many high-income industries – such as those under the broad Professional, Scientific, and Technical Services umbrella – also require more-skilled workers with higher levels of education. Entering these careers may feel daunting to many of Los Angeles County's low-income earners, but there are many opportunities for those without a college degree. Directed training and community college programs can help low-skilled workers access certain jobs in these sectors, and pipelines similar to what other industries have can be the key to bridging the gap.

However, given the broad demand for labor across many industries, throughout the skills spectrum and geographically dispersed, there may be other factors that prove to be obstacles for people currently unemployed or outside the labor force, such as transportation or childcare. Partnering with firms to provide workers with discounted fare cards or subsidies for childcare can help bring some of these residents into the labor force and relieve the labor shortages affecting certain industries. Other issues – such as housing unaffordability driving workers further away from job centers in the County – cannot be fixed quickly or by businesses and their partners, but still contribute significantly to labor shortages. Poignant advocacy from businesses and their partners can help convince policymakers to foster a more pro-housing attitude.



### **About Beacon Economics**

Founded in 2007, Beacon Economics, an LLC and certified Small Business Enterprise with the state of California, is an independent research and consulting firm dedicated to delivering accurate, insightful, and objectively based economic analysis. Employing unique proprietary models, vast databases, and sophisticated data processing, the company's specialized practice

areas include sustainable growth and development, real estate market analysis, economic forecasting, industry analysis, economic policy analysis, and economic impact studies. Beacon Economics equips its clients with the data and analysis they need to understand the significance of on-the-ground realities and to make informed business and policy decisions.

#### Learn more at beaconecon.com

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