THE FUTURE OF CALIFORNIA’S BUSINESS CLIMATE

A CALIFORNIA 100 REPORT ON POLICIES AND FUTURE SCENARIOS

CALIFORNIA 100
VISION & STRATEGY FOR THE NEXT CENTURY
ABOUT CALIFORNIA 100

The California 100 Initiative envisions a future that is innovative, sustainable, and equitable for all. Our mission is to strengthen California’s ability to collectively solve problems and shape our long-term future over the next 100 years.

California 100 is organized around 15 policy domains and driven by interrelated stages of work: research, policy innovation and engagement with Californians. California 100’s work is guided by an expert and intergenerational Commission. Through various projects and activities, California 100 seeks to move California towards an aspirational vision—changing policies and practices, attitudes and mindsets, to inspire a more vibrant future.

This California 100 Report on Policies and Future Scenarios was produced as part of California 100’s research stream of work, in partnership with 20 research institutions across the state. California 100 sponsored grants for data-driven and future-oriented research focused on understanding today and planning for tomorrow. This research, anchored in California 100’s 15 core policy domains, forms the foundation for the initiative’s subsequent work by considering how California has gotten to where it is and by exploring scenarios and policy alternatives for what California can become over the next 100 years.

The California 100 initiative is incubated through the University of California and Stanford.

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TO READ MORE ABOUT THE FUTURE OF CALIFORNIA’S BUSINESS CLIMATE...

Read our research partner’s entire Facts-Origins-Trends report at the California 100 website. The Facts-Origins-Trends report contains all of the references and citations to support the content of this Issue Report.

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CALIFORNIA 100
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FOREWORD

“As California Goes, So Goes the Nation, Alas.” That was a headline from a Los Angeles Times opinion column on April 30, 1989, which noted that, even though “Californians have long considered their state the cutting edge of social and political change… [it] no longer seems the vanguard of political innovation. Other states rarely look to California for policy initiatives.”

Fast-forward to 2022, and few would proclaim that California lacks in policy innovation. Quite the contrary. The state has enacted a variety of policies ranging from expansions in immigrant rights and voting rights to health care and higher education, and from large-scale experiments in guaranteed income to ambitious moves towards net-zero emissions in a variety of sectors. And despite the periodic waves of “doom and gloom” reporting about the state, California’s economic output over the last 25 years has grown faster than the national average, and on par with GDP growth for the state of Texas.

Even so, much remains to be done. The California Dream has always been marred by a high degree of racial exclusion, and it remains out of reach for millions in the state—whether measured by health outcomes, unaffordable housing, or massive disparities in income and wealth. California also recognizes that future progress depends on recognizing and correcting historical wrongs. Its Truth and Healing Council, for example, will provide recommendations aimed at prevention, restoration, and reparation involving California Native Americans and the State. If California’s racial diversity represents America’s demographic reality by 2100, our work is essential—not only for the long-term success of the state, but also for our country’s innovative and equitable future.

This future-focused work is especially pressing today. The COVID-19 pandemic has scrambled a state and nation already undergoing significant changes in economics, politics, and society. The harmful consequences of climate change are at our doorstep,
with forest fires and droughts that grow in frequency and intensity each year. The weakening of local media and the growth of disinformation threaten both our civic health and our public health. And staggering inequities in income and wealth, homeownership and health, threaten the state’s reputation as a haven for migrants, domestic and international alike.

In addition to immediate threats that affect our long-term future, we also see plenty of opportunity. Record increases in federal and state spending mean that billions of additional dollars are flowing to state, local, and tribal governments in California. Many jurisdictions are looking to invest in infrastructure that meets the long-term needs of their communities. Philanthropic institutions and individual donors are also looking to make transformative investments that have enduring impact. We have an opportunity to inform and enrich all of these plans and conversations.

Most institutions and organizations in California are focused on immediate challenges, and don’t have the luxury of time, dedicated talent, and resources to focus on long-term futures. California 100 is grateful for the opportunity to provide added value at this critical time, with actionable research, demonstration projects, and compelling scenarios that help Californians—government agencies, stakeholder groups, and residents alike—to envision, strategize, and act collectively to build a more innovative and equitable future.

Karthick Ramakrishnan, Ph.D. Henry E. Brady, Ph.D.
Executive Director Director of Research
In 1970, California stood out among the 50 American states as a land of opportunity: the most populated and richest state, growing in population and high in per capita income, with bustling and innovation-producing world-class cities. Arguably, California was the first “technological” economy built upon new ideas and inventions epitomized by its aerospace industry that had just sent men to the moon.

California is still rich and innovative, but it also has growing economic inequality and out-of-reach housing prices. Our “Facts-Origins-Trends” report chronicles what has happened over the last 50 years. Here we summarize the basic themes and what they mean for California’s future.
California’s economic prosperity relies on the pre-existing mix of businesses already in the state and governmental policies that affect the business climate.

The state of California is home to nearly 40 million people with nearly $3.4 trillion in gross state product as of 2021. California is the largest economy in the United States and the largest sub-national economy in the world. If California were a sovereign nation, it would rank as the world’s fifth largest economy, after Germany and ahead of the UK. Additionally, as both the most populous U.S. state and one of the most climatologically as well as racially and ethnically diverse states, the economy of California is varied, with many sizable sectors. The most dominant sectors include manufacturing, information, professional services, finance, and real estate.

Much of California’s economic activity is concentrated in the coastal cities, especially Los Angeles, which has a relative focus on media—most notably Hollywood—and the San Francisco Bay Area, which predominantly concentrates on technology. California’s Silicon Valley is home to some of the world’s leading technology companies, including Apple, Alphabet Inc., and Meta Platforms. In total, more than 10 percent of Fortune 1000 companies were based in California in 2018, the most of any state. California’s Los Angeles is also home to the world’s most famous entertainment giants, including Paramount, Warner Bros., NBCUniversal, and MTV. Film and TV production supports well over 700,000 jobs and nearly $70 billion in wages for California workers.
Both Los Angeles in the south and Oakland in the Bay Area, along with San Diego on the border with Mexico, are significant trade hubs to and from the United States. The Port of Los Angeles is one of the world’s busiest seaports and the leading gateway for international trade in North America and has ranked as the number one container port in the United States since 2000. When combined with the adjacent Port of Long Beach, the San Pedro Bay Port Complex, which makes up the two ports, is the ninth largest port in the world, handling 31% of all containerized international waterborne trade in the U.S.

Domestic and international tourists contribute $145 billion to the state’s travel industry. Furthermore, California’s agriculture industry has the highest output of any U.S. state, with its Central Valley being one of the most productive agricultural regions on Earth, growing over half the country’s fruits, vegetables, and nuts.

California’s economic prosperity relies on the pre-existing mix of businesses already in the state and governmental policies that affect the business climate. “Business climate” is a loosely defined concept, and numerous business climate ratings and rankings published by the media, think tanks, trade associations, and policy institutions provide different interpretations of it. One interpretation is that it refers to the strength and vitality of business in a state. Another is that it is more narrowly focused on those policy choices by a state that help or impede business success. We take an expansive view because any complete understanding of a state’s business climate requires both a definition of what we mean by business success and prosperity and an elucidation of the factors that lead to that success.

One measure of business success is the strength of a region’s economic base—the kinds of businesses that it has and the kinds of goods they produce. This theoretical concept
is developed in more detail below, but, roughly, a region with a strong economic base has businesses that bring wealth into the region and provide for economic growth. This report explores the strength of California’s overall and regional economic bases in detail.

More generally, this report considers a state’s “business climate” to be shaped by the facilitators and barriers to the growth and prosperity of businesses located there or considering a move there. Because different ranking systems place different priorities on a selective subset of promoters that enhance business productivity (e.g., talent availability) or barriers that impose costs of running businesses (e.g., tax policy), California’s business climate ranking varies. However, California’s “anti-business” reputation is quite consistently reflected in the Golden State’s disappointing placement in some rankings, including 50th in 2021 Chief Executive’s list of the “Best and Worst States for Business” Survey, 33rd in CNBC 2021 ranking, and 43rd in Forbes’ “Best States for Business” 2019 list.

In sharp contrast to these rankings and perceptions, California actually has enjoyed impressive economic prosperity rooted in a strong economic base; for example, it is sixth among all 50 states in GDP growth and ninth in both employment and per capita income growth in 2017-2019. Indeed, some business climate rankings rate California very highly based upon its performance. This disparity between the ranking systems and the results for California presents a paradox.

Despite the high cost of doing business, some industries’ high concentration in California still attracts new businesses and investments that maintain California’s economic growth as shown in the Facts-Origins-Trends report. Even Chief Executive Magazine, ranking California at the bottom for its business climate, has observed that “while the Golden State often ends up at the bottom of Chief Executive’s list of the Best and Worst States... there is no
shortage of companies eager to invest in new projects and expand here. Despite the regulations, taxes and high cost of living, many find the availability of talent, access to ports and Asian markets and incentives attractive.”

**ECONOMIC BASE THEORY**

Economic growth depends upon having businesses in a region that produce goods for trade (export) to other regions—these businesses constitute the economic base. The export sector drives growth by providing tradable goods, and the residentiary sector produces goods primarily for the local market. Exportable goods (now typically called “basic” or “tradable” goods by economic base theorists) produced by the economic base include natural resources required by the larger national economy (e.g., coal, oil, iron ore, forestry products, and agricultural goods produced beyond local needs), manufactured goods consumed beyond the locality (e.g., cars, appliances, textiles, televisions), and services used by others outside the region (e.g., legal, architectural, consulting). Non-basic residentiary goods, consumed and traded within the region, include housing, retail trade (e.g., grocery stores), healthcare, and personal services (e.g., barbershops).

Exportable tradable goods bring wealth into a region. Export sectors thrive because of some comparative advantage of a region: the existence of some natural resource (e.g., coal, lumber, fertile land), location and transportation advantages (e.g., natural harbors and proximity to markets or resources), or the development of manufacturing and technological capabilities (e.g., automobiles in Detroit, textiles in New England, and computer chips in Silicon Valley). The residentiary sector depends upon the strength of the export sector: “While the export sector produced goods and services for the rest of the world, the residentiary sector (principally, [retail] trade, services, and local government) served the regional market.”

Economic base theory suggests three requirements for the economic growth of a region:

- **A Standard Economic Base with Tradable Goods:** In order to grow, a region must produce some exportable products for which it has a comparative advantage so that they can be traded with other regions. For California, examples of products that have driven growth are—very roughly in historical order when they first became important—gold, wheat, fruits and vegetables, petroleum, movies, ships, planes and aerospace, computer chips, and information technology.

- **Products for its Standard Economic Base for Which Demand is Increasing:** A region can prosper into the future if it produces products for which demand will be strong in the future, for which supply will continue to be available, and for which the tradables are based on highly skilled work that produces high salaries for workers. A region, for example, that produces coal today is not well-positioned for the future, but one that
produces information technology is probably well-positioned. A region dependent upon logistics (e.g., Riverside County) would be in-between. It may benefit from high future demand but it will rely upon low-skilled and low-wage workers.

- **Having a Portfolio of Multiple Products**: A region may be still better situated if it has a portfolio of products for which there is strong demand because unexpected downturns in demand for one product is less likely to create an economic crisis for the whole region.

**REGIONAL PROSPERITY AND ECONOMIC STRENGTH MEASUREMENTS**

In addition to measuring California’s economic base, this report seeks to understand California’s prosperity broadly, as well as its business climate. Regions can prosper by having ample average personal income, having an equitable distribution of that income, and having the opportunities provided by large cities. Each matters for prosperity.

**HIGH PER CAPITA PERSONAL INCOME**

Per capita personal income measures whether the average person in the region is doing well. Although there are critics of this measure and its close cousin, the per capita gross domestic product, it is certainly better to have a high per capita personal income than a low one. Higher personal income allows people to buy goods and services that they need and want. Higher personal income means that employers have the wherewithal to pay generous wages and salaries.

**FAIR INCOME DISTRIBUTION**

As well as having a high average income, a region should have an equitable distribution of personal income that does two things. It properly rewards those who work hard or who have invested in skills by providing them with higher incomes, and it also takes into account the mishaps and misfortunes that can befall anyone in a rapidly changing society by providing a safety net.

In addition, the distribution of income should not allow those at the top of the income distribution to be so well off that they can buy a leg-up for their children through schooling and social connections, while the children of those at the bottom of the distribution or members of various racial, ethnic, regional, or other groups suffer cumulative disadvantages from poor schooling, poor neighborhoods, poor nutrition, and other handicaps. Social programs can help solve these problems by providing healthcare, nutrition, education, and income support in the case of misfortune and by providing more equal starting points for children.

It is easy to see why a fair income distribution would be important for workers, but it is also important for business because social pro-
grams correct for the vagaries of business conditions by keeping labor forces intact (e.g., unemployment insurance), ensure that every talented individual gets a chance to succeed (e.g., public higher education) thus providing better labor for business and citizens for society, and provide a social environment that satisfies our basic sense of fairness (e.g., nutrition programs and help for the homeless) and that makes us proud to be part of the community.

**LARGE CITIES WITH EXPANSIVE OPPORTUNITIES**

The third way a region can prosper is by being highly and densely populated so that it serves as a center for rewarding human interactions and an incubator for innovation and new ideas. Denser metropolitan areas are more prosperous than less dense ones due to agglomeration.

**Agglomeration** refers to a very human set of activities. When people get together (“agglomerate”) their interactions can produce new and better ways to produce products and services—which is the result of the complex societies nurtured in cities that produce arts, culture, science, and civilization. Agglomeration economies are fundamentally about lowered transportation and communication costs—the transportation and communication of goods, people, and ideas.

Agglomeration can lower the costs of physically moving goods because markets are nearby. Since transportation costs for goods have decreased dramatically in the last 100 years, inexpensive ways of moving goods do not appear to be the major reason for cities today, although they were probably essential for the growth of urban centers like San Francisco in the middle to late 19th century with its large, deep, and protected ocean port connected to inland California through the Sacramento and San Joaquin Rivers.

Two other types of agglomeration are important for urban metros: labor market pooling and the flow of ideas. “Labor market pooling” involves having a large workforce active across nearby firms so that the benefits of innovation and training in one firm can be shared by others. As workers move from one firm to another, they improve the productivity of those firms given the experience they have gained at other ones. “The flow of ideas” emphasizes the creation of human capital and new ideas through the intense interaction of people in one place who compete, converse, and invent.

In addition to agglomeration effects that make businesses more profitable, many people may also prefer to be in cities because there is greater access to education, health care, arts and entertainment, shopping, and the everyday thrill of activity on the streets and the chances to meet people. Of course, cities also have their downsides such as congestion, pollution, disease, and crime which have been imperfectly controlled by modern traffic control methods, public health measures, and police departments, so that some still prefer the suburbs. Ultimately, some people may have more of a taste for cities than others, so there can be no agreement on the optimal size of settlements, but it seems sensible to believe that there should be a range of possibilities to achieve agglomeration effects and to provide choices for people of places to live.
Characterizing the economic base of a region requires classifying industries into those which produce tradable goods and those that do not. Using the North American Industry Classification System (NAICS) we can break industries into 19 different categories which we can classify into three groups: mostly tradable, mixed, and mostly residentiary goods and services industries. The mostly “tradable” (basic) goods and services sectors are agriculture, mining, manufacturing, information, finance, and management. The mostly “mixed” sectors are wholesale trade, transportation and warehousing, professional and technical services, and other services. The mostly residentiary, non-basic, and “nontradable” goods and services sectors are utilities, construction, retail trade, real estate, administration and support.
educational services, healthcare, arts and entertainment, and accommodation and food services. We call the first group that produces mostly tradable goods and services the "standard economic base."

Using these classifications and considering the four largest U.S. states and the nearby state of Washington, 34% of California's economy is in industries producing mostly tradable goods and services, 37% for Texas, 38% for New York, and 36% for Washington – approximately equal numbers in the standard economic base for each state. But Florida has only 19.5% in them. The five states have similar percentages in "mixed" goods ranging from 19% to 23%. And for non-tradable goods, Florida’s economy has by far the greatest overall share (58.0% compared to between 40.5% and 45.3% for the other states) in these areas, indicating its reliance on non-tradable goods unlike the other four states. Among other things, Florida depends heavily upon tourism which is typically not considered part of the standard economic base because it does not produce goods for export and because it creates mostly low-wage jobs. Some experts would argue that tourism should be considered part of the economic base because it brings money into a state, but others would not. Florida also depends heavily upon population growth which increases demand for residiary goods and most experts think that this should not be considered part of a state’s economic base since it simply involves people moving from one region to another.

California has especially strong Information, Management, and Professional Services sectors that are growing robustly. It also has a strong Entertainment sector (usually considered just a producer of residiary goods) that produces tradable goods such as movies, television shows, and music. California’s manufacturing sector is relatively large and strong compared to national trends. Its Agricultural and Mining sectors are small fractions of its total output (1.5% and 0.4% respectively) respectively, but they are especially important to some California regions (e.g., San Joaquin Valley) and they are lagging. Overall, California has a strong economic base producing tradable goods in the areas of Information, Manufacturing, Professional Services, and Entertainment. It also has strong and growing sectors providing residiary services. And California is neither reliant upon any one sector that is large and vulnerable to sudden shocks like New York (Finance at 21.9%) because its largest sector is manufacturing at 13.2%, nor does it depend on sectors whose future is problematic like Texas (Mining-Petroleum at 8.9%). The state with the most similar profile is Washington, whose economy shares many of California’s features.
RICHER AREAS OF THE STATE ARE NOT GROWING IN POPULATION, BUT ARE GROWING IN GDP

The metropolitan coastal areas, except for the more inland Sacramento, are not growing in population. However, they are growing economically with GDP growth rates near or above—sometimes far above, as in the Bay Area—the U.S. GDP growth rate. With the exception of the Far North region which is growing very slowly in population, the less well-off inland areas are growing in population, but their GDP growth is highly dependent upon this population increase.

The Bay Area has a 66% bigger GDP share than one would expect given its population and the Inland Empire has half of what would be expected given its population. As a result, the Bay Area’s per capita GDP is three times that of the Inland Empire. The South Coast and San Diego have shares of GDP proportionate to their population, and the Central Coast and Sacramento are at about 80%. The Sierra, San Joaquin Valley, and the Far North are between 57% and 68%.

CALIFORNIA’S ECONOMY IS CONCENTRATED IN ITS COASTAL REGIONS

Three-quarters of California’s GDP is produced in the Bay Area, South Coast, and San Diego. The figure becomes 85.3% if we include the Central Coast and the Sacramento Metro. The agricultural and rural regions of the Sierra, San Joaquin Valley, and Far North produce only 8.5% of the state’s total GDP. A final 6.2% is produced in the Inland Empire.

CALIFORNIA’S EMPLOYMENT GROWTH LAGS AGAINST ITS GDP GROWTH

California’s employment growth, ranked fifth among comparison states, is not as high as that of its GDP, ranked third. There are indications that many of the leading sectors are better at producing GDP growth than employment growth, suggesting that this is leading to higher salaries in these sectors that exacerbate inequality.
There is no significant behavioral evidence that California is not “friendly” to small businesses and new businesses, though small and new businesses are not growing well in some labor-intensive and cost-sensitive industries. Despite the lack of evidence, neighboring states like Arizona, Nevada, and Oregon clearly have higher growth rates than California in their numbers of small and new businesses and related employment. Thus, California will have to work harder to compete more effectively with neighboring states.

Population growth is slow

California’s population growth is relatively slow (0.25%, ranked ninth). More importantly, population is growing much faster in neighboring states like Nevada (1.92%) and Arizona (1.64%), and states with similar economies and industry compositions like Washington (1.41%), Florida (1.35%), Georgia (1.02%), and Oregon (1.00%). This is a critically important issue for policy, especially since many of the states that are growing in population are nearby (Arizona, Nevada, Oregon, and Washington).

Personal income growth rates are doing well in California’s urban metros

In 1970 both the San Francisco Bay Area and the South Coast (Los Angeles) were among the richest metropolitan areas in America. After 1970, California’s most dominant economic region, the South Coast, experienced a downturn that bottomed out in 1999 to 2001, when the region had a per capita personal income that was below the national average for metropolitan areas. San Francisco and San Jose continued to rocket ahead in personal income over these decades, but Los Angeles has come back in the last 15 years as shown in Figure 1, where LA’s real per capita personal income growth rate is eighth among the 40 largest metros according to the 2020 census. Even Riverside is doing much better. And San Jose and San Francisco are doing spectacularly well.
Average Yearly Real Per Capita Personal Income Growth by Average Yearly Population Growth for 40 Largest American Metros – 2007-2021

**Figure 1**

**Source:** Authors’ calculations from Bureau of Economic Analysis data.
Although the South Coast’s comeback is real, some of its prosperity has been eaten up by a high cost of living, especially housing costs. Figure 2 plots the real per capita personal income for each metro adjusted for regional costs of living (using a regional price deflator) versus a measure just adjusted for national inflation. Those metros shown above the line have cost of living that are less than the national average (e.g., Indianapolis, Cleveland, and Nashville) and those that are below the line have costs of living that are higher (e.g., San Jose, San Francisco, Boston, Seattle, New York, and many others). The dashed vertical and horizontal lines represent the average per capita income for metropolitan regions in the United States for 2020 in 2012 dollars. San Jose and San Francisco perform spectacularly, even after adjustments are made for their high cost of living – they rank number one and two among the metros in per capita personal income regardless of whether cost of living corrections are made.
Metro Per Capita Personal Income Calculated With and Without Regional Cost-of-Living Corrections – All 40 Metros

Because San Jose, San Francisco, Boston, and Seattle stretch out the income scales so much, it is useful to reduce the extent of the axes (and to omit those four metros) to get a better picture of what is happening with other metros. When we do this in Figure 3 on the next page, we see that Los Angeles is also one of those metros below the diagonal line, so that its cost of living is above the national average. When no adjustments are made for different costs of living across MSAs, Los Angeles ranks number eight from the right-hand side (remembering to count San Jose, San Francisco,
Figure 3
Metro Per Capita Personal Income Calculated With and Without Regional Cost-of-Living Corrections – Subset of Metros

Source: Authors’ calculations from Bureau of Economic Analysis data.
Boston, and Seattle) on the horizontal axis and it is well above the national average in per capita personal income. But once adjustments are made for cost of living, it ranks 20th when we count down from the top along the vertical axis, and its personal income per capita is just at the national average. Los Angeles is coming back, but it is hampered by a high cost of living.

Sacramento and San Diego are initially above the average in per capita personal income when no adjustment is made for cost of living, but they fall below when an adjustment is made given their high costs of living. Riverside has the lowest per capita personal income among the 40 metros no matter what measure is used. The story for San Jose and San Francisco is an unequivocally positive one: despite their high costs of living, they both provide very high personal incomes. The story for Los Angeles is encouraging in that it is coming back from a sharp decline, and if it continues its high growth rates, it may be about to move upward. San Diego and Sacramento both suffer from their high cost of living and their slightly below average income growth suggesting that they will remain in the middle tier. Riverside, despite its somewhat above average income growth, remains problematic with a very low (less than half that of San Francisco) per capita personal income.

CALIFORNIA HAS HIGH POVERTY AND VERY CONCENTRATED INCOME DISTRIBUTION IN ITS WEALTHIEST RESIDENTS

We use poverty rates and the income share of the top 10 percent of the income distribution to describe the distribution of income. Census Bureau estimates of poverty rates—averaged over three years from 2018 to 2020—indicate that California ranks slightly below the national mean rate of 11.2% at 11.0% (ranking 21st lowest among the 50 states). But this measure of poverty does not adjust for higher costs of living in California.

The Supplemental Poverty Rate, calculated since 2011 by the Census Bureau, makes this adjustment. It also includes cash and noncash benefits from government programs and subtracts taxes and necessary expenditures. Based upon this more accurate measure, California had the highest poverty rate (15.4%) in 2018-2020 followed by Mississippi (14.5%), Florida (14.0%), Louisiana (13.9%), New York (13.3%) and Texas (12.5%). The national average was 11.2%.

California has a significant concentration of wealth in the top 10 percent of its income distribution. Although the result is well-documented and widely known, it is still surprising to see the degree to which
inequality has increased in America since 1970, when the top 10 percent of the U.S. income distribution had roughly a third of the total income (32.7%) and the top 10 percent in California had 30.9%.

Now, using the latest data available from 2018, the share for the top 10 percent of the U.S. is slightly over 50% of wealth. In California the top 10 percent’s share is 53.1%. California is the sixth most unequal of the states.
by this measure. In fact, while the top half of one percent (0.5%) had 5.7% of the total income of California in 1970, these 200,000 people had 19.8%—one-fifth—in 2018. In 2018, the top .01% (4,000 people) had 6.1% of the income while they had only 0.9% in 1970. California is very unequal, and much more so today than in 1970. With its concentration of wealth, high poverty rate, and high cost of living, those at the bottom of the income scale are very vulnerable, especially given the lack of relatively inexpensive housing.

**Figure 5**  Wage Polarization in California—1979-2017

Figure 5 shows that the wages of those in the top of the income distribution at the 90th percentile have increased dramatically since 1979, but wages for those at the 50th and 10th percentile have stagnated—indeed declined somewhat. These data lead the authors of the California 100 Economic Mobility report to describe jobs as “polarized” in California. They trace this back to “increasing occupational, skill, and wage polarization.”

The polarization of jobs has deep roots in the distribution of people’s skill levels, the changes in technology that have first automated repetitive factory jobs with robots and now more skilled jobs with artificial intelligence, and the structure of American capitalism and the lack of regulation of monopolies by the government.

EXTREMELY HIGH HOUSING COSTS ACCOUNT FOR MAJORITY OF THE REGIONAL COSTS OF LIVING IN CALIFORNIA

Here we focus on one of the consequences of economic polarization that is also the result of policy choices as detailed in the California 100 Reports on housing and governance. Figure 6 graphically demonstrates California’s high costs for housing (rents) using the regional price parities of the Bureau of Economic Analysis. These are set to 100 for the entire United States and they indicate the relative cost of housing. Pittsburgh on the left is at about 75% of the national cost and San Jose on the right is at 240%. Housing is overall least expensive in the midwest (average price parity of 91.3), somewhat more expensive in the south (109.0), still more expensive in the northeast (126.2) and west, excluding California (130.1), but it is very, very expensive in California (181.2)—with San Jose, San Francisco, San Diego, and Los Angeles being the four most expensive metros for housing. Even Riverside and Sacramento rank 11th and 12th for highest housing costs.
Figure 6  Rent Parity Data for Metros in 2021 by Region

Region

- Northeast
- Midwest
- South
- United States Metros
- Southwest-West
- California

Source: Authors’ calculation from Bureau of Economic Analysis, Regional Price parities for “Services: Rents.”
CONCLUSION ABOUT CALIFORNIA’S ECONOMIC BASE

THE BAY AREA, SOUTH COAST, AND SAN DIEGO HAVE STRONG STANDARD ECONOMIC BASES, THE CENTRAL COAST AND SACRAMENTO ARE DOING ALRIGHT, BUT THE OTHER REGION’S EITHER LACK A STANDARD ECONOMIC BASE OR THEIR BASE IS STRUGGLING

The three metropolitan regions on the coast have substantial economic bases consisting of prosperous sectors with significant growth such as manufacturing, information, finance, or management. The Bay Area is doing spectacularly well, but the other two regions also show signs of strength. The Central Coast has a significant standard economic base and it shows portents of growth. The Sacramento Metro has a small standard base and it is heavily reliant upon the fortunes of government. Both the Central Coast and Sacramento need to nurture more basic industries. The San Joaquin Valley has a significant standard economic base, but it is concentrated in agriculture and mining which are struggling. The Inland Empire does not have much of a standard economic base except to the extent that it has concentrated in the “mixed” sectors of transportation and wholesale trade. Given the relatively low wage jobs in these sectors, it is not clear if the region can prosper based upon this specialization alone. The Sierra and Far North lack a standard base and are heavily dependent upon tourism and natural resource sectors whose fortunes are uncertain.

Because of agglomeration, there can be relatively long-term disequilibrium in which a region is genuinely richer than another region (e.g., the Bay Area right now) even after adjusting for high costs of some things such as housing. Furthermore, growth in population sometimes just expands an economy by the production of residentiary non-basic (non-tradable) goods which are not truly producing more wealth. Nevertheless, California’s low population growth rate is a problem because it portends a lack of enough workers in the future. What is often missing in discussions of regional prosperity is the issue of income distribution and poverty. California confronts some real problems here given its very high (first in the nation) poverty rate, very unequal income distribution, and high housing costs.
WHAT DOES CALIFORNIA’S COMPETITION LOOK LIKE?

It is worth knowing which states have industry profiles that “look” like California. Using a similarity measure based upon the rankings of the size of the industry sectors, Washington, Georgia, and Oregon are the states most similar to California. Washington and California share four industries in their top five GDP industries—these are Real Estate, Professional Services, Information, and Manufacturing. Considering Washington’s fast growth and similarity with California, policymakers in California must take into account competition from Washington. In addition, Georgia has three industries (Real Estate, Manufacturing, and Information), and Oregon has four (Real Estate, Manufacturing, Healthcare, and Professional Services) in their top five GDP industries that are the same as those of California. Florida is similar to California in its growth, but it is quite different in its economic base and appears to be following a much different strategy from most other states with an emphasis on population growth and tourism. Oregon is relatively small. Texas appears different because of its large mining (petroleum) sector, but it is otherwise a useful comparison state because it has a large Manufacturing sector and it is trying to move forward in Information. California might want to pay special attention to Texas, Georgia, and Washington while keeping an eye on the much different approach being taken by Florida. These states and their policies may hold particular relevance to California.
RATINGS OF BUSINESS CLIMATE: COSTS AND PRODUCTIVITY

DISPARITIES IN BUSINESS CLIMATE RANKINGS

So far we have presented evidence that business thrives in the state of California and that the state is doing relatively well. In that respect, the business climate is good. Housing costs and inequality create difficult problems for workers and their employers, but otherwise (and it is a big “otherwise”) California is doing well by national standards.

It is, of course, possible that businesses have done well in spite of California’s policies. Nowhere is this possibility more visible than in the many business climate rankings that rate California very low because of its supposed lack of support for business. These rankings use different indicators that embody different theories about what is needed for business to prosper – and these theories may or may not be right. In fact there are extensive academic debates over how the components of these measures such as taxes, infrastructure, regulations, input costs, the legal system (especially litigation), education and human capital, quality of life, income distribution, and support for technological innovation affect business prosperity. And there are complicated tradeoffs among them such as the degree to which business taxes which are clearly a burden might be used for infrastructure (or education or scientific research) that might be a net benefit to business.

Indeed, these measures produce disparate results, suggesting that some of these business indexes just measure one aspect of business climate, or that they are wrong or incomplete. For example, California has several low rankings (e.g., Forbes: 31th, CNBC: 33rd, and Small Business Friendliness: D+), but there are some putting California at the top (e.g., U.S. News at 2nd and Crowd Funding at 1st), and two putting California among the top quarter of the states (Motley Fool at 11 and 24/7 at 13).

In an article on business rankings, Kolko and his co-authors concluded that five of the primary indices used to measure business dimensions focused on “productivity of the workforce or quality of life factors” and five others focused “heavily on taxes, costs, and regulation and litigation.” They determined that these were distinct “productivity” and “cost” dimensions. Since high rankings on productivity are good and high rankings on costs are bad, we will refer to the cost dimension as “affordability” so that being ranked highly (typically having a low number indicating being at the top) is good for both dimensions.
In fact, these dimensions are somewhat negatively correlated with one another, suggesting that they are quite different. For example, California’s average rank on the first set of productivity indices was 15.3 and its average rank on the second set of affordability indices was 45.6—California was in the top third for the productivity of its economic activity and in the bottom 10th of the states in terms of affordability due to taxes, costs, and regulation. These results suggest that we should unpack business climate ratings to discover the dimensions on which states are scored. By doing this we will have a set of theories about what might matter for business. After identifying these theories, we will ask the “payoff” question – do these things really matter for growth and prosperity?

FOUR DIMENSIONS OF BUSINESS CLIMATE

In order to find these dimensions, we used a statistical method for uncovering the dimensionality of data to analyze the CNBC rankings which provide rankings of all the states using 85 indicators on 10 sub-factors. These dimensions make theoretical sense as we think about how a business might make the decision to locate in a state:

1. **Productive Standard Business Inputs Available and of High Quality**
   Businesses first look at a state to see if it can provide standard business inputs of labor, capital, land (infrastructure), and technology of high enough quality and in enough quantity to make it feasible that the business would thrive there. Without these factors, it makes no sense at all to locate a business in the state.

2. **Affordable Costs of Doing Business and Living in the State are Reasonable**
   Next businesses consider the costs of actually doing business in the state just as any textbook entrepreneur would consider the “cost function” for the factors of production. Businesses want to do business in an affordable place.

3. **The General Economic Environment in the State is Good**
   Businesses want to locate in stable areas where there is economic growth, solid governmental finances, and support for new businesses.

4. **Human Resources and Equity**
   Finally many businesses are also beginning to consider the degree to which a state provides support for its population through education, health, and other programs to promote equity.

The first of these two dimensions are similar to the “productivity” and “affordability” dimensions identified by Kolko and his colleagues, and they are slightly negatively correlated with one another in the CNBC data. In the CNBC rankings, the first two dimensions count for 61% of the overall ranking. A simple average of California’s ranking on the four sub-components of the “Productive Standard Business Inputs” from the CNBC data yields a result of 12. Similarly, just as California scored low on CNBC’s affordability dimension at 45.6, the simple average of the two components on the “Affordable Costs of Doing
Business and Living in the State” yields a score of 48. On the third component of “General Economic Environment of the State,” which might be considered another measure of affordability, California scores an average of 34. In short, California does well—in the top quarter of the states—on the productivity factors that facilitate business, but it does not do so well on the barriers that limit affordability.

California’s high housing prices captured in the “Affordable Costs of Doing Business and Living” certainly impose constant challenges to businesses. At least partly due to the many regulations in California, the number of new houses is not keeping up with population growth in recent years, pushing up prices of residential properties, retail properties, and rental units. For example, data from the U.S. Census Bureau Building Permits Survey (2022) shows that California has only half of the number of building permits that were granted in Texas despite the fact that Texas has 25% fewer residents than in California.

“California’s regulatory burden” is captured by the “General Economic Environment” dimension, especially by the “Business Friendliness” sub-dimension. California’s regulatory regime has been described by George Mason University’s Mercatus Center as “most burdensome” among the 44 states for which there is data. The top five most burdensome states, according to the center, are California, New York, Illinois, Ohio, and Texas.

Lastly, on the human resources dimension, California ranks 20th in life quality and 33rd in education. Life quality is determined by livability factors like per capita crime rates, healthcare, and environmental quality. According to FBI reports, California ranked 17th in 2020 by violent crime rate (Arizona 6th, Nevada 13th, Texas 16th, Illinois 19, Georgia 23, Pennsylvania 25, Florida 26th, New York 27th). For education, according to the Education Data Initiative, California’s spending per pupil is only 19th ($13,642). It is worth noting that even though California’s K-12 spending is almost at par with the national level, and it pays much higher average teacher salaries ($72,230), California scores poorly with a weak rating on all three metrics used in a state-by-state assessment.

Kolko and his co-authors found that across the 50 states, only the “affordability” dimension mattered for explaining their growth in total employment, total wages, and state product, but we find that for the first two dimensions of the CNBC rankings only the productivity dimension mattered, while affordability did not.

What are we to make of this? We should probably be skeptical of any one business climate index, and we should know that there are at least two fundamental dimensions of these indices, productivity and affordability, and states can differ along those dimensions. Moreover, although the empirical results sometimes stress the importance of one of these dimensions over the other, common-sense and economic theory suggest that both should matter. There are excellent theoretical and empirical reasons to believe that the factors embedded in each of them matter for business success. It would be unwise to conclude that high performance on one dimension can be excused because it does not matter.
Another conclusion is that there may be different models for success. Each of the two dimensions is the result of numerous policy choices and decisions that may involve trade-offs between them such as: Should the state impose higher taxes that will increase business costs in order to fund its higher university system and to improve its roads because these actions will provide a more productive environment for business? Consequently, different states might want to choose different mixes of imposing costs and improving productivity. One model might be high affordability and low cost (low taxes, little regulation, right-to-work laws, etc.) with small investments in productivity (low educational spending, little investment in infrastructure, few programs for the poor or those who lose jobs). Another might be less affordability and higher costs with greater investments in people and infrastructure. Each model might be attractive to some industries, but not others. Labor and land intensive industries might prefer the first model; technology and human capital intensive industries might prefer the second. As a result, probably the most important policy choice is to choose an appropriate model and to be cost-effective within the strictures of that model.

After diving into those factors in-depth, we conclude that California has key inputs for economic growth and productivity such as an educated workforce, strong technology and innovation, and the availability of capital. But the Golden State also imposes higher costs to its local businesses, e.g., cost of doing business, cost of living, and cost of regulation. This suggests that California may be good for some businesses but not for others. California may be a desirable location for industries that rely more on technological innovation and skilled and knowledgeable employees, but it is probably a less friendly environment for industries that are cost-sensitive.
CONSIDERATIONS FOR THE FUTURE: INSURING THAT THE CALIFORNIA MODEL SUCCEEDS

California has chosen a model for economic prosperity. It stands out as a state with high government spending per citizen, high taxes to cover the costs of the spending, highly productive industries generating high incomes for some people, and technological innovation behind it all. For decades domestic migration fueled California’s economy but more recently international migration has helped to provide abundant labor and expertise.

The model has been exceptionally successful for many members of California’s population, but some people and some areas have been left behind. With its high incomes, California has bid up the cost of housing, and through these high housing prices, it has priced less well-off people out of the market and it is probably discouraging people from coming to the state. So California needs to carefully consider the ways that it can sustain its technological leadership and promote business development, the ways that it can improve its governmental performance to justify its high taxes, the options for increasing the production of housing to provide for all groups and to encourage population growth, the policies that will encourage immigration, and the ways that it can ameliorate economic inequality.

The argument for California’s model is that it fosters economic growth through government investments and services, and it provides, to those who are already in the state, a high quality of life through regulations and government spending. Nevertheless, California’s governmental performance does not always correspond with its spending level. For example, California spends significantly more on police per state resident, at $526 versus $302 in Texas. But, California’s violent crime rate is higher than that in Texas and much higher than the national average. Similarly, California’s per mile spending on roads ($206,924) is three times that of Texas ($75,153). Yet, California’s highway system ranks 45th in the nation in overall cost-effectiveness and condition while Texas ranks 16th. California has been a leader in innovations in some areas of governmental policy such as corrections, healthcare, and energy policy—demonstrating its ability to make changes, but overall, California’s policy makers might well focus on increasing the efficiency of their use of government funds and tax revenues.

In addition, California’s policies have not solved two pressing problems: the high cost of housing and growing inequality in California. The cost of housing in California makes it hard for people to live in the state, and it may be choking off immigration to the state. The problem is exacerbated by the growing inequality between people and regions that
makes it very hard for low-income people to live in California. California needs to find ways to produce more housing and to make housing more affordable through subsidies. California must also develop policies to deal with its increasing inequality.

Given California's economic strength, it has the capacity to solve its problems. On the productivity dimension, California is globally known as the world's leading force for technology, innovation, and entrepreneurial opportunity, and it continues to do well economically. The state of Washington displays especially spectacular growth rates, but California is also doing very well with long and short-term growth rates in GDP between 5% and 6%. It far out distances Michigan, Pennsylvania, and Illinois, and it is doing very well against Texas, Florida, New York, Georgia, and Massachusetts—states that are often thought of as direct competitors. The smaller states of Nevada, Arizona, and Oregon that border California are also doing well, especially on short-term growth. Certainly California has competition, but it is also quite definitely in the race—and is, arguably, a leader.

California also beats the U.S. long-term average for employment growth at 2.21%, but it is not doing as well in employment growth as some of the other states such as the leaders, Florida and Texas. Their greater growth in employment is due to much greater population growth than California, whose population growth is tiny comparatively. Long-term population
growth increases employment in not only Florida and Texas, but also Arizona, Oregon, Nevada, Georgia, and Washington. Regardless, California’s strong GDP growth suggests that economic growth does not require population growth. Still, a lingering question is the degree to which California should be concerned about its population growth.

Migration is important for other reasons in California. In California in 2021, more than one-quarter (27%) of the population was foreign-born, the most of any state and almost double the foreign-born population in the rest of the country (14%). There is strong evidence that California’s economy has benefited from the migration of international immigrants into the state. Among other impacts, migrants have helped to reduce the state’s average age, thus providing current and future workers who can support aging Californians. Projections suggest that the over-60 population is growing faster than any other group, and it will be one-quarter of the state’s population by 2030 so that California needs younger workers to support those who are retired.
There are indications of difficulties to come. For years, California has depended on large flows of international migration for a net flow of newcomers to the state because net domestic migration (people coming from other states to California minus those leaving California to go to other states) was negative. A 2022 study found that while there is “no evidence of a pronounced exodus from the state,” the “net entrances from domestic migration — defined as entrances from other U.S. states minus exits to other U.S. states — have dropped significantly since the start of the pandemic. On net today, California loses twice as many people to domestic migration as it did before the pandemic.” Moreover, the Bay Area seems to be especially hard hit, leading to concerns about the future of San Francisco.

Given California’s decision to focus on growth through leadership in technology and innovation, California must work to insure the continued success of the San Francisco Bay Area and Silicon Valley, and to extend that success to other parts of the state. California’s strength in science, technology and innovation has placed the state in a leadership position, both nationally and internationally. The self-reinforcing ecosystems for innovation and industrial concentration structure have contributed to tremendous advantages for California which may sustain it beyond the short term.

However, technological changes are rapid and other cities, states, or nations might replicate California’s success if the state slows its pace of investing in talent through support of higher education or if it puts barriers in the way of innovators such as failing to deal with its housing crisis. On the west coast, for example, the state of Washington is building upon a very strong set of companies such as Microsoft, Boeing, Amazon, and Starbucks and a world-class university at the University of Washington. Texas is also trying to build its capabilities for innovation through investments in education, movie-making, semiconductors, space programs, and higher education research excellence. And the states bordering California—Arizona, Nevada, and Oregon—are trying to encourage start-ups in science and technology.

In addition, more has to be done to make sure that every region in the state benefits from new inventions and technological advances. Some regions such as the South Coast, San Diego, and the Sacramento Metro are already developing efforts to provide leadership in various sectors, and there are efforts to make the San Joaquin Valley a leader in innovation in farming, mining, and renewable sources of energy. Maintaining and expanding its technology edge is key to securing California’s future competitiveness and the state’s ability to maintain economic prosperity and improve economic well-being.
THE FUTURE OF CALIFORNIA'S BUSINESS CLIMATE

FOUR ALTERNATIVE SCENARIOS

ABUNDANT PRODUCTIVE FACTORS

1. LAND OF OPPORTUNITIES
   Inviting selective sectors with high profit margins, able to deal with more regulations and requiring capital and skilled workers.

2. LAND OF DREAMS
   Business booming across sectors with positive synergy.

SCARCE PRODUCTIVE FACTORS

3. LAND OF NIGHTMARES
   Losing innovation edge, talents, and starting on a vicious downward spiral.

4. LAND OF NATURAL RESOURCES
   Inviting selective sectors dependent on the state's natural advantages (agriculture, tourism, and trading).
SCENARIOS FOR THE FUTURE OF
CALIFORNIA’S BUSINESS CLIMATE

Foresight practitioners use scenarios to help make future possibilities more vivid and tangible, immersing the reader in the particular details of a future world so that they can mentally situate themselves in what it would feel like to live there. Without scenarios, the signals, trends, and other research that underlie strategic foresight work can feel distant and abstract. Scenarios can be used to center a group conversation in a positive and concrete picture of a future state so that stakeholders can pursue a shared vision for how to respond to that possibility, or mobilize action to avoid an undesirable outcome.

As discussed throughout this report, the key dimensions related to California’s business climate are affordability and productivity. California is a high cost and not very affordable state for doing business, but it is also a state with very high productivity which results in California’s mixed bag of business climate reviews. These two dimensions are often correlated negatively across the states in business rankings because of the complicated relationship between affordability and productivity. High productivity can decrease affordability by providing salaries to workers that bid up the costs of housing. High productivity can be facilitated by government investments in education that require taxes that decrease affordability by increasing business costs. Conversely, low wages and low taxes can keep housing prices low but perhaps at the expense of productivity, especially for high-tech industries that require a highly skilled workforce, if there is a lack of investment in education and infrastructure. Nevertheless, improvements are possible along one dimension without losses on the other. Productivity improvements in government operations, more cost-effective regulatory regimes, and government programs targeted at supporting business can produce both greater affordability and greater productivity.

We use these two dimensions to understand California’s future business climate, and the approaches taken by some other states. The affordability dimension is relatively straightforward because it involves costs of living, costs of regulation, costs of taxes, and costs of other factors. The productivity dimension is more complicated because it involves the economic model chosen by a state or region. Productive industries can be based upon natural resources such as agriculture or mining, although these can be depletiable resources. California’s tremendous productivity in the production of wheat in the late 19th century ended as the fertility of land declined, and oil and gas production today presents problems because of global warming. Productivity can be based upon transportation advantages as in the San Pedro Port Complex and Inland Empire logistics industry, but this often creates many low-wage jobs. Productivity can be based upon manufacturing but this often requires low-cost labor which is not America’s comparative advantage. Or productivity can be based upon professional and technical knowledge, management, or financial knowledge as in the Information, Finance, Management, and Professional Services sectors. California has mostly chosen this last path, although some regions such as the San Joaquin Valley, depend upon other approaches. Productivity can also be based upon population growth and tourism as in Florida, which is a still different path.
LAND OF NATURAL RESOURCES

Inviting selective sectors dependent on the state's natural advantages (agriculture, tourism, and trading)

In this scenario, California focuses, as it did in the past, on promoting the use of its scarce productive factors, and it works to create a more affordable business climate. Historically, California relied upon its natural resources to produce gold, wheat, and petroleum and to promote population growth and tourism. The modern equivalent would be to focus on agriculture, tourism, population growth, and trading, somewhat as Florida has done.

California would become something like Italy with fine food, beautiful landscapes, agro-tourism, and a reliance upon tourism for its success. After all, like Italy, California has fine wines, stellar cuisine, attractive beaches, and mountains with hiking and skiing. It is even roughly shaped like Italy. But this model would undoubtedly produce much lower wages than the current approach that focuses on the information, professional services, management, and finance sectors. It also seems unlikely that this scenario would actually lead to less regulation and more affordable conditions for business.

There are two reasons why this model seems unlikely to succeed. First, with climate change, California’s natural resources and its ecology are even more fragile than in the past. With increased temperatures, there are year-round wildfires, significant water shortages, encroaching sea levels upon beaches and coastal communities, and a less temperate climate. Second, the state has demonstrated a strong environmental consciousness embodied in an extensive regulatory framework that is unlikely to be rolled back to the situation when California experienced its greatest growth from 1940 to 1970. Hence, California might steadily drift into the next scenario on the lower left of the matrix.

19th Century Agriculture Hub: Early in California’s history, the state became a hub for agriculture following the development of irrigation canals and networks that allowed for the planting of crops including citrus fruits, grapes and almonds. In the decades following, California became one of the leading producers of crops including almonds, grapes, strawberries, lettuce, dairy products, and others.

1950s Growth: Although the construction of the transcontinental railroad in the late 19th century opened up California to much of the U.S., bringing tourists and migrants into the region to enjoy its natural beauty and mild climate, California’s tourism industry exploded with the growth of the film industry and opening of Disneyland in the 1950s. Today, millions of visitors come to California annually, making it one of the most popular tourist destinations in the world.

FUTURE DRIVERS

- Preserve natural resources in California.
- Develop trade and tourism tax credit programs.
- Invest in environmental-friendly agriculture.

San Diego developed around its deepwater port.

WHAT: San Diego developed much of its economy around its deepwater port. Early development of the port was intended to enable U.S. military installations to design and deploy submarines and other naval technologies. By 2008, 35,000 Navy servicepeople, Department of Defense civilian employees, and contractors worked in the area. The port also became a center for international trade and for the area’s tourism industry by way of cruise ships, creating a portion of the estimated 160,000 jobs in tourism.

SO WHAT: California has a history of leveraging its natural resources to build up significant metro regions throughout the state. It is not impossible that, with a strategic focus on its natural resources, similar growth could occur in areas like Yosemite and throughout the Far North. Lake Tahoe has seen similar growth.

Source: PortofSanDiego.org

Signals

Alaska conserves and focuses its economy on its natural resources.

WHAT: The state of Alaska possesses vast reserves of coal, oil, natural gas, zinc, lumber, and immense beauty and natural wonder. The state’s economy is inextricably linked to its natural resource industries, which also include seven of 10 largest national parks in the country.

SO WHAT: California could similarly pivot its economy to focus more directly and broadly on its abundant natural resources, as both an economic driver and a way to preserve California for its residents.

Source: Alaska.gov
California becomes increasingly less competitive as a place for doing business. Businesses choose to relocate to other states with lower costs associated with running their businesses as well as lower costs of living in general. As a consequence of industries like advanced technology, entertainment, and biotechnology leaving the state for more business-friendly states or countries, California loses many of its high-paying jobs. The loss of such industries represents both a decline in economic growth and prosperity for California residents. As high-paying jobs leave the state, graduates of California's universities leave the state at higher rates, leading to "brain drain" and a rapid loss of talent and resources.

In addition to the loss of high-profit and high-margin industries, California's lack of affordability leads to the closure of small businesses, a source of both local economic value and jobs. Many small businesses face challenges paying rent, employee salaries—particularly as paying "living wages" has grown more burdensome—and other expenses required to operate in the state. As businesses close, local economies suffer and opportunities for upward mobility for California residents decline.

On the other hand, because so many industries have left the state, there are fewer drivers on the road, thereby reducing transportation emissions from cars and trucks. Other highly pollutive industries, that involve manufacturing and chemical production, have also been forced to leave, leading to a significant decrease in emissions, which have beneficial effects on California's air quality and aid in reaching the state's climate goals.

### Aerial Scenarios

#### Land of Nightmares

Losing innovation edge, talents, and starting on a vicious downward spiral

California has not addressed its housing crisis.

**WHAT:** Although many bills have been passed, California still faces a housing crisis of extraordinary scale and complexity, which leads to high rents and home prices, high rates of homelessness, overcrowding, increased exposure to pollution, long commutes and limited access to jobs in inland regions.

**SO WHAT:** Without drastic changes, the affordability of doing business will continue its downward trend. The lowered quality of life will also negatively impact the talent pools that leading industries rely heavily on, ultimately discouraging more investments even in those sectors.

**Source:** CalMatters.org

**Business exodus from California in 2020 and 2021.**

**WHAT:** Among many other factors, California’s high income tax on high-income individuals and worsening housing costs led to Silicon Valley’s tech giants leaving the state in 2020 and 2021. The number of companies relocating their headquarters out of California in 2021 occurred at twice the rate of 2020.

**SO WHAT:** As companies’ exit the Golden State, a steady decline of population and “donut effect” migration, have hollowed out many major cities such as San Francisco and San Jose. This exodus gained momentum when young workers saw more remote work opportunities, rising housing costs in the Silicon Valley, and public safety concerns. The worsened affordability of doing business in California not only discourages tech giants but also alienates service firms and service workers, adding fuel to the exodus of middle-income workers.

**Source:** Hoover Institution. Why Company Headquarters Are Leaving California in Unprecedented Numbers.

### Historical Precedents

**1990s Aerospace Decline:** The aerospace industry played a major role in shaping Southern California’s economy beginning in the 1920s. A hub for commercial aircraft manufacturing and the defense industry, Southern California became an economic hub, with the population more than quadrupling between 1920 and 1960. However, following the end of the Cold War in 1991, more than two dozen aerospace industries merged to form only three major companies, resulting in significant job losses and high-skilled workers leaving the Southern California area to find jobs elsewhere.

### Future Drivers

- Worsened housing crisis.
- Public safety concerns
- Increased tax burdens for individuals and businesses.

### Signals

**California has not addressed its housing crisis.**

**WHAT:** Although many bills have been passed, California still faces a housing crisis of extraordinary scale and complexity, which leads to high rents and home prices, high rates of homelessness, overcrowding, increased exposure to pollution, long commutes and limited access to jobs in inland regions.

**SO WHAT:** Without drastic changes, the affordability of doing business will continue its downward trend. The lowered quality of life will also negatively impact the talent pools that leading industries rely heavily on, ultimately discouraging more investments even in those sectors.

**Source:** CalMatters.org
California prioritizes a select group of industries that yield high profit margins, which can deal with greater regulation and oversight, but also require more capital and a highly-skilled workforce. An exemplar would be biotechnology where regulations can help industries to tout their reliability and trustworthiness and where the high profit margins makes it possible for them to absorb these costs. With a focus on high-profit industries, California experiences yet another shift in its housing market: as those employed within industries like advanced technology, life sciences, entertainment, and biotechnology grow, so too does the buying power of such residents across the state. High-profit industries typically correlate with greater skill and higher wages, driving up the cost of housing in areas where such industries are concentrated. Consequently, workers in other industries find it increasingly difficult to afford housing and are thus forced out of their neighborhoods, either moving to more affordable parts of the state or elsewhere in the country.

Moreover, despite a prioritization of high-profit industries, the state still faces challenges retaining companies because of features that make it less business friendly than states like Texas or Florida, for example. California has one of the greatest regulatory burdens for business in the county and some of the highest tax rates – for both corporations and individuals. As more regulations are passed to oversee these high-profit industries, the cost of doing business in the state also continues to rise, leading companies to consider moving their operations out of state. And as California continues to experience the effects of climate change, worsening droughts, water shortages, and natural disasters, it must impose further environmental regulations upon companies operating in the state, again driving up business costs. Thus, despite its long history of incubating new industries and its many world-renowned institutions, the state faces challenges retaining the industries it has been prioritizing, because companies and talent choose to operate elsewhere with fewer regulations and fees.

**HISTORICAL PRECEDENTS**

1980s Environmental Laws: In the 1980s, California implemented strict environmental regulations with the goal of reducing pollution and prioritizing public health. For some businesses, adhering to these strict new guidelines became too burdensome, with many companies choosing to leave California as a result.

The late 1990s “Dot-Com” Boom and Bust: Silicon Valley emerged as a hub for technology, home to notable startups such as Google, eBay, and PayPal, each of which was founded in the area during the 1990s. But the allure of the internet led to an overinvestment in startup companies without viable business plans. Ultimately the boom turned into a bust.

**FUTURE DRIVERS**

- More education investment.
- Enhanced environment laws.
- More industry-specific tax incentives.

**SIGNALS**

California continues to nurture selective industries, including entertainment and tech.

**WHAT:** California offers a variety of tax incentives to businesses in targeted industries, including the film and television industry, biotech, and clean energy. For example, the California Film Commission provides tax credits to eligible productions that are produced in California. California also provides grants and loans to businesses in targeted sectors through a variety of programs. For example, the California Energy Commission’s Electric Program Investment Charge (EPIC) program provides funding for clean energy research, development, and demonstration projects.

**SO WHAT:** Besides the existing benefits of agglomeration, California continues its tax incentives and investment to nurture an even stronger pool of talent for selective industries.

**Without direct support, small businesses are priced out of the state.**

**WHAT:** The combination of high costs of living, high taxes and fees, a complex regulatory environment, and high commercial rents can make it difficult for small businesses in California to compete and thrive.

**SO WHAT:** When the affordability of doing business continues to decline, businesses outside the selective industries will face even more challenges to survive in California. Such challenges could be especially serious for manufacturing sectors, if California continues taxing manufacturing equipment (some areas over 10%) and imposing stricter environmental regulations on top of high taxes.

**Source:** LATimes.com
Business booming across sectors with positive synergy

Rather than promoting policies that favor a select few industries, California focuses instead on making the state a more affordable place for all businesses to operate, regardless of their profit margins. California streamlines regulatory processes across industries, rather than making them more burdensome, by reducing the time and expenditures required to obtain licenses and permits. Moreover, the tax burdens placed upon businesses are alleviated, thereby reducing the fees and operating costs for small and large businesses alike. The state also offers tax incentives to businesses that move to California, or choose to expand their operations here.

As a greater number of businesses proliferate in communities across the state, California prioritizes the availability of affordable housing and transportation to ensure that workers of all income levels are able to access housing near their place of work, while reducing commute times and congestion on highways. The state invests in critical infrastructure to expand public transportation networks, access to high-speed internet, and other utilities for workers.

California experiences a brief hit to its budget to improve these services, notwithstanding the positive impact made by increased economic activity and tax revenue. Some of the most costly regulations, including those related to the environment, are also relaxed, resulting in more much-needed construction of housing and infrastructure, but also increasing pollution across the state. California attempts to carefully balance the incentives offered to businesses to ensure that the state can implement policies that make it more business friendly to all, but it does not sacrifice the state's environment, worker health and safety, and natural resources.

### HISTORICAL PRECEDENTS

**Master Plan for Higher Education:** In the 1960s, California developed a statewide plan to increase college access and establish a network of postsecondary education institutions. Today, California has one of the largest and most successful higher education systems in the world.

**1980s Tax Incentives:** California implemented tax incentives for developers of affordable rental housing by establishing the Low Income Housing Tax Credit (LIHTC) in 1986, which has led to the construction of roughly 3 million homes.

**OSBA:** In 2018, California established the Office of the Small Business Advocate (OSBA) to support small businesses by providing startups and business owners guidance with processes like licensing, permitting, financing, and workforce development. More than 99% of all businesses in California are small businesses, and OSBA recognized the importance of supporting those seeking to start a business by reducing barriers to entry like statewide regulations and requirements.

### FUTURE DRIVERS

- Continued investments in higher education and non-traditional education systems.
- Efforts to address the housing barriers to entry like statewide regulations and requirements.
- Encouragement of economic development beyond the coastal corridors.

### SIGNALS

**California continues to strengthen non-traditional education models.**

**WHAT:** California’s active apprenticeship program has been a proven model and clear strategy for connecting Californians to good jobs. Nearly 100,000 active Registered Apprentices represent the largest share of any state in the nation. In 2018, California Governor Gavin Newsom set an ambitious goal of reaching 500,000 active apprentices by 2029.

**SO WHAT:** This ambitious re-imagination could build on California’s decades-long legacy of investing in its people to generate prosperity. Through this non-traditional talent building effort, the Golden State could help close the equity gaps in postsecondary educational attainment by granting more access to workers and families to cutting-edge, knowledge-intensive industries such as technology, aerospace, and entertainment. Such non-traditional education investment will provide talent sectors outside the current leading industries (e.g., healthcare, construction, manufacturing) at a more affordable cost. Thus, it will bring prosperity for all sectors and families, especially for racial minorities.

**Source:** New America.

**California reassigned CSU Humboldt as a Polytechnic University.**

**WHAT:** In January 2022, Humboldt State was renamed to California State Polytechnic University, Humboldt, becoming the third polytechnic university in the state. The change is backed by a $438 million investment from the state of California.

**SO WHAT:** This new Cal Poly will offer broader hands-on opportunities in STEM fields than other Cal State campuses, thus preparing students for the increasing demands for STEM talents in order to maintain California’s competitive advantages in supplying cutting-edge talent pools for the booming IT and related sectors. Given this new Cal Poly’s location in Humboldt County, its establishment could become a catalytic force for providing a more equitable job market in the northern part of the State, outside the state’s coastal corridor.

**Source:** Cal Poly Humboldt.
Choices among governmental policies depend partly upon which future scenarios seem most attractive to us, but they also depend upon our perspectives on the proper role of government, on the resources available to government, and on the likelihood that government will succeed in its endeavors. Doing nothing is sometimes the best policy option, but doing nothing often uncritically accepts the current mix of policies and the future they entail without considering the alternatives. Over the past 75 years in California, that meant accepting discriminatory racial housing covenants, restrictive zoning laws, few restrictions on air or water pollution, “separate but equal” schooling, the dismantling of transit systems, and many more things that are now thought to have been wrong or misguided. We have also seen aggressive policy measures in California that have had unintended consequences, from the impacts of Proposition 13 on local government budgets to the way the California Environmental Quality Act has affected housing supply and manufacturing.

Because we are thinking about the future and we do not want to be hemmed in by the status quo or a lack of imagination, we put forth an array of alternative policies, and we tie them to the different scenarios introduced before. Readers can decide which ones (or combinations of them) they prefer. Our discussion of the policy tradeoffs below will favor scenarios that continue to view California’s business climate as an opportunity for California to create a strategic plan for its economic future, and look critically at approaches that do not. Readers should consider which scenario best captures the California they want to live in, and evaluate which policy recommendations they believe will get us there.

The scenarios described above represent a range of productivity outcomes and affordability inputs across diverse industries. Therefore, the policy recommendations discussed below for each scenario attempt to move California towards an economic future that is both more affordable and productive for business.
LAND OF NATURAL RESOURCES

Business Climate is More Affordable, but with Scarce Productive Resources

Promote agricultural training programs

California provides education and training programs to develop a workforce skilled in the agriculture and sustainable tourism industries. Moreover, it provides subsidies or tax incentives to businesses that support such industries or education programs.

Distribute funds for climate adaptation

To reduce the effects of climate change, the state uses funds to help low-income communities adapt to the detrimental effects and extended periods of wildfire smoke.

Offer tax incentives

California could offer tax incentives for companies that invest in and utilize the state’s natural resources, such as timber, minerals, or renewable energy sources. These incentives could include tax credits, exemptions, or deductions that reduce the tax burden for businesses.
To encourage investment and growth in natural resource industries, California could streamline regulations related to resource extraction, permitting, and environmental compliance. This could make it easier for businesses to operate and reduce the costs associated with regulatory compliance.

California could invest in infrastructure to support the growth of natural resource industries. For example, the state could build new ports, highways, or rail lines to improve the transportation of resources to markets. It could also invest in renewable energy infrastructure, such as wind farms or solar arrays.

To maintain a competitive edge in its natural resource industries, California could invest in research and development programs to promote innovation and new technologies. This could include funding for research institutions, partnerships with businesses, and incentives for entrepreneurs.
LAND OF NIGHTMARES

Business Climate is Less Affordable and has Scarce Productive Resources

*Raise taxes on business*

Increasing taxes on businesses would increase their operating costs, which could reduce their profitability and discourage investment in the state.

*Increase regulatory burden*

Adding more regulations would increase the compliance costs for businesses, which could also discourage investment and job creation.

*Decrease funding and incentive programs for entrepreneurship*

Small businesses would suffer if the state decreased funding programs that support entrepreneurship and investment in lower-resourced communities.
In the past 10 years, California has witnessed more than $150 billion in venture capital investment. If the state were to enact policies that made loans to small businesses and startups more difficult, innovation would decrease and small businesses and startups would struggle.

Limiting access to resources such as land, water, or energy could increase the cost of production for businesses, which could limit their profitability and discourage investment.

California could offer tax incentives for companies that invest in targeted industries, such as technology, biotech, or finance. These incentives could include tax credits, exemptions, or deductions that reduce the tax burden for businesses.
Streamline regulations

To encourage investment and growth in selective sectors, California could streamline regulations related to those industries, while still ensuring they operate safely and with respect for the environment. This could make it easier for businesses to operate and reduce the costs associated with regulatory compliance.

Invest in infrastructure

California could invest in infrastructure to support the growth of selective sectors. This could include funding for research and development, incubators, and accelerators, as well as building out technology infrastructure such as 5G networks.

Promote innovation

To maintain a competitive edge in targeted sectors, California could invest in research and development programs to promote innovation and new technologies. This could include funding for research institutions, partnerships with businesses, and incentives for entrepreneurs.

Attract capital and talent

California could promote itself as a hub for targeted sectors by offering a variety of incentives to attract capital and talent to the state. This could include tax breaks for investors, streamlined visa processes for highly skilled workers, and funding for innovation and entrepreneurship programs.
To counteract the effects of a focus on high-profit industries, policymakers could ensure that more affordable housing is available in areas that become hubs for high-profit industries, which would then also experience further growth and development.

**LAND OF DREAMS**

*Business Climate is More Affordable and has Abundant Productive Resources*

**Foster entrepreneurship**

California could encourage entrepreneurship by providing funding, mentorship, and resources to aspiring entrepreneurs. This could include creating incubators and accelerators that provide space, resources, and support to early-stage companies.

**Promote innovation**

California could promote innovation by investing in research and development, funding entrepreneurship programs, and offering tax incentives for businesses that invest in new technologies and innovation. California could also expand tax incentive policies that relate to investments in R&D and renewable energy, such as subsidizing research or offering low-interest loans for businesses engaging in research that could mitigate environmental harm.
California has some of the highest corporate tax rates in the country, and reducing taxes would make the state more attractive to businesses. This could be accomplished through a reduction in corporate taxes, sales taxes, or other taxes that burden businesses.

California is known for having a complex regulatory environment, which can be burdensome for businesses. Streamlining regulations, simplifying the permitting process, and reducing bureaucracy could make it easier for businesses to operate in the state.

California could streamline regulations to make it easier for businesses to operate in the state, while still ensuring that they operate safely and with respect for the environment. This could include reducing the time and cost of regulatory compliance, as well as increasing transparency in the regulatory process.

California has a significant infrastructure deficit, which can hinder business growth. Investing in infrastructure projects such as highways, bridges, and public transportation could improve the state’s business climate by making it easier for businesses to move goods and people.

California could also invest in infrastructure to support business growth in diverse sectors. This could include funding for transportation, energy, and communication infrastructure, as well as investment in research and development.
California has a highly educated workforce, but there are still gaps in certain industries. Investing in workforce development programs, such as vocational training, apprenticeships, and continuing education, could help bridge these gaps and create a more skilled workforce that is better suited to the needs of businesses.

California could invest in workforce development programs to help ensure that workers have the skills needed to succeed in diverse sectors. This could include partnerships with industry leaders, vocational training, and apprenticeships.

California could reform and then expand upon its existing tax incentive policies, like the LIHTC, whose regulations critics argue are too burdensome and thus deter development of low-cost housing. Reforms could also address the critics who indicate that the program is not effective at developing housing in urban, high-cost regions where affordable housing is often needed most.

California could encourage collaboration between businesses in different sectors to create positive synergy. This could include promoting networking events, creating industry associations, and encouraging partnerships between businesses in different sectors.