



2024 San Bernardino County Comprehensive Economic Development Strategy

Prepared for:

San Bernardino County Economic Development Department

Prepared by:

Christiana McFarland, Director

Claire Lecornu, Project Leader

Shay Moore, Senior Research Analyst

Christa Reid, Research Analyst

Table of Contents

- Executive Summary 1
- Introduction 3
 - Acknowledgments 4
- Economic and Community Assessment 5
 - Introduction 5
 - Demographics 6
 - Industry Landscape 13
 - Education & Workforce 18
 - Infrastructure & Quality of Life 24
 - Table of Assets 27
 - Conclusion 28
- SWOT Analysis 29
 - Introduction 29
 - Strengths 27
 - Weaknesses 28
 - Opportunities 30
 - Threats 32
- Strategic Direction and Action Plan 34
 - Strategy 1: Diversify the Economy and Increase High Quality Employment 36
 - Strategy 2: Spur the Creation and Scaling of New Businesses 40
 - Strategy 3: Strengthen Capacity and Governance for Regional Action 42
 - Strategy 4: Bolster Quality of Life 44
- Evaluation Framework 48
- Appendix A: Supplemental Figures and Tables 51
- Appendix B: San Bernardino County Cities’ EDA Projects 59
- Notes 74



Executive Summary

Since 2016, San Bernardino County has benefited from strong population and economic growth. To ensure these trends continue, in 2022, the San Bernardino County Economic Development Department (EDD) engaged SRI International to prepare this Comprehensive Economic Development Strategy to guide EDD's activities and support the vision for the county's economy:

San Bernardino County Economic Development Department will support a resilient and vibrant economy that increases access to high-quality jobs for all residents by attracting employers across a diverse set of industries that have strong growth potential and by promoting education and training opportunities. Collaboration between sectors and across San Bernardino County will ensure widespread and equitable prosperity.

To support this effort, SRI conducted interviews with 16 stakeholders from public, private, and academic sectors and held four focus groups with representatives from 20 of San Bernardino County's municipalities. Input from these stakeholders and EDD staff was complemented by extensive analysis of state and federal data to assess the county's strengths, weaknesses, opportunities, and threats. Stakeholders boasted of the county's relative affordability, natural beauty, and strategic location for the nation's logistics. However, the county's low educational attainment, low job quality, and overreliance on the logistics industry make the county's economy vulnerable to increases in automation, changes in market demand, and other economic shocks. Still, there are opportunities to capitalize on the county's existing assets to attract new businesses, residents, and tourists and to create higher-skill jobs in a more diverse mix of industries.

To that end, SRI developed the following four strategies, along with specific action items, to inform EDD's approach in supporting the growth and resiliency of the county in the years ahead:

Strategy 1: Diversify the Economy and Increase High Quality Employment

- Create an inventory of shovel-ready or near-shovel-ready sites.
- Develop industrial rail parks as attractive manufacturing locations with easy rail access.
- Support development and adoption of alternative energies, including hydrogen.
- Promote industry collaborations with the Cybersecurity Center at California State University, San Bernardino to expand applied cybersecurity opportunities and experiences for students and faculty.
- Promote opportunities for foreign direct investment and foreign trade.
- Create an online data portal that compiles county statistics in one place to inform and attract businesses considering establishing an office in San Bernardino County.

Strategy 2: Spur the Creation and Scaling of New Businesses

- Create a bilingual online business portal with resources and funding programs to start and grow a business in the county.
- Support the development of business incubator, accelerator, and entrepreneurial assistance spaces.

Strategy 3: Strengthen Capacity and Governance for Regional Action

- Convene economic development leaders quarterly to identify best practices, bottlenecks, challenges, solutions, and areas that would benefit from county support.
- Establish an industry council to coordinate the development of target industries comprised of stakeholders in business, workforce development, community development, and local governments.
- Provide cities with grant and proposal writing and other technical support.
- Collaborate across the county government to communicate with residents and the media and to develop and implement a countywide marketing strategy.



Strategy 4: Bolster Quality of Life

- Promote and invest in opportunities for, access to, and entrepreneurship related to urban outdoor recreation, such as bike shops, community parks, and programs for school-aged children.
- Support municipalities' development of employment center districts, including cultural arts and retail districts, to spur tourism, placemaking, and entrepreneurship.
- Work with community leaders and organizations to explore the possibility of providing county support for community land trusts.

Following delivery of this report, EDD will work with their partners at other county departments, municipalities, nonprofits, businesses, and other entities to begin carrying out the action items. Evaluation metrics will allow EDD to track progress toward achieving the goals of each action item, at least annually, to ensure the county's continued prosperity amidst changes in industry, demographics, and community needs.

Introduction

As the geographically largest county in the contiguous United States, San Bernardino County contains a rich diversity of resources, industries, and people. It has 24 incorporated cities, with large swaths of more rural, unincorporated land. Most of the county's population resides in the southwestern corner near Los Angeles and the Pacific coastline, while the county's eastern side borders Nevada and Arizona. Its proximity to ports and other major cities in the Southwest United States, such as Phoenix and Las Vegas, contributes heavily to the county's economy and has helped the region earn the nickname the Inland Empire.

The 2017 San Bernardino County Comprehensive Economic Development Strategy (CEDS) has served as the guiding document for the county's Economic Development Department (EDD) for the past five years. As laid out by the U.S. Economic Development Administration (EDA), a CEDS document "establish[es] a strategic blueprint for regional collaboration" between public and private sectors in order to support "regional economic prosperity" and is required for EDA financial assistance.¹ In 2022, EDD began the process of updating its vision and strategy for economic development to ensure San Bernardino County's continued prosperity amidst changes in industry, demographics, and community needs. EDD's new vision is as follows:

San Bernardino County Economic Development Department will support a resilient and vibrant economy that increases access to high-quality jobs for all residents by attracting employers across a diverse set of industries that have strong growth potential and by promoting education and training opportunities. Collaboration between sectors and across San Bernardino County will ensure widespread and equitable prosperity.

EDD engaged SRI International to prepare this CEDS update. To support this effort, SRI conducted interviews with 16 stakeholders from public, private, and academic sectors to gather insights on the current state of the county and identify areas in which the county government can provide more support. Additionally, SRI held four focus groups with representatives from 20 of San Bernardino County's municipalities. Input from these stakeholders and EDD staff was complemented by extensive analysis of state and federal data, which are presented primarily in the first section of this report, Economic and Community Assessment. The SWOT Analysis follows, which looks at the strengths, weaknesses, opportunities, and threats in San Bernardino County. Strategies and specific action items for EDD and county partners are presented in the Strategic Direction and Action Plan section. Finally, the Evaluation Framework presents performance metrics for assessing the county's progress toward implementing strategies.

Throughout this report, special attention was given to promoting economic resiliency. This approach included considering ways to diversify the industrial composition of San Bernardino County's economy to protect it from widespread economic downturns, shifts in foreign trade, and external shocks. It also included consideration for how to prepare the county for demographic shifts, severe climate change and natural disasters, and new state and federal regulations. The need to preempt and prepare for these kinds of shocks played a critical role in the SWOT analysis and the development of recommendations.

Acknowledgments

SRI and San Bernardino County Economic Development Department would like to thank the following organizations for their contributions to the 2024 CEDS, without whom this report would not have been possible.

Ted Alejandre - San Bernardino County Superintendent of Schools
Molly Burgess - Manufacturers' Council of the Inland Empire
Michael Burrows - Inland Valley Development Agency / San Bernardino International Airport Authority
Michael Curley - Southern California Edison
Joshua Dugas - San Bernardino County Department of Public Health
Paul Granillo - Inland Empire Economic Partnership
Ryan Holman - Snowline Joint Unified School District
Gil Keinan - Local Equity
Hilda Kennedy - AmPac Business Capital
Michael Krouse - Greater Ontario Convention and Visitors Bureau
Randall Lewis - Lewis Homes
Johannes Moenius - University of Redlands
Edward Ornelas - Inland Empire Regional Chamber of Commerce
B.J. Patterson - Pacific Mountain Logistics
Michael Samardzija - Loma Linda University
Michael Stull - California State University, San Bernardino
City of Adelanto
City of Barstow
City of Big Bear Lake
City of Chino
City of Colton
City of Fontana
City of Hesperia
City of Highland
City of Montclair
City of Needles
City of Ontario
City of Rancho Cucamonga
City of Redlands
City of Rialto
City of San Bernardino
City of Twentynine Palms
City of Upland
City of Victorville
City of Yucaipa
City of Yucca Valley

Economic and Community Assessment

Introduction

To understand San Bernardino County's current economic situation, identify ways that the county's economy can lead and benefit from the broader regional economy, and shed light on challenges to and opportunities for future prosperity, this economic and community assessment presents baseline data across demographic, economic, industry, and social metrics. As applicable, specific programs, businesses, and other assets to the county's economic development efforts have been highlighted, as well as areas in which critical assets are missing or lagging.

SRI drew data primarily from administrative sources such as the U.S. Census Bureau and the California Employment Development Department. This first section of a CEDS forms the foundation for the subsequent SWOT analysis and Strategic Direction and Action Plan report.

Key Takeaways:

- San Bernardino County benefits from significant in-migration from the broader region, with many new residents drawn to the county's high quality of life and relative affordability.
- Many county households have relatively high incomes regardless of race.
- While the county has made significant strides in reducing poverty among its residents, homelessness, housing affordability, and public safety continue to be a challenge.
- San Bernardino County is a major transportation hub, with three airports, two major railroads, and highways stretching in every direction.
- Buoyed by the rapid growth of its Transportation & Warehousing sector, San Bernardino County's economy experienced a strong recovery from the COVID-19 pandemic.
- While Transportation & Warehousing growth has brought with it many opportunities to obtain well-paying jobs, it has also increased the vulnerability of the county to unpredictable downturns in the industry, geopolitical risks, and long-term trends toward automation.
- As such, there is an urgent need for the county to diversify its economy into other promising industries and to prepare its workforce for automation.
- San Bernardino County's unemployment has returned to its pre-pandemic low, but rates are not equal across race and ethnicity.
- The vast majority (69%) of residents do not have a college degree, with Hispanic residents holding the lowest educational attainment rates in the county.
- Job growth is driven by the Transportation & Warehousing and Healthcare industries.
- The location makes it prone to water scarcity challenges but also a prime location for solar and wind energy installations.
- Compared to statewide and national metrics, San Bernardino County has worse health outcomes, but it has comparable rates of health insurance.

Demographics

- San Bernardino County benefits from significant in-migration from the broader region, with many new residents drawn to the county’s high quality of life and relative affordability.
- Many county households have relatively high incomes regardless of race. This is likely due to the prevalence of industries that offer competitive wages for workers without a college degree.
- While the county has made significant strides in reducing poverty among its residents, homelessness, housing affordability, and public safety continue to challenge economic and community development efforts.

☆ **Asset Highlights:**

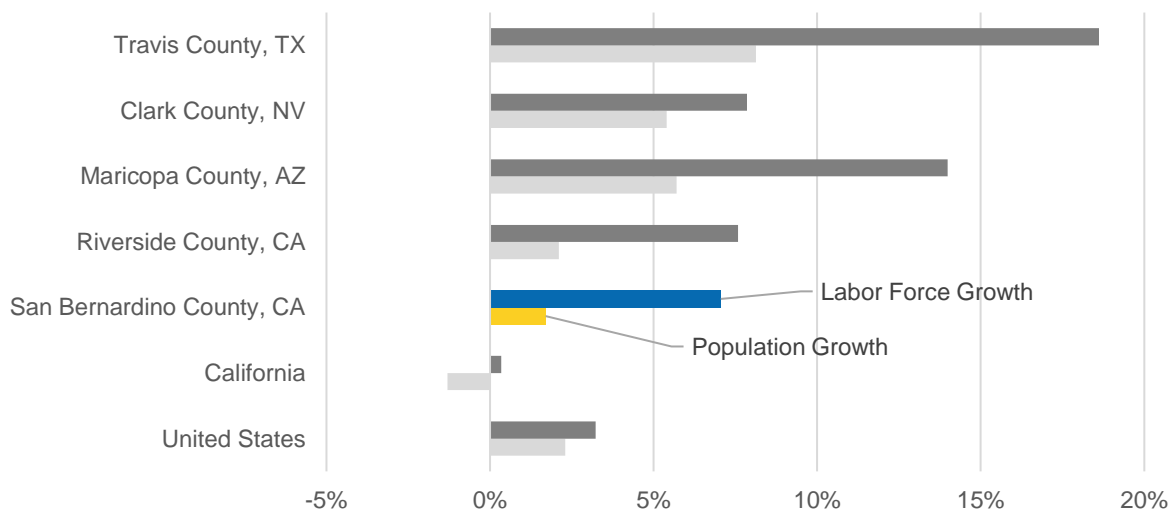
- Homeless Provider Network
- Neighborhood Partnership Housing Services

Population and labor force growth outpace California.

Economic growth and opportunity depend on a growing population and the labor force participation of an area’s residents. From 2017 to 2022, San Bernardino County’s population grew 1.7% to 2.2 million; this rate outpaces California’s population growth and is in line with rates of population growth both nationally and in neighboring Riverside County, though it’s lower than that of the other peer counties (see Figure 1). The county has also seen impressive growth in its workforce (7.1% over the 6-year time span), indicating that more and more residents are entering the county’s labor force in pursuit of employment opportunities throughout the region.

2022 U.S. Census data show that a higher share of the population in San Bernardino County is comprised of residents under 18 than in California overall (25.4% to 21.7%). Similarly, while there has been huge growth in the number of residents over 65 years old (see Figure 19 in Appendix A), this group still makes up a smaller share of the population in San Bernardino County than it does in California (12.5% to 15.8%, respectively). This indicates that the county should have a strong and growing labor force for years to come, so long as it is able to retain its current residents.

Figure 1: Change in population and labor force among San Bernardino County, peer regions, 2017–2022
 Source: U.S. Census Bureau American Community Survey; Bureau of Labor Statistics

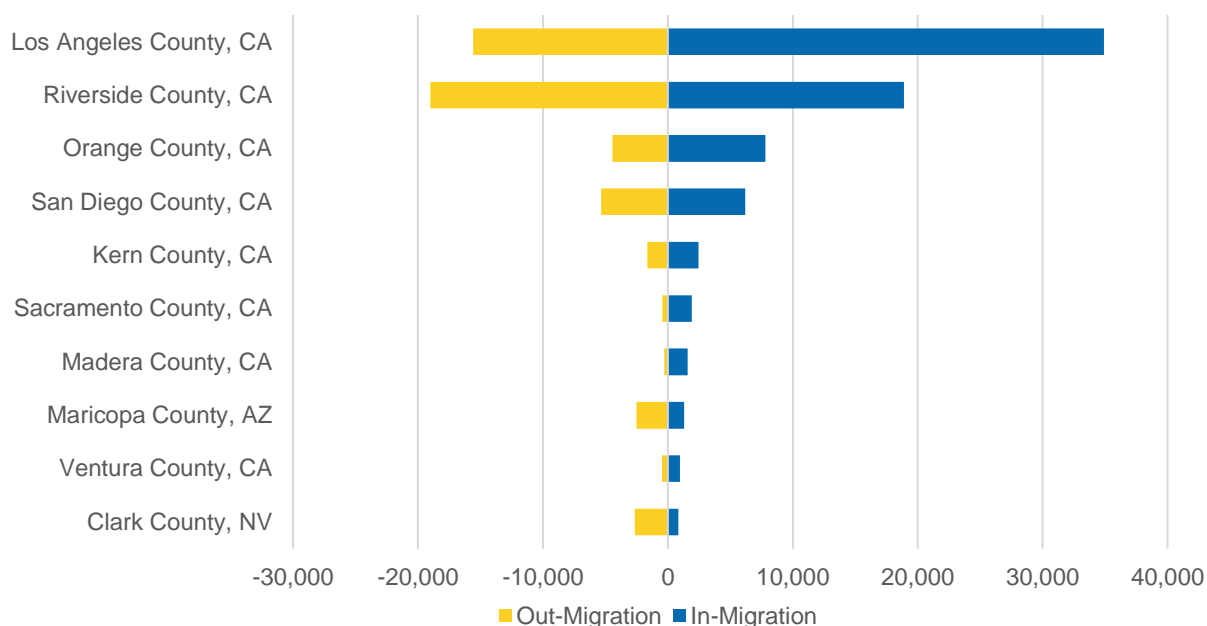


The drivers behind the county’s population and labor force dynamics are manifold, but they are closely intertwined with broader regional dynamics. According to stakeholders interviewed, many residents throughout southern California are drawn to the county’s high quality of life and relative affordability. As such, the county has enjoyed a significant influx of new residents who previously lived in other areas of the region. Furthermore, many residents are commuters who travel for work to areas outside the county. According to 2021 U.S. Census Bureau data, over half (53%) of the county’s employed residents work outside of San Bernardino County (commute patterns are discussed in more detail in the Education and Workforce section).

Most migration to and from San Bernardino County is regional.

As shown in Figure 2, most people moving to the county previously lived in counties nearby, with Los Angeles and Riverside Counties contributing significant numbers of new residents. Among residents moving out of San Bernardino County, the most popular destinations are again Riverside and Los Angeles Counties. These trends indicate that migration activity is largely limited to the region, with significant back and forth movement of residents between San Bernardino, Riverside, and Los Angeles Counties (and to a lesser extent, Orange and San Diego Counties). However, the fact that twice as many people move from Los Angeles County to San Bernardino County as from San Bernardino County to Los Angeles County is a testament to the county’s affordability and quality of life appeal to individuals and families throughout the region.

Figure 2: San Bernardino County’s inflow and outflow migration, 2016–2020
Source: U.S. Census Bureau

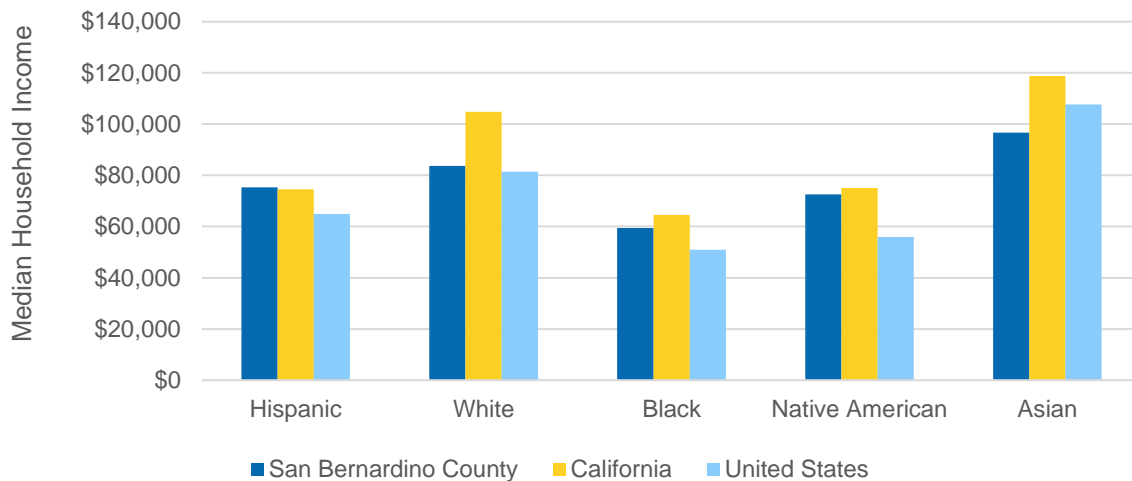


As a majority-minority county, San Bernardino has historically been home to a large Hispanic population. This population has continued to grow in the past five years, with Hispanic residents’ share of the population increasing from 53% in 2017 to 56% in 2022. Conversely, non-Hispanic whites’ share of the population decreased from 28% to 24% over the same period (see Figure 17 in Appendix A).

Disparities in income between racial and ethnic groups exist but are less pronounced.

An analysis of income data by race and ethnicity reveals that some historically disadvantaged groups—specifically Hispanic, Black, and Native American—have on average slightly higher salaries in San Bernardino County than they do in California or the United States overall. Still, significant disparities between races and ethnicities persist. As shown in Figure 3, the median household income for White non-Hispanic residents is about 11% greater than that of Hispanic residents and 41% greater than that of Black residents.

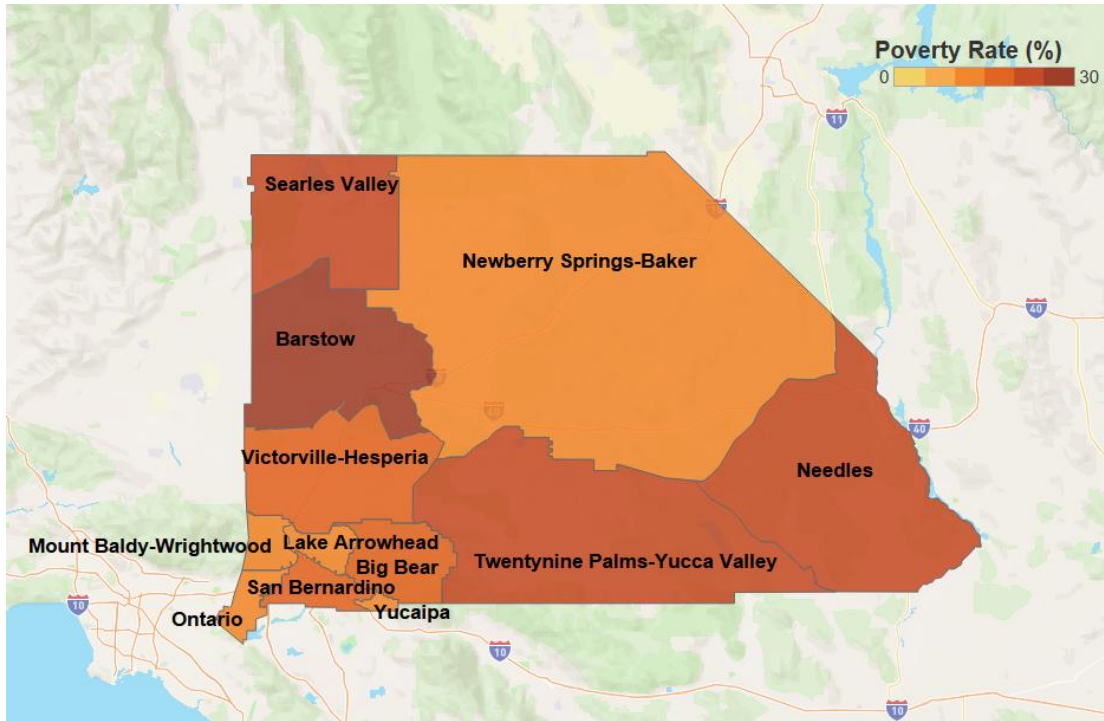
Figure 3: Median household income, by race and ethnicity, 2022
Source: U.S. Census Bureau American Community Survey



Poverty rates are higher in rural communities.

The past five years have seen a substantial reduction in the county's poverty rates, which is reflective of trends at the state and national levels as well as efforts taken by the county. From 2017 to 2022, the county's poverty rate fell from 18% to 13% (see Figure 21 in Appendix A). While this reduction is impressive, the county's 13% poverty rate remains slightly higher than the state and national poverty rates. A closer analysis of poverty at the county subdivision level reveals that poverty is generally more prevalent in rural communities, such as Barstow, Searles Valley, Twentynine Palms-Yucca Valley, Victorville-Hesperia, and Needles (see Figure 4). These communities exhibit poverty rates at or above 18%. In contrast, urban areas exhibit moderate rates of poverty, between 8% and 15%.

Figure 4: Poverty rate by county subdivision, 2022
Source: U.S. Census Bureau American Community Survey

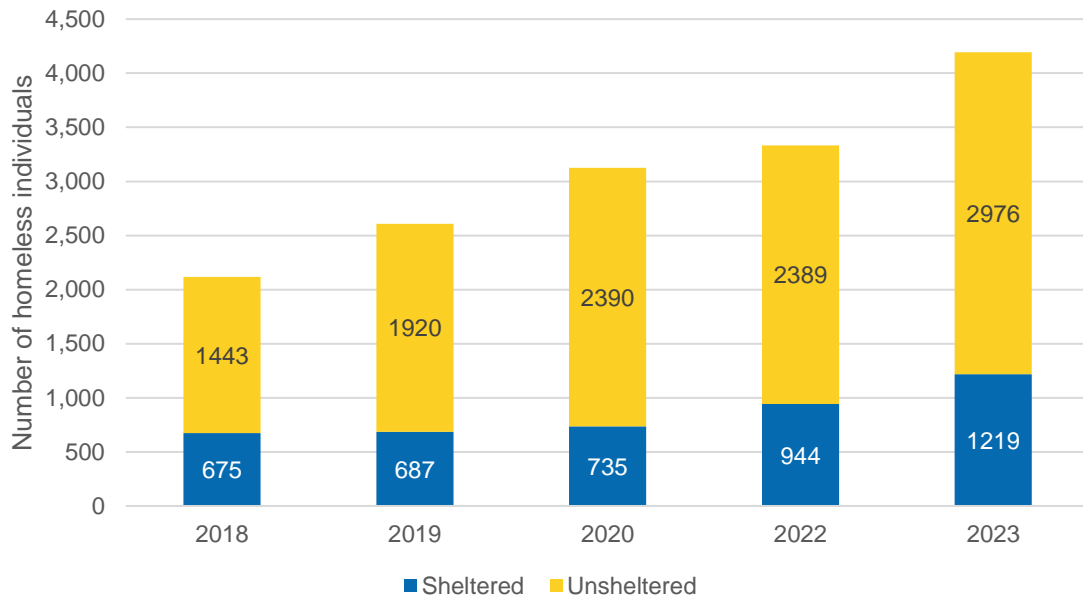


Number of homeless individuals has increased in recent years.

Addressing homelessness is another priority issue for the county and its municipalities. Residents who struggle with housing insecurity are severely limited in their ability to pursue economic opportunities. Furthermore, the cost of homelessness extends beyond affected individuals, as homelessness places undue strain on public services, infrastructure, and local economies. Unfortunately, the number of homeless individuals living in the county has increased significantly, nearly doubling between 2018 and 2023. According to San Bernardino County's Homeless Partnership, approximately 3 in 4 homeless individuals live unsheltered. The most recent count also indicates that the county's unsheltered homeless population is predominantly male, with almost half chronically homeless and many suffering from substance abuse and/or mental health disorders.²

Figure 5: Number of homeless individuals by sheltered and unsheltered status in San Bernardino County, 2018–2023

Source: San Bernardino County Homeless Partnership

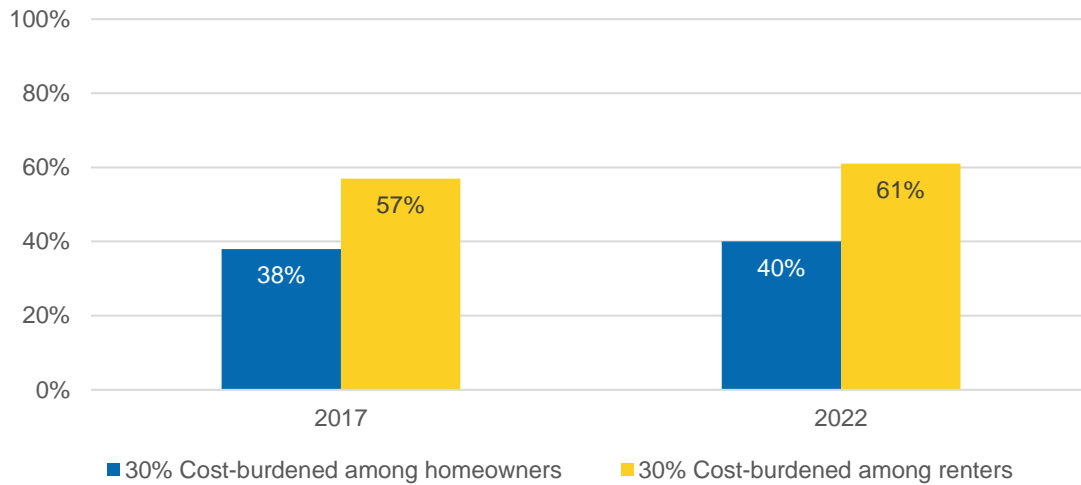


Housing affordability continues to be a challenge for some residents.

For many county residents, housing insecurity stems from challenges in finding affordable housing. While home prices vary by community, the median monthly cost of housing in San Bernardino County has increased by 26% in the past five years, rising from \$1,314 in 2017 to \$1,662 in 2022. Still, this is far below the median monthly housing cost statewide (\$1,925 in 2022). Increasing housing costs means that for a sizeable proportion of households, a significant percentage of monthly income is spent on housing expenses. This metric—the ratio of housing costs to household income—is widely used to measure an area’s housing affordability. Households that spend 30% or more of their incomes on housing are considered “cost-burdened,” and those that spend 50% or more of their incomes on housing are considered “severely cost-burdened.” As shown in Figure 6, renters continue to be disproportionately affected by the high cost of housing compared with homeowners. More than half of the county’s renters are considered cost-burdened, compared to approximately 2 in 5 of the county’s homeowners. Still, the share of households that are considered cost-burdened has risen more slowly than the house prices.

Figure 6: Percent of San Bernardino County households that pay more than 30% of income on housing costs, 2017 and 2022

Source: U.S. Census Bureau American Community Survey



Multiple county departments are collaborating to address homelessness and housing insecurity by developing innovative initiatives and piloting strategies to increase access to affordable housing and housing for at-risk populations. Additionally, the Homeless Provider Network coordinates the efforts of community organizations, educational institutions, private industry, and all levels of government to support homeless and near-homeless individuals.

Neighborhood Partnership Housing Services, Inc. (NPHS) is one example of an organization on the private side working to bolster access to affordable housing. Through partnerships with local governments and financial institutions, and as a certified community development financial institution itself, NPHS provides down payment assistance and home improvement loans, offers education on home buying, and “supplies and sells quality, affordable factory-built homes,” including accessory dwelling units.³ This novel approach is a quick way to increase the supply of affordable housing, a critical step to addressing housing insecurity.

Trends in property and violent crime rates tell divergent stories about public safety in the county.

An often overlooked aspect of economic development is the role of public safety and perceptions of safety in local economic growth. Public safety plays a critical role in economic development by reducing the cost of crime, enhancing the desirability of communities as places to live and to do business, and increasing the level of societal trust and interaction.⁴ As shown in Figure 7, property crime rates (e.g., burglary, vandalism, motor vehicle theft) in San Bernardino County decreased from 2017 to 2021, with an increase in 2022. This is largely consistent with national patterns and is still a far lower rate than is seen in neighboring Riverside County or California overall. However, there has been a noticeable increase in violent crimes that is distinct from trends seen in Riverside County and nationally (see Figure 8).

According to the San Bernardino County Sheriff’s Department, this increase is due to drug-related crimes and the opioid epidemic, which continue to cause tragedies in the county and pose a challenge to economic and community development efforts.⁵ Successfully addressing these public

safety and health challenges would therefore greatly enhance the quality of life in communities throughout the county.

Figure 7: Property crime rate, San Bernardino County and peer regions, 2017–2022
 Source: California Department of Justice Open Justice Portal; Federal Bureau of Investigation

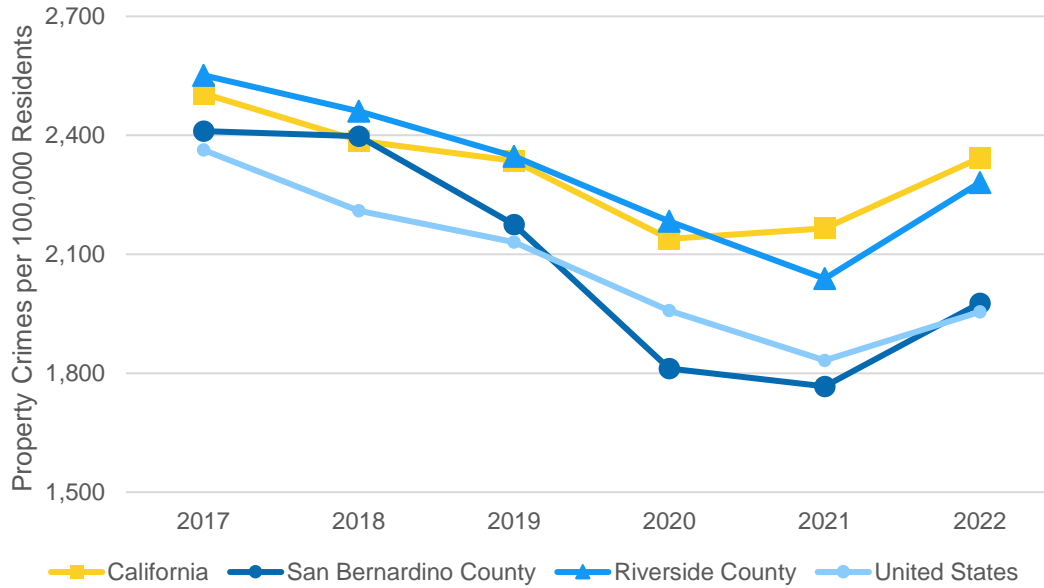
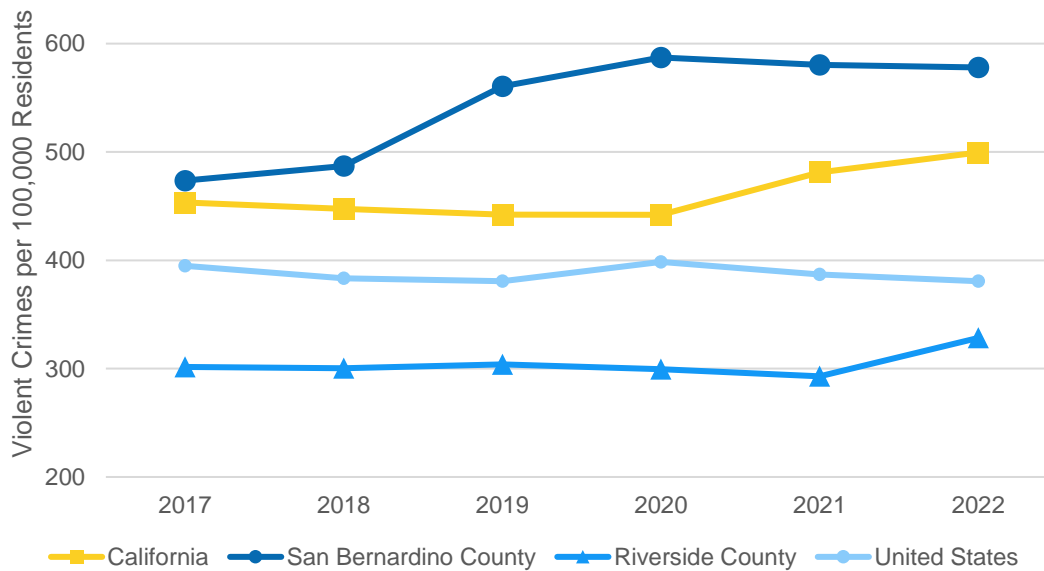


Figure 8: Violent crime rate, San Bernardino County and peer regions, 2017–2022
 Source: California Department of Justice Open Justice Portal; Federal Bureau of Investigation



Industry Landscape

- Buoyed by the rapid growth of its Transportation & Warehousing sector, San Bernardino County's economy experienced a strong recovery from the COVID-19 pandemic.
- While Transportation & Warehousing growth has brought with it many opportunities to obtain well-paying jobs, especially for residents who do not possess bachelor's degrees, it has also increased the vulnerability of the county to unpredictable downturns in the industry, geopolitical risks, and long-term trends toward automation.
- As such, there is an urgent need for the county to diversify its economy into other promising industries and to prepare its workforce for automation.

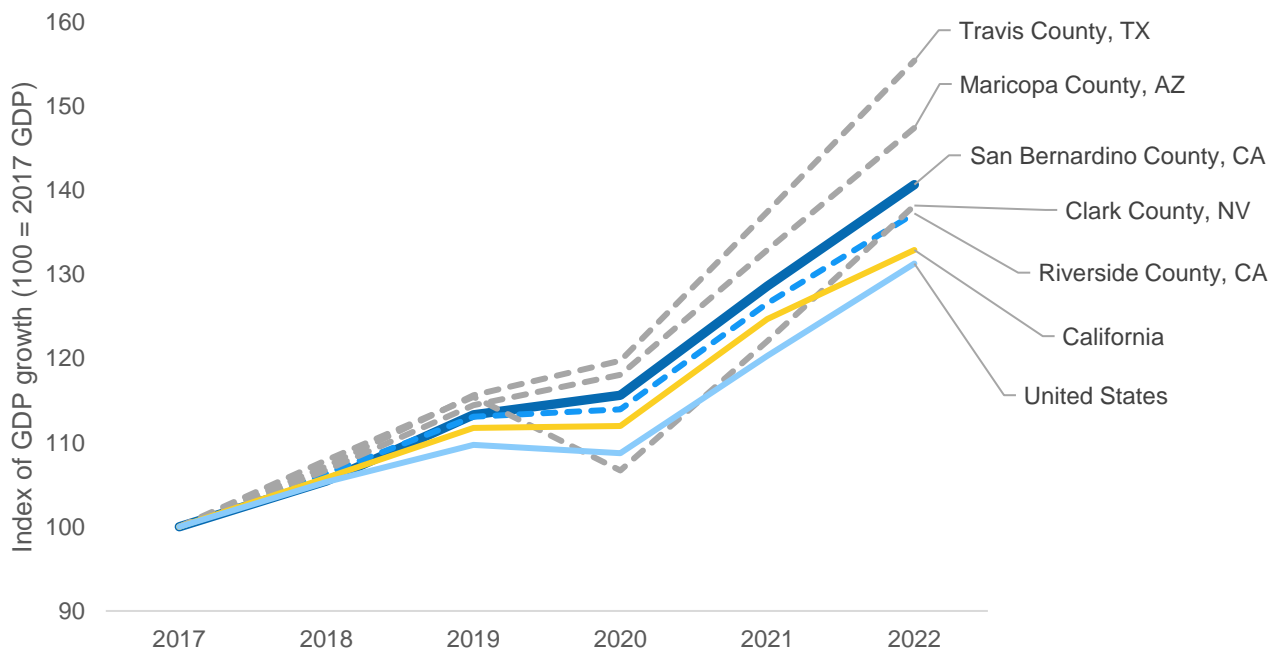
☆ **Asset Highlights:**

- National logistics hub
- General Atomics
- Inland Empire Center for Entrepreneurship
- N³eight
- AmPac

San Bernardino County's GDP growth has outpaced that of the United States.

San Bernardino County's economy has seen impressive growth in the past six years. Since 2017, the county's gross domestic product (GDP) has grown by 41% (an average annual growth rate of 7.1%), which outpaced state and national GDP growth as well as that of Riverside and Clark Counties in California and Nevada, respectively. The rate at which GDP grew annually increased each of the three years leading up to the COVID-19 pandemic. Though the pandemic briefly halted this momentum in 2020, the county's economy then grew by 11.2% in 2021 and stayed strong in 2022. Nevertheless, total growth in the past five years has been slower than that of fast-growing peers such as Travis and Maricopa Counties in Texas and Arizona, respectively.

Figure 9: Index of GDP growth, San Bernardino County and peer regions, 2017–2022
 Source: Bureau of Economic Analysis



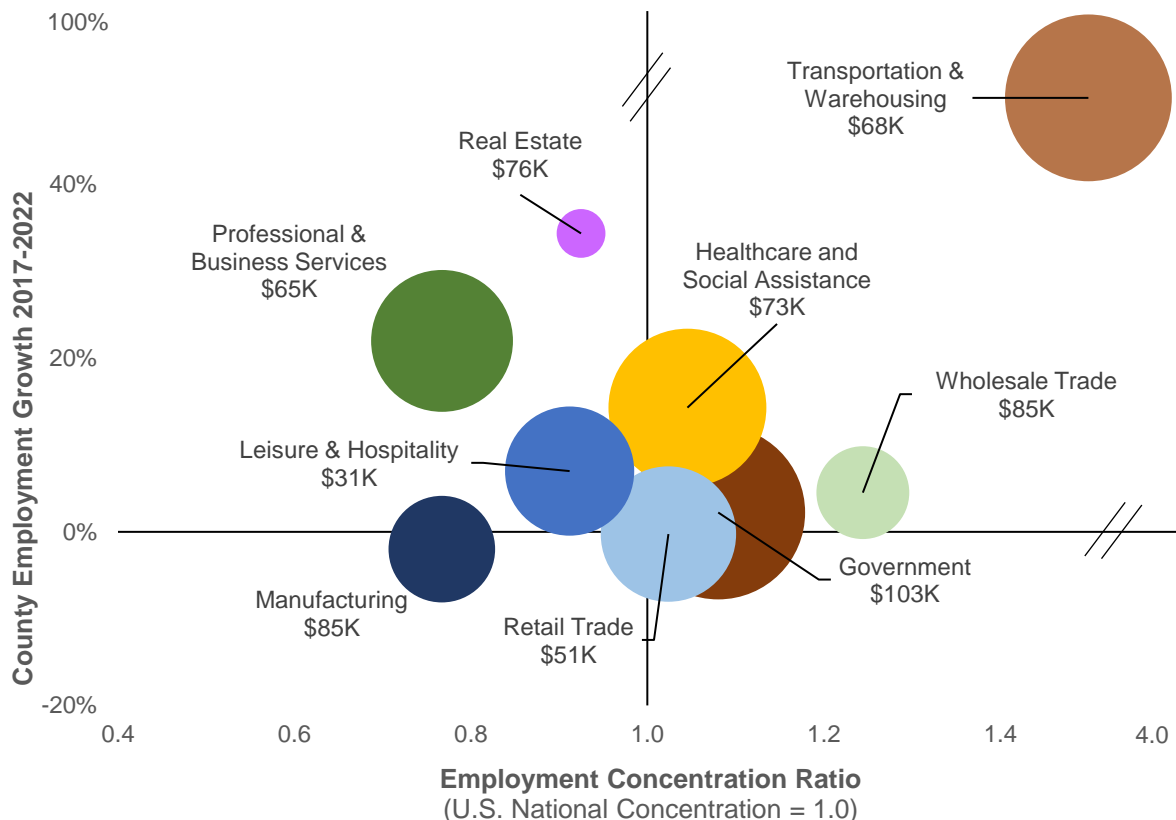
Job growth is concentrated in a few industries, raising the need for economic diversification.

Much of the county's recent economic growth is driven by the Transportation & Warehousing sector. Owing to the Inland Empire's strategic location both as a logistical hub for e-commerce and as a staging area for international shipping, the rapid development of warehouses and logistical facilities has contributed to the county's economic recovery while making the sector a large and essential component of the county's economic competitiveness. Throughout the Inland Empire, approximately 4,300 warehouses cover an area over 37 square miles, and sectoral employment in San Bernardino County nearly doubled from 74,000 jobs in 2017 to 133,000 in 2022.⁶ As Figure 10 shows, sectors related to Transportation & Warehousing, such as Real Estate and Professional & Business Services, also benefited from the sector's rapid growth. In the figure, bubble size indicates number of workers employed in the industry.

On the other hand, other sectors that employ significant numbers of workers have experienced modest, stagnant, or even negative growth. While employment in the Healthcare sector grew by 14% in the past five years, Retail Trade and Government experienced little to no growth, and Manufacturing employment decreased by 2%. It is worth noting that of all sectors shown in Figure 10, Government, Wholesale Trade, and Manufacturing offer the highest average annual wages at \$103,000 and \$85,000 for Wholesale Trade and Manufacturing. By contrast, the average annual wage in Transportation & Warehousing is \$68,000. To reduce the county's vulnerability to economic disruptions due to too much industry concentration, it will be important for the county to establish programs that target support for a few key industries with high growth potential.

Figure 10: Growth, concentration, size, and average annual wage of select industries in San Bernardino County, 2017–2022

Source: Bureau of Labor Statistics

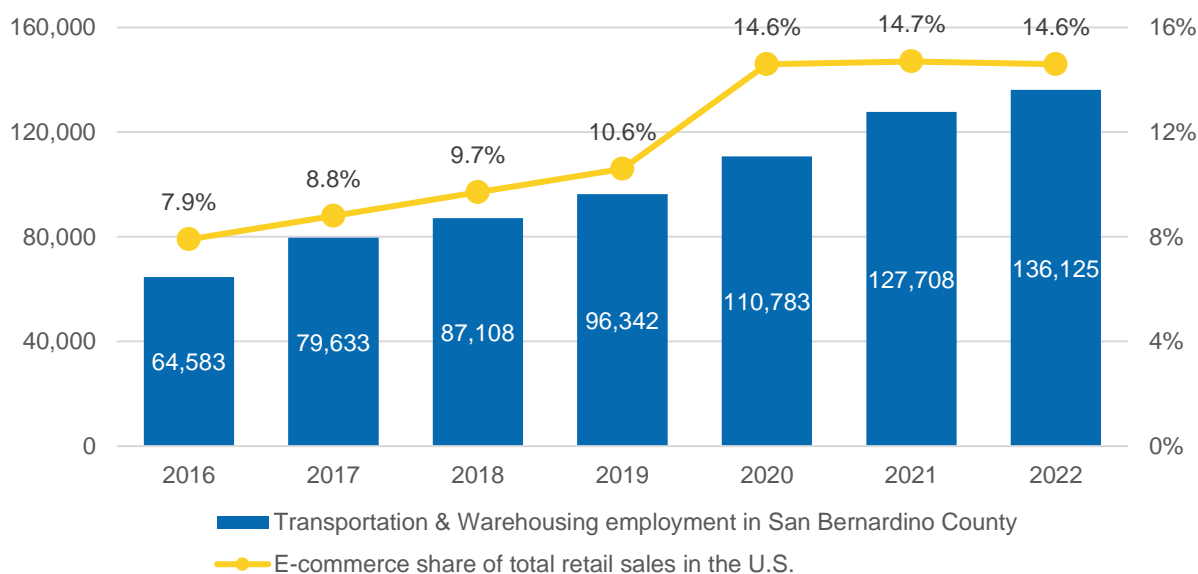


E-Commerce share of total retail appears to have peaked, but growth in Transportation & Warehousing continues.

While growth in logistics (broadly defined in this report to refer to activities in the Transportation & Warehousing industry) has brought with it many opportunities to obtain well-paying jobs, especially for residents who do not possess bachelor's degrees, it has also increased the vulnerability of the county's economy to unpredictable downturns in the industry, geopolitical risks, and long-term trends toward automation.⁷ Several stakeholders interviewed raised concerns over the sector's ability to drive sustainable economic development in the future. They noted that dedicating valuable land to warehouses limits the potential for redevelopment and puts the county at risk for an economic downturn if demand for warehouse space wanes. Indeed, there is evidence that e-commerce activity has peaked and plateaued following the pandemic, as shown in Figure 11, indicating that demand for warehouse space may weaken in the future. Stakeholders also noted the need for more collaboration between government officials across the county in determining where to site future warehouses to preserve the environment and the region's natural beauty, mitigate air pollution, and plan for alternative land uses.

Figure 11: Transportation & Warehousing employment in San Bernardino County compared to U.S. e-commerce trends, 2016–2022

Source: U.S. Census Bureau Quarterly E-Commerce Report; California Employment Development Department



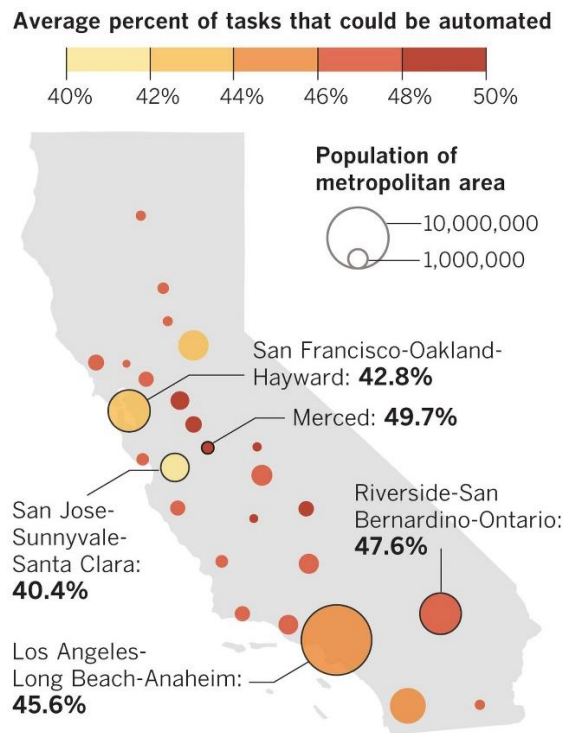
A significant portion of jobs in San Bernardino County are at risk of displacement due to trade disruption and automation.

The dependence of the county's Transportation & Warehousing sector on international shipping to and from the Port of Los Angeles and the Port of Long Beach raises the county's economic vulnerability to geopolitical instability. Prolonged disruptions to international trade and supply chains could disproportionately affect San Bernardino County, whose warehouses rely on the movement of goods across borders.

Over the next five years, the Transportation & Warehousing sector is expected to undergo a transformation as firms increasingly utilize automated technologies and practices in day-to-day operations. The workforce needs of warehouse and logistics operators will therefore trend toward

higher-skill workers who can effectively program automation equipment, solve complex problems, and communicate and collaborate as part of multi-faceted teams. Yet, stakeholders noted that the county’s warehouse and logistics workforce generally lacks the education and skills needed to benefit from the sector’s pivot toward automation. Rather, many jobs in the county are highly susceptible to disruption and displacement from automation (see Figure 12). As such, there is an urgent need to invest in the education of the county’s residents in a way that provides them with the skillsets needed to work with the most up-to-date technologies and practices.

Figure 12: Average percent of tasks that could be automated, by California metro area
 Source: Brookings Institution; Los Angeles Times



Still, there are examples of how some businesses in San Bernardino County are beginning to prepare for this industry transition. For one, drone manufacturer General Atomics conducts drone maintenance and trains aircraft mechanics at the southern California Logistics Airport through a partnership with Victor Valley College, helping create quality, high paying jobs for the skilled technical workforce (i.e., those with high technical skills but less than a bachelor’s degree). There are similar drone testing and training programs at San Bernardino International Airport through its Unmanned Aircraft Systems Center.

Entrepreneurial support is concentrated in academia and lacks risk capital.

An important part of every region’s economic ecosystem are entrepreneurs and startups. San Bernardino County has some resources for supporting enterprising individuals, though stakeholders were mixed on whether it is sufficient. The Inland Empire Center for Entrepreneurship (IECE) is one great source of support. IECE, and its affiliated Women’s Business Center and Small Business Development Center, provides training on entrepreneurship, business mentoring and counseling, technical services, and more to small businesses and entrepreneurs. Furthermore, as IECE is

located within California State University, San Bernardino, it also educates college students on entrepreneurship so that they graduate with the tools they need to start their own businesses. Similarly, Loma Linda University's N³eight incubator provides a space for translating knowledge and research from academia into commercialization focused on biosciences. However, beyond these two university-based centers for business support, there are few other incubators and accelerators in the region to support business formation and scale-up.

Furthermore, in addition to mentorship and research space, entrepreneurs need access to risk capital to be successful. Many stakeholders noted the lack of venture capital and angel investors in the region, and there are no county government initiatives providing loans and/or grants directly to startups and small businesses. One group that does provide risk capital in southern California is the Tech Coast Angels, though stakeholders have noted that they have not been very active in investing in San Bernardino County businesses. On the other hand, AmPac is an active community development financial institution that provides loans to small businesses at every stage and is a valuable part of San Bernardino's entrepreneurial ecosystem.

To summarize, the rapid growth of San Bernardino County's Transportation & Warehousing sector has brought valuable economic benefits to residents but has also made the county more vulnerable to short-term shocks and long-term technological change. These developments underscore the need for the county to diversify its economy, upskill its workforce in preparation for jobs of the future, and support entrepreneurship and small businesses.

Education & Workforce

- San Bernardino County’s unemployment has returned to its pre-pandemic low, but rates are not equal across race and ethnicity.
- The vast majority (69%) of residents do not have a college degree, with Hispanic residents holding the lowest educational attainment rates in the county.
- The largest and fastest-growing occupations are in the Transportation & Warehousing and Healthcare industries.

☆ Asset Highlights:

- 13 community colleges
- InTech Center
- K-12 pre-apprenticeship programs
- 29 Palms Marine Corps base
- America’s Jobs Center of California offices

Native American and Black residents face significantly higher rates of unemployment.

When the COVID-19 pandemic hit, unemployment across the country skyrocketed, and that was true in San Bernardino County as well. Nevertheless, the county has made a swift rebound, as its annual unemployment rate in 2022, 4.1%, is the same as it was in 2018. This rate is on par with that of Riverside County and the State of California (see Figure 24 in Appendix A). Still, there is substantial variation in the unemployment and labor force participation rates by race and ethnicity, though they reflect national patterns. As shown in Table 1, the unemployment rate of Native American and Black residents is substantially larger than that for White and Asian residents. Note that Figure 24 and Table 1 use different data sources, resulting in different numbers for overall county unemployment in 2022. The 4.1% unemployment number stated above is based on the Bureau of Labor Statistics annual average.

Table 1: Labor force participation rate and unemployment rate in San Bernardino County, by race and ethnicity, 2022

Source: U.S. Census Bureau American Community Survey

Race/Ethnicity	Labor force participation rate	Unemployment rate
Countywide	62.9%	6.3%
Hispanic or Latino	66.2%	5.9%
Asian American	63.0%	4.1%
Native American	68.1%	6.4%
Black	61.3%	9.9%
White	56.7%	6.4%
Other	66.0%	2.8%

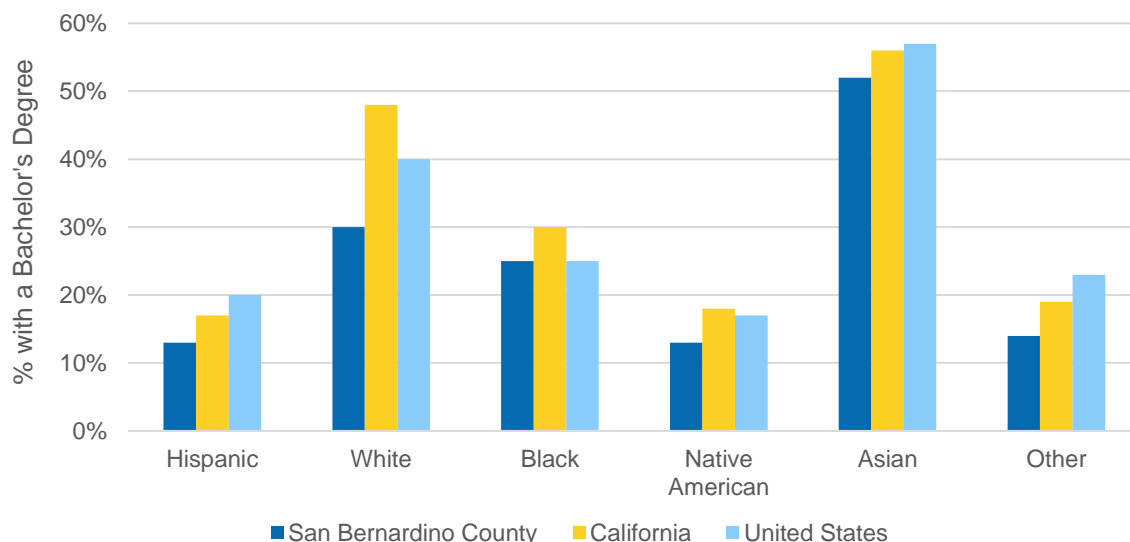
Disparities between racial and ethnic groups are prevalent in educational attainment rates.

One factor that can hinder employment and economic growth potential is educational attainment, a weak spot for San Bernardino County. Just 23% of the population over 25 years old has earned a bachelor’s degree or higher, compared to 37% for California. While 8% of the population has earned an associate degree, another 22% has received some college education without earning a degree (see Figure 25 in Appendix A). This indicates that many people are starting college, often at a



community college, but are unable to complete the program. Educational attainment rates in the county vary significantly by race and ethnicity. Only 13% of Hispanic residents over the age of 25 possess a bachelor’s degree compared to 30% for non-Hispanic Whites and 52% for Asian residents (see Figure 13).

Figure 13: Share of residents with a bachelor’s degree, by race and ethnicity, 2022
Source: U.S. Census Bureau American Community Survey



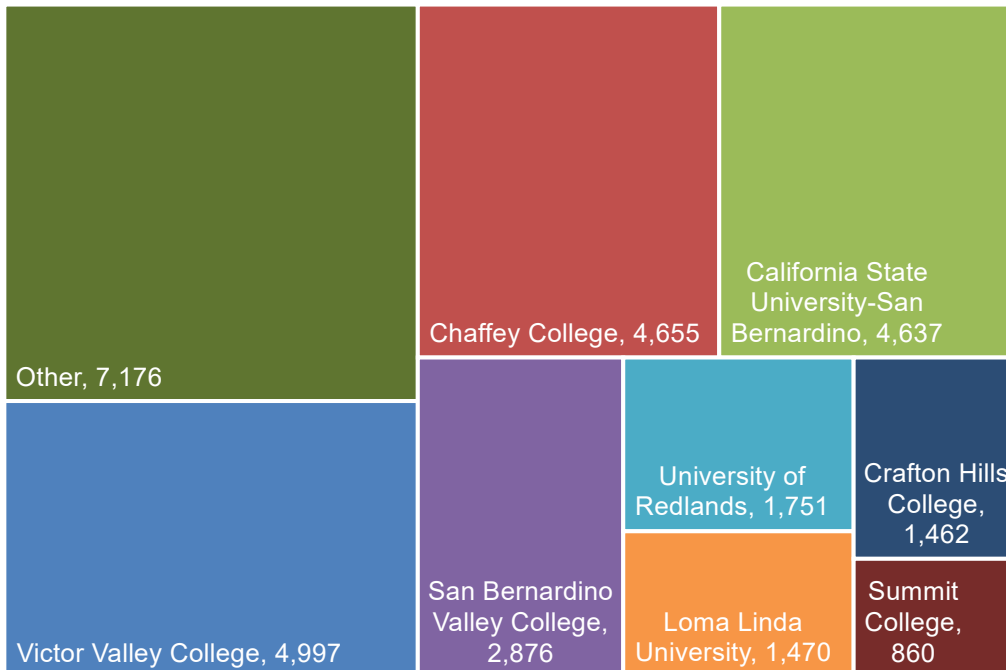
Community colleges play a large role in preparing young adults for the workforce.

There are a few 4-year universities in San Bernardino County, including California State University, San Bernardino; University of Redlands; Loma Linda University; and a regional campus of University of La Verne. The region also benefits from talent and programming at nearby University of California, Riverside in Riverside County and the seven Claremont Colleges in Los Angeles County.

San Bernardino County’s community colleges are also a critical part of the county’s higher education system. In fact, 65% of degrees earned at degree-granting higher education institutions in San Bernardino County in 2022 were earned at one of the region’s 13 community colleges (see Figure 14). Furthermore, the number of associate degrees granted at some of the county’s community colleges has increased in recent years. For example, Victor Valley College has seen a 45% increase in associate degrees granted from 2017 to 2022, with San Bernardino Valley College and Crafton Hills College seeing increases of 23% and 13%, respectively.

Figure 14: Degree-granting institutions in San Bernardino County, by number of completions, 2022

Source: California Employment Development Department



High engagement with community colleges is partly due to the fact that an average of only 47% of students graduating from San Bernardino County public high schools meet the requirements necessary for admission to the University of California or California State University systems (see Figure 26 in Appendix A). Thus, community colleges hold an important role in the county of providing education and training opportunities to disadvantaged students who face outsized barriers to attending a 4-year college.

Nevertheless, many students in the county are underprepared for the rigors of higher education, which has led to lower-than-expected college completion rates. San Bernardino County’s K-12 public education system is comprised of 33 individual school districts, and the San Bernardino County Superintendent of Schools serves as a liaison between the districts and the California Department of Education. It is evident that the county’s school districts are taking proactive steps to ensure students graduate from high school with increased levels of workforce and college preparedness through innovative programs such as job training and pre-apprenticeships, robust afterschool learning, and the national program Advancement Via Individual Determination. Growing Inland Achievement is another initiative focused on increasing educational attainment in the Inland Empire through partnerships with education, government, nonprofit, and business entities in the region. Increased support for and opportunities through these K-12 programs should improve student outcomes and lead to more students graduating high school ready to succeed in college or the workforce.

Given the role that 2-year colleges play in San Bernardino County, it is vital that they respond effectively to changing industry demands to ensure that their students are prepared for the future labor market. In 2022, the most common associate degree awarded in the county was in Liberal Arts and Humanities, but the degree fields associated with many of the highest job openings are in the business and marketing, multi/interdisciplinary studies, health professions, and engineering

technologies (see Figure 27 in Appendix A). Through regular collaboration with major industries and local employers, community colleges can work to adapt their curriculum and program offerings to ensure that students are graduating with the skills most needed in the region. These partnerships can also increase opportunities for students to receive on-the-job training during the completion of their degree, which can make them more desirable job candidates upon graduation.

One great example of collaboration between academia and industry is the InTech Center at Chaffey College, which has partnered with California Steel Industries to provide technical training and professional development. Upon completion of one of InTech's pre-apprenticeship programs, graduates earn a certificate and are equipped with in-demand skills. Building on the success of the InTech Center, Chaffey College and Victor Valley College collaborated to open the High Desert Training Center in 2021 to provide short-term, intensive training to employees of local industrial companies.⁸ Still, there are opportunities for more of this kind of collaboration, as many stakeholders with whom SRI spoke noted that San Bernardino County currently lacks strong ties between its employers and its higher education institutions, limiting the ability of community colleges to quickly adapt to changing industry needs and leading college graduates to look outside the county for jobs.

High rates of underemployment and workers commuting out of the county indicate job quality issues.

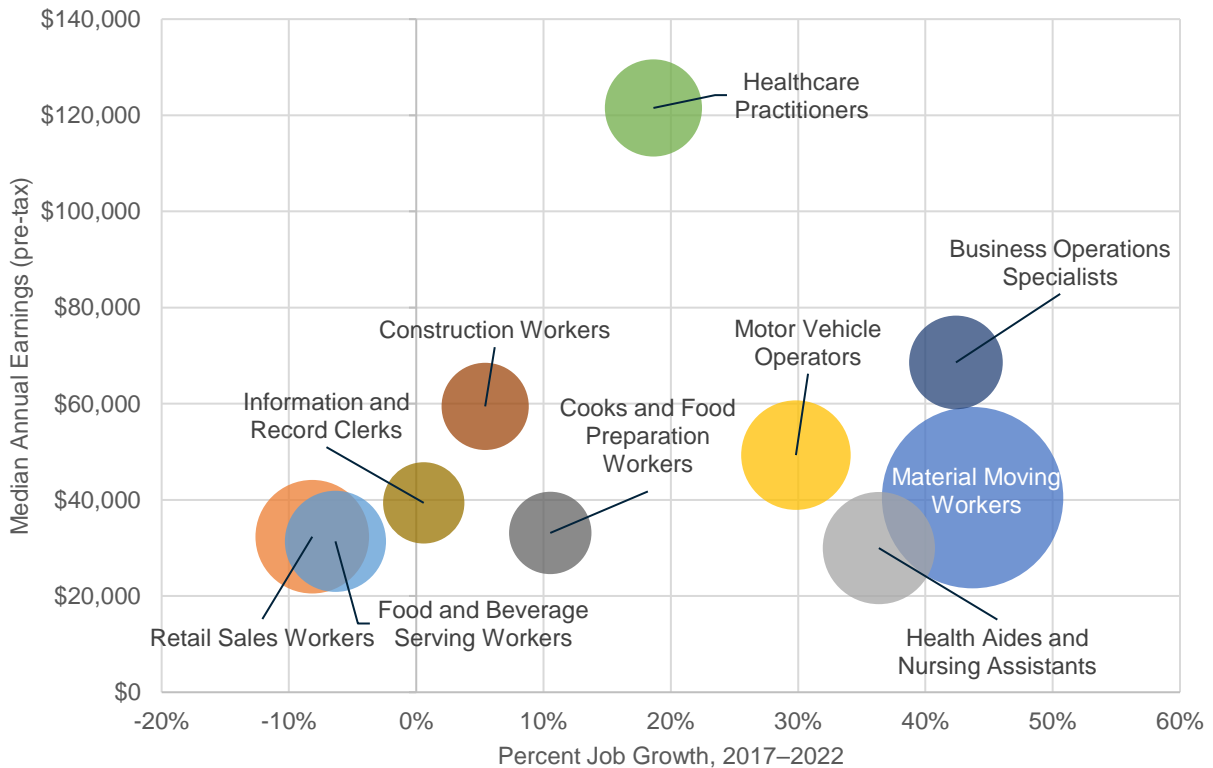
Upon high school and college graduation, many young adults in the county often have trouble finding jobs that meet their qualifications and interests. Two in five (41%) residents holding a bachelor's degree or higher are considered underemployed, meaning they hold a job for which the typical education requirement is less than a bachelor's degree. The most common occupations among the county's underemployed college graduates include bookkeeping and accounting clerks, customer service representatives, and laborers and freight workers.

An examination of additional workforce metrics raises further concerns about job quality in the county. According to 2021 U.S. Census data, 53% of San Bernardino County residents (423,000) commute out of the county for work, 70% of whom work in Los Angeles or Riverside Counties; on the other hand, 342,000 non-residents commute into San Bernardino County for work (see Figure 28 in Appendix A). The fact that over half of the county's residents leave the county for work represents both an indicator that many residents are unable to find jobs that match their qualifications and an opportunity for the county to create jobs that align with the qualifications of its residents. There is also an opportunity to inspire those commuting in to become permanent residents.

Occupations in the Transportation & Warehousing and Healthcare industries are growing.

Within the county's existing jobs base, the five largest occupations pay an average median annual wage of less than \$37,000. Some of these occupations, such as Material Moving Workers and Health Aides and Nursing Assistants, are growing substantially and may contribute further to a growing pool of lower wage jobs (see Figure 15). As discussed in the Industry Landscape section, much of San Bernardino County's economic activity is concentrated in the Transportation & Warehousing and Healthcare industries. In fact, Transportation and Material Moving occupations accounted for 19% of county jobs in 2022, and Healthcare Support and Health Practitioner occupations account for another 12%.

Figure 15: Growth, median annual earnings, and size of San Bernardino County’s largest occupations, 2022
 Sources: Department of Labor Occupational Employment Statistics; U.S. Census Bureau American Community Survey; California Employment Development Department



Though jobs in the Transportation and Material Moving classification are typically associated with salaries under \$50,000, multiple stakeholders with whom we spoke mentioned the great career opportunities in warehousing and logistics afforded to residents without a college degree. Because non-college educated residents comprise a large share of the county’s population, it is critical that ample job opportunities exist that enable these residents to earn a livable, middle-class salary. As the county seeks to create and expand higher wage job opportunities for the skilled technical workforce, it must also contend with trends toward automation that put existing jobs at high risk of displacement and with potential disruptions from geopolitical or industry-specific events.

Outside of the primary industries shown in Figure 15 above, the presence of the U.S. military in San Bernardino County is also noteworthy. Specifically, the Twentynine Palms Marine Corps Air Ground Combat Center (MCAGCC) is the nation’s largest Marine Corps base. With a focus on training and operational readiness, MCAGCC is home to 12,500 active-duty service members, along with family members and other defense-related civilians who spur economic activity in the High Desert.⁹

Male residents are more likely than female residents to have a STEM degree.

One metric that can demonstrate a region’s ability to adapt to changing technologies is the rate at which individuals are earning degrees in science, technology, engineering, and mathematics (STEM) fields. In San Bernardino County, 40% of the last degree earned by residents with an associate

degree or higher were in a STEM field. The share of STEM degrees varies by race and gender, as presented in Table 2.

Table 2: Percent of college degrees earned by San Bernardino County residents in a STEM field, 2018–2022
Source: U.S. Census Bureau American Community Survey

Race/Ethnicity	Male	Female	Overall
All Races and ethnicities	49%	31%	40%
Hispanic	48%	31%	38%
Asian American	58%	31%	45%
White	46%	30%	38%
Black	46%	40%	43%
Other	50%	31%	39%

A greater share of businesses is minority-owned in San Bernardino County than in California.

Similarly, there are racial and gender differences in business ownership, an indirect indicator of innovation activity. As shown in Table 3, in 2017, 38% of businesses in San Bernardino County are classified as minority-owned, a higher rate than in California overall. Just 18% of businesses are women-owned. One stakeholder noted that many small businesses in the region are started as a necessity, meaning the owner needed the income.

Table 3: Demographics of business ownership, 2017
Source: U.S. Census Bureau Annual Business Survey

Business Demographic	San Bernardino County		California	
	Count	Share	Count	Share
Minority-owned employer firms	10,733	38%	237,419	32%
Women-owned employer firms	5,211	18%	150,552	20%

Another asset for the county’s economic resiliency is the strength of its Workforce Development Board (WDB), which was a source of pride of nearly every stakeholder with whom we spoke. The WDB operates the three America’s Job Centers of California located in the county, at which county employees support job seekers with job search tools, resume writing, interview techniques, and other resources, and they support employers with employee recruitment services and funding for training programs, including upskilling incumbent workers. WDB has also set a goal of developing career pathways around specific sectors that are prominent and in need of workers. This includes working with local colleges and organizations to develop targeted training that will benefit both job seekers and businesses through skills alignment. Furthermore, the LAUNCH apprenticeship initiative—led by the region’s community colleges, K-12 school districts, and the WDBs of San Bernardino and Riverside Counties—combines paid, on-the-job training led by a local business with technical instruction provided by a community college to strengthen pathways between education and employment. These WDB programs are vital to San Bernardino County’s efforts to create quality jobs and support its workers through industry transitions.

Infrastructure & Quality of Life

- San Bernardino County is a major transportation hub, with three airports, two major railroads, and highways stretching in every direction.
- The location makes it prone to water scarcity challenges but also a prime location for solar and wind energy installations.
- Compared to statewide and national metrics, San Bernardino County has worse health outcomes, but it has comparable rates of health insurance.

☆ Asset Highlights:

- Joshua Tree and Death Valley National Parks
- Three state parks
- Big Bear Lake
- Union Pacific and BNSF railways
- Metrolink
- K-12 High Speed Network initiative
- Ontario Convention Center
- Toyota Arena

Ample outdoor recreation opportunities and transportation options are assets to the economy and quality of life.

Many stakeholders with whom SRI spoke highlighted the natural beauty of the region. San Bernardino County has vast amounts of rural, undeveloped land. Desert wilderness and natural preserves cover large swaths of the county, while other parts have mountains and forestland. The county contains parts of Joshua Tree and Death Valley National Parks, in addition to three state parks, providing county residents and visitors with ample access to hiking, camping, boating, and other outdoor recreation opportunities. From 2017 to 2022, Joshua Tree National Park saw an annual average of 2.8 million visitors, while Death Valley National Park saw 1.3 million. National Parks are an incredible asset to a region, as they bring in visitors from across the world who spend money on lodging, food, and retail, so it is important that San Bernardino County take steps to ensure the county is fully capitalizing on this visitor traffic.

Situated within the San Bernardino National Forest, Big Bear Lake also serves as a popular tourist destination with its opportunities for fishing, hiking, snow and water sports, and wildlife viewing; however, vacation rental occupancy data for the city indicate that tourism levels are not as high as they could be and have declined 21% from 2021 to 2022 (see Table 4 in Appendix A). Fortunately, the Big Bear Lake Tourism Business Improvement District provides marketing and advertising for the area, which will hopefully increase visitor traffic.¹⁰

As mentioned in previous sections, the abundance of open land has also helped San Bernardino County become a key player in the nation's logistics. Several interstate highways and two Class I railroads—the Union Pacific and BNSF—cross through the county, making San Bernardino County a critical hub for the nation's logistics and transportation industries. In fact, BNSF is in the process of expanding its facility in San Bernardino to improve traffic flow and reduce bottlenecks.¹¹ The ample transportation options are a boon to commuting residents as well, who can also take advantage of southern California's regional rail system, Metrolink. This service includes many stations in San Bernardino County on routes to downtown Los Angeles, Orange County, and Oceanside.

Furthermore, multiple stakeholders with whom SRI spoke touted the ease and accessibility of the county's two commercial airports in San Bernardino and Ontario, which provide critical overflow support for both passenger and cargo traffic for Los Angeles International Airport. Both airports have been increasing their passenger traffic over the past decade with new routes and airlines, and together they serve as hubs for Amazon Air, FedEx, and UPS.^{12,13} The county's third airport, a

logistics airport in Victorville, serves a vital role by providing a place for aircraft training, maintenance, and storage.

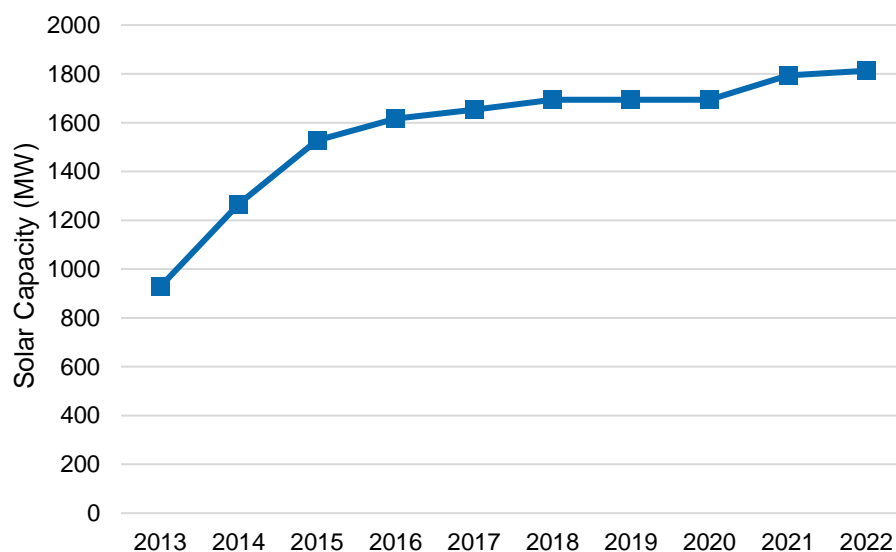
The county faces water scarcity challenges but has abundant renewable energy resources.

One challenge of San Bernardino County's geographic position is the threat of water scarcity, a challenge shared by the entirety of the American Southwest region. Several years of extreme drought, coupled with population growth and increased irrigation activities, have impacted both the San Bernardino Valley's groundwater supplies and the Santa Ana River flows. In response to the water shortage, many state utilities and agencies are working together to encourage water conservation and increase groundwater recovery and recycling rates to ensure that there is enough water supply to meet the needs of the region for years to come. One measure that has been taken is restricting outdoor watering to only one day a week for many San Bernardino County residents, though more restrictions are possible this year.¹⁴ As these utilities, water districts, and other regulators continue to collaborate to address what could be the "new normal" for water flows in the region, it will be important for county administrators to support these efforts and participate where appropriate.

On the other hand, San Bernardino is in a prime location for abundant renewable energy resources. There is no place in the nation with more potential for solar energy than Southwestern United States, particularly the Mojave Desert. Over the past decade, the capacity for solar energy production in the county has nearly doubled, as shown in Figure 16, indicating the increase in installed solar facilities. Many parts of San Bernardino County are also prime for wind energy generation; however, in 2022, the county only had 7 megawatts (MW) of installed wind energy capacity, compared to 592 MW of capacity in Riverside County.¹⁵ This indicates that there currently is a missed opportunity to generate more renewable energy in the county, an opportunity that can support the local economy through the creation of high-quality jobs and industry diversification.

Figure 16: Solar photovoltaic and solar thermal electricity production capacity in San Bernardino County, 2013–2022

Source: California Energy Commission



Access to broadband and healthcare varies across the county.

Due to the county's size and geographic diversity, there is a risk of drastic differences in quality of life for rural and urban residents. Fortunately, one metric for which this does not apply is broadband access, which is available across most of the county. U.S. Census data indicate that 94% of households in the county have an internet subscription, which is on par with the rate for California and higher than the rate for the United States overall. However, there are discrepancies in this rate by income level: 20% of households with an income of less than \$20,000 have no internet subscription compared to less than 3% of households with an income of \$75,000 or more. One state initiative helping to address broadband access challenges is the K-12 High Speed Network (K12HSN) program funded by the California Department of Education. This program supports local school districts to ensure every school has strong, reliable internet connection for its staff and students.

Healthcare availability and health outcomes are also critical indicators of quality of life. County Health Rankings & Roadmaps is an initiative run by the University of Wisconsin that collects and aggregates data on various health metrics by county. Many of these metrics indicate poorer health outcomes in San Bernardino County than in California overall. For one, the years of potential life lost due to premature death is 35% greater in San Bernardino County than it is in California (7,700 to 5,700 years per 100,000 people), though that rate is only 5% greater than the national number. One factor that could be contributing to premature death is air quality. Data for 2019 indicate that San Bernardino County has more than double the amount of particulate matter in the air than the California and United States averages; this can lead to higher rates of asthma and other respiratory illnesses, especially in children.¹⁶

Additionally, the size of the county and the broad distribution of the population can make it harder for residents to easily reach a doctor or hospital when needed. The ratio of primary care physicians to the population in San Bernardino County is 1 to 1,680, compared to 1 to 1,230 for California. One bright spot for county health access is the rate of health insurance coverage. U.S. Census data for 2022 indicate that 91.9% of county residents have health insurance, which is roughly on par with that of the United States overall (92.0%) and just below that of California (93.5%).

Event spaces draw visitors but miss opportunities for greater economic impact.

Retail and entertainment opportunities also impact a region's quality of life. The Toyota Arena and San Manuel Stadium serve as home to multiple minor league sports teams. The Arena and the Ontario Convention Center also host major concerts and conferences, attracting visitors from across the region and the country. While the events themselves support the local economy through ticket revenue, event staffing, and food and beverage sales, there are more economic benefits that can be captured from these events. Specifically, developing retail opportunities and lodging around the Convention Center and Toyota Arena that match the needs and expectations of the clientele—something stakeholders noted is currently lacking—can help the county fully capitalize on its existing assets that already draw visitors. Coordination between local tourism departments, chambers of commerce, and the San Bernardino County Economic Development Department can ensure that these efforts have the greatest impact.

Table of Assets

Category	Existing asset	Missing or Lagging Asset
Demographics	<ul style="list-style-type: none"> Youth population Relative housing affordability Programs to address homelessness Low cost of living 	<ul style="list-style-type: none"> Ability to attract and retain residents with college degrees
Industry Landscape	<ul style="list-style-type: none"> Major employers in the Transportation & Warehousing sector Proximity to ports Business mentorship Community development financial institutions 	<ul style="list-style-type: none"> Economic diversification Local policies/programs to support target industries Coordination between jurisdictions Incubator and accelerator availability Risk capital access
Education & Workforce	<ul style="list-style-type: none"> K-12 pre-apprenticeship programs Higher education institutions Large military presence Workforce Development Board programs 	<ul style="list-style-type: none"> College readiness of K-12 graduates Education attainment Linkages between colleges and employers Quality jobs to reduce commuting out
Infrastructure & Quality of Life	<ul style="list-style-type: none"> National and state parks Highways in every direction Commuter and industrial rail Airports Opportunities for renewable energy Entertainment and sports venues Access to internet 	<ul style="list-style-type: none"> Tourism around parks Access to healthcare Retail opportunities

Conclusion

Over the past five years, San Bernardino County has enjoyed impressive growth in both its population and its economy. Drawn to its high quality of life and relative affordability, residents throughout southern California continue to move to the county, thereby contributing to its economy and labor force. At the same time, the rapid growth of the Transportation & Warehousing sector has contributed to the county's economic recovery from COVID-19 and opened many opportunities for residents to secure jobs with competitive wages.

However, substantial challenges remain. Despite reducing the countywide poverty rate by 5% over the past five years, poverty remains above the state and national average and is particularly prevalent in rural communities. Similarly, homelessness, housing affordability, and crime continue to pose challenges to economic and community development efforts. From an industry perspective, the rapid growth of the Transportation & Warehousing sector, while providing many economic benefits, has made the county more vulnerable to unpredictable downturns in the sector, international trade disruptions, and long-term trends toward automation. Regarding the county's workforce, low educational attainment has made non-college educated workers increasingly dependent on the Transportation & Warehousing sector, in which the shift toward automation underscores the need to retrain and upskill these workers for the jobs of the future. There is a further need for the county to attract high-quality jobs that align with the education and skills of the county's diverse labor force. Lastly, water scarcity, air quality, and opportunities for renewable energy generation remain important considerations as the county and its municipalities pursue more sustainable land use and development patterns.

From these challenges, the county can identify areas for strategic improvement. First, there is an urgent need to train current and future workers on the skills that are expected to be in high demand in the future. Second, the county should intensify efforts to diversify its economy into other industries that offer high-quality jobs and sustainable growth opportunities, thereby building economic resilience. Third, a renewed focus on long-standing social and equity issues is needed to ensure that all county residents have the opportunities and resources to succeed. Fourth, given its immense natural assets, the county should work with its municipal partners to pursue sustainable land use and development patterns while capitalizing on its potential for renewable energy generation. In all of these efforts, it will be important for county government to play a greater role in leading coordination across sectors to minimize duplication of work and maximize impact. This should include actions such as connecting businesses and colleges, holding summits with city leaders, and sending representatives to serve on advisory boards and steering committees for initiatives focused on improving educational attainment, expanding affordable housing access, increasing tourism, and others. These ideas will be addressed in more detail in the *Strategic Direction and Action Plan*.

SWOT Analysis

Introduction

To advance San Bernardino County’s economic position, expand opportunities for residents, and strengthen economic resilience, SRI conducted an analysis of strengths, weaknesses, opportunities, and threats (SWOT). The SWOT analysis draws upon findings from the Economic and Community Assessment to inform the county’s path forward. In the SWOT analysis: (1) strengths refer to characteristics of the county’s economy that impart a competitive advantage, (2) weaknesses refer to characteristics of the county’s economy that put the county at a competitive disadvantage, (3) opportunities refer to elements in both the external and internal environment that the county could leverage to further its objectives, and (4) threats refer to elements in the external and internal environment that could hinder the county’s efforts to achieve its objectives.

STRENGTHS

- **Strategic location** serves as a hub for West Coast transportation and warehousing activity.
- **Cost of living and quality of life** attracts new residents.
- **Large population** includes a young and capable workforce.
- **Strong institutional network** focuses on economic, community, and workforce development.
- **Physical and natural amenities** attract visitors and residents.

WEAKNESSES

- **Low job quality** limits socioeconomic mobility and perpetuates inequality.
- **Low educational attainment** is pervasive within the local workforce, especially among Hispanic people.
- **Overreliance on the Transportation & Warehousing industry** for economic growth and prosperity raises San Bernardino County’s vulnerability to macroeconomic shocks.
- **Lack of risk capital** persists for entrepreneurs and small business owners.
- **High cost of doing business in California** decreases the county’s business appeal compared to other states.

OPPORTUNITIES

- **Create jobs and recruit businesses** in industries outside logistics, such as manufacturing, tourism, and professional services, to increase economic diversification and resilience.
- **Renew focus on workforce upskilling and job access** among low-skill workers and underserved communities to match industry needs.
- **Attract tech-intensive activities and jobs to** complement existing industries.
- **Retain workers who commute outside San Bernardino County** through more employment opportunities within the county.
- **Create a forum for coordination and collaboration** between San Bernardino County and its municipalities.
- **Develop a coordinated marketing strategy**, in partnership with municipalities, to attract residents and businesses.

THREATS

- **Warehouse automation** may lead to future job losses.
- **Trade disruption, increased competition, and rising costs** may adversely impact economic competitiveness and prosperity.
- **Gap in social mobility between baccalaureate and sub-baccalaureate** workers may perpetuate economic inequality.



Strengths

Strategic location serves as a hub for West Coast transportation and warehousing activity.

In recent years, San Bernardino County has successfully utilized its strategic location to become a logistical hub for southern California. Capitalizing on its location, the county has been able to fuel its economic recovery from the Great Recession through the rapid development of its logistics industry. Today, logistics forms the core of the county's economic base of tradeable industries—industries that are integral to successful regional economies by exporting products and services outside the region while bringing in new income that stimulates growth and wealth creation.¹⁷

The county's strategic location is rooted in its proximity to southern California's ports, its well-developed transportation infrastructure, and the relative abundance of affordable land. With 40% of all goods that enter the United States by container passing through the Ports of Los Angeles and Long Beach, the county's easy access to freeways, rail networks, and airports near these ports has transformed it into a staging area for a significant portion of both domestic and international trade.¹⁸ Consequently, the large amount of transportation, warehousing, and logistics activity has been a boon for the county's economy and its residents.

Cost of living and quality of life attracts new residents.

San Bernardino County's relative affordability, compared with its high quality of life, has attracted many new residents to the area. Individuals and families throughout southern California looking to be first-time homeowners are drawn to the county's low cost of living as well as its wide array of cultural and natural amenities. For many individuals who work in Los Angeles, the county is a logical place to reside owing to the ease of commute and the presence of various public transit options (e.g., Metrolink, Arrow, bus networks). As such, Los Angeles County is the biggest contributor of new residents, many of whom commute to Los Angeles for work. Overall, more than half of San Bernardino County's working residents travel outside the county for work.

Large population includes a young and capable workforce.

With a population of 2.2 million residents, San Bernardino County's population is larger than many small states. Over one million residents are in the labor force, and over 600,000 (29% of the population) are between the ages of 25 and 44. The pool of individuals in this age range, also known as the *prime working age population*, is commonly viewed as a measure of a region's talent potential. The large share of the county's population that falls under this age group should be viewed as a strength from a workforce development perspective, indicating that there is an abundance of working-age individuals who can fill future jobs.

Strong institutional network focuses on economic, community, and workforce development.

San Bernardino County benefits from a strong and diverse network of stakeholders that is deeply invested in the county's economic future. These stakeholders, from real estate developers and local businesses to education providers and community organizations, all make an active effort to address different challenges facing the county and to offer perspectives to policymakers on how the county can best position itself for future prosperity. In conversations with county staff, these stakeholders identified areas of opportunity to achieve the county's economic development goals. While many issues were discussed by stakeholders, common themes include an opportunity to better market the county's assets, a need to pursue economic diversification, and an urgency to upskill workers for jobs of the future.



Physical and natural amenities attract visitors and residents.

As the largest county in the United States by land area, San Bernardino County's vast amount of rural, undeveloped land and its diverse ecological systems draw in both residents and visitors. Natural assets such as Joshua Tree National Park and Death Valley National Park, in addition to three state parks, provide ample opportunities for recreation. The county's natural assets and amenities, moreover, can also serve as a driver of economic development through tourism-related activities.

Weaknesses

Low job quality limits socioeconomic mobility and perpetuates inequality.

Although San Bernardino County enjoyed a remarkable period of job growth in the 2010s, the average quality of its jobs base remains low relative to regions of comparable size. Much of the new jobs gained by Inland Empire—and by San Bernardino County—are in low-paying sectors, which has done little to advance economic opportunity for many residents.¹⁹ Additionally, the Great Recession led to a decline in jobs within high-paying industries, such as manufacturing, construction, and government. Thus, while the county has enjoyed significant job growth over the past decade, the distribution of jobs has trended toward industries that tend to offer lower-quality and lower-wage jobs.

Low job quality has significant implications for a region's economic and community well-being. For those who live and work in San Bernardino County, persistently low wages have led to a growing number of individuals struggling to make ends meet.²⁰ According to the Brookings Institution, 862,000 residents in the county—44% of the county's population—are part of families that struggle financially. These struggles, furthermore, are more prevalent among people of color as well as among residents of the more rural High Desert region. As a significant portion of the county's children live in financially struggling families lacking access to higher-quality jobs, it is also necessary to consider the intergenerational impact of this persistent economic insecurity. That is, children growing up in struggling families may face the same challenges as their parents, thereby perpetuating economic inequality within the county.

Low educational attainment is pervasive within the local workforce, especially among Hispanic people.

In addition to low job quality, a key weakness of San Bernardino County's economy is the low educational attainment of its workforce. Only 23% of the population over 25 years old holds a bachelor's degree or higher, compared to 37% for California. Among the county's Hispanic population, this share is 13%. In contrast, 30% of non-Hispanic Whites and 52% of Asians hold bachelor's degrees.

The combination of low job quality and low educational attainment perpetuates a negative cycle within the county that constrains its economic potential. The relative lack of skilled workers discourages the creation or location of high-quality jobs within the county. In turn, the scarcity of high-quality jobs discourages skilled workers from both living and working in the county. To break the cycle, the county must invest in and expand educational and career transition pathways for sub-baccalaureate workers toward industries with strong growth prospects and higher-than-average job quality. Combined with a concerted strategy to bring high-quality jobs to communities, the county and its stakeholders may initiate a positive cycle whereby the presence of skilled workers attracts high-quality jobs, which in turn attracts more skilled workers.



Overreliance on the Transportation & Warehousing industry for economic growth and prosperity raises San Bernardino County’s vulnerability to macroeconomic shocks.

The outsized presence of the Transportation & Warehousing industry, while providing numerous job opportunities for residents, has also made the county’s economy more vulnerable to unpredictable downturns in the industry, geopolitical events that may disrupt West Coast shipping activity, and long-term trends toward automation. The lack of diversification in the county’s industries is therefore a notable weakness. While an abundance of warehouse jobs continues to provide low-skill workers with opportunities to make a decent wage, it is far from certain that these opportunities will persist in the next decade. In the scenario in which the logistics industry ceases to serve as a source of middle-class jobs for the county’s vast base of low-skill workers, the effect on the local labor market will likely be severe and the socioeconomic consequences devastating. As such, the county should not continue to rely solely on the logistics industry as a source of sustained economic activity.

Lack of risk capital persists for entrepreneurs and small business owners.

The entrepreneurship ecosystem in San Bernardino County is largely driven by necessity, i.e., entrepreneurship driven by the need to create and sustain an individual’s personal income through their ventures rather than driven by a pursuit of opportunity motivated by the rewards of innovation. While there is some presence of venture capital and angel investors in the county, this presence is limited due to the scarcity of innovative startups in which to invest. Furthermore, most entrepreneurs operate firms with five or fewer employees and annual sales of less than \$400,000, a scale that is too small to attract the interest of most venture and angel investors.²¹ Nevertheless, some stakeholders in the county are actively nurturing opportunity entrepreneurs to develop technology-driven startups, such as Loma Linda University’s launch of the N³eight incubator for life sciences startups. In the future, these efforts may attract more innovation-minded investors to the county.

For necessity entrepreneurs, many of whom come from under-resourced communities, obtaining risk capital has been a challenge. Many small business owners do not qualify for traditional bank loans, and some lack the education necessary to successfully maintain a business as well as knowledge of the various entrepreneurship resources that exist in the county. To fill this financing and competency gap, community development organizations such as AmPac Community Capital offer micro-grants, loans, and entrepreneurship education to small business owners. Supporting these organizations in a way that allows them to scale up their financing capabilities and engagement efforts may strengthen the county’s small business landscape.

High cost of doing business in California decreases the county’s business appeal compared to other states.

The high cost of doing business in California, due in part to its regulatory environment, has been regarded by many stakeholders as a barrier to San Bernardino County’s ability to attract businesses. Real estate developers and investors, for instance, have historically been reluctant to pursue projects in the county because regulatory hurdles at the state level have substantially slowed the development process. Consequently, many developers choose to build in Phoenix, AZ or Las Vegas, NV instead, where projects can be brought to market 2 to 3 times faster.

Businesses considering relocation to San Bernardino County face similar dilemmas. Despite the county’s strategic location and relatively low cost of land and labor, stakeholders noted that the difficulty in navigating California’s regulatory environment—and the high cost of doing business in the state more broadly—make companies hesitant to locate in the county. These regulations, moreover, may also incentivize some businesses to leave for other states. Though this challenge is

shared by all local governments in California, there may be opportunities to ease its impact through better marketing of the county's assets as well as closer collaboration with state-level agencies in business attraction activities.

Opportunities

Create jobs and recruit businesses in industries outside logistics, such as manufacturing, tourism, and professional services, to increase economic diversification and resilience.

The creation and recruitment of high-quality jobs outside the logistics industry represent a major opportunity to strengthen San Bernardino County's economic resilience. First, an influx of high-wage jobs can, in conjunction with effective workforce development, provide viable career pathways for underserved residents to achieve greater social mobility. Second, this influx will likely diversify the county's economy into industries outside logistics. With a more diverse economy that draws on the county's strength in multiple industries, the county's economic exposure to a potential slowdown in logistics activity will be greatly mitigated.

To achieve economic diversification, the county needs to position and market itself as an attractive place for business. Such a place would have, first and foremost, a skilled workforce that meets businesses' talent needs. The importance of skilled workforce availability to businesses' location decisions further highlights the need for the county to upskill its workers. Other attractive qualities include the openness of the county's economic developers to work with a business to meet its relocation needs, the availability of shovel-ready sites on which to operate, and the presence of incentive packages that lower the cost of doing business.

Renew focus on workforce upskilling and job access among low-skill workers and underserved communities to match industry needs.

Over the past decade, San Bernardino County has made great strides in strengthening its workforce development activities in a way that matches training programs with the needs of local employers. Initiatives such as the Workforce Development Department's Apprenticeship Program and Business Services team have made the county a crucial provider of workforce services. These services have benefited cities and towns throughout the county, especially those that lack their own workforce development capabilities, and have become an especially valuable resource for residents from underserved or marginalized backgrounds.

Nevertheless, many county residents are still underprepared for jobs of the future, and the county and its stakeholders have a significant opportunity to help them overcome labor market barriers through upskilling and improvements in their ability to access various career pathways. These upskilling initiatives should be implemented in tandem with job creation and industry engagement activities and as part of a broader strategy to improve the socioeconomic mobility of financially struggling workers.

Attract tech-intensive activities and jobs that complement existing industries.

Several features of San Bernardino County's industrial composition and workforce grants the county various opportunities to attract higher-value economic activities. The county's logistics sector, which is largely defined by the movement and storage of goods, has significant potential to attract higher-value and knowledge-intensive activities such as warehouse automation research and testing. A strong transportation and logistics cluster that is supported by well-connected infrastructure also



presents opportunities for growth in the manufacturing sector. This is because easy access to distribution networks lowers shipping costs for manufacturers and grants them a competitive advantage. Going forward, the county may consider strategies to utilize its strength in logistics to develop complementary industries.

Retain workers who commute outside San Bernardino County through employment opportunities within the county.

The advent of remote work presents another opportunity for the county to attract knowledge-intensive jobs and businesses. For the 53% of working residents who commute outside the county, the widespread acceptance of remote or hybrid work during the COVID-19 pandemic has enabled many to work from home. As the county's commuters increasingly choose to work remotely, companies who employ them may be incentivized to open locations within the county to better engage with their workers. Thus, the trend toward remote work presents a significant opportunity for the county to attract new businesses.

Given the county's high quality of living, remote work also makes the county an attractive place to relocate workers who currently live outside the county and who can work remotely. This is particularly true for those living in California's more urban areas, where rising costs and congestion are driving workers and businesses to smaller cities and towns. As such, opportunities exist for the county to pursue targeted strategies that incentivize remote worker relocation, and initiatives by other regions such as Tulsa, Oklahoma and the State of Vermont provide useful models for such strategies.^{22,23}

Create a forum for coordination and collaboration between San Bernardino County and its municipalities.

Conversations with municipal staff have revealed a need and an opportunity for a formal mechanism for collaboration between San Bernardino County's economic developers and those in its municipal governments. In the past, this collaboration took place in the form of quarterly economic development roundtables, which facilitated information sharing and helped local governments coordinate their economic development initiatives. While these roundtables have since stopped, municipal staff expressed a strong desire to restart inter-city roundtable events as a platform through which to address common challenges, share best practices, exchange ideas, and stay up to date on economic conditions in other areas of the county. Furthermore, given the county's large size and diverse communities, it is likely that only county staff have the resources and relationships to organize and coordinate sustained collaboration between all of its municipalities. Such collaboration and mutual support between municipalities is critical to the county's ability to implement the county-wide initiatives needed to achieve its economic development goals.

Develop a coordinated marketing strategy, in partnership with municipalities, to attract residents and businesses.

Despite being endowed with an immense base of physical, cultural, and economic assets, San Bernardino County's brand and image has historically been underutilized. Improving the marketing, branding, and storytelling of the county's assets and communities represents a major opportunity to attract residents and businesses. This sentiment was expressed by numerous stakeholders who emphasized that many individuals both inside and outside the county are unaware of its various assets and lack knowledge about the wide range of resources the county offers. Despite the county's lack of a dedicated news station and the challenges its large geographic size poses to the implementation of a cohesive marketing strategy, opportunities exist for greater community involvement in marketing efforts as well as more effective media outreach. As the county facilitates



greater collaboration and coordination between its municipalities, the development of a shared marketing campaign may serve as a major objective around which to frame inter-city collaboration.

Threats

Warehouse automation may lead to future job losses.

The Transportation & Warehousing industry is a reliable source of economic growth in San Bernardino County. However, the industry is currently trending toward increased automation, which could potentially become an economic vulnerability for the county.²⁴ The prospect that low-skill logistics jobs—of which there are many in the county—can be replaced by technology underscores the urgency to accelerate industrial diversification and workforce upskilling efforts. Many of the jobs that will result from increased automation will require a high skill level and at least an associate degree (for example, jobs working with robotics). Because of the county's low educational attainment rates, many current workers in the logistics industry will be unable to take on new roles as logistics companies continue to replace low-skilled labor with new technologies, leading to job insecurity.

To mitigate the threat of automation and capitalize on its opportunities, the county must heavily invest in education in a way that provides underserved residents with skillsets needed to thrive in a more technology- and knowledge-intensive economy. Furthermore, these investments should be complemented with targeted industry recruitment efforts offering career pathways that provide greater social mobility for those at the lower end of the income ladder.

Trade disruption, increased competition, and rising costs may adversely impact economic competitiveness and prosperity.

As a region that specializes in the storage and movement of goods, international trade has become a key source of economic growth in San Bernardino County. However, the growth of U.S. trade with Asia is slowing and may even decline as the geopolitical environment continues to evolve.²⁵ As discussed earlier in this report, prolonged disruptions to shipping activity at the Ports of Los Angeles and Long Beach would disproportionately affect the county's economy. Furthermore, new infrastructure development outside southern California, such as the recent expansion of the Panama Canal, may reshape existing trade routes to the county's detriment.²⁶

Beyond international trade, both the cost of living and the cost of land and labor in the Inland Empire—qualities that have historically granted the county a competitive advantage—are rising. For instance, stakeholders claim that some cities that were once considered attractive to first-time homebuyers due to their low cost of living are now being perceived as unaffordable and more upscale communities. Thus, the combination of trade headwinds and rising costs may threaten the county's competitiveness and prosperity in the near-to-medium term.

Gap in social mobility between baccalaureate and sub-baccalaureate workers may perpetuate economic inequality.

In some respects, San Bernardino County's resident population can appear to be bifurcated between college-educated workers, many of whom commute outside the county, and less educated workers who typically hold lower quality jobs. This has created an uneven distribution in access to opportunity that perpetuates existing disparities between communities. Furthermore, as the years following the Great Recession saw a decline in the share of high-quality jobs within the county's employment base, earnings growth has become overwhelmingly concentrated in the top fifth of the income distribution. For the remaining 80% of workers, earnings data show stagnant or declining

real incomes, with workers without bachelor's degrees suffering the largest declines.²⁷ Because historically marginalized populations comprise a disproportionate share of the county's sub-baccalaureate workers, the growing social mobility gap could seriously undermine economic progress if this trend is left unchecked. As such, the county would do well to invest in and expand training opportunities for sub-baccalaureate workers, such as apprenticeships, micro-credentials, and other forms of work-based learning.

Strategic Direction and Action Plan

San Bernardino County's economic development strategy is a roadmap to help the county realize its vision for the future: *a resilient and vibrant economy that increases access to high-quality jobs for all residents by attracting employers across a diverse set of industries*. San Bernardino's unique economic assets—from its location and competitive business environment to relative affordability and emergent innovation assets—situate the county for growth in the years ahead. Success, however, depends on the county's ability to capitalize on its assets, address critical gaps, and strengthen coordination and collaboration among stakeholders.

Informed by insights from the Economic and Community Assessment, SWOT Analysis, and discussions with stakeholders, this plan details recommendations for how San Bernardino County's Economic Development Department (EDD) can support the growth and resilience of the county's economy. These recommendations have been organized into four broad strategies with accompanying actions:

Strategy 1: Diversify the Economy and Increase High Quality Employment

- Create an inventory of shovel-ready or near-shovel-ready sites.
- Develop industrial rail parks as attractive manufacturing locations with easy rail access.
- Support development and adoption of alternative energies, including hydrogen.
- Promote industry collaborations with the Cybersecurity Center at California State University, San Bernardino to expand applied cybersecurity opportunities and experiences for students and faculty.
- Promote opportunities for foreign direct investment and foreign trade.
- Create an online data portal that compiles county statistics in one place to inform and attract businesses considering establishing an office in San Bernardino County.

Strategy 2: Spur the Creation and Scaling of New Businesses

- Create a bilingual online business portal with resources and funding programs to start and grow a business in the county.
- Support the development of business incubator, accelerator, and entrepreneurial assistance spaces.

Strategy 3: Strengthen Capacity and Governance for Regional Action

- Convene economic development leaders quarterly to identify best practices, bottlenecks, challenges, solutions, and areas that would benefit from county support.
- Establish an industry council to coordinate the development of target industries comprised of stakeholders in business, workforce development, community development, and local governments.
- Provide cities with grant and proposal writing and other technical support.
- Collaborate across the county government to communicate with residents and the media and to develop and implement a countywide marketing strategy.

Strategy 4: Bolster Quality of Life

- Promote and invest in opportunities for, access to, and entrepreneurship related to urban outdoor recreation, such as bike shops, community parks, and programs for school-aged children.
- Support municipalities' development of employment center districts, including cultural arts and retail districts, to spur tourism, placemaking, and entrepreneurship.



- Work with community leaders and organizations to explore the possibility of providing county support for community land trusts.

Strategy 1: Diversify the Economy and Increase High Quality Employment

While the county's strength in Transportation & Warehousing has been a source of economic growth, the industry concentration makes the county's economy highly vulnerable to economic shocks. Additionally, these industries are significant employers of lower skilled workers. Transition in these industries brought about by automation threatens to impact a sizable share of the county's workforce. Therefore, the county should focus on diversifying the economy with special attention to employment opportunities across the skills spectrum that offer a living wage.

Action Item 1.1: Create an inventory of shovel-ready or near-shovel-ready sites.

Lead: EDD, Land Use Services Department

Support: City economic development administrators, commercial developers

For some businesses, high infrastructure and land development costs can lower the relative attractiveness of regions that would otherwise be highly competitive. Some regions possess an abundance of highly suitable sites that are ready to be developed, thus reducing these upfront costs, but information about these sites may not be readily available to prospective businesses. With an inventory of candidate sites primed for infrastructure investment and permitting at hand, the county and its communities would be well equipped to prepare shovel-ready sites when the funding becomes available.

To provide businesses with more complete information on candidate locations to set up operations, EDD should first establish a digital inventory of shovel-ready sites and near-shovel-ready sites in partnership with the Land Use Services Department and local communities and developers. Such an initiative would first define a set of standards for what makes a site shovel-ready to align expectations when attracting businesses. Second, the digital inventory should include specific information about the site, its existing infrastructure, the status of the permitting approval process, and other features that make a site ready for a business's investment.

Virginia Economic Development Partnership's (VEDP) website offers an excellent inventory of shovel-ready sites in the state.²⁸ Each site contains satellite images of the prospective site, specifications of the available acreage, contiguous acreage, possibility to subdivide, zoning information, available utilities, nearby transportation, supporting information about the site, general community economic indicators and statistics, and the available state incentives (cash grants and tax credits) for developers. EDD should create an online inventory similar to VEDP's to aid interested developers.

Action Item 1.2: Develop industrial rail parks as attractive manufacturing locations with easy rail access.

Lead: EDD

Support: BNSF and other industrial developers

The growing popularity of industrial rail parks presents a promising solution to the site selection challenges that make it difficult for regions throughout the United States to attract prospective manufacturers. These parks, complete with trans-load and multimodal facilities, are specifically designed for manufacturers and industrial businesses that seek direct rail service to enhance their access to markets and suppliers. According to a 2018 study by the American Trucking Association, moving products by rail is 45% less expensive than by truck, and while rail has historically taken longer to transport goods than trucks, rail operators are closing this time gap through improved planning and logistics.²⁹

San Bernardino County’s two Class I railroads (operated by Union Pacific and BNSF) and the county’s role as a critical logistics hub for the nation make it an attractive location for manufacturers seeking proximity to distribution networks. The development of industrial rail parks would therefore capitalize on these synergies between manufacturing and logistics. For example, the Barstow International Gateway is a planned 4,500-acre intermodal rail facility that is expected to bring thousands of jobs to High Desert communities. It would also be a prime location for one or more rail parks for manufacturers to take advantage of their proximity to rail assets in order to lower shipping costs. As such, EDD and county stakeholders should utilize industrial rail parks as a key site selection asset when recruiting manufacturers.

Action Item 1.3: Support development and adoption of alternative energies, including hydrogen.

Lead: EDD

Support: ARCHES, SBCTA, SoCalGas

The state of California has set 2035 as the target date for all new cars to be zero-emissions and 2045 as the target date for all energy to come from renewables. These ambitious goals mean California’s current renewable energy power capacity must increase threefold, requiring significant energy infrastructure investments.³⁰ Hydrogen is one renewable energy source that could be critical to California’s decarbonization. The Alliance for Renewable Clean Hydrogen Energy Systems (ARCHES), a California public-private partnership, applied for and was selected to implement a California hydrogen hub. ARCHES has now received up \$1.2 billion in federal funding to distribute for hydrogen projects across California.³¹

San Bernardino County is well situated to benefit from this new federal investment. Hydrogen fuel cells are anticipated to be particularly valuable for transitioning ships, heavy-duty trucks and buses, rail, and airplanes that need to refuel quickly. Given San Bernardino County’s proximity to ports and its position as a transportation crossroads, early investment in hydrogen infrastructure across the county will ensure the county stays at the forefront of this energy transition. San Bernardino County Transportation Authority (SBCTA) has already demonstrated commitment to this movement by partnering with a Swiss train builder, Sadler, to develop fully hydrogen-powered passenger trains to join the Metrolink service fleet.³² Similarly, PowerTap Hydrogen Capital Corp. and Newport Realty Group have partnered to construct a sustainable fueling station in Yermo that will include an on-site hydrogen production and dispensing station, as well as battery electric charging stations and traditional petrol stations.³³

EDD can build on this momentum by supporting hydrogen projects, such as fueling stations and production sites. EDD can provide site selection services to help identify locations that are already well connected to an energy grid and are near distribution staging hubs. Additionally, San Bernardino County should join ARCHES to better advocate for the county to receive federal funding for hydrogen projects. Through participation in ARCHES, San Bernardino County can also ensure the county is well connected to any future hydrogen energy pipelines. Capitalizing on this opportunity to get involved in the hydrogen energy industry now can help build foundational partnerships with energy providers, transportation fleet managers, and energy researchers to increase technology adoption.

Of note, the increased hydrogen and electric infrastructure construction and future maintenance needs will require more skilled technical jobs with lower education requirements. These jobs are likely to be disbursed across the county, including in rural areas with land available for energy production sites, which can support inclusive economic growth and offset potential losses from increased automation.



Action Item 1.4: Promote industry collaborations with the Cybersecurity Center at California State University, San Bernardino (CSUSB) to expand applied cybersecurity opportunities and experiences for students and faculty.

Lead: EDD

Support: CSUSB Cybersecurity Center

The cybersecurity program at CSUSB is considered one of the top cybersecurity programs in the United States, receiving millions of dollars annually from national grants to conduct pioneering research. Despite CSUSB training many world-class cybersecurity professionals each year, San Bernardino County itself lacks a strong cybersecurity industry, forcing many graduates of the program to leave the county for employment. To address this “brain drain,” the county should work closely with CSUSB’s Cybersecurity Center to foster a local cybersecurity industry that draws on talent from CSUSB.

Building connections between local businesses and the Cybersecurity Center’s students and faculty will facilitate this objective. CSUSB could introduce a capstone project requirement that organizes students into small teams to find and remedy a local gap in the cybersecurity infrastructure. The best or winning team (or teams, as there could be several) could then be paired with a local business to fund the project and implement their proposed solution. This would provide students with hands-on experience while expanding industry networks that could attract or grow the local cybersecurity industry.

Nationwide, there is a shortage of cybersecurity professionals needed to address the increasingly sophisticated cyber threats faced by businesses and institutions, especially utility companies, schools, and healthcare systems. As such, many of San Bernardino County’s businesses and institutions would benefit from cybersecurity expertise. The county should consider supporting and funding a program through which Cybersecurity Center personnel can provide specialized services to local businesses and institutions. Doing so would assist Cybersecurity Center students and staff in developing critical entrepreneurship skills and providing networking opportunities that may become the foundation for a strong local cybersecurity industry and high-quality employment in the future. The cybersecurity expertise offered in the county could then attract cybersecurity companies hoping to build networks with talented workers. Furthermore, businesses and institutions throughout the county would benefit from the spillover from stronger cybersecurity measures because of the Cybersecurity Center’s engagement efforts.

Action Item 1.5: Promote opportunities for foreign direct investment and foreign trade.

Lead: EDD

Support: State and federal economic development agencies, entrepreneurship and small business support organizations

San Bernardino County is endowed with various features that make it an ideal location for receiving foreign direct investment (FDI) and conducting foreign trade. These features include accessibility to West Coast markets, proximity to the Ports of Los Angeles and Long Beach, affordable commercial real estate, abundance of warehouse space, and a large workforce from which to draw talent. Furthermore, the county is home to Foreign Trade Zone 243, based around Southern California Logistics Airport in Victorville, which further enhances the county’s attractiveness to international companies and small businesses. Taiwanese surveillance provider company NUUO, for example, has highlighted features of San Bernardino County that make it a great location to operate—and thereby a great candidate for foreign direct investment. Assets mentioned include access to major highways, 16 universities and colleges within a 10-mile radius, and reasonable costs for sales taxes and electric power.³⁴



Nationally, by industry, employment by foreign direct investment is largest in manufacturing and in retail trade—two industries that the county is primed to grow. This is particularly true as the county seeks to increase opportunities for segments of the workforce most impacted by automation in logistics and related industries. On average, foreign-owned establishments in San Bernardino County pay wages 20% higher than U.S.-owned establishments.³⁵

Going forward, San Bernardino County should continue to actively pursue foreign direct investment and foreign trade opportunities through both county-level engagement efforts, such as facilitating an export support program for small businesses, and collaboration with state and federal agencies involved in promoting foreign direct investment. To attract foreign direct investment to San Bernardino County, EDD should identify core assets for FDI attraction and investor leads, generate regional awareness of FDI opportunities, market the county to foreign-owned enterprises in target sectors, be ready for new investments by offering supportive resources and guidance to facilitate deals, and continually communicate with investors and monitor projects to help investors be successful in the region.³⁶ While EDD is taking proactive steps to market the county to international companies, it also has significant opportunities to integrate its activities into those of the Governor’s Office of Business and Economic Development and the Office of the U.S. Trade Representative, both of which conduct trade missions on a regular basis. Given the resources dedicated to promoting foreign direct investment that are available at the state and federal levels, there is an opportunity for the county to better leverage these resources to successfully attract more foreign-owned enterprises.

The process of identifying sources of FDI and building relationships with state and federal trade representatives will likely also bolster EDD’s ability to provide export support services. These services can especially improve market access for small businesses and entrepreneurs, who often face more significant barriers than larger, well-established businesses due to limited experience and financial resources and the complexity of the legal and logistical steps to trade. Export assistance programs provide small businesses with guidance, training, and market research to help them make informed decisions about the viability of an export strategy and build the strategic capacities needed to enter a foreign market. San Antonio, Texas’s Export Leaders Program is one example of a well-organized program that helps businesses of all sizes, especially small businesses, grow their exports through resources that prioritize international targets, develop an export plan, and connect with prospective markets.

One of the most important steps for EDD is to regularly communicate with businesses through efforts such as conducting interviews with company CEOs, partnering with the Small Business Development Center (SBDC), and holding roundtables with chambers of commerce. This communication will inform how EDD can better support export activities, including adjusting local regulations to make sure that the policy environment encourages growth; passing along the information about area businesses interested in exporting to regional, state, and federal stakeholders; making sure businesses interested in exporting are connected to available trainings, missions, and assistance; and celebrating exporting success stories.³⁷

Action Item 1.6: Create an online data portal that compiles county statistics in one place to inform and attract businesses considering establishing an office in San Bernardino County.

Lead: EDD

Support: Other relevant county departments

When businesses are looking to relocate or expand to a new location, they rely on administrative data about a region to evaluate its suitability. This typically includes data on a region’s demographics, such as the median age, the labor force participation and unemployment rates, and



the educational attainment of residents, in order to understand the opportunities for and qualifications of the potential workforce. Businesses interested in relocating are also often interested in evaluating the amenities a region offers and the quality of life it can provide to ensure the business’s current employees will be excited to relocate; this can include data on health outcomes and access, home prices, environmental statistics, and cultural and recreational offerings. Furthermore, businesses must consider a region’s tax, licensing, and regulatory environment when determining the best location for the business.

By compiling data on these types of statistics in one user-friendly data portal, EDD can better attract businesses that are considering relocating to or expanding in San Bernardino County by ensuring they are well informed of the county’s assets and capabilities. EDD should work with site selectors and businesses to determine the most relevant information to compile in this data portal to make it comprehensive and attractive to potential new businesses, and EDD’s home page should prominently include a link to this portal. The Marin County, California [Open Data Portal](#) and Arlington County, Virginia [Locate in Arlington](#) are two examples of appealing and informative data portals.

Strategy 2: Spur the Creation and Scaling of New Businesses

Entrepreneurs and small businesses are an essential part of a region’s economic ecosystem and a pathway to provide a livelihood for many residents, drive innovation, and contribute to a community’s unique character. To better support local entrepreneurship and small business growth, San Bernardino County should develop a multi-pronged strategy that addresses all elements necessary for entrepreneurial and small business success, including financing, education, and market access for a diverse mix of businesses—from mom-and-pop retailers to high-growth startups. Additionally, because local organizations such as AmPac Community Capital, Fourth Sector Innovations, and the Inland Empire Center for Entrepreneurship already provide some capacity in entrepreneurship financing, education, and consulting, the county should help coordinate these efforts and align its strategy with those of local entrepreneurship development organizations so that these efforts can be scaled up to serve a greater number of existing and aspiring entrepreneurs. Key areas of opportunity for EDD to help businesses launch and scale is through making it easy for owners and entrepreneurs to find resources to start and grow their business and supporting entrepreneurs’ access to risk capital, technical expertise, and collaboration.

Action Item 2.1: Create a bilingual online business portal with resources and funding programs to start and grow a business in the county.

Lead: EDD

Support: Providers of entrepreneurship and small business assistance

EDD can support small business owners and entrepreneurs by ensuring that they have quick and easy access to resources and funding programs through a “one-stop-shop” website. Many stakeholders with whom SRI spoke or who were interviewed for CSUSB’s Inland Empire Center for Entrepreneurship’s 2021 State of Entrepreneurship report noted that resources available to entrepreneurs and small business owners are not widely known.³⁸

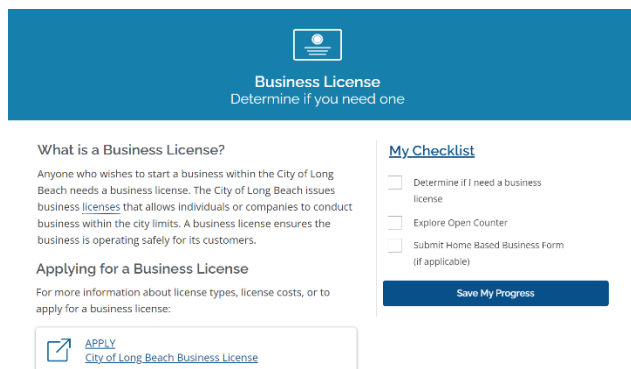
Given the challenge of limited financing options that can serve as alternatives to a traditional bank loan, EDD should work with local community financing groups such as AmPac Capital to compile a list of community development financial institutions and other risk capital providers in the county. Moreover, the website should provide information on upcoming opportunities to receive training on business fundamentals. This web portal should provide links to other county resources, such as EDD’s site selection assistance and the workforce development board’s employee recruitment and



training services. It should also provide clear and concise information about the county’s policies and regulations that are relevant to business owners to make it easier for owners and entrepreneurs to navigate permitting and licensing processes.

Furthermore, because a large share of San Bernardino County residents (15%) is not proficient in English, and 16% of businesses in the Inland Empire are Hispanic owned, it is important for county resources supporting small businesses and entrepreneurs to be available in Spanish. To that end, this web portal should be available in both English and Spanish. Language differences can often be a barrier to achieving greater financial literacy, so improving access to these resources can serve to bolster entrepreneurship and small business success throughout San Bernardino County, especially in heavily Hispanic communities.

The City of Long Beach, California’s [business portal](#) includes resources for planning, launching, and growing a business within the city; an interactive “to-do” checklist of items with guided support for businesses in each of these categories; and easy-access customer service support via immediate chat or email. The code used to build Long Beach’s business portal is available open-source on GitHub for any community to use: <https://github.com/codeforamerica/bizport>.



Action Item 2.2: Support the development of business incubator, accelerator, and entrepreneurial assistance spaces.	
Lead: EDD	Support: Incubators, accelerators, libraries, community centers, community colleges

Entrepreneurs and small business owners in San Bernardino County can face outsized barriers to launching, sustaining, and growing a company, due in part to the small number of incubators and accelerators operating in the county. To address the challenge of limited spaces for entrepreneurs to launch and scale their businesses, EDD should work with incubators and accelerators currently operating in the region to identify suitable locations for them to expand their provision of services, in both English and Spanish, across the county. This should include permanent locations where entrepreneurs can access coworking spaces, internet, mail services, mentoring and networking opportunities, and guidance on establishing and growing a business. EDD should also consider supporting the establishment of more task-specific spaces such as makerspaces, podcast recording rooms, and computer labs with specialized software (e.g., Python, Adobe Creative Cloud, Tableau).

Additionally, EDD should identify suitable pop-up locations for EDD to host “office hours” and trainings on topics such as the permitting process for starting a business, where to find top talent, and how to obtain risk capital. Where feasible, EDD should identify libraries, community centers, community colleges, and other venues that are already primed for hosting one-off events that draw in budding entrepreneurs. The Akron-Summit County Public Library Microbusiness Center in Akron, Ohio, is a great example of how existing community spaces can be utilized as a resource center for entrepreneurs. The Microbusiness Center, located in one of the city’s public libraries, provides accessible business training, coworking space, and maker equipment to the community.³⁹



By operating in existing community spaces and providing bilingual services, EDD can ensure that entrepreneurs and small businesses across the High Desert region, not just in the most densely populated parts of the county, have access to resources and support.

Strategy 3: Strengthen Capacity and Governance for Regional Action

San Bernardino is a geographically large county comprised of 24 incorporated cities. As such, frequent collaboration between the county and municipalities is vital for equitable economic growth across the region, not just in the southwest corner. EDD can lead this collaboration by supporting cities’ development projects and unique needs. EDD can further support countywide economic growth by convening dynamic groups that support target industries and business attraction. Developing the local economic assets that will drive the region and its communities forward requires support by the county and collaboration across sectors.

Action Item 3.1: Convene economic development leaders quarterly to identify best practices, bottlenecks, challenges, solutions, and areas that would benefit from county support.

Lead: EDD

Support: City economic development leaders

To accelerate regional action, EDD can serve as a convener of local economic development leaders, staff, and other economic development practitioners from across the county, as well as administrators from other county departments. A common theme of SRI’s focus groups with San Bernardino County’s city leaders was a desire for greater collaboration with other cities in the region. By providing a forum for cities’ economic development administrators to share strategies, disseminate resources, advocate for cities, and support local development, San Bernardino County can increase the capacity of local jurisdictions to carry out economic development and community revitalization activities to the benefit of the entire region.

Quarterly summits will build valuable partnerships and increase efficiencies between jurisdictions by facilitating the sharing of best practices and strategies for business retention, expansion, and recruitment. Regular convenings would also ensure that EDD stay apprised of the unique needs and challenges of each of its cities and consider ways that county policies and programs can address them. EDD should host these summits quarterly, rotating the location between county districts. Each summit could have a theme to guide discussion and selection of speakers/facilitators, such as addressing affordable housing and homelessness, site selection for new businesses, or improving secondary education outcomes. In addition to providing a space for the sharing of challenges and strategies, summits should also provide ample opportunity for economic development practitioners to network with each other and foster collaborative relationships between jurisdictions and with the county.

Action Item 3.2: Establish an industry council to coordinate the development of target industries comprised of stakeholders in business, workforce development, community development, and local governments.

Lead: EDD

Support: Chambers of commerce, industry representatives

Diversifying San Bernardino County’s economy requires an intentional approach to industry development. Such an approach would identify specific industries in which the county should build its competitiveness and execute a coordinated strategy for growing those industries. Industry councils have emerged as a common tool used by national, state, and local governments to better understand the needs and pain points of firms in key industries. Such councils—comprising



stakeholders in business, workforce development, community development, and local government—enable the county to plan and coordinate different aspects of industry development, from how to engage with prospective businesses to preparing the local workforce. Industry councils also provide real-time data on market conditions (e.g., state of the industry reports) and, in some instances, provide recommendations to public sector decisionmakers on policies, programs, or initiatives that could be implemented to address industry concerns. Industry councils, such as the Commerce Industrial Council located in Los Angeles County California, promote commercial, industrial, education, and legislative actions that will benefit the community and help businesses take root and grow within the county.

In the San Bernardino County context, EDD can partner with chambers of commerce to facilitate an industry council with a focus on clarifying target industries and the assets, policies, and other resources needed to grow and sustain these industries. The county can also work with the industry council to launch new opportunities to support target industries. For example, the Coeur d’Alene Area Economic Development Corporation-Jobs Plus in Idaho identified assets in the region that can support aerospace manufacturing connected to industry growth in nearby eastern Washington. Jobs Plus worked with businesses and workforce service providers to facilitate collaboration between the aerospace industry and industry associations in both states and Montana to create the I-90 Conference.⁴⁰ The annual conference brings together aerospace businesses and service providers, creates valuable opportunities for small businesses in the region to connect with the procurement officers of large businesses, and is spurring growth of other businesses with precision technology and a strong, specialized workforce.⁴¹ An industry council in San Bernardino County can serve in a similar capacity, creating new opportunities for growth and development through targeted strategies, information sharing, and high-value networking.

Action Item 3.3: Provide cities with grant and proposal writing and other technical support.

Lead: EDD

Support: League of California Cities, State of California, local libraries, CSUSB

Many of the city leaders with whom SRI spoke mentioned the need for more grant writing support. While outside funding opportunities can have a large impact on a municipality’s capacity for improvement and revitalization projects, identifying grant opportunities and writing proposals can require a lot of staff time and resources, as well as special technical knowledge. This can pose an especially large burden on smaller municipalities.

EDD can collaborate with the League of California Cities, local libraries, and CSUSB’s Office of Research Development to facilitate training on how to identify and apply for state and federal grants and prepare proposal budgets. These measures would increase the technical knowledge of municipalities’ administrative staff and expand cities’ access to funding for development projects.

EDD can also amplify additional resources made available as part of the Grants Information Act of 2018. As part of this legislation, the State of California began compiling resources and tips for finding and applying to grants from dozens of state entities on [one site](#). This includes a database of available grants as well as information about state-sponsored webinars on seeking grants and guidance available through trained librarians.

Action Item 3.4: Collaborate across the county government to communicate with residents and the media and to develop and implement a countywide marketing strategy.

Lead: EDD, County Administrative Office

Support: Local tourism boards, chambers of commerce



There are many good things happening in San Bernardino County, with the development of cutting-edge technologies, the attraction of major national corporations, and innovative new government initiatives. However, the benefits of these accomplishments cannot reach their full potential if they are not celebrated. As such, EDD should closely collaborate with the county’s communication team and the County Administrative Office (CAO) to ensure that economic and business opportunities and victories in the county are widely publicized. This should include both posts on county social media accounts and stories in local newspapers and on regional television and radio news networks.

Additionally, EDD should work with the county’s communication team, CAO, and local tourism boards and chambers of commerce to develop a marketing strategy for the county. As part of developing this strategy, the coalition should inventory and prioritize assets to highlight in tourism advertisements, such as Big Bear Lake, the county’s two National Parks, Ontario Mills outlet mall, and historical sites. Though each community offers unique assets and amenities that can be individually promoted by their local chambers of commerce, there is an important opportunity for EDD and other stakeholders to “knit” local tourism promotions into a countywide framework. EDD and this coalition should also identify assets to attract new residents and businesses. Once this marketing strategy is developed, EDD should support monitoring of its implementation and track progress toward meeting the strategy’s goals.

Strategy 4: Bolster Quality of Life

Developing and maintaining amenities such as affordable housing and community spaces is a critical way to retain residents in San Bernardino County. This is especially important for retention of younger residents who place a high value on amenities when determining where to live. Similarly, marketing the county’s assets can attract both tourists and new residents alike. By collaborating with different county departments and local nonprofits and chambers of commerce to bolster the county’s amenities, EDD can enhance the quality of life of San Bernardino County.

Action Item 4.1: Promote and invest in opportunities for, access to, and entrepreneurship related to urban outdoor recreation, such as bike shops, community parks, and programs for school-aged children.

Lead: EDD, Regional Parks Department	Support: Community leaders, San Bernardino County Superintendent of Schools
---	--

Southern California is nationally known as a region with beautiful natural resources and a high quality of life, and this was often highlighted in SRI’s conversations with San Bernardino County residents. Still, some stakeholders expressed concerns about the threat that extensive warehousing poses to the county’s aesthetics, and data indicate that the region’s parks and outdoor recreation opportunities are not seeing the traffic that they could be. This creates an opportunity to expand access to and offerings around outdoor recreation for both county residents and visitors alike.

To that end, EDD should work with the San Bernardino County Regional Parks Department to promote the national, state, and regional parks in the county. In addition to the quality-of-life gains that parks can have on nearby residents, they can also boost economic activity by attracting visitors. EDD can further capitalize on this tourism by supporting the establishment and retention of outdoor recreation-focused businesses around parks, such as camping and fishing supply stores and bike shops. EDD should consider establishing a loan program specifically for small businesses in this industry. Working with the Regional Parks Department and local advocates of urban outdoor recreation, EDD should identify any retail hubs that could potentially benefit from more outdoor

amenities (such as bike trails, skate parks, and community gardens) to make those retail areas more attractive and increase access to greenspaces.

Additionally, EDD should work with the County Superintendent of Schools to establish after-school programs that increase access to outdoor recreation among underprivileged K-12 students. Offerings such as skate clubs and weekend hiking trips enhance students' physical and mental wellbeing and teach children about environmental stewardship, while also having the potential to stir students' interest in the business of outdoor recreation.

Action Item 4.2: Support municipalities' development of employment center districts, including cultural arts and retail districts, to spur tourism, placemaking, and entrepreneurship.

Lead: EDD, local municipalities

Support: Chambers of commerce (particularly those serving Hispanic-owned businesses), small business support organizations, artist support organizations

Several stakeholders with whom SRI spoke mentioned the need for more retail development, which can be a major contributor to local tax revenue, create employment opportunities, and bolster support for local businesses. Similarly, many cities in San Bernardino County have downtown areas that are in need of revitalization. Employment center districts that strategically site local businesses and attractions together along main thoroughfares of a city and in densely populated areas can be a great boost to visitor traffic and business vitality.

Given EDD's expertise in site selection and business support services, EDD should work with cities in the county to identify suitable places for developing cultural arts and retail districts that will drive economic activity and attract both local shoppers and tourists. The area around the Ontario Convention Center is one potential place where the county can encourage investments in restaurants, shopping, and multiunit housing to help create a more active, livable, and workable neighborhood for residents and to secure more revenue from existing visitor traffic (see case study on Pittsburgh's Cultural District below). Similarly, developing amenities and retail outlets around the San Bernardino County Museum, the San Bernardino History and Railroad Museum, and other attractions could help the region capitalize further on tourist traffic. The downtown areas of Upland, Barstow, Fontana, Needles, and Victorville are also primed for investment that will support local small businesses and artisans while increasing the cities' charm.

To develop cultural amenities, EDD can partner with [ArtsConnection](#) to encourage local art installations and other cultural amenities and help define a cultural district. To increase retail offerings, EDD can partner with local chambers of commerce, particularly chambers serving Hispanic-owned businesses, and small business support organizations to provide funding and technical assistance to help local entrepreneurs establish new small businesses in these retail districts. For existing businesses in retail districts, EDD should explore ways of using Community Development Block Grants and American Rescue Plan Act (ARPA) funds to support storefront improvements and other projects to enhance the curb appeal of the district. The county can also work with cities and chambers of commerce to organize events in these districts to further increase traffic.

Facilitating the establishment of local shops, art galleries, and restaurants in strategically chosen corridors would reenergize downtowns, spur economic activity across the county, support local entrepreneurs, and celebrate the regional culture.

Pittsburgh, Pennsylvania's Cultural Trust

Pittsburgh Cultural Trust is a nonprofit organization that manages a Cultural District around the city's convention center. The corridor includes theaters, parks, public art installations, restaurants, and unique retail stores and has helped revitalize the city's distressed downtown. Organized as a public-private partnership, this intentional and strategic investment in the neighborhood's cultural amenities has built up the offerings around the city's convention center, facilitating the attraction of more than 2 million visitors and generating an estimated \$300 million in economic benefits each year.⁴²

Action Item 4.3: Work with community leaders and organizations to explore the possibility of providing county support for community land trusts.

Lead: EDD, Community Development and Housing Department

Support: Local housing organizations, nonprofits, and philanthropists

Community Land Trusts (CLTs) are one path to creating and preserving affordable housing, both for owners and renters, particularly in areas with very high land costs, such as California. According to the Othering and Belonging Institute at the University of California, Berkley, "CLTs achieve their mission of creating permanently affordable, community-controlled land and housing by acquiring properties and retaining ownership of the land while entering into a 99-year ground lease with the owner of the improvements (often homes or apartment buildings)...CLTs monitor and enforce the ground lease while also supporting its residents with services that ensure their financial stability and ability to thrive."⁴³ Though CLTs have existed for decades, they have only recently gained traction. As of 2021, California's CLTs steward over 1,500 units of housing spread across 21 counties, providing housing for more than 3,500 residents (see case study on Oakland's CLT below).⁴⁴ In San Bernardino County, groups such as Neighborhood Partnership Housing Services, Inland Empire Community Land Trust, and Inland Equity Community Land Trust are actively looking for homes and sites for developing this form of affordable housing.

Given housing challenges in San Bernardino County and the particularly high share of homelessness and cost-burdened renters, EDD and the Community Development and Housing Department should explore the potential of providing county support to increase the supply of CLT housing. This effort should include local organizations focused on improving housing access and affordability, including groups working to establish CLTs.

In particular, EDD can add value by helping to identify plots of land that would be well suited for a CLT based on their proximity to jobs and community resources such as schools, libraries, and parks. Additionally, EDD can support efforts to source funding for the purchase of land for CLTs, which may include Community Development Block Grant programs (CDBG) and the HOME Investment Partnerships program (HOME), in addition to support from local foundations and philanthropists. EDD's leadership in exploring the feasibility of providing county support for CLTs can help ensure that San Bernardino County takes an innovative, multi-pronged approach to addressing housing affordability challenges.

Oakland, CA Community Land Trust

OakCLT's mission is to expand and preserve housing and economic development opportunities for Black, Latinx, Asian, other communities of color, and low-income residents of Oakland, CA. OakCLT acquired its first vacant, foreclosed home in 2009, and has



continued acquiring, rehabilitating, and selling homes since. The basic requirements they have for a homeowner applicant are that the household must be under 80% of the median income for Alameda County and that the homeowner must have a credit score of at least 640, stable employment, no bankruptcy or foreclosure in the last seven years, and enough funds for a down payment and costs at closing, which are estimated at \$11,000–18,000.

Funding for OakCLT started in 2009, when the Oakland City Council approved a resolution authorizing an allocation of Federal Neighborhood Stabilization Program funds to the Oakland Community Land Trust. Since then, OakCLT has partnered with nonprofit transitional housing providers, youth programs, commercial tenants, and residents in providing affordable land use. OakCLT worked alongside at-risk youth in the Youth Employment Partnership’s Building Futures program to fully rehabilitate homes and do construction work. They partnered with the small nonprofit transitional housing provider, A Diamond in the Ruff, to provide transitional housing for single women and their children; with Hasta Muerte Coffee to preserve two apartments and a commercial space; and with commercial tenants and residents for a mixed-use, multi-family project.⁴⁵

Evaluation Framework

The performance and evaluation plan provides a framework for San Bernardino County Economic Development Department (EDD) to track the progress of its strategies. The framework tool provides tracking information for each action item, including:

- Strategy
- Action item
- Performance metric(s)
- Owner & supporter
- Relevant program & funding
- Timeline
- Status

The performance measures presented allow EDD and its stakeholders to first measure the progress of its strategies and then to adapt and improve its work. Performance measures include some program activities (largely conducted by San Bernardino County EDD) in support of community and economic development but are primarily outcomes for the county. These include a mix of outcomes that enhance EDD’s capabilities and longer-term outcomes such as job and wage growth.

STRATEGY 1: Diversify the Economy and Increase High Quality Employment					
Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Create an inventory of shovel-ready or near-shovel-ready sites.	Website with information about available sites in the county, including existing infrastructure, status of the permitting approval process, and other features.	EDD, Land Use Services Department, local economic development administrators, commercial developers			
2: Develop industrial rail parks as attractive manufacturing locations with easy rail access.	Establish fund for grants to build out critical facilities.	EDD, BNSF, industrial developers			
3: Support development and adoption of alternative energies, including hydrogen.	Partnership with ARCHES. Increasing number of hydrogen production sites.	EDD, ARCHES, SBCTA, SoCalGas			
4: Promote industry collaborations with the Cybersecurity Center at California State University, San Bernardino to expand applied cybersecurity opportunities and experiences for students and faculty.	Increasing number of industry collaborations. Increasing number of cybersecurity jobs.	EDD, CSUSB Cybersecurity Center			

5: Promote opportunities for foreign direct investment and foreign trade.	Increasing number of firms (greenfield and M&A), jobs, and wages of foreign-owned enterprises. Number of businesses served by export assistance. Increase in exports by businesses served.	EDD, state and federal economic development agencies, entrepreneurship and small business support organizations			
6: Create an online data portal that compiles county statistics in one place to inform and attract businesses considering establishing an office in San Bernardino County.	Number of businesses expanding or relocating in county. Webpage views (increase over time).	EDD, other relevant county departments			

STRATEGY 2: Spur the Creation and Scaling of New Businesses

Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Create a bilingual online business portal with resources and funding programs to start and grow a business in the county.	Number of businesses accessing resources and funding (increasing over time). Web conversion rate higher than 5% (increase over time). Webpage views (increase over time).	EDD, local providers of entrepreneurship and small business assistance			
2: Support the development of business incubator, accelerator, and entrepreneurial assistance spaces.	Number of pop-up "office hours" hosted by EDD. Increasing number of small businesses and entrepreneurs helped by EDD's partner organizations.	EDD, local libraries, incubators, accelerators, community centers, and community colleges			

STRATEGY 3: Strengthen Capacity and Governance for Regional Action

Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Convene economic development leaders quarterly to identify best practices, bottlenecks, challenges, solutions, and areas that would benefit from county support.	Launch group and convene quarterly.	EDD, city economic development leaders			
2: Establish an industry council to coordinate the development of target industries comprised of stakeholders in business, workforce development, community development, and local governments.	Hold meeting of industry council and determine target industries.	EDD, chambers of commerce, industry reps			

3: Provide cities with grant and proposal writing and other technical support.	Establish collaboration with partner organizations. Conduct outreach and marketing of grant resources.	EDD, League of California Cities, State of California, local libraries, CSUSB			
4: Collaborate across the county government to communicate with residents and the media and to develop and implement a countywide marketing strategy.	Increasing number of engagements with county social media accounts. Develop marketing strategy.	EDD, County Administrative Office, local tourism boards, chambers of commerce			

STRATEGY 4: Bolster Quality of Life

Action Item	Performance Metrics	Owner & Supporter	Relevant Program & Funding*	Timeline*	Status*
1: Promote and invest in opportunities for, access to, and entrepreneurship related to urban outdoor recreation, such as bike shops, community parks, and programs for school-aged children.	Increased number of new jobs and outdoor recreation amenities.	EDD, Regional Parks Department, community leaders, San Bernardino County Superintendent of Schools			
2: Expand the Chamber-County Partnership Program to promote tourism in unincorporated communities.	Increasing tourist traffic to unincorporated communities. Increasing transient occupancy tax revenue. Reach of tourism marketing efforts.	EDD, chambers of commerce			
3: Support municipalities' development of employment center districts, including cultural arts and retail districts, to spur tourism, placemaking, and entrepreneurship.	Increasing number of retail shops within two miles of Ontario Convention Center. Increasing hotel tax revenue in San Bernardino County.	EDD, local municipalities, chambers of commerce, small business support organizations, artist support organizations			
4: Work with community leaders and organizations to explore the possibility of providing county support for community land trusts.	Increasing number of affordable rental and owner units developed on community land trusts.	EDD, Community Development and Housing Department, local housing support groups			

**For San Bernardino County EDD to add as the action items are being implemented.*

Appendix A: Supplemental Figures and Tables

Figure 17: Population share by race and ethnicity, 2017 and 2022

Source: U.S. Census Bureau American Community Survey

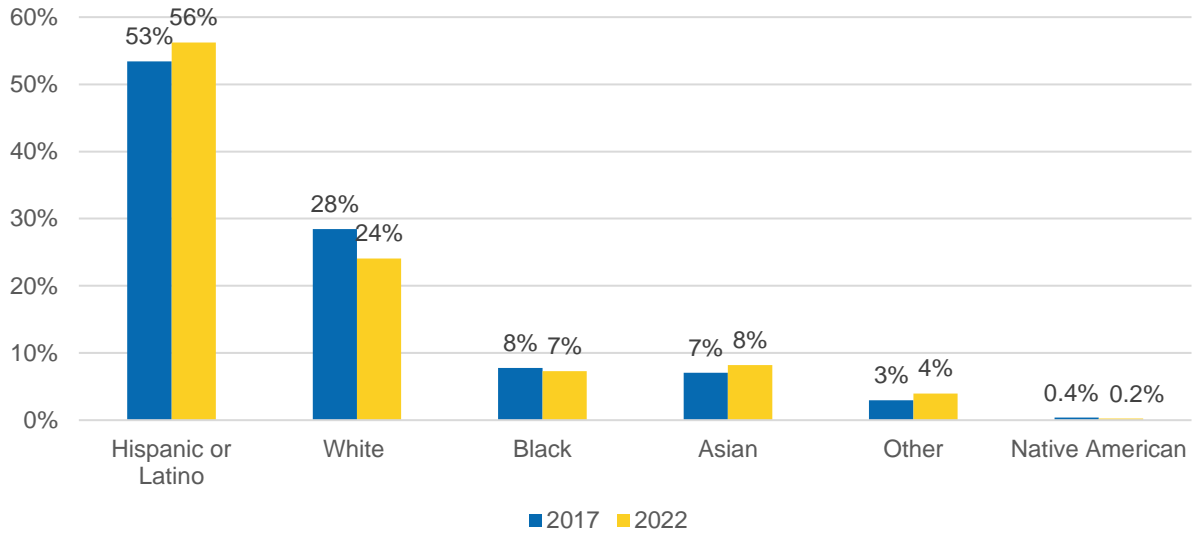


Figure 18: Components of population change, 2017–2022

Source: U.S. Census Bureau Population Estimates

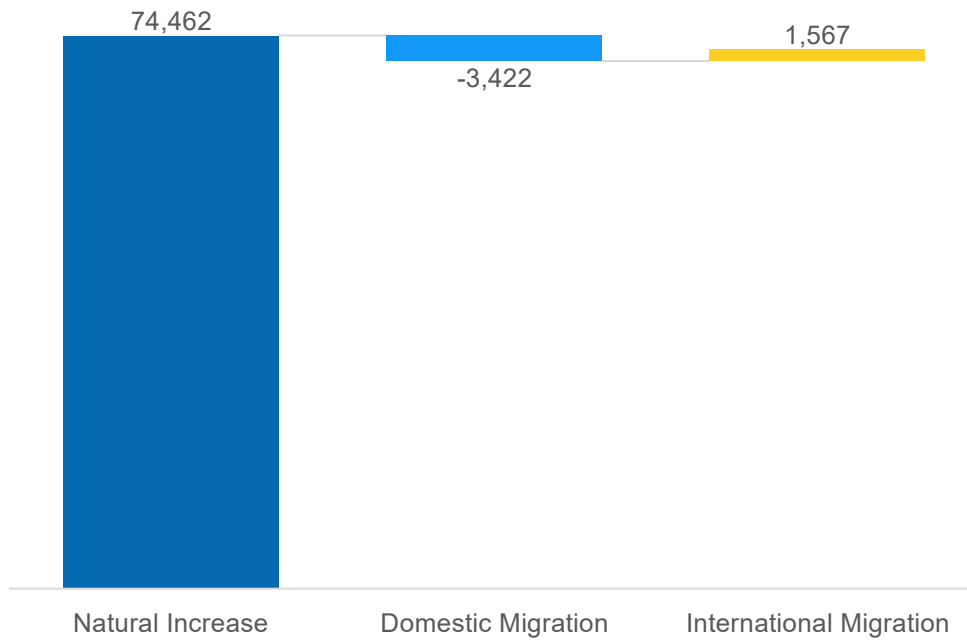


Figure 19: Population change, by number and percent, by age group, 2017–2022
 Source: U.S. Census Bureau American Community Survey

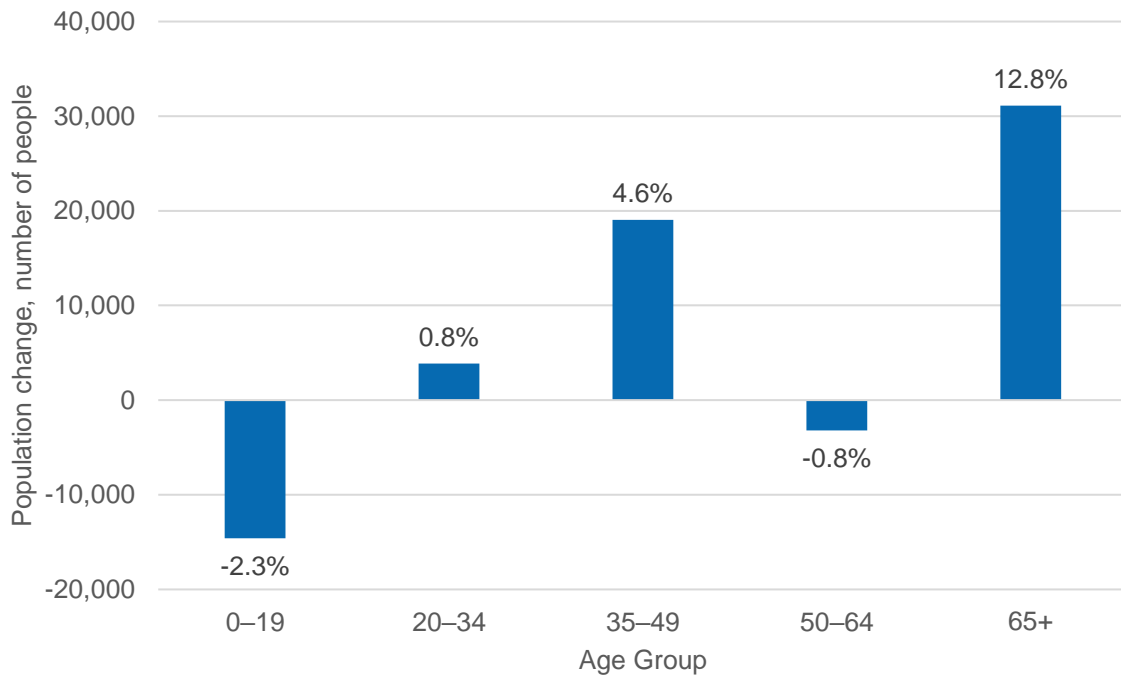


Figure 20: Annual births and deaths, 2017–2022
 Source: U.S. Census Bureau Population Estimates

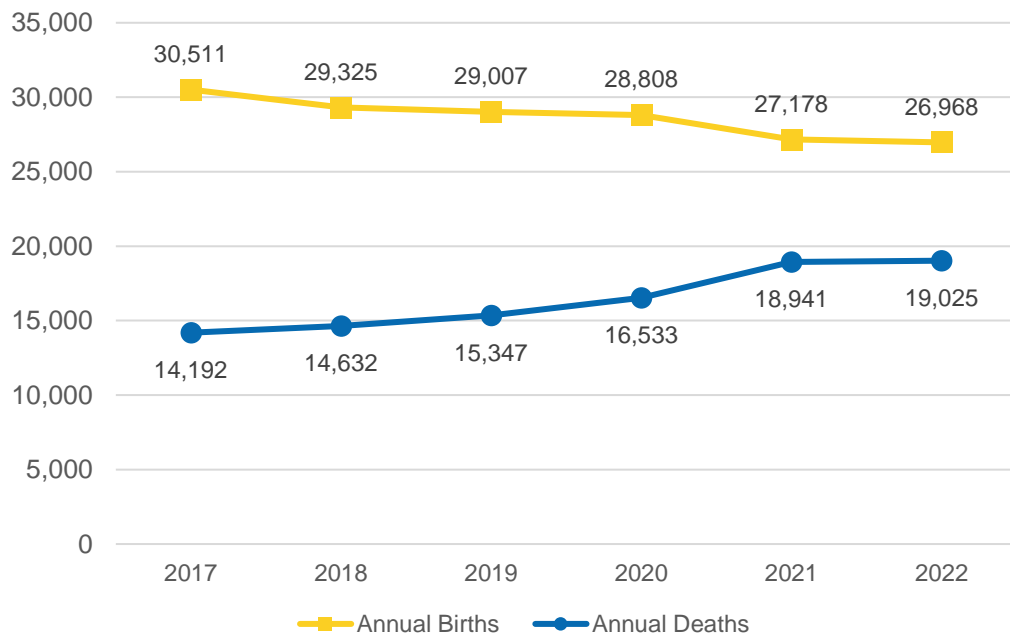


Figure 21: Share of population below the poverty line, San Bernardino County and peer regions, 2017 and 2022

Source: U.S. Census Bureau American Community Survey

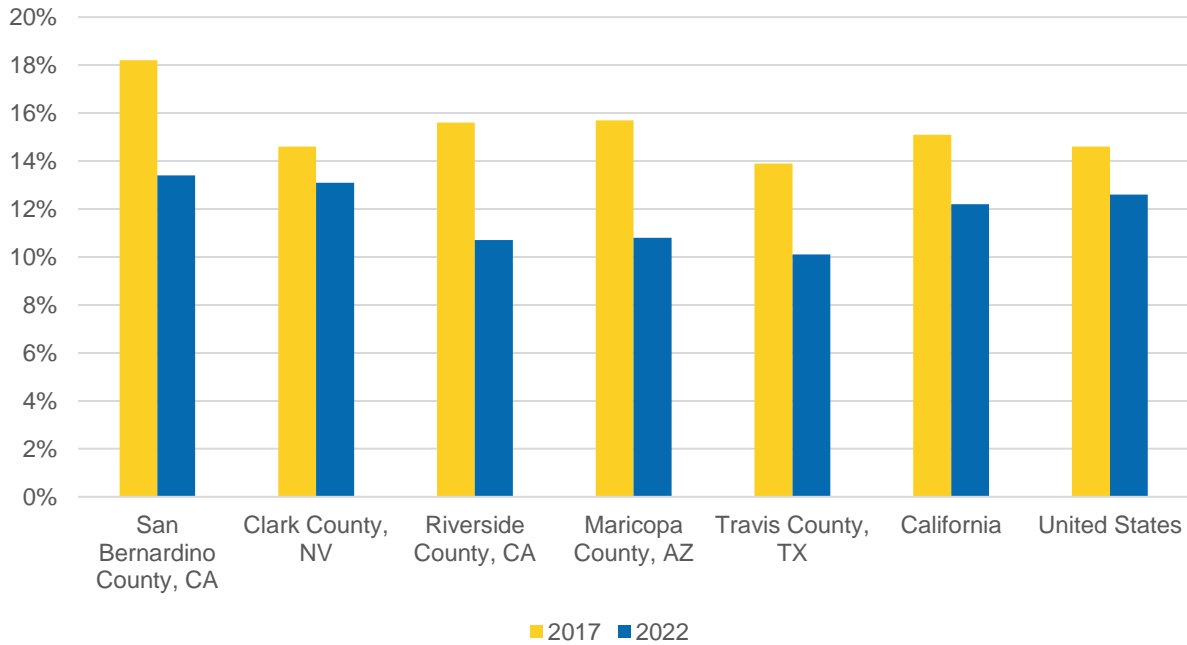


Figure 22: Percent of residents covered by health insurance, San Bernardino County and peer regions, 2022

Source: U.S. Census Bureau American Community Survey

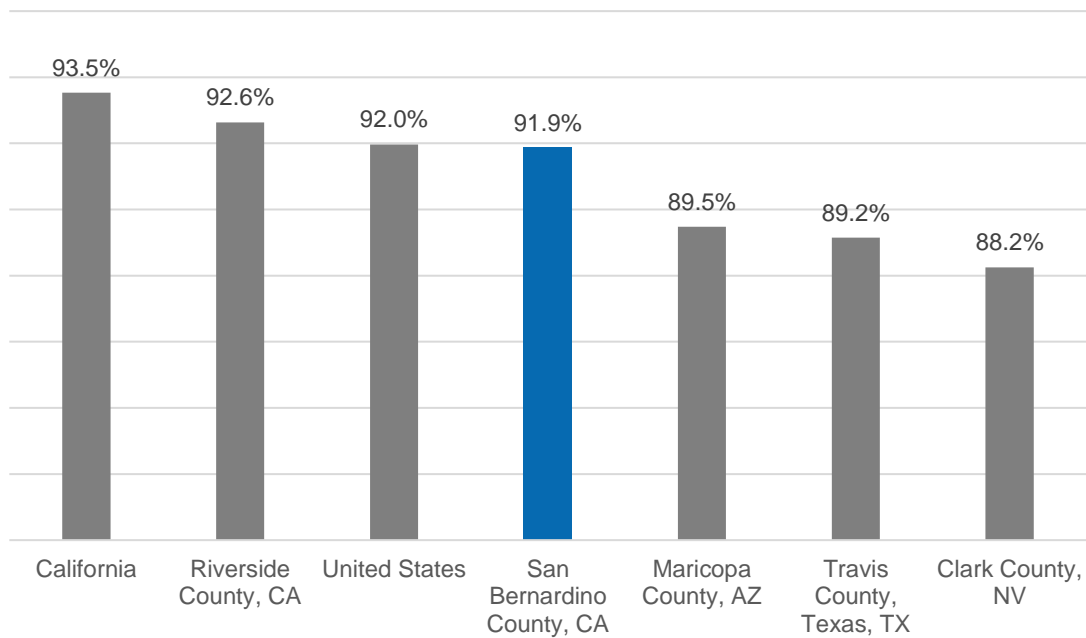


Figure 23: Percent of residents proficient in English, San Bernardino County and peer regions, 2022
 Source: U.S. Census Bureau American Community Survey

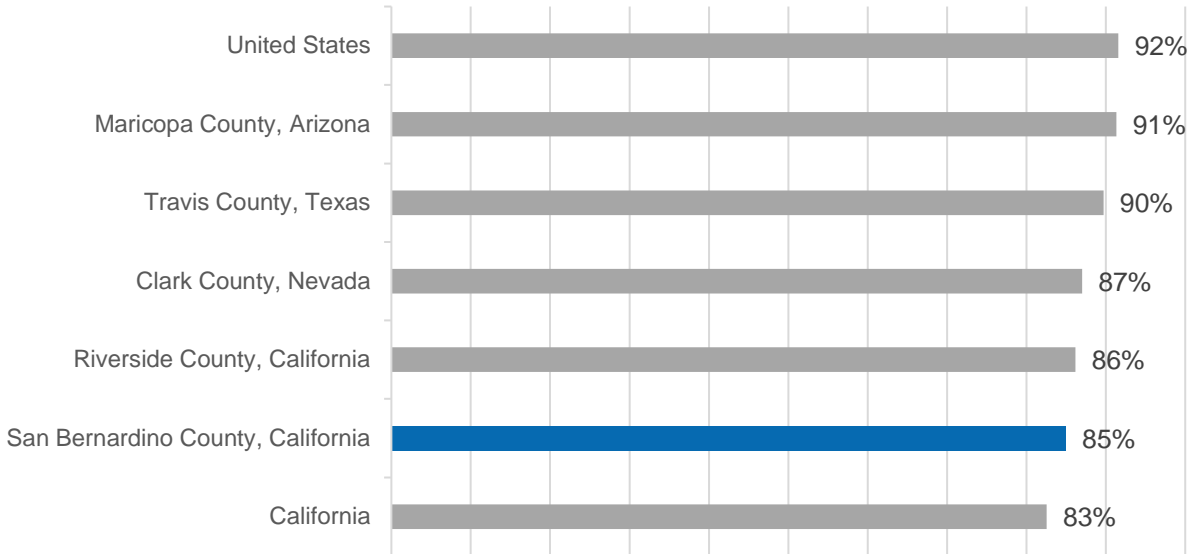


Figure 24: Unemployment for San Bernardino County and peer regions, 2017–2022
 Source: Bureau of Labor Statistics

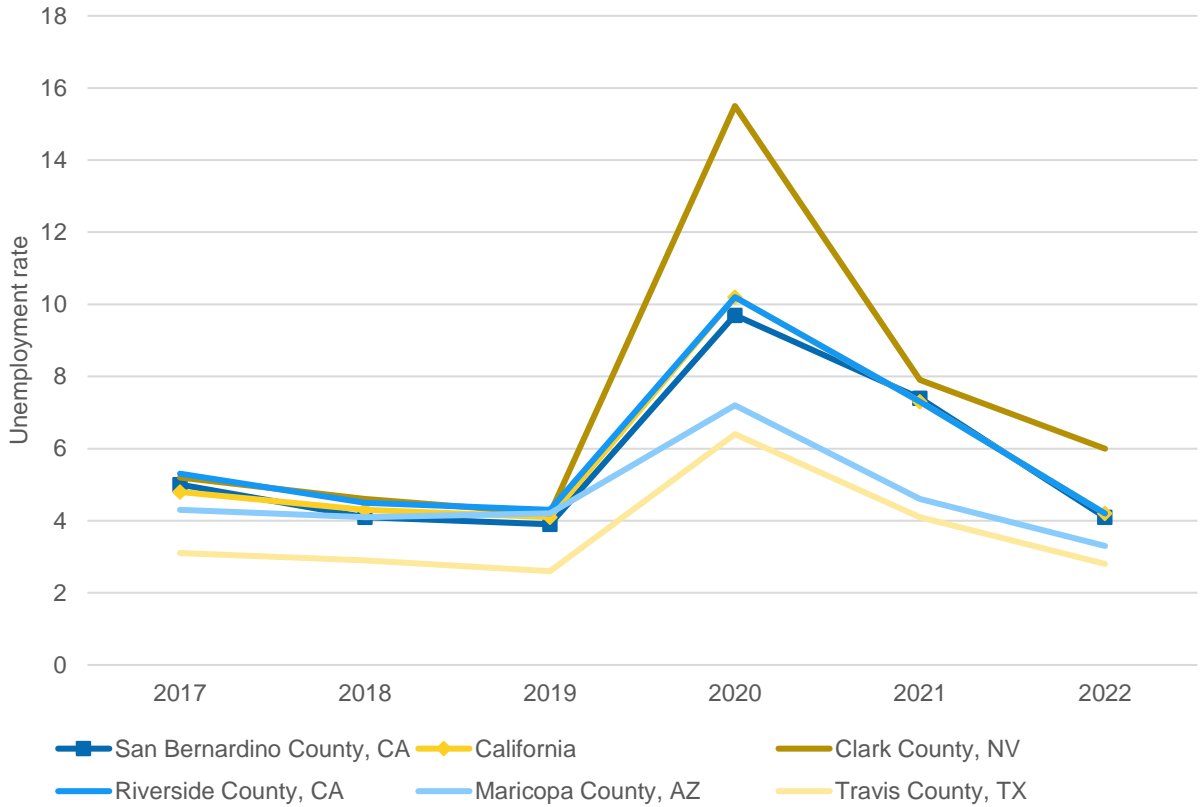


Figure 25: Educational attainment for San Bernardino County and peer regions, 2022
 Source: U.S. Census Bureau American Community Survey

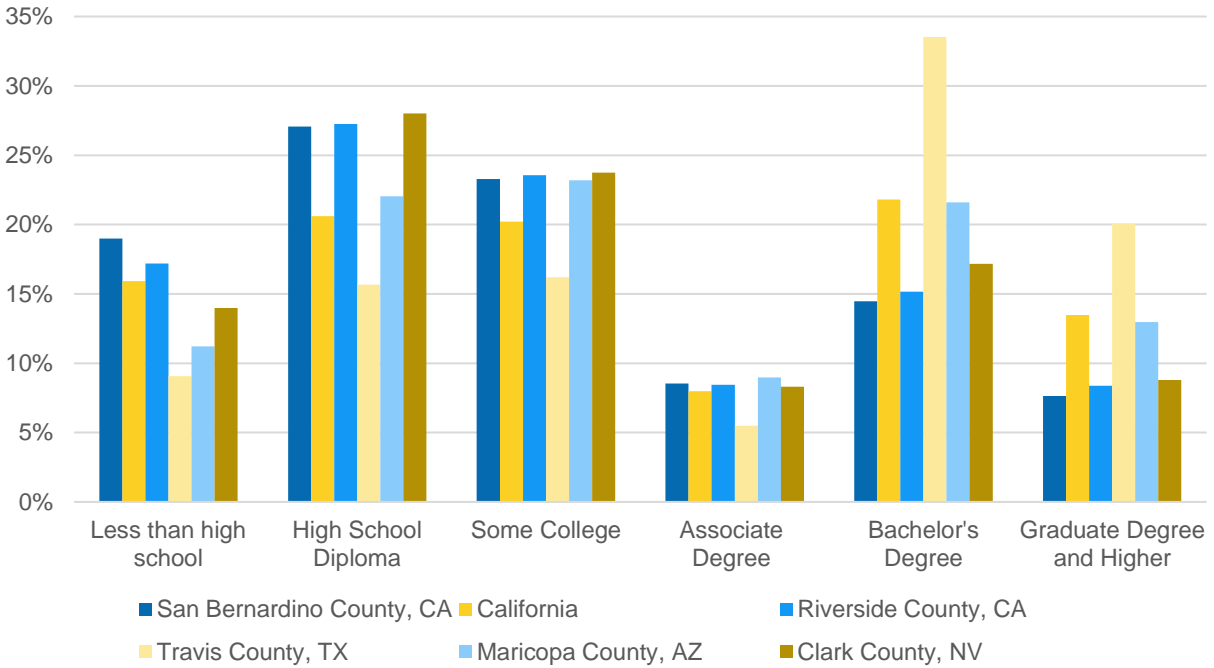


Figure 26: Share of students graduating from San Bernardino County public schools meeting University of California/California State University A-G requirements, 2018–2023
 Source: San Bernardino County Superintendent of Schools

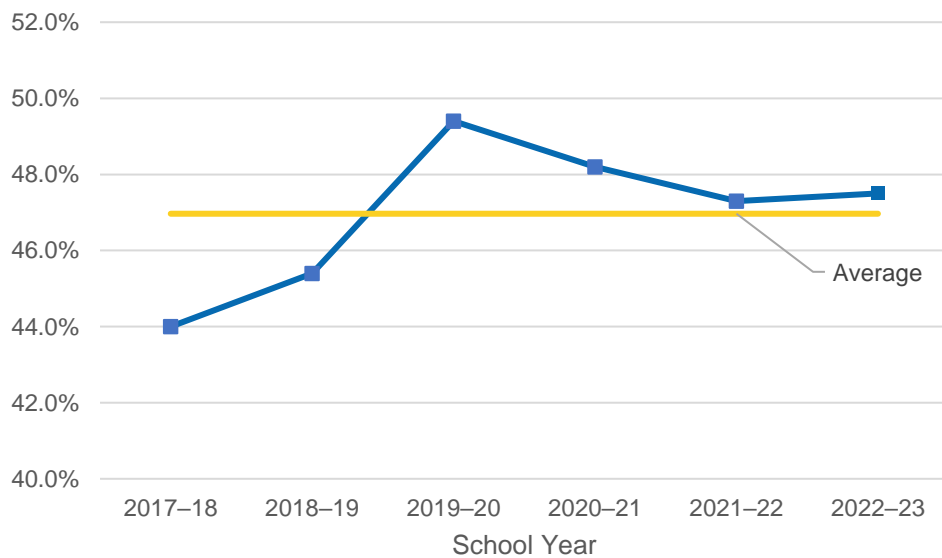


Figure 27: Top fields of study in San Bernardino County by number of associate and bachelor's degrees awarded and annual job openings, 2022

Source: California Employment Development Department

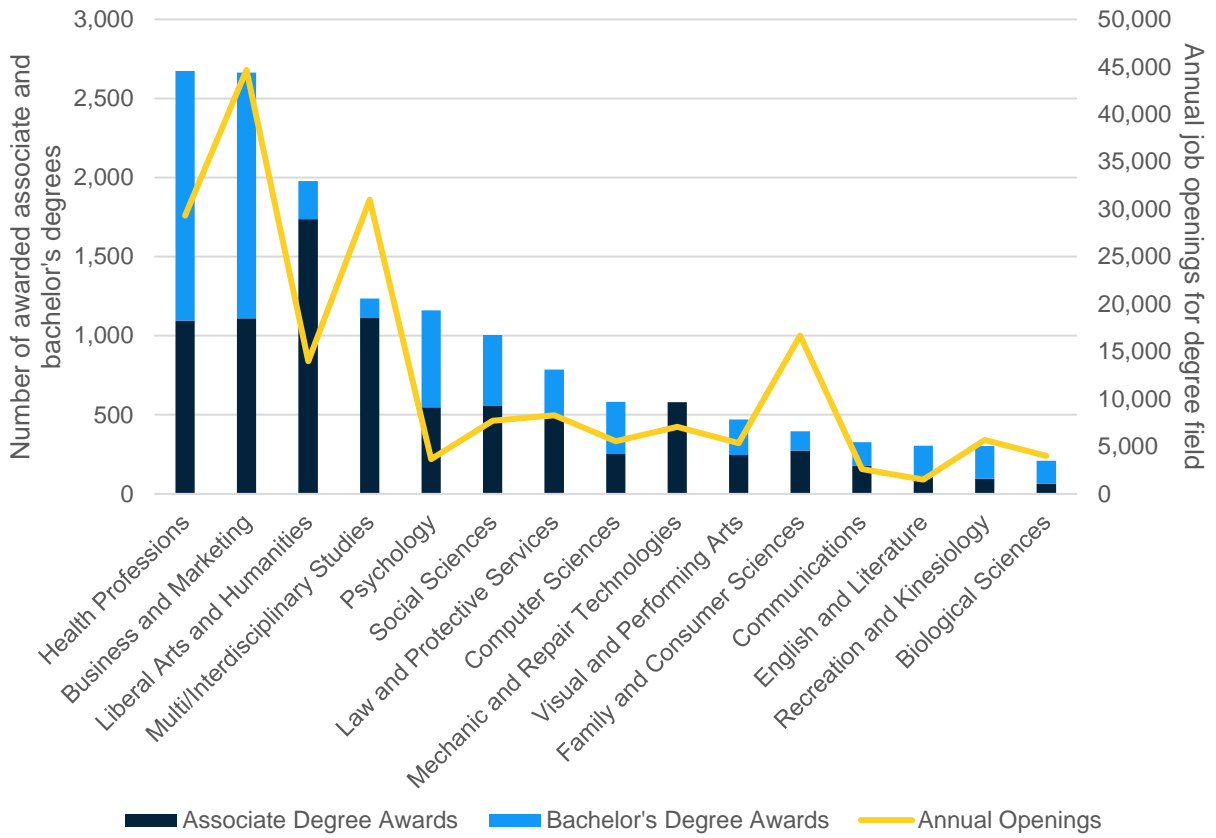


Figure 28: Share of workers commuting to and from San Bernardino County for each origin and destination county, 2021

Source: U.S. Census Longitudinal Employer-Household Dynamics

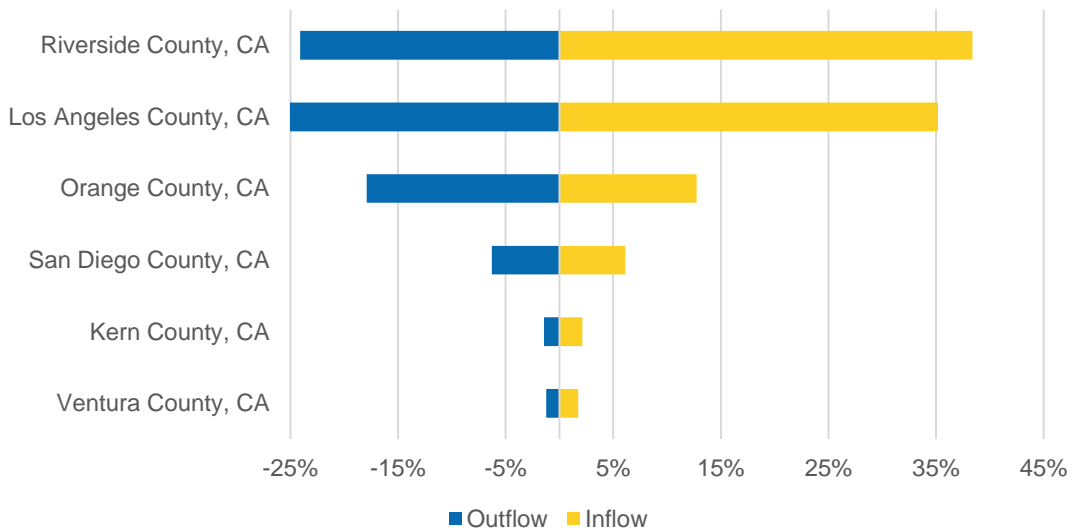


Figure 29: Number of small businesses in San Bernardino County by industry, 2021

Source: U.S. Census Bureau Business Patterns

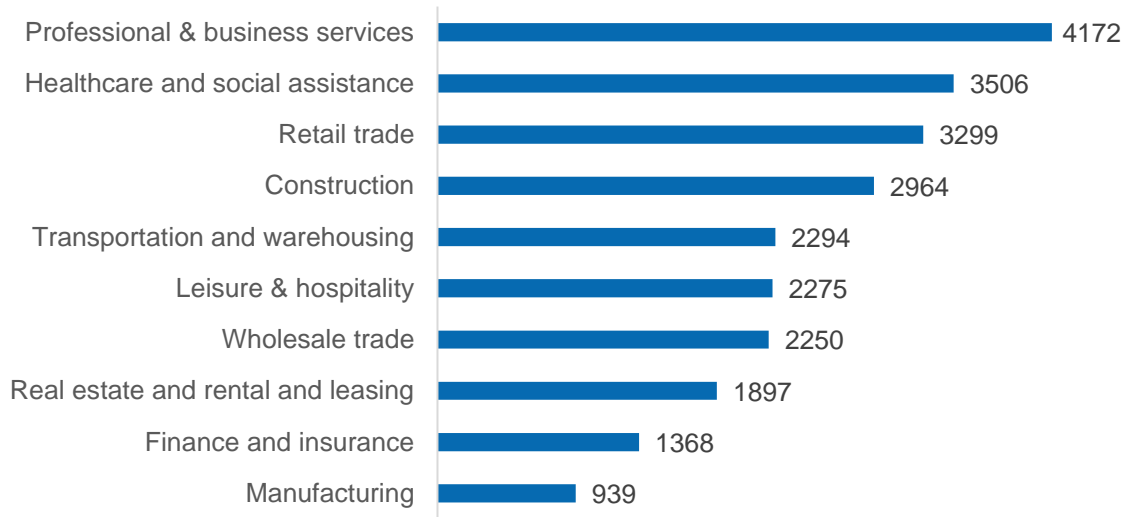


Figure 30: Establishment size of businesses in San Bernardino County by industry, 2021

Source: U.S. Census Bureau Business Patterns

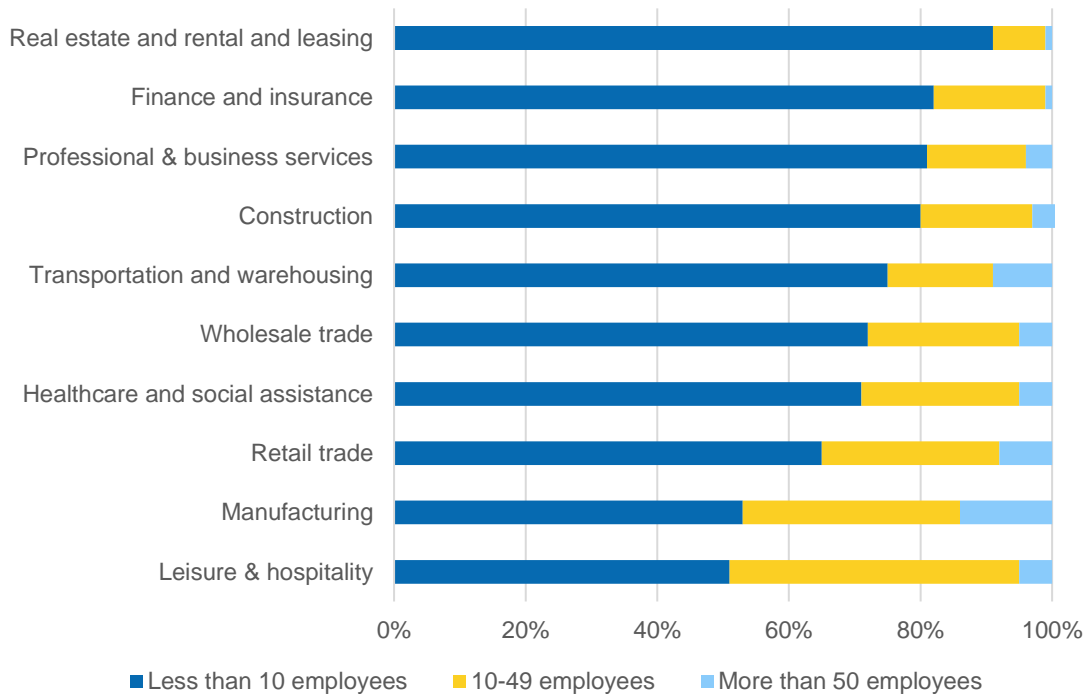


Table 4: City of Big Bear Lake vacation rental occupancy rate, 2021 and 2022, for months available

Source: City of Big Bear Lake, California Tourism Management Department

Month	2021	2022
January	67%	55%
February	68%	50%
March	51%	36%
April	41%	34%
May	37%	29%
June	47%	37%
July	55%	46%
August	46%	39%
Average	52%	41%

Appendix B: San Bernardino County Cities' EDA Projects

City of Adelanto

City Buildings — Adelanto

The project will focus on providing better lighting, stabilizing the Council Members sitting area platform, providing new paint, and Providing vehicles and equipment needed to perform proper inspection and doing maintenance throughout the city. The project aims to improve the physical conditions of city council chamber and provides vehicles and equipment for city. Total employment created by the project is 5 jobs. Top employment industries are maintenance and repair, which includes 2 jobs. City Council Chamber Improvements and vehicles and equipment: \$ 600,000. Available match funding is 20%.

Fire Station Remodeling — Adelanto

10370 Rancho Rd, Adelanto, CA 92301. The project will focus on remodeling of first station, which includes remodeling bathrooms, kitchen, and laundry to comply with latest building codes and making more functional, and providing sleeping quarters, day room, captain quarters, dining room, unisex bathrooms, and laundry. The project aims to improve County Fire Station 322 and provide safe and workable conditions to the Fire Department. Total employment created by the project is 15 jobs. Top employment industries are construction, which includes 11 jobs. Remodeling of Fire station: \$1,600,000. Available match funding is 20%.

Landfill Vapor Extraction System — Adelanto

The project will focus on remediation at the Landfill property which to comply with Cal Recycle regulations. Phase 3 of the adopted remediation plan is complete and currently in the monitoring stage. If compliance is not met through this work, Phase 4 of the plan will need to be implemented. The project aims to remedy the landfill property and comply with Cal Recycle regulations. Include specific details related to how the project will create or retain jobs, including an estimate of the number of jobs created and estimated wages. Potential applicant should provide a complete budget outline showing a line-item breakdown of all project costs. The budget should also show sources of funding and the status of these funds including any in-kind contributions. EDA funded projects typically require 50% local matching funds. These matching funds cannot include other federal funding. The project budget submitted should show the sources of the matching funds required. Waterman Landfill Vapor Extraction System Improvements: \$4,438,546

New Electric Charging Stations — Adelanto

Electric Charging Station

City Hall, 11600 Air Expy., Adelanto, CA 92301

Stadium, 12000 Stadium Way, Adelanto, CA 92301

The project will provide Electric Charging Station Level 2, 8 at City Hall and 10 at the Stadium.

The project aims to construct new electric charge stations. Total employment created by the project is 178 jobs. Top employment industries are maintenance and repair, construction, and retail of building materials and equipment, which includes 72,34, and 17 jobs respectively.

Electric Charging Stations: \$ 75,000

Available match funding is 20%.



New Park — Adelanto

Jonathan and Chamberlaine, Bellflower Street and Chamberlaine Way. The project will focus on construction of two parks. The project aims to construct new parks and improve the quality of life of residents. Total employment created by the project is 27 jobs. Top employment industry is construction, which includes 19 jobs \$ 2,800,000.

New Traffic Study and Signal — Adelanto

New traffic signal. Route 395 and Lawson Avenue. The project will focus on the conducting traffic study and creation of new traffic signal. The project aims to conduct traffic study and create a new traffic signal. Traffic study, and new signal: \$ 470,000. Available match funding is 20%.

New Well — Adelanto

The project will focus on drilling New Groundwater production well to satisfy increasing water demand. The project aims to increase the capacity of current water production. Total employment created by the project is 5 jobs. Drilling New Groundwater Production Well: \$ 130,000. Available match funding is 20%.

Road Improvement — Adelanto

Road pavement:

- White Avenue between Adelanto Road and Montezuma Street, Montezuma between White Avenue and Chamberlaine Way, and Intersection at Jonathan Street and Chamberlaine Way.
- Auburn Avenue between Adelanto Road and Route 395, Jonathan Street between Auburn Avenue and Barcelona Avenue, and Pearmain Street between Vintage Road and Chamberlaine Way.
- Bartlett Avenue between Adelanto Road and Poinciana Road.
- Bellflower Street from Air Expressway to Chamberlaine Way.
- El Mirage Road between Route 395. ROW and Koala Road.
- Lawson Ave from Route 395 to Bellflower Street.
- Cortez Ave from Route 395 to Bellflower Street.

The project will focus on road improvement in several avenue includes providing sidewalk, ADA ramp, curb and gutter along the stretch. The project aims to improve and maintain infrastructure that provides necessary access for residents and developers. Total employment created by the project is 130 jobs. Top employment industries are maintenance and repair, and retail of building materials and equipment, which includes 72 and 17 jobs respectively. Potential applicant should provide a complete budget outline showing a line-item breakdown of all project costs. The budget should also show sources of funding and the status of these funds including any in-kind contributions. EDA funded projects typically require 50% local matching funds. These matching funds cannot include other federal funding. The project budget submitted should show the sources of the matching funds required. \$ 20,141,000 Available match funding is 20%.

Shooting Range — Adelanto

The project will focus on assisting the Sheriff Department exploring locations for building an indoor shooting range. The project aims to help the Sheriff Department exploring locations for building an

indoor shooting range. Police Department's shooting range: \$ 4,500,000. Available match funding is 20%.

Signage Improvements — Adelanto

The project will focus on signage improvements.

The project aims to improve signage.

Signage improvement and new signal: \$ 20,000

Available match funding is 20%.

City of Barstow

Infrastructure Improvement — Barstow

Spanish Trail Infrastructure Enhancement Project

The Spanish Trail Infrastructure Enhancement project would fund the extension of water, sewer and storm drainage services required to support up to 800,000 square feet of new retail, a hotel and housing on a 110-acre project area. The initiative will also fund the construction of pedestrian and bicycle pathways, benches, and landscaping along with the Spanish Trail Visitors Center where information will be displayed about the history of the Old Spanish Trail, the City of Barstow and Route 66.

Barstow Outlet Center Infrastructure Improvements

The Barstow Outlet Center is the City's economic engine located along I-15, halfway between Los Angeles and Las Vegas. The demand to expand the center is strong but the city lacks the water, sewer and storm drainage systems required to accommodate the expansion.

Revitalize Downtown Route 66

Downtown is on Historic Route 66, also known by the community as Main Street. At one point, Downtown was vibrant with commercial store fronts, entertainment venues, service providers, and food establishment. The establishments provide employment and entrepreneurship opportunities for the local citizens. Today, many visitors come to Barstow to travel one the most famous road in the United States. The City of Barstow goal is to improve the overall Route 66 experience, identity opportunities for events and activities for tourist and residents and improve the economics of the downtown by supporting existing and develop new business. The city vision is to revitalize downtown into a live, work, and play environment that increase employment opportunities, provides affordable housing, and easy access to amenities. The projects aim to enhance current infrastructure in Barstow.

Infrastructure Enhancement Projects

Total jobs: 26

Spanish Trail Infrastructure Enhancement Project

Total cost: \$3,600,000 and Phase 1 development improvement costs:

Developing the Park: \$750,000.

Costs of the visitor's center, including land acquisition and construction: \$290,000.

The Spanish Trail Interpretive Pathway: \$450,000

Revitalize Downtown Route 66



Downtown Area Conceptual Plans: \$160,000

Engineering plans: \$180,000

Other costs are unknown.

Available match funding is 20%.

Railroad Transportation — Barstow

The BNSF project is located on the west side of town. Roads, sewer, water, will need to be improved leading to the location and additional healthcare facilities, schools, and housing will be required. BNSF Railway plans to invest more than \$1.5 billion to construct a new state-of-the-art master planned integrated rail facility in Southern California – the first being developed by a Class 1 railroad. Approximately 130 miles from the Ports of Long Beach and Los Angeles, the facility will be located on more than 4,500 acres just west of Barstow, where BNSF has operated an existing railyard for more than 140 years. The facility will facilitate the direct transfer of containers from ships at the Ports of Los Angeles and Long Beach to trains for transport through the Alameda Corridor onto the BNSF mainline up to Barstow. Once the containers reach the Barstow International Gateway, they will be processed at the facility using clean-energy powered cargo-handling equipment, and then staged and built into trains moving east via BNSF’s network across the nation. Westbound freight will similarly be processed at the facility to more efficiently bring trains to the ports and other California facilities. The projects aim to support the development of transportation industry and create employment and housing demands in the region. The city will need to improve the surrounding infrastructure to support the BNSF project. 20,000 direct and indirect jobs BNSF will fund the Construction cost: \$1,500,000,000. The city will need approx. \$100m to upgrade its infrastructure to support the project. Available match funding is 20%.

Wastewater Plant Improvement — Barstow

Wastewater treatment plant: 2200 Riverside Dr, Barstow, CA 92311

Wastewater Treatment Plant Improvements. The City’s wastewater treatment plant needs to be upgraded in order to support new business and residential growth. The original facility was built in 1968, and it was upgraded in recent years, but the demand for services continues to outpace the plant’s capacity. The most pressing need is an influent pump station, operations building, and the expansion of the treatment plant. These expansions would allow for the economic and residential expansion of Barstow. The projects aim to increase the capacity of wastewater treatment plant and support new business and residential growth.

Total jobs: 60

Rehabilitating aerobic digesters: \$3,600,000

Influent pump: \$6,000,000

Available match funding is 20%.

City of Chino

Upskill Chino — Zeb Welborn

The Inland Empire region is home to a vibrant and diverse community of residents, many of whom are seeking new opportunities to advance their careers and improve their financial well-being. However, despite the growing demand for tech-related jobs, there is a critical shortage of skilled workers to meet the needs of local businesses. This grant proposal seeks to address this challenge



by establishing a series of satellite locations that will offer customized training programs aimed at equipping individuals with the skills and knowledge they need to succeed in the tech sector. This grant proposal will provide a comprehensive tech, entrepreneurship, and cybersecurity training program aimed at developing a highly skilled and knowledgeable workforce in the Inland Empire region of California. This innovative program will establish a series of satellite locations throughout the region, each offering targeted training and support services to help individuals develop the skills they need to secure high-paying jobs in the fast-growing tech sector. Each satellite location will be tied together by technology that facilitates the movement of goods and services, leveraging the existing infrastructure of the region. For example, the Chino Valley Chamber of Commerce could run a satellite location that leverages its existing relationships with local high schools to offer cybersecurity and biomedical sciences training to students. The proposed training program will incorporate the unique strengths of each community in the Inland Empire, ensuring that individuals have access to the support and resources they need to succeed. Through a combination of classroom-based training, hands-on experience, and mentorship from experienced professionals, participants will develop the technical skills and business acumen they need to thrive in the fast-paced and rapidly evolving tech sector. In conclusion, this grant proposal represents a unique opportunity to support the economic development of the Inland Empire region by providing individuals with the skills and knowledge they need to secure high-paying tech-related jobs. We respectfully request your support for this important initiative and look forward to the opportunity to further discuss the potential benefits and outcomes of this program.

IE Consortium CERF Pilot Proposal — Chino

Administration (RCCD) - \$350,000.

Objective 1: Develop, source, and iterate market-ready technologies and logistics solutions that accelerate the industry's transition to net-zero. \$1,000,000

Objective 2: Create a thriving ecosystem of startups launched by local entrepreneurs, particularly from within marginalized communities. \$1,000,000

Objective 3: Create a local labor pool to meet the needs of the evolving goods movement industry; provide skills training that leads members of marginalized populations into living-wage careers. \$1,000,000

City of Fontana

Downtown Revitalization Plan — Fontana

Fontana Downtown Revitalization plan will assist in the transformation of the downtown area by establishing cultural and commercial development. Cultural development will include expansion of municipal properties such as the Center Stage Theater, Art Depot, Miller Amphitheater, and support establishing a Children's Museum Commercial development will also support the creation of multi-tenant Food Lab and restaurant incubator and public art displays. These efforts and more will aide in the attraction of commercial office / headquarters and retail development which will include an anchor hotel with food and beverage options to include meeting space and restaurant, five story office space with lower-level retail and restaurants, microbreweries, tap rooms and tasting rooms. Additional upgrades to the downtown area will include parking structures to build parking capacity, affordable and market rate housing, and infrastructure upgrades (sewer, power, water, broadband).

The City of Fontana believes, that enhancing the creative economy will garner visitation, new business development and increase cultural pride within City. Fontana's long-term vision seeks to diversify industry sectors that will provide livable wages to downtown area residents. The downtown



area is federal designated as an Opportunity Zone due to concentration of the underserved population. Industry sectors will include hospitality, light manufacturing, creative arts, and administration. Fontana anticipates more than 1,000 jobs added to the downtown area. The past 12 months, the city has acquired several parcels within the downtown area with a specific focus on Spring Street, Nuevo Avenue and Arrow Boulevard. The city will continue to advance the project through land acquisition. Infrastructure projects through a master plan development will provide developers assistance in scoping project feasibility. The City will request approximately \$3 million from Federal EDA and match project with \$3 million through property acquisitions and other development expenditures.

University of La Verne

University of La Verne Health Careers Academy — University of La Verne

320 East D. Street, Ontario, Ca. 91764. There is an acute shortage of trained health professionals in San Bernardino County. In response to this shortage, the University of La Verne, a Federally Designated Hispanic-Serving Institution, is creating an accelerated Health Career Academy to address issues of equity (EDA Investment Priority #1) and Workforce Development (EDA Investment Priority #3). The Health Career Academy will support participants in successfully obtaining their licensure/certification in an accelerated professional medical program for Certified Nursing Assistants, Central Service Technicians, and Medical Assistants. In addition, the Health Academy will also develop participants entrepreneurial skills in the medical industry to support medical startup businesses. In doing so, the University will increase the number of qualified frontline healthcare workers in high-quality jobs with livable wages, especially for historically underrepresented populations such as Women, Immigrants, Blacks, Latinos, Native American, Asian American and Pacific Islanders. The project will be located in the City of Ontario and will leverage the University of La Verne's College of Health and Community Well-Being and The Randall Lewis Center for Entrepreneurship, Innovation and Social Impact to better serve the surrounding communities of San Bernardino County. The Health Career Academy will support San Bernardino County's revitalization efforts by creating high quality jobs with livable wages in entry-level medical and emerging sub-disciplines of health professions with technological and interdisciplinary expertise capable of addressing novel challenges at the patient and community level that will ultimately transform the greater San Bernardino region. The project will support workforce education and skills training activities directly connected to the hiring and skills needs of the business community that will result in well-paying, qualifying jobs. The project will create quality jobs in a high demand medical field such as Certified Nursing Assistants, Central Service Technicians, and Medical Assistants, and will generate 300 jobs over the span of six years. This project will retain local talent in the region by providing well-paying jobs ranging from \$22-29 dollars as a starting base salary. Participants of this program will receive credit-bearing courses that are transferable to institutions of higher education, should they choose to seek additional credentials and higher paying jobs in the future. The estimated starting annual salary range for Certified Nursing Assistants is \$29,000.00–\$38,000.00, Medical Assistants is \$38,000.00–\$50,000.00, and Central Service Technicians is \$36,000–\$55,000.

The University of La Verne is requesting \$3,000,000.00 for lab equipment to support the cost associated with the Health Careers Academy. The University is requesting the following:

- 3-D anatomy tables with medical design suites: \$650,000.00
- VR/AR hardware: \$250,000.00
- Patient simulators: \$1,200,000.00



- Medical education materials: \$500,000.00
- Medical teaching supplies: \$400,000.00

The University of La Verne will provide \$1,500,000.00 in matching contributions from public-private resources. The University of La Verne will not use Federal funding for this project.

City of Needles

Park Moabi 69 KV (Kilovolt) Line Extension — Needles

Park Moabi is located just east of the Needles City Limits essentially at the intersection of National Trails Highway (aka Route 66) and Park Moabi Blvd.

Park Moabi may expand its existing operation along the Colorado River just east of the city limits in order to improve the park's offerings of services and recreational activities bringing new economic activity to the area/region.

Develop/construct additional infrastructure to meet the needs of the community/region and provide additional facilities to serve recreational visitors to the Colorado River Region.

A specific job creation analysis has not yet been undertaken. It is estimated that the infrastructure construction budget of \$5.5 million will generate 18 FTE (one-year) jobs. Operation of the new line will generate additional jobs through demand from residents and visitors to the region.

The 69KV extension is estimated to cost \$5.5 million (2023 dollars). The City of Needles shall seek 50% funding from the United States Department of Commerce to match with utility department infrastructure funding and development impact fees.

Revolving Housing Loan Fund — Needles

The project is proposed to be throughout the entire City of Needles.

City of Needles Revolving Housing Loan Fund will provide capital for the City of Needles and/or the City of Needles Housing Authority to purchase, rehabilitate and sell homes to persons/families in the Needles Area seeking clean and safe housing. Provide additional housing to the local workforce through the acquisition, rehabilitation, and sale of homes to persons engaged in the local workforce. A specific job creation analysis has not yet been undertaken. It is estimated that each \$1 million spent on the purchase and rehabilitation of housing will generate four (4) full-time equivalent jobs in addition to the jobs that will be created or retained as a result of the local workforce having housing options within the community. A \$5 million program is expected to generate 20 full-time equivalent jobs in addition to providing 5 homes per \$1 million or 25 jobs retained in the community and supporting an estimated 75 families. The City of Needles Revolving Housing Loan Fund has a budget of \$5 million. The City of Needles shall seek 50% funding from the Department of Commerce or other Federal Agencies. The balance of funds will be provided through both local (City of Needles) and State HCD/HOME funds.

Water/Wastewater Improvement Project — Needles

The project is located along the Northern Portion of the City of Needles along Needles Highway north to the City of Needles boundary (vicinity south of Rocker Bluff Road)

City of Needles proposes to expand the sanitary sewer service into the North Needles Area that will need additional storage to handle estimated demands from growth.

Develop/construct additional infrastructure to meet the needs of the community/region and provide additional facilities to serve residents and recreational visitors to the Colorado River Region. A



specific job creation analysis has not yet been undertaken. It is estimated that the infrastructure construction budget of \$55 million will generate 183 FTE (one-year) jobs. Operation of the new line will generate additional jobs through demand from residents, businesses, and visitors to the region.

Water and Wastewater extension is estimated to cost \$55 million (2023) dollars. The City of Needles shall seek 50% funding from the Department of Commerce. The balance of funds will be acquired through internal sources (utility infrastructure funds, development impact fees and State of California infrastructure funding).

City of Rialto

IBM Advanced Transportation and Logistics — Rialto

Project is conceptual. The City of Rialto would develop an ATLAC to track and coordinate goods movement shipments from the Ports of Los Angeles and Long Beach into and out of the Inland Empire Ports. The project may also include installation of high-speed fiber optic cables to accelerate transmission of data to users. The ATLAC will provide real time routing and time of use data to help optimize existing transportation infrastructure and implement congestion management pricing. Project implementation may also attract additional technology firms and logistics establishments. The ATLAC would occupy 20,000 square feet of space on a 3-acre site that will create approximately 20 full time jobs. Approximately \$5 million to develop the facility. City intends to contribute land as local match.

Wastewater Treatment Plant Microgrid — Rialto

The Rialto Wastewater Treatment Plant Microgrid Project will be located at the City's existing Wastewater Treatment Plant at 501 E. Santa Ana Avenue, Bloomington, CA 92316. The Rialto Wastewater Treatment Plant Microgrid Project will be powered through a combination of biogas cogeneration, solar power, and backup battery storage to supply the majority of the electricity needed to operate its wastewater treatment plant. The Project will address the following EDA investment priorities: 1) equity – the City of Rialto's Wastewater Treatment Plant sewer system serves 100% of the city and a portion of the underserved residents of Colton, Fontana, and the unincorporated area of Bloomington. Disadvantaged communities make up approximately 67% of Rialto by area and encompass roughly 78,750 people; 2) workforce development – as California transitions to a carbon-neutral economy and transforms its energy systems, the demand for energy storage and microgrids is expected to accelerate rapidly and counties already having microgrid technology as infrastructure assets will draw that workforce into their communities through job availability; 3) technology-based economic development - further technology-based economic development initiatives that deploy more zero-emissions energy sources to make use of waste heat, reduce energy lost through transmission lines, help manage power supply and demand, and improve grid resilience.; and 4) environmentally sustainable development – microgrids deploy more zero-emission electricity sources, thereby reducing greenhouse gas emissions. The Rialto Wastewater Treatment Plant Microgrid Project's goal is to bring the city greater energy independence, resilience, and efficiency, by protecting the wastewater treatment system from outages and operational interruptions. California microgrid assets have created 4,670 jobs and contributed \$0.85 billion in GDP and \$1.76 billion in business sales. Therefore, for every \$1 million invested in microgrids, 3.4 jobs ranging in an annual salary of \$30,000 to \$137,000 are created. The estimated engineering cost of the Rialto Wastewater Treatment Plant Microgrid Project is \$21 Million. Potential applicant should provide a complete budget outline showing a line-item breakdown of all project costs. The budget should also show sources of funding and the status of these funds including any in-kind contributions. EDA-funded projects typically require 50% local matching funds. These matching



funds cannot include other federal funding. The project budget submitted should show the sources of the matching funds required. The Rialto Wastewater Treatment Plant Microgrid Project is proposed to be funded through the federal WIFIA Loan and California SRF loan for any costs not reimbursable through the Inflation Reduction Act Credit. Project costs funded by a loan require repayment through an increase in Rialto wastewater rates. In 2012, to fund several necessary capital improvement projects and to upgrade the wastewater treatment plant to meet capacity operating standards, the City increased rates by 100% over five years. This rate adjustment has left the City of Rialto still with the highest wastewater rate in the area. Therefore, any capital investment that can offset adversely impacting customer rates is welcomed.

City of San Bernardino

Carousel Mall Redevelopment — San Bernardino

Downtown San Bernardino

Redevelopment of this long-vacant 43-acre property will send a clear signal that downtown San Bernardino is poised for a comeback. The project will bring new life downtown by creating space for academic and research institutions, industry, small businesses, workforce development, and other key contributors to the local innovation ecosystem. In addition, it will re-establish the historic street grid, expand workforce housing, and implement urban forestry and placemaking measures to enhance sustainability and walkability downtown.

- Jumpstart sustainable development and expand accessible workforce housing stock downtown
- Boost employment among San Bernardino residents through quality job creation and clear, well supported workforce development pathways
- Advance equitable economic development in the city via local hire and local procurement provisions

Could result in thousands of jobs through opportunities provided by the new business creation. It would also result in new residential opportunities.

- Site preparation / demolition: \$12M
- Workforce development: \$10M
- Planning: \$5M
- Labor: \$5M
- Streetscaping and urban greening: \$5M

The city is looking at other grant funding for this project as well.

City Hall Renovation — San Bernardino

Downtown San Bernardino. San Bernardino's seven-story, 105,000 square-foot City Hall opened in 1974 as part of a centralized public sector campus in the heart of downtown. In order to bring this facility back to full use, the now unoccupied building will undergo a wholesale renovation, to include seismic retrofitting as well as removal and replacement of all core systems and components (e.g., HVAC, electrical, plumbing, ADA accessibility, fire protection, telecom, windows).

- Modernize City Hall in order to ensure that the building better serves the 600+-person City staff as well as residents and visitors



- Provide a revitalized center of civic activity that inspires community pride

Could result in retaining hundreds of jobs, including City Staff.

- Architectural work: \$25M
- Seismic retrofit: \$20M
- HVAC: \$15M
- Fire protection: \$10M
- Site improvements: \$10M
- Plumbing: \$8M
- Electrical: \$5M

The City could use general fund or grant funding to support this project.

Downtown Academic Hub — San Bernardino

Downtown San Bernardino. The high level of transit accessibility in Downtown San Bernardino makes it an ideal location for satellite branches of regional academic institutions. Whether independently or as part of a larger shared facility, California State University San Bernardino; California Baptist University; San Bernardino Community College District; and the University of California, Riverside will establish a physical presence in the downtown core in order to expand access to higher education and pathways into quality jobs. A delivery team composed of representatives from regional academic institutions and City staff will develop cost estimates and devise a roadmap for securing funding and phased implementation.

- Expand access to training, services, and resources provided by area academic institutions
- Establish a physical presence for regional academic institutions in downtown San Bernardino

Could result in thousands of jobs through opportunities provided by the various educational institutions, such as workforce training, childcare services, administrative services, and learning resources. To be determined. City staff is in conversation with CSUSB regarding the potentials of this project. The City could contribute with providing a location on City owned property. The city could look into grant funding to support this project.

Entrepreneurial Resource Center — San Bernardino

Downtown San Bernardino. The Entrepreneurial Resource Center (ERC) will provide a centrally located and easily accessible downtown hub for small business training and technical assistance. It will bring together a wide range of entrepreneurial support organizations to provide a complete set of training, technical assistance, and access to resources for small business owners and entrepreneurs in the area. The ERC will offer assistance to both aspiring and existing entrepreneurs, increase the rate of business creation, and foster greater success and long-term sustainability for local small businesses. Anchored by the Inland Empire Center for Entrepreneurship and CSUSB's School of Entrepreneurship, the ERC will provide support for every stage of company formation. It will also work with the Supply SB supplier diversity initiative to connect local small businesses to contract-readiness programming and procurement-focused sales opportunities.

- Establish a continuum of support for local entrepreneurs and small business owners
- Provide long-term small business support in order to ensure success



- Address disparities in small business ownership and entrepreneurship
- Increase coordination and collaboration among entrepreneurial support organizations in the region

Could create thousands of jobs and assist thousands of small businesses. Likely will provide assistance to 1,000+ businesses per year.

- Facilities, staff, programming, and services: \$5–7.5M

City funds intend to use ARPA programming to support project.

Entrepreneur Resource Center — Entrepreneurial Development Services

The target location for the ERC is the Chase Building in downtown San Bernardino 330 N D St, San Bernardino, CA 92401. The purpose of this project is to create a sustainable (long-term), accessible, and beneficial Entrepreneurial Resource Center (ERC) for existing and startup businesses in the City of San Bernardino. Backed by the Inland Empire Center for Entrepreneurship (IECE) at Cal State San Bernardino, the proposed project intends to create new programs to aid businesses recovering from the effects of the pandemic while simultaneously leveraging the other resources already available to them given by the Inland Empire Small Business Development Center (SBDC) and Women’s Business Center (WBC). To provide long-term and consistent aid to small businesses to ensure their success by creating a network of entrepreneurs and support organizations intended to support any small business at any stage of its development. To address the disparities in small business ownership by focusing on notoriously underrepresented demographic groups in the city of San Bernardino as well as its surrounding areas. The project anticipates the creation of 10-15 new jobs in the ERC including the administrative staff. (Estimated wage not provided) With services job creation and jobs retained will be in the hundreds. On average the SBDC creates and retains over 600 jobs per year locally.

Fiber Network Installation — San Bernardino

Across San Bernardino. Installation of a citywide fiber network will ensure that San Bernardino residents, businesses, and organizations have the connectivity they need to thrive. A companion Digital Inclusion Initiative led by an organization with community standing will conduct outreach and provide equipment and training to residents from historically disadvantaged and disinvested communities so that all can access and benefit from this investment.

- Expand access to high-speed Internet
- Establish San Bernardino as an attractive location for innovation-intensive companies and research institutions
- Rectify racial and ethnic disparities in high-speed Internet access and usage

Could create thousands of jobs by providing a valuable resource to small businesses and residents who have the potential to use connectivity to create jobs \$150 M Installation, \$16M Digital Inclusion Initiative. The city successfully received the CPUC technical assistance grant to perform a needs assessment and feasibility study. The city intends to pursue more grant funding in the future to support this initiative.

Sustainable Logistics Center — San Bernardino

Downtown San Bernardino or surrounding area. A California Sustainable Logistics Center of Excellence in downtown San Bernardino will accelerate multidisciplinary, cross-sector innovation in order to address pressing challenges facing the logistics sector, including decarbonization and



climate adaptation, skilled workforce development, and economic competitiveness and resilience. This 20,000-square-foot facility will bring together key stakeholders from industry, academia, and government in order to establish the Inland Empire as a global exemplar of next-generation sustainable logistics. Special emphasis will be placed on building capacity to deliver educational programs and experiential learning opportunities to students from high school to PhD. The Center will provide access to facilities where academic and industry partners can conduct demonstration projects on innovative new technologies. Partners will be able to use onsite facilities as well as a network of testbeds and specialized equipment located throughout the region. UCR's Entrepreneurial Proof of Concept and Innovation Center (EPIC) and CSUSB's Entrepreneurial Resource Center (ERC) will help technology startups access specialized mentorship and seed capital for proof-of-concept demonstrations. It will also support the formation of employer-led workforce development partnerships as well as collaborations among logistics companies on workforce development, decarbonization, and hyperconnected logistics models powered by multiparty networks and open synchro modal technologies.

A delivery team of key stakeholders will work together to identify project components, develop cost estimates, and devise a roadmap for securing funding and phased implementation.

- Establish the Inland Empire as a global leader in sustainable logistics and supply chain innovation
- Expedite decarbonization at scale in the logistics sector
- Increase collaboration among industry employers, higher education, and other relevant stakeholders
- Strengthen career pathways into quality jobs within the sustainable logistics sector

Could result in thousands of jobs through opportunities provided through the job training and educational opportunities. It would also provide resources to likely hundreds of businesses using the services provided by the Center.

To be determined. City staff is in conversation with UCR regarding the potentials of this project. The City could contribute with providing a location on City owned property. The city could look into grant funding to support this project.

City of Victorville

Old Town Revitalization — Victorville

The Old Town Revitalization Project encompasses +400 acres located between Interstate 15 and the eastern boundary of the city, including the historic Old Town core, the area north of the railroad tracks and the 7th Street corridor gateway leading into Old Town Victorville's Old Town is +400-acre parcel area blighted and in need of revitalization. In the 1920's U.S. Route 66 was established, and portions of this historical route entered Victorville's Old Town. With the development of Interstate-15, traffic shifted away from Old Town Victorville, causing a great loss in population, retail, commercial and residential development. Over the years, Old Town has continued to lose its identity with increasing crime, homelessness, loss of private and public capital investment, and job loss. The City has acquired 30+ properties in hopes of partnering with a developer to develop a mixed-use retail development project that will serve as a catalyst in the Old Town Revitalization. Gap funding will be necessary for the commercial development, studies, and reports, as well as installation of underground public infrastructure. The Old Town Revitalization Project will meet the Economic Development Administration's ("EDA") Investment Priorities 1.) Equity, 2.) Recovery & Resilience,



and 3.) Workforce Development. The Old Town Revitalization Project will meet the goals of the Old Town Specific Plan which serves as a tool for creating opportunities by promoting higher-density mixed-use development, creating new housing opportunities to house an array of household income populations and implement standards and guidelines that encourages new business and job creation in the area. The Old Town Revitalization Project will further support the formation of a Community Revitalization and Investment Authority (“CRIA”), which is a tool enacted into law by Assembly Bill 2, authorizing local government agencies to finance the revitalization of disadvantaged communities through planning and financing infrastructure improvements, economic development activities and affordable housing using tax increment. The Project will also contribute to meeting the housing requirements of the Regional Housing Needs Assessment (“RHNA”), as referenced in the City’s Housing Element, ensuring housing growth and production as identified by the State. Although, an economic study/analysis needs to be conducted, it can reasonably be stated that the Old Town Revitalization Project will create several hundreds of indirect and direct jobs through the development of new construction (housing and commercial development and redevelopment), workforce housing and development and tourism. Jobs created will benefit local and regional workforce. Tax Increment generated by the CRIA will be used towards the Old Town Revitalization Project along with monies from the City’s Sales Tax Measure (Measure P). In addition, the City proposes to contribute city-owned properties towards project development while leveraging private and public capital.

SCLA Wide Body Aircraft Hangar — Victorville/SCLA

18480 Readiness St, Victorville, CA 92394

Design and build a 105,000 sq. ft Aircraft Hangar Complex, of which 75,000 sq ft will be used for a Wide Body Hangar Bay and 30,000 sq ft. for Offices. Economic Development Administration “EDA” Investment Priorities 1.) Equities 2.) Recovery and Resilience and 3.) Workforce Development. 1.) Expansion of Maintenance, Repair, and Overhaul (MRO) Facilities at SCLA creating additional employment opportunities. 2.) Complete construction within 3 years of procuring the funding.

Approximately 100 jobs

25 million; Requesting 22% of the budget be funded by the EDA, in the amount of 5.5 million. The remaining 78% of funding will be sourced by the SCLA.

City of Yucaipa

Wildwood Canyon Road Interchange — Yucaipa

Conceptual. Currently constructing studies to determine the best interchange overcrossing. Which include, no build, skewed diamond overcrossing, diamond interchange overcrossing, and diverging diamond interchange overcrossing. In 2008, the City of Yucaipa adopted the Freeway Corridor Specific Plan (Plan) which encompasses 1,242 acres located in the southwest portion of the City. This Plan, which is bisected by Interstate 10 (I-10), has carefully studied and reviewed the increase in economic development and population growth occurring within the city, eastern San Bernardino County as well as Riverside County. As a result, the Plan has identified the need for a new interchange between Live Oak Canyon/Oak Glen Road and County Line Road, the Wildwood Canyon Road Interchange Project. At build-out, this project will provide a regionally significant commercial center, agricultural tourism, commercial and business parks, as well as almost 2,000 new residential dwelling units. Not only will the proposed interchange mitigate local and regional traffic congestion, but it will also help the city secure long-term economic sustainability while incorporating community amenities such as trails and open spaces in order to create a cohesive area where residents can live, work, shop, and play. Based on the data gathered in the PSR



process, the City believes the proposed Project will provide the following benefits to the community, the region and the I-10 which is a critical transportation corridor in California and beyond.

- Improve connectivity for local traffic to a regional transportation network.
- Improve traffic circulation and capacity for the local roads, intersections, and adjacent interchanges.
- Improve the operational 'life-expectancy' of existing/adjacent on and off-ramps which will be considered unacceptable as a result of future traffic conditions.
- Facilitate the delivery of nearly 2,000 much needed housing units within the Freeway Corridor Specific Plan area.
- Facilitate the delivery of nearly 3.5 million square feet of commercial and industrial development within the Freeway Corridor Specific Plan area.
- Reduce traffic congestion along the I-10 freeway mainline.
- Enhance operational safety to I-10 by mitigating traffic queues at adjacent local interchanges.
- Provide the infrastructure needed to spur on economic growth within the Freeway Corridor Specific Plan area, creating an opportunity for the city to balance its housing/job needs.
- Incorporate and improve multimodal access to the surrounding residential, commercial, and open space land uses in the Project area while avoiding impacts or limiting modifications to the existing Wildwood SRRA.
- Enhance the quality of life for the City of Yucaipa and the surrounding communities by securing long-term economic sustainability while incorporating community amenities such as trails and open spaces in order to create a cohesive area where residents can live, work, shop, and play.

This critical infrastructure project will support future economic development, the delivery of much needed housing units, improve local and regional traffic operations, increase public safety, and as a result, create opportunities for long-term economic sustainability, which will enhance the quality of life for the residents of Yucaipa, and those in region. Direct employment: The construction of a freeway interchange requires a large workforce with a variety of skills, including architects, engineers, surveyors, heavy equipment operators, construction workers, and laborers. The number of direct jobs created will depend on the size and complexity of the interchange, but it can be estimated that several hundred workers may be employed during the construction phase. Indirect employment: The construction of a freeway interchange can also create jobs indirectly. For example, local businesses may benefit from the increased traffic flow and demand for goods and services, resulting in additional employment opportunities. Similarly, the demand for materials and supplies required for the construction of the interchange can also create additional jobs. Retention of existing jobs: The construction of a freeway interchange can also help to retain existing jobs. Improved transportation infrastructure can make it easier for businesses to transport goods and access markets, which can help them to remain competitive and avoid layoffs. As this project was incorporated as part of the City's Capital Improvement Program, contractors and subcontractors are required to comply with prevailing wage laws. These laws mandate that workers be paid the prevailing wage rate for their job classification in the local area, which is usually determined by union wage rates or wage rates set by the Department of Labor. Prevailing wage rates are variable and depend on the location of the project and the nature of the work being performed. To estimate the



number of jobs that will be created by the construction of a freeway interchange, it is necessary to consider a variety of factors, including the size and complexity of this project, the duration of the construction period, and the level of investment in the project. However, it is reasonable to assume that several hundred direct jobs and additional indirect jobs may be created as a result of the construction of a typical freeway interchange. The cost to build this new interchange is anticipated to be in the cost range from \$108,000,000 to \$129,000,000. These costs include estimated engineering/environmental costs for the PA/ED phase, estimated construction costs for all phases, estimated right of way costs, and estimated costs for engineering/construction support. As with prior large scale projects within Caltrans right of way, grant applications are typically more competitive once they have completed the PA/ED phase and through the final engineering phase which is the Plans, Specifications and Estimates phase (PS&E).

Notes

- ¹ U.S. Economic Development Administration. (n.d.). *Comprehensive economic development strategy (CEDS)*. <https://www.eda.gov/grant-resources/tools/comprehensive-economic-development-strategy>.
- ² San Bernardino County. (2023). *2023 Continuum of Care Homeless Count and Survey Final Report*. <https://www.sbcounty.gov/uploads/sbchp/content/SBC-2023-Homeless-Count-Report.pdf>.
- ³ Neighborhood Partnership Housing Services (NPHS). (2017). <https://nphsinc.org/>.
- ⁴ IBM Institute for Business Value. (2012). *Accelerating economic growth and vitality through smarter public safety management*. <https://www.ibm.com/downloads/cas/N1VDDVA8>.
- ⁵ *Fontana Herald News*. (2022, August 11). Report says there was an increase in crime in cities covered by S.B. County Sheriff's Department. https://www.fontanaheraldnews.com/news/report-says-there-was-an-increase-in-crime-in-cities-covered-by-s-b-county/article_08d9a1fe-15dd-11ed-ae9f-2f2d915d3e03.html.
- ⁶ Moenius, J. (2022, October 13). Warehouses pose a dilemma for the Inland Empire. *The Sun*. <https://www.sbsun.com/2022/10/13/warehouses-pose-a-dilemma-for-the-inland-empire/>.
- ⁷ Shearer, C., Shah, I., & Gootman, M. (2019, February). *Advancing opportunity in California's Inland Empire*. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf.
- ⁸ Chaffey College. (2021, January 27). *Chaffey College helps launch High Desert Training Center*. <https://www.chaffey.edu/news/news-articles/2020-2021/chaffey-helps-launch-high-desert-training-center.php>.
- ⁹ Department of Defense. (2022). *Twentynine Palms (MCAGCC) in-depth overview*. Military OneSource. <https://installations.militaryonesource.mil/in-depth-overview/twentynine-palms-mcagcc>.
- ¹⁰ Big Bear Lake. (n.d.). *Big Bear Lake TBID*. <https://www.bigbear.com/about/about-visit-big-bear/big-bear-lake-tbid/>.
- ¹¹ Luczak, M. (2022, June 9). *BNSF: California congestion relief project moving forward*. Railway Age. <https://www.railwayage.com/freight/class-i/bnsf-california-congestion-relief-project-moving-forward/>.
- ¹² Whitehead, B. (2021, April 28). Amazon begins operations at San Bernardino airport hub. *The Sun*. <https://www.sbsun.com/2021/04/28/amazon-begins-operations-at-san-bernardino-airport-hub/>.
- ¹³ SBD International Airport. (2018, July 17). *FedEx Express expands into SBD International Airport*. <https://www.sbdairport.com/fedex-express-expands-into-sbd-international-airport/>.
- ¹⁴ Metropolitan Water District of Southern California. (2022). *Drought across the West*. Retrieved January 17, 2023, from <https://www.mwdh2o.com/how-we-plan/drought/>.
- ¹⁵ California Energy Commission. (2022). *Utility wind project size by county and state*. Retrieved February 2, 2022, from <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data>.
- ¹⁶ County Health Rankings & Roadmaps. (2022). *County: San Bernardino, CA*. Retrieved November 2022, from <https://www.countyhealthrankings.org/explore-health-rankings/california/san-bernardino?year=2022>.
- ¹⁷ Shearer, C., Shah, I., & Gootman, M. (2019, February). *Advancing opportunity in California's Inland Empire*. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf.

- ¹⁸ Guilhem, M. (2022, September 22). Inland Empire as warehouse hub: Is the era ending? *KCRW*. <https://www.kcrw.com/news/shows/greater-la/logistics-industry-missing-women-fine-dining/inland-empire-warehouses-amazon>.
- ¹⁹ Shearer, C., Shah, I., & Gootman, M. (2019, February). *Advancing opportunity in California's Inland Empire*. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf.
- ²⁰ Ibid.
- ²¹ California State University, San Bernardino. (2021). *State of Entrepreneurship '21 Report*. https://entre.csusb.edu/pdfs/SOEReport_2021_V11.pdf.
- ²² City of Tulsa. (2023). *Tulsa Remote*. <https://tulsaremote.com/>.
- ²³ Vermont Technology Alliance. (2023). *Career Center*. <https://vtta.org/remote-worker-relocation-grant-program-accepting-applications/>.
- ²⁴ Downey, D. (2021, October 20). What is the future of warehouses in the Inland Empire? *The Press-Enterprise*. <https://www.pressenterprise.com/2021/10/20/what-is-the-future-of-warehouses-in-the-inland-empire/>.
- ²⁵ Shearer, C., Shah, I., & Gootman, M. (2019, February). *Advancing opportunity in California's Inland Empire*. Brookings Institution. https://www.brookings.edu/wp-content/uploads/2019/02/Full-Report_Opportunity-Industries_Inland-California_Final_Shearer-Shah-Gootman.pdf.
- ²⁶ Ibid.
- ²⁷ Ibid.
- ²⁸ Virginia Economic Development Partnership. (2023). *Certified sites*. <https://sites.vedp.org/virginia/site/242790?Certified=1>.
- ²⁹ Kirk, P. (2020). Proximity to rail service to play a bigger role in industrial site selection. *Wealth Management*. <https://www.wealthmanagement.com/industrial/proximity-rail-service-play-bigger-role-industrial-site-selection>.
- ³⁰ Lopez, N. (2023, February 6). Race to zero: Can California's power grid handle a 15-fold increase in electric cars? *CalMatters*. <https://calmatters.org/environment/2023/01/california-electric-cars-grid/>
- ³¹ Governor Gavin Newsom. (2023, October 13). *California selected as a national hydrogen hub* [Press release]. <https://www.gov.ca.gov/2023/10/13/california-selected-as-a-national-hydrogen-hub/>
- ³² San Bernardino County Transportation Authority. (2023, October 10). *SBCTA, Stadler unveil first-of-its-kind hydrogen powered passenger train* [Press release]. <https://www.gosbcta.com/sbcta-stadler-unveil-first-of-its-kind-hydrogen-powered-passenger-train/>
- ³³ Nasdaq. (2023, May 2). *NRG fueling station plans in East San Bernardino County to include PowerTap hydrogen, battery electric charging, and petrol options* [Press release]. <https://www.nasdaq.com/press-release/nrg-fueling-station-plans-in-east-san-bernardino-county-to-include-powertap-hydrogen>
- ³⁴ Starner, R. (2018, September). When the world takes notice: Access to markets, skilled workers lures foreign firms to San Bernardino County. *Site Selection*. <https://siteselection.com/issues/2018/sep/san-bernardino-county-california-when-the-world-takes-notice.cfm>.
- ³⁵ International Trade Administration. (2020). *FDI Data for States, MSAs, and Counties*. <https://www.trade.gov/data-visualization/fdi-data-states-msas-and-counties>.
- ³⁶ McFarland, C. K. & McConnell, J. K. (2011). Strategies for globally competitive cities: Local roles in foreign direct investment and international trade. *National League of Cities Center for Research and*

Innovation. <https://www.usacompetes.com/wp-content/uploads/sites/7/2018/04/NLC-Strategies-for-globally-competitive-cities-National-League-of-Cities.pdf>.

³⁷ Ibid.

³⁸ California State University, San Bernardino. (2021). *State of Entrepreneurship '21 Report*. https://entre.csusb.edu/pdfs/SOEReport_2021_V11.pdf.

³⁹ Johnson, C. (2017, April 3). 5 coworking spaces and business incubators in libraries that support local workers. *Shareable*. <https://www.shareable.net/5-coworking-spaces-and-business-incubators-in-libraries-that-support-local-workers/>.

⁴⁰ I-90 Aerospace Corridor. (2021). *About us*. <https://www.i90aerospacecorridor.org/about-us>.

⁴¹ McFarland, C. K., Ohle, N., Grabowski, E., & Landes, L. (2021). Developing regional economic connectivity: Key factors and strategies for urban and rural communities. *National League of Cities Center for City Solutions*. <https://www.nlc.org/wp-content/uploads/2021/06/Key-Factors-Urban-Rural-Communities-Report.pdf>.

⁴² Pittsburgh Cultural Trust. (2023). *About*. https://www.trustarts.org/pct_home/about.

⁴³ Zepeda, F., Montojo, N., & Goldberg, L. (2022, September 16). Community Land Trusts as stewards of public land: A guide for local governments in California. *Othering & Belonging Institute*. <https://belonging.berkeley.edu/community-land-trusts-stewards-public-land>.

⁴⁴ California Community Land Trust Network. (2022). *2021 Impact Report*. <https://www.cacltnetwork.org/wp-content/uploads/2022/02/2021-CACLTN-Impact-Report-Spread.pdf>.

⁴⁵ OakCLT. (2023). <https://oakclt.org/>.